For want of a scalpel

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See accompanying articles, pages 187, 195 and 207.

For want of a nail the shoe was lost.
For want of a shoe the horse was lost.
For want of a horse the rider was lost.
For want of a rider the battle was lost.
For want of a battle the kingdom was lost.
And all for the want of a horseshoe nail.

[Traditional rhyme]

One of the fascinations of examining rural practice is discovering the variety of ways in which the same medical needs are met in different communities. The evolution of service provision seems to depend on numerous factors, including local geography and demographics, training or mentoring opportunities, licensing policies and even immigration regulations, as Iglesias and colleagues suggest (see page 207).[1] This mix of general practitioners (GPs), GPs with special skills in surgery, anesthesia or obstetrics, and specialists has provided local care with no evidence that outcomes for routine procedures such as appendectomy would be improved by transfer to larger, higher volume centres.[2] Indeed, some studies suggest worse outcomes for obstetrical patients in "outflow" communities where women need to travel for delivery.[3,4]

The pipeline that has produced such capable physicians is now under threat as the current surgical cohort approach retirement. Where will our next generation of rural surgeons come from? Recruitment of general surgeons throughout the country will be challenging, with estimates of a shortfall of 185 general surgeons within Ontario by 2010.[5] In rural Canada the situation is likely to be worse: by 2002, 40% of rural general surgeons were over the age of 65.[6] Newly trained general surgeons are likely to have a narrower scope of practice compared with the "tonsil to toenail" generalists currently in place. Although we can hope that the postgraduate surgical programs of the new rural medical schools will work to address these issues, a rural shortfall seems certain. For communities near to specialist centres there may be some opportunity to expand itinerant surgery programs, but these will not meet the needs of more distant areas.

An obvious solution is to develop the pool of GP surgeons. This pool historically has been filled in different ways: by third-year family medicine residencies or re-entry training programs run by universities, and by the assessment and credentialling of appropriately trained international medical graduates (IMGs). There have been great successes with this approach in anesthesia and obstetrics. However, in surgery, the story is different. The most successful program for training GP surgeons has been at the University of Alberta. Over a 12-year period, 16 physicians have completed a 6-month program, usually combined with 6 months of obstetrics, thus taking invaluable skills back to their communities. Although the university remains supportive, the program can no longer find preceptors willing to provide meaningful training. In a parallel process, access to competency assessment before credentialling has become a formidable stumbling block for IMGs.

At a time when competency-based evaluation has become widely advocated, it is ironic that such seemingly insurmountable barriers to training and assessment have become commonplace, so that it is difficult for GPs to access training not only in surgery but

also in other extended skills such as endoscopy, ultrasonography or colposcopy. A number of possibilities may explain the reluctance on the part of the relevant specialist groups to facilitate training. Foremost are concerns about quality of care, but such issues do not appear to be evidence-based for the type of procedures performed in rural Canada. A subsidiary problem may be that of possible legal liability arising out of training or assessment. Potential legal problems include being held responsible for the future performance of a trainee or the difficulties arising from a refusal to credential the inadequate trainee. Unfortunately, there is a tendency for discussions about training or credentialling GPs with extended procedural skills to become derailed by diverging opinions about the theoretical appropriateness of non-specialists performing appendectomies.

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We need to reframe the debate and focus instead upon the health needs of rural communities, just as we managed to do with our anesthesia and obstetric specialty colleagues. The importance of surgical practice within a community is about much more than whether patients can have appendectomies locally. It is also about maintaining the expertise of operating room staff and providing sufficient volume to ensure the competence of GP anesthetists, so that the emergency cesarean can be performed, the patient with a severe head injury intubated or a surgical airway accessed in an emergency situation. The provision of all these skills is interdependent and of great value to the health of our communities. Just as the lack of a nail led to the loss of the kingdom, the absence of a surgeon all too often leads to the loss of obstetric services and even the loss of physicians in our rural areas.

The faculties of medicine in Canada now accept that they have a social accountability mandate to ensure they provide appropriate medical training for the population that they serve. Facilitating the training and assessment of physicians with appropriate extended procedural skills clearly fits within this mandate. The make-up of these skills will vary from community to community depending on local resources and geography. Doctors entering training programs will need to develop a list of objectives derived from a review of local needs and supported by hospital boards or regional health authorities. These objectives will likely transcend individual disciplines and might include cesarean section, tubal ligation, vasectomy, appendectomy, endoscopy, carpal tunnel release, extensor tendon repair, drainage of abscesses, needle biopsy and minor plastic procedures, with the exact mix customized to fit the requirements of the local community and the skills of the trainee. Training should be brokered with the assistance of a faculty of medicine, but could take place in tertiary care centres, community or regional hospitals, and preferably in the facility that the trainee will later use as a referral centre. This will foster the development of an ongoing mentoring relationship, perhaps supported by telehealth. Universities must assist preceptors by developing appropriate assessment tools to determine competence and by indemnification against potential legal issues.

Unless we move rapidly to implement such training and assessment programs, traditional rural medicine is at risk of withering away, with ever greater burdens falling to our urban facilities and a further decline in rural health indicators.

References

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