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Maldistribution of physicians in BC: What we are trying to do about it

Expanded and distributed medical education may help us answer a critically important question: Where are the rural family physicians and specialists going to come from in the future?

ABSTRACT: Expanding the medical school in British Columbia provides an opportunity to explore issues of physician shortages and poor distribution, particularly in rural areas. The programs in the north and on Vancouver Island were conceived on the understanding that doctors tend to settle near where they train and that students of rural origin are more inclined to practise in rural areas. The programs were also based on the assumption that undergraduate experiences will lead to enhanced postgraduate opportunities at the distributed sites and increase recruitment potential. Early indications suggest we will have good outcomes, but it will be many years before we know the effect of distributed medical education on recruitment and retention of physicians in rural and underserved areas.

Expanding the medical school in British Columbia has provided us with an opportunity to ask questions about what kind of doctors we should be trying to educate. As in the rest of Canada, BC suffers not only from a shortage of physicians, but also from poor distribution of the physicians it has. This is particularly so in rural areas, where shortages of primary care physicians and specialists translate into significant problems for people living in those communities.[1]

The Northern Medical Program (NMP) and Island Medical Program (IMP) were conceived on the basis of well-accepted evidence that doctors tend to settle near where they train[2,3] and that MDs of rural origin are more inclined to practise in rural areas.[4] The programs have also been developed to address the difficulties rural students face when gaining admission to medical school in the first place.[5] In fact, the NMP now uses a rural and remote "suitability" instrument to help select students.[6]

Although the new programs are based in the largest cities in their areas (Victoria and Prince George), they are developing rotations and preceptor-based experiences throughout Vancouver Island and northern BC. These clinical rotations in smaller communities are not restricted to family medicine but include specialty attachments in rural hospitals as well. For example, some NMP students taking a core clerkship in psychiatry spend one week in Dawson Creek, and students taking a core clerkship in obstetrics can spend a week in a rural community such as Quesnel, Dawson Creek, or Fort St. John. Some IMP students spend a portion of their core obstetrics rotation in Duncan, and their 2-week mandatory orthopaedics rotation in Duncan, Nanaimo, or Campbell River. Electives for senior students are also being developed throughout the province.

As we build clinical training opportunities, there are inevitable challenges. One challenge involves developing ways for students to immerse themselves in rural practice. Successful models of integrated clerkships have been developed in other parts of the world[7] and found to be successful in terms of student performance in clinical and written exams.[8,9] This finding has been confirmed with UBC's

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own integrated program at Chilliwack. Integrated clerkships challenge the norm and, in their purest form, place students in small communities without specialists; as few as two students can spend up to a year learning all their core clinical medicine there. Not only are students immersed in a generalist environment, they are immersed in a community. The evidence indicates that students see all the required cases of a traditional rotating clerkship from first presentation through to treatment and conclusion. This approach can cause significant concern in specialist colleges and some academic departments, but we have to remember that medical school is about core clinical education—the fundamentals of being a doctor. Some would in fact argue that academic health centres are no longer appropriate places to carry out the bulk of basic clinical training because they deal with only the most complex cases and, even then, with new technology and shorter patient stays it is hard for students to follow a case from start to finish. Continuity of care is increasingly recognized as a fundamental part of the development of physicians.[10,11]

If we are going to develop a physician workforce that can serve the needs of all Canadians, we need to educate more students in underserved areas. A fundamental part of doing this requires developing core experiences in remote areas with limited access to specialists. This is now happening in Alberta, where the University of Alberta and the University of Calgary are engaged with small communities throughout the province. Their first integrated clerkships in towns of fewer than 10 000 people started in the fall of 2007.

Expanding the medical school is also about postgraduate expansion, since undergraduate experiences naturally feed into postgraduate experiences, where the real recruitment potential lies. In the last decade, the Prince George Family Medicine Residency program has provided most of the new family medicine practitioners in Prince George and the surrounding area, with more than half the graduates of that program settling locally. In order to further increase the opportunities for exposure to rural medicine and rural life, a family medicine residency program was started in Nanaimo in 2007, and one will start in Fort St. John and Dawson Creek in 2008. Programs may also start in Terrace in 2009. Many Vancouver-based specialty programs are now regularly rotating first-year and senior residents through smaller centres.

We believe that exposing medical students and residents to rural practice has a better chance of success than more coercive methods such as return of service programs. We also realize medical education models are not solutions in themselves and have to be part of broader initiatives, such as the rural practice programs implemented by the BC government in conjunction with the BC Medical Association.

This is an exciting time for rural medicine in BC. Many hopes and aspirations ride on the expansion of the medical school and at times the expectations of small communities seem frighteningly high. We are engaged in a bold experiment, and early indications suggest we will have good outcomes. However, it will be many years before we know the effect of distributed medical education on recruitment and retention of physicians in rural and underserved areas. Until then, there are thousands of people across the province—from small community groups welcoming students to government policymakers and virtually every physician and health care worker—doing their best to make this work.

Competing interests

None declared.

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