

Medical school expansion in BC

A plan involving three universities, six health authorities, the provincial government, and countless health professionals has allowed UBC to double the number of first-year students admitted in only 4 years.

ABSTRACT: In 2004, the MD undergraduate program at the University of British Columbia increased its first-year intake from 128 students to 200. Of these students, 24 were accepted into the new Northern Medical Program delivered in partnership with the University of Northern BC in Prince George, and 24 were accepted into the new Island Medical Program delivered in partnership with the University of Victoria on Vancouver Island. In 2008, this first cohort will enter postgraduate training. The implementation of an expanded and distributed undergraduate program has been studied by others in Canada and the US, who are now following BC's lead and creating regional campuses for medical education.

In June 2000, 7000 citizens rallied in the Prince George hockey arena to protest their lack of access to physicians and health care. While physician shortages were starting to be felt across the province, they were particularly acute in northern and rural parts of British Columbia.

At the time, the only medical school in BC—the Faculty of Medicine at the University of British Columbia—was accepting 128 students a year into its MD undergraduate program. These students were being selected from a qualified applicant pool of more than 700. Young people in BC had fewer opportunities to become physicians than young people in other parts of Canada. And in spite of an increase in BC's population from about 2.5 million in 1980 to 4 million in 2000, UBC's first-year class size had remained the same since the mid-1980s.

In 2001, UBC joined with the University of Northern BC (UNBC) in Prince George and the University of Victoria (UVic) in Victoria to accept a mandate from the provincial government to address physician supply by doubling the size of the medical school, with medical students distributed across the province. The stated aims of this distributed expansion were the following:

- Increase the total number of physicians being educated in BC.
- Address the physician maldistribution in northern and rural areas of BC.
- Increase access to medical education for BC young people, including rural and Aboriginal youth who are underrepresented in Canadian medical schools.
- Increase the proportion of students being educated about caring for elderly people.
- Support the northern economic base of BC.
- Distribute health sciences research across the province.

Although distributed medical education is not uncommon in Canada for clinical education, regional campuses for preclerkship education exist only in the US,¹ and nowhere do students spend all of their years at a site distant from the medical school. In 2001, no one was sure what was possible in terms of distributing the MD undergraduate program across the province, but advances in technology were seen as a possible way to help distribute core academic content. Faculty members from the three universi-

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ties, students, physicians, architects, and information and communication technology experts came together to plan and implement the program.²

During the years that followed, UBC, UNBC, and UVic constructed new buildings incorporating educational technology that allows lectures, lab demonstrations, and faculty and student meetings to take place across all three sites through interactive videoconferencing. The universities recruited new associate deans for the Northern Medical Program (NMP) and the Island Medical Program (IMP), and recruited additional basic science faculty and physicians willing to teach the students clinical skills and community-based practice. Faculty development prepared tutors and physicians at all sites for their new teaching roles. A new admissions process was created that featured panel interviews with participants from across the province,³ and a new evaluation process determined the fit of applicants to rural and northern settings.⁴

In 2004, the North American accrediting bodies for medical education, LCME and CACMS, visited UBC, UNBC, and UVic and determined that UBC was ready to implement the planned expansion. That August, UBC admitted 200 students: 24 were admitted to the new IMP, 24 were admitted to the new NMP, and 152 were admitted to the Vancouver Fraser Medical Program (VFMP). The next year, 224 students were admitted.

All students are UBC students, and receive a UBC degree in medicine. The students spend the first 14 weeks of their program at the UBC main campus. Following their first set of exams, students in the IMP move to Vancouver Island and students in the NMP move to Prince George to complete the remainder of their undergraduate medical education. The stu-

dents at the regional campuses follow the same curriculum as the students at the main campus. Lectures and lab demonstrations, including gross anatomy, are delivered by videoconference to all sites, and the students at each distributed site can see their distant classmates, the presenter, and the slides. Microphones allow students to

sites, leading to an integrated student body. Student clubs such as the Family Practice Interest Group meet by videoconference so that students can participate no matter where they are located. In the same way that students are integrated, faculty are increasingly integrated across the province, participating in tutor meetings, course

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The students at the regional campuses have the same facilities as students at the UBC campus, including anatomy labs for dissection. They have student support on site, and have equal access to UBC bursaries and scholarships. All students write the same exams, and the promotions committee that determines whether a student has met the requirements makes decisions for all students across all sites. To date, the minor differences in student performance have not been considered statistically significant. The medical student undergraduate society has access to the videoconferencing network and runs meetings across all

planning, and department and faculty meetings across all the sites.

In 2007, students in the first class since expansion began their clinical clerkships. The planning needed to deliver core clinical education across BC was intense, with piloting of new clerkship rotations and extensive discussions with physicians, health authorities, and hospitals. New academic space to accommodate UBC medical students and other health care students has been built at major hospitals around BC, and is being planned at smaller facilities as well. A network of videoconferencing links in these facilities allows students at distant sites to participate in academic teaching sessions occurring some distance from them. The Faculty of Medicine is also piloting a new type of clerkship in which students spend a full year in a small community attached to a

family physician, and thus meet the objectives of specialty disciplines through broad patient care. If successful, this model will allow students to complete their entire clinical education in smaller centres.

UBC admitted 256 first-year students in 2007, doubling the student intake in just 4 years. The speed of implementation has only been possible with intense collaboration from physicians, universities, health authorities, government, and patients. In 2008, the first cohort of students from this bold expansion will graduate and enter postgraduate programs, which are also expanding in anticipation of the demand. Seven other medical

schools across Canada and several in the US are following BC's lead in expanding student numbers through the creation of regional campuses.⁵ It remains to be seen whether the citizens of Prince George and those elsewhere in BC will benefit from this program, but the prospects are promising.

Competing interests

None declared.

References

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