
e-Appendix 1: Strategies to increase the enrolment of students of rural origin in medical school

Educational initiatives

Objectives

- To increase the number of rural high school graduates who go on to university programs with an interest in medicine as a possible career
- To increase the number of university students of rural origin who are interested in a medical career and are able to meet the entrance requirements for medical school

Recommended strategies

High school

- Establish university–high school outreach programs for rural students and guidance counsellors that involve medical students and local physicians
Rationale: Local physicians can be powerful mentors and role models and encourage rural students to go on to higher education, including medical school. More medical schools are sending students to rural communities for part of their education. Medical students can share their stories of why they chose medicine, describe the steps they took to get into medical school and answer questions from a perspective not far removed in age from that of the high school students. Medical students can be particularly powerful role models in their home communities, giving other students something tangible to aspire to. The Canadian Federation of Medical Students' Outreach Program (CROP) is an excellent student-led initiative that needs more medical school support to be sustainable and more successful.
- Provide university–high school educational opportunities for rural students to attend science and health-related summer programs
Rationale: Rural high school students often lack the opportunity to access enrichment activities that might inspire them to pursue a career in science and health. A few medical schools and the larger university science faculties have taken a leadership role in providing exciting summer enrichment activities, particularly for rural high school students.

University

- Introduce rural components into health sciences courses and programs
Rationale: An increasing number of students are enrolling in health sciences programs in Canadian universities, often as their premed degree. Some universities have successfully introduced rural components into their programs and courses that not only include the rural health context, but also provide opportunities for students to do rural-related projects, sometimes with community involvement. This highlights rural health as an important issue and generates student interest and involvement.
- Establish pre-med clubs and mentoring systems for rural students
Rationale: Student interest, when shared and supported by mentors, can be infectious and become a very positive factor in increasing student interest and applications.
- Establish counselling and support systems for rural students
Rationale: This is particularly important for some rural students, who do not have the option, as urban students do, of attending university in their home town. For some, the transition from rural to urban life and the distance from family and other support structures can be very challenging. In addition, course and career counselling can be particularly important in helping with the bewildering choices they face, which are often combined with a lack of adequate counselling from their own rural high schools.
- Provide pre-med summer school programs for rural students
Rationale: A variety of summer programs could be set up for university students of rural origin who have an interest in medicine as a career. This could be as short as an overview weekend or as long as a month or more of experiential learning. Students would learn about the complicated journey toward becoming a doctor — from premed preparation and the admissions process to the medical school experience, residency training, licensure and practice — and how it can be accomplished.
- Provide information on and assistance with preparing medical school applications
Rationale: Providing information and help sessions on medical school applications, MCATs and interview skills can help rural medical school applicants to succeed.

Funding support

Objective

- To reduce financial barriers to enrolment in and completion of medical school

Recommended strategies

- Provide funding for rural education initiatives
Rationale: The recommendations listed under “Educational initiatives” will need specific funding to be successfully implemented. In addition to program development and implementation costs, funding should be provided to reduce the travel and accommodation and other cost barriers faced by rural students.

- Establish major scholarships
Rationale: A major increase in scholarships for students of rural origin is needed to offset the perception and reality for many rural students that medical school is just too expensive. This will require a significant funding commitment by government similar to that in Australia. In addition, community and private donors can play an important role in supporting students from their own areas who pursue higher education, including medical school.
- Offer medical school tuition relief
Rationale: Appropriately funded and timed return of service agreements could benefit students of rural origin and encourage rural practice. Unfortunately, some tuition relief programs demand commitment to a return-of-service that is difficult for students to make early in medical school before they have had the opportunity to see the full variety of career possibilities. Return-of-service agreements have not been highly rated by residents or practising doctors, possibly because of the relatively large return required for a small amount of financial support and the requirement to commit to a career choice too early.
- Award financial need-based bursaries
Rationale: Financial need-based bursaries at medical schools are important overall and could be particularly important for many students of rural origin, since rural family incomes in Canada are significantly lower than urban family incomes. In addition, costs are higher for students of rural origin, who do not have the financial advantage of being able to live at home while attending medical school in their home community.

Changes to admissions process

Objective

- To admit a fair and equitable number of students of rural origin to medical school

Recommended strategies

- Include rural physicians and rural community members on admissions policy and process committees
Rationale: Every medical school in Canada serves a large population that includes rural communities. This should necessitate the inclusion of rural physicians and community members to help shape the admissions policy and process.
- Include rural physicians and rural community members as interviewers
Rationale: There is an increasing trend toward including interviewers who reflect community diversity on admissions committees. This should be extended to include a fair number of rural physicians and rural community members on admissions committees. This may require some compensation for travel and accommodation costs.
- Ensure that students of rural origin are not disadvantaged by the admissions process
Rationale: All admission committees should apply a “rural lens” to the admissions process. This should include examining what is looked for at every stage: screening, scoring, essay questions and interviews to ensure there are no unintentional barriers to rural origin students. In fact, “rural” could be regarded as one of the positive or desirable candidate attributes to be considered in the selection process.
- Apply a rural adjustment factor to grade point averages and MCAT scores
Rationale: A rural bonus or adjustment factor should be used to offset rural student education and other disadvantages and help correct the underrepresentation of students of rural origin in Canadian medical schools. Medical schools that use grade point averages and MCAT cut-offs to narrow the applicant pool may need to apply a rural bonus or adjustment factor to grade point averages and MCAT scores. This could help to ensure that a fair and equitable number of rural candidates are included in the groups that go on to further assessment steps, including the interview phase. Grade point and MCAT adjustments and other bonuses are already used successfully by a number of Canadian medical schools for special groups of applicants. One province (Quebec) has instituted a rural bonus based on location of high school attended; in one medical school, 7 additional rural students were offered a position in September 2003 because of the rural bonus, and 4 of them chose that school. Similar policies could be implemented by medical schools or provinces across Canada. It may be best to focus on where the candidate lived during their adolescent or high school years, as these are the most important formative years. Bonuses or adjustments should be temporary measures while inequities are being addressed.
- Set targets for rural enrolment
Rationale: The regional, provincial and national rural population and the need for rural physicians presents a compelling national and provincial interest for setting fair and equitable targets for the admission of students of rural origin to Canadian medical schools. In other countries, increased funding and increased medical school class size have been tied by governments to rural student support and admissions. In Canada, the social values of fairness and equity combined with the need for more rural doctors should lead to the implementation of strategies to increase the admission of rural students to medical school. Broader educational initiatives at the high school and university level as well as government and foundation funding for rural scholarships and bursaries will also be needed to reach the target of a fair and equitable number of medical students who come from rural backgrounds.