## Chapter 1.2.4

# RECRUITING STUDENTS TO RURAL MEDICAL CAREERS

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## Introduction

In 2004 just under a quarter (21,1%) of the Canadian population resided in rural areas, while 9,4% of physicians practiced in rural communities (1). This disparity underlines the necessity of having strategies to recruit students to rural medical careers.

## Rural-origin students

While family medicine graduates with a rural background are 2,5 times more likely to be in rural practice than those from larger towns and cities (2), students with rural backgrounds are under-represented in medical schools in Canada (3), despite their applications being competitive (3,4,5). As social accountability requires that medical schools take appropriate measures to increase the number of rural-origin students, pipeline strategies to increase the number of applicants from rural areas have been recommended. These include outreach programmes to rural schools and opportunities for rural students to attend science and health-related programmes (6).

Admissions and selection processes have been identified as an important aspect of recruiting students to rural medical careers. Strategies include an 'adjustment factor' or advantage for students of rural origin – which entails setting targets for rural enrolment and the inclusion of rural members as interviewers or admissions committee members (6, 7, 8, 9, 10, 11).

## Attracting urban students

Positive rural-based learning experiences during undergraduate and postgraduate training can make a valuable contribution to attracting doctors to rural areas (12, 13, 14, 15) as these can increase the interest in rural practice among students from urban backgrounds (16).

Financial incentives and return-of-services (ROS) commitments are additional ways of recruiting urban students to rural or underserviced areas. While incentives may be successful in initial recruitment, however, these doctors may be less likely to be retained than those who voluntarily chose a rural area (17). Other factors that may influence a choice of rural practice include a partner's predisposition to rural life and their career potential in a rural setting (6).

#### The Northern Ontario School of Medicine

The Northern Ontario School of Medicine (NOSM) is Canada's newest medical school. It is located in Northern Ontario with two main campuses in Sudbury and Thunder Bay, approximately a thousand kilometres apart.

The NOSM was incorporated in 2002 with a social accountability mandate – realised through, among others, its admissions process and the curriculum which has a rural focus on underserviced populations. This includes all students undertaking three integrated Community Experiences (ICE) in their first two years. At the end of the first year there is a four-week ICE placement in an Aboriginal community followed in the second year by two four-week ICE placements in rural and remote communities.

A Comprehensive Community Clerkship<sup>1</sup> (CCC) comprises the third year of the NOSM curriculum. This is a longitudinal integrated clerkship during which each student lives and learns in one of the large rural or small urban communities outside of the two main campuses in Sudbury and Thunder Bay (18).

To date three classes have graduated from NOSM. The Canadian Resident Matching Service (CARMS) results indicate that 65% of all NOSM graduates have been matched to residencies in family medicine. Many of these have been matched to the NOSM rural-focussed family medicine residencies as well as family medicine programmes elsewhere in Canada with a rural focus. As the first NOSM graduates who subsequently entered family medicine residencies are about to graduate, there is no data yet on the long-term practice location.

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A clerkship – or rotation or block – is a structured clinical learning opportunity which forms part of academic requirements that have to be met.

# Rural family medicine residency programmes

Prior to the establishment of NOSM, two family medicine residency programmes were established in Northern Ontario in the 1990s. In Northwestern Ontario this was through the Northwestern Ontario Medical Programmes (NOMP) under the auspices of McMaster University – and in Northeastern Ontario through the Northeastern Ontario Medical Association Corporation (NOMEC) in association with this University of Ottawa (18). A study of the graduates of these two family residency programmes found that 67,5% of all person years of medical practice were in Northern Ontario or rural areas outside of Northern Ontario (19).

# Specialty training

Prior to the establishment of NOSM specialty training took place in Northeastern Ontario under the Northeastern Ontario Postgraduate Specialty (NOPS) Programmes. A study of NOPS participants (from 2000-2006) found that they were more likely to practice in Northeastern Ontario than matched non-participants.

A strong association was found between the length of training in Northeastern Ontario and practice in Northeastern Ontario and avoidance of practice in metropolitan areas (20).

### **Practice pearls**

#### What to do

- Undertake pipeline initiatives to increase the number of applicants with rural background to medical schools.
- Incorporate rural experiences into undergraduate medical school.
- Incorporate rural experiences into postgraduate training.

### What not to do

• Don't rely on only one approach or initiative to increasing recruitment to rural medical practice.

#### Conclusion

Student recruitment to rural medical careers includes pipeline initiatives, increased enrolment of students of rural origin through admissions policies and procedures, and positive rural learning experiences throughout undergraduate and postgraduate education. These strategies are necessary to ensure the appropriate supply of doctors in rural practice.

While this chapter has focused on student recruitment to rural medical careers, the principles discussed may be relevant to other health related disciplines.

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