Thinking of med school?

Where do you live?

Call it the luck of the Canadian geographical draw. The odds against becoming a physician, and the cost of doing so, are significantly higher in some parts of Canada than others, according to Association of Faculties of Medicine of Canada's (AFMC) annual medical school enrolment statistics.

That will likely continue for the foreseeable future, as there's little evidence that any provinces are intending to follow the lead of Ontario by making their medical schools geographically blind when it comes to admissions.

If there is anything like a push to alter current medical school demographics, it's an attempt to attract more students from First Nations or from rural and remote settings, says AFMC President Dr. Nick Busing. "We need more rural students to enter medicine because the likelihood that they would return to their town, or small community of origin, is higher. Obviously, we [also] have a complete mismatch, or a significant mismatch, between the number of Aboriginal physicians, and the Aboriginal populations."

Broadly speaking, though, the statistics indicate that provincial policy continues to be the greatest determining factor in overall medical school demographics.

It was ever thus and will only continue, if not accelerate, in the future, says Dr. Mamoru Watanabe, emeritus professor of medicine and former dean of medicine at the University of Calgary. "As the world gets a bit more difficult with respect to the shortage of physicians and as provinces begin to worry about the number of doctors they're producing, I suspect there may be more pressure to take people from your province" on the assumption that they're more likely to practise in familiar surroundings. "Even though it may not be [official policy], it may be unstated."

Canapress

Ontario medical students protested against tuition hikes to no avail. University of Toronto students now pay \$16 531 a year — the highest tuition fees in Canada.

The statistics indicate that Quebec continues to be the largest producer of physicians. Its 4 medical schools have a combined quota of 835 entry positions in the current academic year. Ontario's 6 schools have a combined quota of 800. All told, there are now 2419 entry positions available in Canada, as well as 28 contract spots funded by foreign nations.

Given provincial quotas, and the restricted number of spots that are available to out-of-province students within all medical schools except those in Ontario, it creates a situation in which an applicant's chances of getting into medical school differs substantially according to province of birth.

Students in Quebec (1.45), New Brunswick (1.44), Newfoundland and Labrador (1.25), Manitoba (1.16) and Nova Scotia (1.12) have a higher than average national chance of getting into medical school than do those from Saskatchewan (0.89), Alberta (0.88), Ontario (0.81), PEI (0.79), BC (0.79) and the Yukon/NWT/Nunavut (0.23).

In Ontario, of the 800 positions now

available at Ottawa, Queen's, Toronto, McMaster, Western Ontario and the Northern Ontario School of Medicine (NOSM), only 27 are theoretically designated for out-of-province residents. Only 10 of Manitoba's 100 spots are available for out-of-province residents, as are 6 of 60 in Saskatchewan, 38 of 250 in Alberta, 29 of 150 in the Maritimes and 60 of 835 in Quebec.

Canadian Federation of Medical Students President Philip Brost says it probably comes as no surprise to most medical students across the country that provincial residency improves the odds of being accepted to a medical school. He says that for himself, it was helpful doing his undergraduate education at the University of Saskatchewan. "I was confident that the University of Saskatchewan would be my best opportunity, my best chance."

The statistics also confirm that there's widespread regional variation in tuition costs at medical schools, which means that newly-minted physicians are carrying more staggering debt loads in some parts of the country

than in others, while it's likely that, as many believe, the profession is increasingly the domain of students from wealthier families, particularly in Ontario.

Quebec, Manitoba and Newfoundland and Labrador students continue to pay significantly lower tuition fees than their counterparts in other provinces. Tuition fees for first-year students range from \$2759 to \$3565 in Quebec, while at Memorial, the fee is \$6250 and at Manitoba, \$7595. By contrast, Ontario tuition fees range from \$14 630 at the University of Ottawa to \$16 531 at the University of Toronto.

The AFMC stats also indicate that the so-called trend toward the "feminization" of the physician supply continues apace. Of the 8687 undergraduate students enrolled at the 17 medical schools in the past academic year, roughly 58.5% (5082) were female. Last year, 59% of MD degrees awarded were earned by women. Ten years ago,

it was exactly 50%. Two decades ago, in 1986, it was 41.6%, while in 1976, it was 24.7%.

First-year enrolments suggest that this trend will continue. Some 57.7% of first-year students in medical school in 2005–06 were female. Notably, there were also significant regional variations. In Quebec, some 64.9% of first-year spots were filled by women (ranging from 73.9% at Laval to 58.3% at Sherbrooke). In Ontario, the provincial average was 57.8% (ranging from 47.4% at Western to 67.9% at the new NOSM). Alberta had the lowest percentage of women in first-year spots, at 42.9%. Only 4 medical schools in Canada now have fewer than 50% of first-year spots filled by women, including Alberta (41.1%), Memorial (45%), Calgary (45.2%) and Western Ontario (47.4%). Success rates by applicants roughly parallel the same gender distribution. Some 57.4% of female applicants in 2005–06 were successful,

while 42.6% of male applicants were successful.

The annual stats also indicate the nation's medical schools raked in a combined and staggering \$2.37 billion for biomedical and health research in 2004–05, including roughly \$786 million from the federal government (some \$528 million of which came from the Canadian Institutes of Health Research), \$460 million from provincial governments, \$228 million from not-for-profit foundations, \$194 million from industry, \$114 million from internal university sources and \$208 million from foreign sources. The University of Toronto continued to be the largest beneficiary, as it has since 1978. McMaster continues to skyrocket up the charts, ranking second for the second consecutive year. McGill ranked third, followed by UBC, Montréal, Alberta and Western. — Wayne Kondro, *CMAJ*

DOI:10.1503/cmaj.061477