The changing dynamic of medical school admissions

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Old-school pedagogues must be cringing. The Medical College Admissions Test (MCAT) and panel interviews dispatched to the dustbins of medical school history? Spaces set aside for those trained in the humanities? Have the caretakers of all that is good and time-honoured in the hallowed halls of medical schools gone entirely mad?

There is little doubt that the medical school admissions landscape in Canada has changed in recent years, largely as a consequence of efforts to adopt a more evidence-based approach to selecting students and measures designed to diversify the composition of incoming classes.

The latter appears the primary rationale for the change, as many believe the profession was increasingly the purview of the privileged.

It only makes sense that most medical students come from such an environment, as individuals flourish when they come from a "stable environment with high expectations," says Joseph Finkler, dean of admissions for the University of British Columbia (UBC) Faculty of Medicine. Many applicants haven't had to worry about finances and have been able to focus on "diverse, exotic extracurricular activities and sports," in addition to their studies.

Yet there's been a move toward use of broader admissions criteria so as to achieve a more socio-economically diverse student population because of a belief that physicians "should, in some way, mirror the population they are treating in racial, ethnic, and socio-economic diversity," Finkler says.

The goal is to ensure a "more broadly representative profession," says Saleem Razack, assistant dean of admissions, equity and diversity at the McGill University School of Medicine in Montreal, Quebec. "We want a class where not everyone … [appears as if they came out of the same] cookie cutter."

The Medical College Admissions Test, or MCAT, has long been a staple of the admissions process for Canadian medical schools, but some universities have now dispatched it to the dustbin.

The push for diversity has prompted UBC to reach out to students from less affluent backgrounds, develop mentorship programs and help applicants from small or rural communities, who may be intimidated by the notion of taking classes at a large, urban university, prepare for medical school by first taking approved, prerequisite courses at smaller universities, essentially grooming them for the rigours of medical school.

But despite such moves, Finkler and other administrators stress, core capabilities are still essential.

Finkler says most medical schools look first for evidence of "academic stamina" to ensure that applicants won't "collapse under the volume of information they have to process and analyze." As well, he says schools seek applicants with qualities such as conscientiousness, leadership, and empathy. Razack adds communication skills to that list.

Traditionally, medical schools have sought such qualities through an application process in which selections were made on the basis of such criteria as grades, MCAT scores, extracurricular activities and work experience. Students were also required to complete a slew of prerequisite courses, submit letters of reference and an autobiographical essay laying out their background and motivation for pursuing a medical career, as well as attend a panel-style interview that many students believe was borrowed from the Inquisition.

No longer.

Even time-honoured elements of applications are being abandoned.

Several schools, including the University of Saskatchewan in Saskatoon and UBC, have already phased out autobiographical essays. At UBC, the change came after essays were found to have been edited by professionals. Instead, some applications leave a space for applicants to explain inconsistencies in their transcripts or lack of extracurricular activities.

Some institutions offer coaching to applicants while others, such as McMaster University in Hamilton, Ontario, have adopted variations on autobiographical essays. McMaster requires students to complete a computer-based test called CASPer, the Computer-based Assessment for Sampling Personal characteristics, which is designed to assess interpersonal skills and decision making.

Perhaps most surprising is the move by some schools to eliminate the need to write the MCAT. The Northern Ontario School of Medicine in Sudbury, Ontario, has never required applicants to write the test and this year, McGill announced that it was removing the requirement for Canadian applicants on the grounds that it was biased against French-speaking students.

Developed in 1928, the MCAT assesses scientific problem solving, verbal reasoning and writing ability. Karen Mitchell, head of MCAT Program for the Association of American Medical Colleges, defends it as a better indicator of ability than are university grades, which can be highly variable,

depending on pedagogical variations at different schools.

But Razack says McGill had little option but to abandon the MCAT as a French language version was not available and the medical school wanted "to make sure we are able to attract candidates from all segments of the population, including our very large francophone population."

Razack dismisses concerns that removing the MCAT will make McGill's admissions process less rigorous by noting that while MCAT performance predicts how well students will perform in basic science courses during their first two years of medical school, "in some ways what we really should be concerned with is how people are practicing as physicians."

Other medical schools have modified other aspects of the traditional admissions approach. Rather than doing away with the MCAT, for example, McMaster has no requirement for prerequisite courses and looks only at undergraduate marks and scores on the verbal reasoning component of the MCAT. Those applying to the University of Saskatchewan have the option of applying with their MCAT or prerequisite scores only, or with both sets of scores.

Perhaps the biggest casualty of traditional medical school admissions has been the panel-style interview, which is disappearing in favour of the Multiple Mini Interview (MMI). Many of the nation's 17 medical schools now use the MMI but among those who don't are three of the largest, the universities of Toronto, Western Ontario in London, and Queen's in Kingston, Ontario, which along with Memorial University in St. John's, Newfoundland and Labrador, and the University of Ottawa in Ontario, continue to use some manner of panel interview.

The MMI hinges on the notion that performance on a single interview question is generally not predictive of the next. The objective is to minimize the influence of chance in an applicant answering a single question successfully or poorly, and to determine — on average — a participant's ability to work through problems, says Kevin Eva, director of educational research and scholarship at UBC, who was involved in the MMI's development at McMaster.

The MMI moves candidates through interview "stations" where they are evaluated independently by up to 12 different faculty members, students, or representatives from the community. It aims to gauge applicants' ability to reason through ethical dilemmas and solve problems.

"The research was overwhelming that the panel of 'fireside chat' was not at all predictive of anything in medical school, and probably negatively correlated with any performance measure that you could name," Finkler says. Research by Eva and his colleagues shows that performance on the MMI correlates with success on the pre-clerkship objective structured clinical examination, a standard part of the curriculum (*Acad Med* 2004;79:S40-S42).

Beyond that lie direct measures to expand the pool, such as McGill's program to provide a "nontraditional" entry pathway to three students who may have spent a great deal of time in the work force before applying to medical school. It's not the first such program. For years, the Mount Sinai School of Medicine in New York has had a Humanities and Medicine Early Acceptance Program, which allows approximately 35 undergraduate students who study the humanities, rather than the sciences, an opportunity to pursue medical studies. Meanwhile, McMaster, since opening its doors in 1969, has accepted students with undergraduate courses in any discipline.

Will all these changes work, or have any impact whatsoever on the type or quality of clinician rolled out by medical school factories?

No one knows, Finkler says. "The science of linking admissions policies to qualities of the end product of undergraduate medical education is complicated" and very much in its infancy.

Joan Sargeant, director of the program in health and medical education research at Dalhousie University in Halifax, Nova Scotia, notes that emerging research shows that the practice of medicine — although it presents itself as a much-defined science — often involves navigating uncertainties. She believes many of the changes in recruiting strategy come down to identifying candidates who will be successful at negotiating grey areas.

"Certainly, measuring knowledge is easiest to do. I think that's why we've measured it traditionally," she says. But slowly, schools have been able to develop more sophisticated ways of measuring other capacities that might predict success.

Even for the MMI, she adds, "what we truly need are longitudinal studies … to help us be able to answer the question: Does it make a difference to how doctors practice?" — Goldis Chami, Vancouver, BC

Goldis Chami is a medical student at the University of British Columbia.

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