Nathan Chomilo, MD, remembers applying to medical school before a simple Internet search made it easy to find out what schools wanted in a candidate and how their admissions process worked. “Every school had different prerequisites, and not all of them had good websites,” he recalls. “A lot of information about the application process came from message boards where students talked about their interview experience.”

Chomilo, who entered the University of Minnesota Medical School in the fall of 2005, says his experience applying to and interviewing for medical school honed an interest in how he and his classmates were chosen. As a second-year student, he volunteered as an admissions ambassador, leading tours of the campus for prospects who came for interviews. In his fourth year, he was elected to the medical school’s admissions committee as a student representative.

Now practicing internal medicine/pediatrics with Park Nicollet Health Services, Chomilo has returned to that committee. He views serving on it as an opportunity to be part of something bigger: “We have the
opportunity to shape the next generation of our profession,” he says. “And that’s a unique responsibility.”

As admissions committees undertake the heavy lifting of building the physician corps of the future, what do they look for in candidates? And how do today’s applicants differ from those who came before them?

A big job
Understanding what goes into the selection process begins with understanding how medical school admissions works. The cycle begins in June, when prospective students begin submitting their applications through the American Medical College Application Service (AMCAS), which is operated by the Association of American Medical Colleges (AAMC). The AMCAS application is used by nearly all medical schools in the United States. Prospective students indicate on the form the schools in which they’re interested.

At Minnesota’s medical schools (the University of Minnesota Twin Cities and Duluth medical schools and Mayo Medical School), admissions staff take the first pass at applications to make sure prospective students meet the minimum requirements such as having taken the necessary prerequisite classes and achieved a certain MCAT score. At Mayo, members of the admissions committee (see “Admissions committees at a glance,”) then review the applications of those who pass the initial screening. Admissions officers from both University of Minnesota medical schools send selected students a supplemental questionnaire that asks about their reason for wanting to go into medicine, the extent to which they’ve explored the field, their commitment to improving the human condition and their dedication to life-long learning among other things. Committee members then review both the primary applications and supplementary questionnaires and select individuals to interview.

Applicants who are selected for an in-person interview meet with committee members, get a tour of campus and talk with current students. Those who pass muster with the full admissions committee receive an offer the following spring.

The entire process takes nearly a year and can involve multiple meetings and discussions on the part of committee members. “We want to make sure you can really say why someone should or should not be admitted,” says Julia Joseph-DiCaprio, MD, MPH, assistant chief of provider services and senior medical director of primary care at Hennepin County Medical Center, who has served on the University of Minnesota’s Twin Cities medical school committee since 2010.

Committee members interviewed for this article agree that the job of winnowing down the candidates has become more difficult as the number of applicants has increased in recent years. According to the AAMC, 52,550 individuals submitted applications through AMCAS in 2015, a 6.2 percent increase over the previous year. First-time applicants increased by 4.8 percent to 38,460. A total of 20,630 students enrolled in medical school last fall.

Minnesota’s medical schools have seen similar increases. “The number has gradu-
ally gone up,” says Dimple Patel, associate dean of admissions at the Twin Cities medical school. The Twin Cities school received 4,226 applications through AMCAS during the current cycle (the school received 4,118 in 2015). Of those, 2,694 completed supplementary applications and 651 were interviewed for 160 seats in the MD-only (as opposed to MD/PhD) class that will begin this fall. The Duluth medical school received 1,700 applications through AMCAS (up from 1,628 in 2015); 842 submitted supplementary applications and 180 were invited to interview for 60 seats. Mayo Medical School received 4,522 applications (up from 4,347 in 2015), screened 1,785 applicants and interviewed 249 for 46 positions in the MD-only class.

Chomilo says candidates’ GPA and MCAT scores have crept upward as well. “And they have very polished applications,” he says, acknowledging that a whole industry has been built around preparing students for medical, law and business school, upping the ante among those competing for a limited number of positions. “I joke and say I would never get into medical school these days,” Joseph-DiCaprio says. “These applicants are so much more qualified. They’re dedicated and hard-working and all are really committed to the advancement of others.”

Looking for more than academics
Although having a solid grounding in science is important (and must be demonstrated through MCAT scores), the journey to medical school at the University of Minnesota has changed in the last 10 years. No longer must students follow a narrow path as undergraduates. Chomilo, who recalls having to take calculus as a college senior in order to meet a requirement, served as a student member of then Dean Deborah Powell’s Task Force on Qualifications for Admissions in 2007, which took a hard look at the prerequisites for medical school. At the time, prospective students had to complete 15 courses—the equivalent of about two years of college. “Dean Powell was interested in a more holistic admissions process,” Chomilo recalls. “She recognized that if you’re required to take courses just to get into medical school, it doesn’t allow you to develop other interests.”

The task force recommended changing the requirements from nine semesters of science to six (one of biology with a lab, one of chemistry with a lab and four additional semesters of science), dropping the calculus requirement and condensing the humanities requirement from two semesters of English and three of humanities to one humanities or social science course.
“The idea was to develop more well-rounded students who are more attuned to what they hope to accomplish in their career personally and professionally,” Chomilo says. “They also have a chance to see if medicine is the best thing for them or if, along the way, something else is more their calling.” Mayo requires two semesters of biology with a lab, two of inorganic chemistry with a lab, two of organic chemistry with a lab, two of physics with a lab and one of biochemistry.

But it’s an applicant’s outside activities, experience and personal story that sets them apart in the eyes of admissions committee members. “The student needs to take the opportunity in their application and in their interview to make a good accounting of themselves, to explain how all the things they’ve done make them into the kind of person they are or they’re becoming,” says J. Michael Bostwick, MD, senior associate dean of admissions for Mayo Medical School.

“Metrics are nice—MCAT scores, GPA—but that doesn’t make the story for us. We want a student who has social responsibility, who has shown altruism and who’s given back intensively,” says Ray Christensen, MD, a family physician and University of Minnesota Medical School, Duluth faculty member who has served on their admissions committee since 2004. He says many who apply to the Duluth program, whose mission is to train primary care physicians for rural Minnesota, have volunteered or served with organizations such as the Peace Corps or AmeriCorps.
In addition, many have had exposure to health care. Some have worked as personal care attendants or CNAs in nursing homes during their undergraduate years. Others worked on research teams or served as medical scribes before applying to medical school. "Being a scribe gives you a very good idea of what the day-to-day routine of a physician is like," Chomilo says.

Bostwick says that while having exposure to patients and medicine is important, showing leadership and initiative are the true game changers. "Did the student make the most of the opportunities he or she had? Not every student has the opportunity to do basic science or medical research. It’s not going to exist on every undergraduate campus. But did they explore what they could? Do they have the work ethic? The organizational skills?" he says.

Bostwick recalls one student who came from a school that was strong in agriculture but not medicine. "She took every possible opportunity to get exposure to medicine, and she did well on her MCAT," he says. Another spent a year in college being treated for cancer and wrote a book about her experience. "She’s deeply committed to helping children with serious illnesses. And she comes with a very compelling story that she’s using to inform her plans," he says.

In addition, applicants are a bit older than they used to be. According to Patel, only 25 to 30 percent of those admitted to the Twin Cities medical school come straight out of undergraduate school. "The rest take time to do other things—maybe improve their academic profile, or gain experience and knowledge of the profession," she says. Bostwick says at least half of Mayo’s class of 2019 spent at least two years doing other things before applying. "No longer is it the four years of undergraduate work and a little shadowing with the local physician like it was back in my day," he says.

In many cases, applicants already have one career under their belt. All three Minnesota medical schools have students who’ve spent time in the military. The current first-year class at Mayo has two West Point graduates, and the second-year class has a student who attained the rank of colonel before coming to medical school.

Students at the Twin Cities medical school have worked in the culinary arts, theater, engineering, social sciences and other health professions. One Mayo student worked as an architect for 10 years; another was an opera singer in New York; yet another worked as a clothing designer before pursuing medicine.

Christensen says such nontraditional students bring a maturity that’s important. “They’ve learned how to deal with life and people,” he says.

Choosing a class … building a profession

Bostwick admits there’s an art to building a medical school class. “We start thinking very early on about how we can come up with a class that represents the breadth and depth of our country, if not the world,” he says, adding that there’s no formula. “We try to get a class that has all kinds of passionate people.”

Bostwick says they look closely at applicants who are first-generation Americans or who’ve had a difficult start and managed to change the course of their life. “We do require they demonstrate their academic prowess through the MCAT, but we may forgive a low GPA early on if they’ve gone on and made something of themselves.” He describes one student who came to the United States from the former Soviet Union at age 10 knowing little English. “He blazed an amazing academic path and is now in medical school,” Bostwick says.

Admissions committees are also looking for those who are representative of the population they will serve—and perhaps are more willing to work in communities where physicians are most needed. “If you look across the state, we’re becoming much more diverse,” Chomilo says. “The University of Minnesota trains the vast majority of physicians in Minnesota, and we’re behind in having physicians who look like the communities they’re serving.” That’s changing. Nearly 20 percent of the 2019 class at the Twin Cities medical school come from underrepresented populations (see “Increasing diversity,” p. 14).

At the Duluth medical school, 11 members of the class of 2019 are from minority groups including seven Native Americans. In addition, more than 90 percent of the class come from communities within Minnesota, and 80 percent hail from towns with populations under 20,000. "If you’re going to train someone to practice rural medicine [where there’s currently a shortage of physicians], they ought to come from rural areas," Christensen says. "People like to go back to where they grew up."

Bostwick believes having more students with diverse and unusual backgrounds will make medicine a richer, more diverse and more interesting profession. “Those students will come out confident in their medical skills and bring what’s special and unique about them to the medical field,” he says. “And that’s good for patients.” MM

Kim Kiser is editor of Minnesota Medicine.