

The 15 skills medical schools expect from students on day one

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Medical school aims to take bright students and transform them into physicians prepared for the transition to residency training. Still, that requires a certain skill set from first-year medical students.

Medicine can be a career that is both challenging and highly rewarding but figuring out a medical school's prerequisites and navigating the application process can be a challenge into itself. The AMA premed glossary guide has the answers to frequently asked questions about medical school, the application process, the MCAT and more.

Laid out by the Association of American Medical Colleges (AAMC), the core competencies for entering medical school consist of a list of 15 traits the ideal medical student should possess.

Intrapersonal and interpersonal competencies

These two groups within preprofessional competencies can be broadly interpreted. The nine competencies in these two groups are:

- Service orientation.
- Social skills.
- Cultural competence.
- Teamwork.
- Oral communication.
- Ethical responsibility to self and others.
- Reliability and dependability.
- Resilience and adaptability.
- Capacity for improvement.

How one goes about gaining these core competencies can vary, but a number of them can be gained through volunteer work.

AMA member Avani Patel, MD, MHA, a psychiatry resident at the University of Mississippi Medical Center, volunteered with Habitat for Humanity before entering medical school.

“One of the ways you can build teamwork skills and social skills is through community service,” she said. “If that’s something you feel you need to do better with, whether it’s that sense of control or sense of needing to lead all the time, community service can really help you improve those skills and your patience with others.”

Science competencies

Just two of the 15 core competencies fall in this category, described below.

Living systems: The AAMC says the incoming medical student should be one who “applies knowledge and skill in the natural sciences to solve problems related to molecular and macro systems, including biomolecules, molecules, cells and organs.”

Human behavior: The ideal incoming student “applies knowledge of the self, others, and social systems to solve problems related to the psychological, sociocultural, and biological factors that influence health and well-being.”

While all the competencies are rooted in a student’s scholastic experience, these two are the most rooted in a prospective medical student’s formal education. Portions of human behavior may be influenced by structural drivers of social determinants of health, which is possible to explore through your own volunteer work or lived experiences.

AMA member Subha Hanif, MD, now a resident physician at Wayne State University School of Medicine, was able to gain information into factors that influence health and well-being during her undergraduate work running lectures on women’s health in Southeast Detroit.

“At a young age, I learned about disparities in care and became interested in how medicine plays a role in that,” she said.

Thinking and reasoning competencies

The thinking and reasoning competencies are largely skills that students will acquire through scholastic endeavors.

The four competencies that fall in this category are:

- Critical thinking.
- Quantitative reasoning.
- Scientific inquiry.
- Written communication.

Hanif found she was able to gain some of those skills by volunteering to help with research during her college years. Working with a physician in a local emergency department, she researched the prevalence of angioedema in patients, eventually publishing a paper on the topic.

“I went through the whole process of critically examining a question, learning how to analyze it, learning how to go through the IRB [institutional review board], then also formulating a hypothesis and doing data collecting through the EMR,” she said.

“More med schools want students to be involved in some type of research project, and it may have given me a leg up on my peers,” she said. “I came in with a background in data analysis, and that matters when an attending asks you to read up on a topic in *JAMA*.”

Have peace of mind and get everything you need to start med school off strong with the AMA.