

Refreshing the Premed Competencies: The Process Used to Update the Core Competencies for Entering Medical Students

The updated premed competencies come from a joint effort between the AAMC (Association of American Medical Colleges) and others in the medical education community. Medical school faculty, students, prehealth advisors, and competency experts contributed throughout the process. Our goals were to make sure the updated competencies reflect the changing needs of medical schools and society to help prepare prehealth students and to support medical schools conducting a holistic review of applicants.

Introduction

Medical students must possess a broad range of competencies to navigate medical school and become physicians who can provide quality health care for a diverse patient population.^a More than 10 years ago, we identified the core competencies students needed for entering and succeeding in medical school. The competency model included professional, thinking and reasoning, and science competencies. The model indicated important areas for student preparation, guided student development for medical school, and supported medical school admissions evaluation of applicant readiness for medical school as part of holistic review.

During the past decade, medical education has changed to better support student learning and meet society's health care needs, requiring a review and update of the core competencies. From August 2022 to May 2023, the AAMC collaborated with medical school faculty, staff, students, and prehealth advisors to review these core competencies. Together, they explored recent changes to undergraduate medical education and what should be updated to reflect current and future expectations for new medical students. As a result of this work, we updated the professional competencies to reflect those expectations.

This document describes the new premed competencies and how they were revised.

The Process Used to Update the Premed Competencies

We used a rigorous process, including literature reviews and data collection from multiple sources, to evaluate the premed competencies and propose updates. This process relied heavily on representatives from admissions, academic affairs, student affairs, and diversity affairs across MD- and DO-granting schools, medical students, and prehealth advisors. For 10 months, we gathered feedback from constituents representing more than 100 medical schools. A small group of constituents, called the Premed Competencies Working Group, met regularly to review the findings and help refine updates to the competencies. (See **Appendix** for a complete list of working group members and AAMC staff who worked together to update the competencies.)

^a Koenig TW, Parrish SK, Terregino CA, Williams JP, Dunleavy DM, Volsch JM. Core personal competencies important to entering students' success in medical school: What are they and how could they be assessed early in the admission process? *Acad Med*. 2013;88(5):603-613.



Figure 1 summarizes the process used for the updates. This process included several cycles of focus groups and revisions, which included constituent input at key milestones.

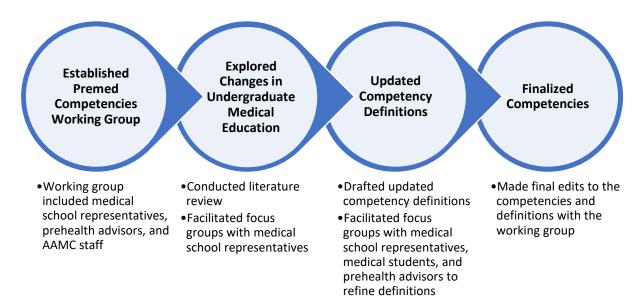


Figure 1. Process used to update the premed competencies.

Changing Expectations for Medical Students

Medical school representatives shared that many aspects of medical education have remained the same. However, the curriculum and environment have evolved in significant and specific ways that emphasize certain aspects of the professional competencies. For example:

- Students learn in both in-person and virtual settings, in large and small groups, and alongside other health care professionals.
- Clinical experiences are introduced earlier and appear throughout the curriculum.
- Medical school curriculum has added diversity, equity, and inclusion content to help students develop a deeper understanding.
- Medical schools are providing additional services to support student well-being.

Accordingly, expectations for medical students have also evolved. Medical school representatives emphasized particular characteristics within the current professional competencies that distinguish those who are better prepared to learn in medical school. These characteristics include:

- Commitment to something bigger than oneself.
- Perspective taking.
- Emotional intelligence.
- Active listening.
- Conflict management.
- Humility.
- Vulnerability.
- Growth mindset.
- Accountability.

- Professional identity.
- Self-efficacy.
- Leadership and followership.
- Cultural humility.
- Patient advocacy.
- Understanding social determinants of health.
- Managing stress and anxiety.
- Tolerance for ambiguity.



All these qualities and characteristics are related to the professional competencies rather than the science or thinking and reasoning competencies. Therefore, updates were made only to the professional competencies.

Updates to Professional Competencies

Although students still need an understanding of professional competencies, certain aspects of the professional competencies have become more important for new students to learn and grow in medical school to become effective, successful physicians. Experts in developing competencies drafted updates to the definitions with input from AAMC staff. Medical school representatives, medical students, and prehealth advisors then reviewed and refined the competencies so that the definitions were accurate and appropriate for students entering medical school and the competencies would be easy to use in prehealth student development and medical school admissions. Through this process, some competencies changed more than others to emphasize or elaborate upon certain aspects of each competency that are more important to current and future medical students. However, all professional competencies continued to be important. The professional competencies continue to include:

- Cultural Awareness (formerly part of Cultural Competence).
- Cultural Humility (formerly part of Cultural Competence).
- Empathy and Compassion (formerly part of Service Orientation).
- Interpersonal Skills (formerly Social Skills).
- Oral Communication.
- Service Orientation.
- Teamwork and Collaboration (formerly Teamwork).
- Commitment to Learning and Growth (formerly Capacity for Improvement).
- Ethical Responsibility to Self and Others.
- Reliability and Dependability.
- Resilience and Adaptability.

 Table 1 displays the updated competencies and key changes in their definitions.

Competency	Key Shift in Focus	Definition
Cultural Awareness ¹	Focuses on the attitude and value one has toward different people, cultures, and backgrounds.	Appreciates how historical, sociocultural, political, and economic factors affect others' interactions, behaviors, and well-being; values diversity; and demonstrates a desire to learn about different cultures, beliefs, and values.
Cultural Humility ¹	Focuses on perspective- taking, openness to differences, and self- reflection.	Seeks out and engages diverse and divergent perspectives with a desire to understand and willingness to adjust one's mindset; understands a situation or idea from alternative viewpoints; reflects on one's values, beliefs, and identities and how they may affect others; reflects on and addresses bias in oneself and others; and fosters a supportive environment that values inclusivity.

Table 1. Updated Professional Competencies with Key Changes



Empathy and	Focuses on emotional	Recognizes, understands, and acknowledges
Compassion ²	connection and desire to help others.	others' experiences, feelings, perspectives, and reactions to situations; is sensitive to others' needs and feelings; and demonstrates a desire to help others and alleviate others' distress.
Interpersonal Skills	Focuses on understanding how to interact with others and self-regulating behaviors.	Demonstrates an awareness of how social and behavioral cues affect people's interactions and behaviors; adjusts behaviors appropriately in response to these cues; recognizes and manages one's emotions and understands how emotions impact others or a situation; and treats others with dignity, courtesy, and respect.
Oral Communication	Elaborates on the importance of active listening.	Effectively conveys information to others using spoken words and sentences; actively listens to understand the meaning and intent behind what others say; and recognizes potential communication barriers and adjusts approach or clarifies information as needed.
Service Orientation ²	Focuses on a commitment to helping others.	Shows a commitment to something larger than oneself; demonstrates dedication to service and a commitment to making meaningful contributions that meet the needs of communities.
Teamwork and Collaboration	Emphasizes supporting the team as a leader or team member based on one's own and others' expertise.	Collaborates with others to achieve shared goals and prioritizes shared goals; adjusts role between team member and leader based on one's own and others' expertise and experience; shares information with team members and encourages this behavior in others; and gives and accepts feedback to improve team performance.
Commitment to Learning and Growth	Emphasizes a growth mindset in development.	Practices continuous personal and professional growth for improvement, including setting and communicating goals for learning and development; reflects on successes, challenges, and mistakes; pursues opportunities to improve knowledge and understanding; and asks for and incorporates feedback to learn and grow.
Ethical Responsibility to Self and Others	Focuses on ethical reasoning and understanding ethical principles to guide behavior.	Behaves with honesty and integrity; considers multiple and/or conflicting principles and values to inform decisions; adheres to ethical principles when carrying out professional obligations; resists pressure to engage in unethical



		behavior; and encourages others to behave honestly and ethically.
Reliability and Dependability	Emphasizes being accountable to both self and others, as well as understanding the consequences of not fulfilling responsibilities.	Demonstrates accountability for performance and responsibilities to self and others; prioritizes and fulfills obligations in a timely and satisfactory manner; and understands consequences of not fulfilling one's responsibilities to self and others.
Resilience and Adaptability	Articulates the balance among persevering in challenging situations, adjusting one's approach, and knowing when to seek help, along with the importance of personal well- being.	Perseveres in challenging, stressful, or ambiguous environments or situations by adjusting behavior or approach in response to new information, changing conditions, or unexpected obstacles, and recognizes and seeks help and support when needed; recovers from and reflects on setbacks; and balances personal well-being with responsibilities.

Note: This table includes only the professional competencies because they were the only competencies updated. The Science and Thinking and Reasoning competencies remain the same.

¹ Cultural Awareness and Cultural Humility were originally addressed under Culture Competence. Medical school representatives stressed the importance of these as standalone competencies to signal their importance and ensure they receive proper attention. ² Empathy and Compassion and Service Orientation were originally addressed under Service Orientation. Medical school representatives stressed these as standalone competencies to signal their importance and ensure they receive proper attention.

Conclusion

Changes in undergraduate medical education required updates to the professional competencies so that students enter medical school ready to learn. The premed competencies support prehealth students' development and guide medical school admissions' evaluation of applicants' readiness for medical school as part of holistic review. The competencies also alert medical schools to possible curriculum changes that may be needed to support the continued development of aspiring physicians. The premed competencies should be reviewed and updated more frequently to reflect major changes to medical education and ensure they comply with current and future expectations for incoming medical students.



Appendix. Committee Members and AAMC Staff Who Contributed to the Updated Core Competencies for Entering Medical Students

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