

# Using AAMC **PREview®** Data in 2024 Medical Student Selection

**OCTOBER 2023** 

Association of American Medical Colleges





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October 2023

The sample sizes and percentages in Table 4 have been updated to correct prior miscoding of acceptance data. The updated table presents the same pattern of acceptance rates as previously reported.





The AAMC (Association of American Medical Colleges) is a nonprofit association dedicated to improving the health of people everywhere through medical education, health care, medical research, and community collaborations. Its members are all 157 U.S. medical schools accredited by the <u>Liaison</u> <u>Committee on Medical Education</u>; 13 accredited Canadian medical schools; approximately 400 teaching hospitals and health systems, including Department of Veterans Affairs medical centers; and more than 70 academic societies. Through these institutions and organizations, the AAMC leads and serves America's medical schools and teaching hospitals and the millions of individuals across academic medicine, including more than 193,000 full-time faculty members, 96,000 medical students, 153,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences. Following a 2022 merger, the Alliance of Academic Health Centers and the Alliance of Academic Health Centers International broadened the AAMC's U.S. membership and expanded its reach to international academic health centers. Learn more at <u>aamc.org</u>.

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# Contents

Letter to admissions officers iv
Introduction1
What is the AAMC PREview® exam?1
Competencies1
Format2
How is the PREview exam scored?
Who has taken the PREview exam?4
How do examinees prepare for the PREview exam?8
How well do examinees score on the PREview exam?
How precise are examinees' PREview scores and how should they be interpreted?11
Confidence bands11
Percentile rank12
How should admissions officers use PREview scores for holistic admission?13
What is the relationship between PREview scores and other admission data?
How do PREview scores relate to MCAT total scores?16
How do PREview scores relate to interview and MMI ratings?17
How well do PREview scores predict students' performance in medical school?19
Conclusion and next steps
References
Appendix. Summary of AAMC PREview scores





### Letter to admissions officers

Practicing medicine in the 21st century requires a collaborative approach to meet the access, safety, and quality needs of all patients. Physicians need awareness and appreciation of the sociocultural issues that affect interactions with a more diverse set of colleagues, patients, and communities. Accordingly, medical students need to demonstrate both academic and pre-professional competencies to be successful in medical school, in residency training, and as physicians. In addition to selecting students who are academically prepared, we need to select those who have the strong professional and interpersonal competencies necessary to develop clinical skills and work effectively with colleagues.

The AAMC developed the AAMC PREview<sup>®</sup> professional readiness exam with medical schools to assess pre-professional competencies in a reliable, valid, and fair way and help them more easily identify the applicants who demonstrate core pre-professional competencies. After nearly a decade of research with many U.S. medical schools and three years of successful administrations, the AAMC is pleased to offer the PREview exam for the 2023-2024 admission cycle to all medical schools that use the American Medical College Application Service<sup>®</sup> (AMCAS<sup>®</sup>).

The PREview exam is designed to look beyond academic metrics to assess and evaluate preprofessional competencies such as resilience, service orientation, ethics, cultural competence, and teamwork. When combined with other elements of the admission process, the PREview exam provides a more complete picture of applicants and helps schools identify applicants who demonstrate these core competencies.

The AAMC will be available every step of the way to help schools incorporate PREview scores into the admission process. We continue to expand the suite of resources for admissions officers, which now include tips and best practices based on ongoing research and evaluation (including this guide), recorded training webinars, and individual training sessions with your admissions committees.

Please do not hesitate to reach out to the AAMC PREview team at preview@aamc.org if you have any questions.

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### Introduction

This guide provides admissions officers, medical school faculty members, and others who serve on admissions committees with information about the design, interpretation, and use of the AAMC PREview<sup>®</sup> exam. It describes the competencies assessed on the exam and the format of the exam. It also summarizes nearly a decade of research on the PREview exam, including a longitudinal study with eight medical schools, which shows the validity of the exam. It presents evaluation results from the 2020-2022 administrations, including how applicants who took the exam prepared for and performed on the exam, group differences, and correlations with other admission data.

Finally, this guide offers recommendations and best practices to support medical schools in incorporating PREview scores into holistic review. It highlights the value added by PREview scores when considered as part of application review, interview evaluation, and admission decisions.

## What is the AAMC PREview<sup>®</sup> exam?

The PREview exam was developed to measure applicants' knowledge of effective and ineffective behaviors related to core pre-professional competencies. This knowledge serves as a foundation for further learning and developing in these areas during medical school and is a necessary precursor to behaving effectively.

The AAMC collaborates with subject matter experts in the medical school community, including faculty, admissions officers, and student and diversity affairs officers, on an ongoing basis to develop the PREview exam for medical school admission. Engaging subject matter experts ensures the exam meaningfully and fairly measures pre-professional competencies and is scored to align with medical schools' current and future expectations and standards for entering medical school students.

#### Competencies

As shown in Figure 1, the AAMC PREview exam assesses examinees' understanding of effective preprofessional behaviors across eight core competencies for entering medical students. These competencies (defined in Table 1) were identified by medical educators as important for students to understand in order to be successful in medical school.



#### Figure 1. AAMC core competencies for entering medical students.





#### Table 1. Pre-professional Competencies Tested on the AAMC PREview Exam

Competency	Definition		
Service Orientation	Demonstrates a desire to help others and sensitivity to others' needs and feelings; demonstrates a desire to alleviate others' distress; recognizes and acts on one's responsibilities to society locally, nationally, and globally.		
Social Skills	Demonstrates an awareness of others' needs, goals, and feelings and the ways that social and behavioral cues affect peoples' interactions and behaviors; adjusts behaviors appropriately in response to these cues; treats others with respect.		
Cultural Competence	Demonstrates knowledge of sociocultural factors that affect interactions and behaviors; shows an appreciation and respect for multiple dimensions of diversity; recognizes and acts on the obligation to inform one's own judgment; engages diverse and competing perspectives as a resource for learning, citizenship, and work; recognizes and appropriately addresses bias in themselves and others; interacts effectively with people from diverse backgrounds.		
Teamwork	Works collaboratively with others to achieve shared goals; shares information and knowledge with others and provides feedback; puts team goals ahead of individual goals.		
Ethical Responsibility to Self and Others	Behaves in an honest and ethical manner; cultivates personal and academic integrity; adheres to ethical principles and follows rules and procedures; resists peer pressure to engage in unethical behavior and encourages others to behave in honest and ethical ways; develops and demonstrates ethical and moral reasoning.		
Resilience and Adaptability	Demonstrates tolerance of stressful or changing environments or situations and adapts effectively to them; is persistent, even in difficult situations; recovers from setbacks.		
Reliability and Dependability	Consistently fulfills obligations in a timely and satisfactory manner; takes responsibility for personal actions and performance.		
Capacity for Improvement	Sets goals for continuous improvement and for learning new concepts and skills; engages in reflective practice for improvement; solicits and responds appropriately to feedback.		

#### Format

The PREview exam presents examinees with a series of scenario sets, each of which include a hypothetical dilemma based on real-world situations students may experience in medical school. Each scenario calls upon examinees' knowledge or understanding of one or more pre-professional competencies. Scenarios are set in educational, health care, or other real-life settings but do not require knowledge of medical school or health care.

Following each scenario are items (also referred to as "responses") that reflect a range of possible actions someone might take in response to the scenario. Examinees are instructed to read each scenario





and response and then rate the effectiveness of each response using a four-point scale. The PREview exam includes 30 scenarios and 186 items on the test. Examinees have 75 minutes to complete the test.

A sample scenario set is presented in Figure 2.

#### Figure 2. Sample scenario set from the AAMC PREview exam.

You are pursuing a two-week volunteer opportunity at a well-regarded local clinic. When you receive your course schedule, you realize the volunteer opportunity would conflict with your weekly required lab. This is the only time the lab is offered this semester, so you are not able to make up the lab. Participation in the lab will count toward your grade.

Please rate the effectiveness of each response to the situation.

Very Ineffective	Ineffective	Effective	Very Effective
(1)	(2)	(3)	(4)
The response will cause additional problems or make the situation worse.	The response will not improve the situation or may cause a problem.	The response could help but will not significantly improve the situation.	The response will significantly improve the situation.

- 1. Skip your lab for two weeks to attend the volunteer opportunity.
- 2. Ask your lab instructor to identify a solution that will allow you to attend both.
- 3. Stop pursuing the volunteer opportunity so that you can attend the required lab.
- 4. Tell your lab instructor in advance that you will miss two of your scheduled lab sessions.
- 5. Attend the lab and investigate if similar volunteer opportunities are available at another time.

### How is the PREview exam scored?

The AAMC collaborates with subject matter experts to develop the scoring key. Subject matter experts include a diverse group of admissions officers, faculty, student affairs representatives, and others who work closely with medical students and understand the expectations and responsibilities of medical students.

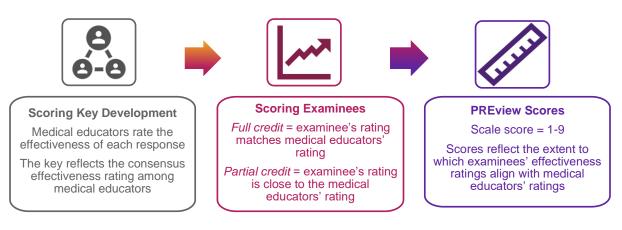
During scoring key development, subject matter experts are trained to ensure they rate the responses with a focus on the competencies and that knowledge of medical school or health care is not required. Then subject matter experts review scenarios and rate responses in the same way examinees do, and their ratings establish the scoring key. During scoring, examinees' ratings are compared with subject matter expert ratings (i.e., the scoring key).

Examinees with higher PREview scores have a stronger understanding of effective and ineffective preprofessional behavior. Figure 3 displays the scoring key development and scoring process.





Figure 3. AAMC PREview scoring key development and scoring process.



### Who has taken the PREview exam?

In 2020, the AAMC launched a pilot administration of the PREview exam with two medical schools. Since then, participation in the PREview program has grown to 18 medical schools across the United States, 14 of which considered PREview scores in their admission process. Participating medical schools reflect a variety of institutional characteristics related to mission, curriculum, matriculant class, region, public or private status, and applicant pool.

Table 2 displays the 14 medical schools for which PREview scores were required, were recommended, or satisfied a situational judgment test (SJT) requirement in the 2022 PREview administration (2022-2023 admission cycle). The percentage of applicants who reported PREview scores varied based on whether a school required or recommended PREview scores. A higher percentage of applicants took the PREview exam when schools required PREview scores (median = 74%) than when schools recommended PREview scores (median = 50%).

PREview-Score Use	Medical Schools
Required	<ul> <li>Saint Louis University School of Medicine</li> <li>University of California, Davis, School of Medicine</li> <li>University of California, Los Angeles, David Geffen School of Medicine</li> <li>Universidad Central del Caribe School of Medicine</li> <li>University of Hawaii at Manoa John A. Burns School of Medicine</li> </ul>
Recommended	<ul> <li>Cooper Medical School of Rowan University</li> <li>Des Moines University Medicine and Health Sciences*</li> <li>Geisinger Commonwealth School of Medicine</li> <li>George Washington University School of Medicine and Health Sciences</li> <li>Morehouse School of Medicine</li> <li>Oakland University William Beaumont School of Medicine</li> <li>Southern Illinois University School of Medicine</li> <li>University of Alabama at Birmingham Marnix E. Heersink School of Medicine</li> </ul>
Satisfies an SJT Score Requirement	Michigan State University College of Human Medicine

# Table 2. Medical Schools That Required or Recommended PREview Scores In the 2022 Administration

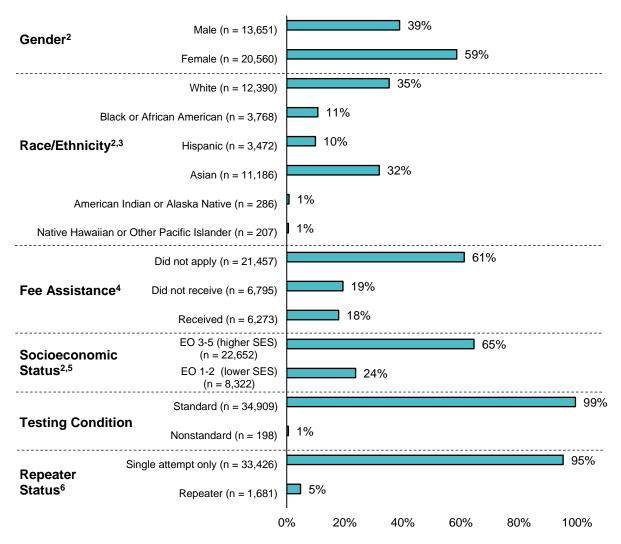
\* DO-granting school.





During the 2020-2022 administrations, 35,107 examinees took the PREview exam. Registration was limited to examinees who intended to apply to a medical school that used the PREview exam. Figure 4 shows the percentages of the examinees by gender, race/ethnicity, fee assistance status, socioeconomic status, testing condition, and repeater status.

Figure 4. Percentages of AAMC PREview examinees from 2020 to 2022, by gender, race/ethnicity, fee assistance status, socioeconomic status, testing condition, and repeater status.<sup>1</sup>



#### Notes

 The total number of examinees who took the PREview exam from 2020 to 2022 is 35,107. The total number of PREview exams administered from 2020 to 2022 is 36,843. For the 1,681 examinees who tested more than once (i.e., repeaters), information from their most recent administration was included. Percentages reflect data from examinees who applied to at least one MD-granting school and reported information in their AMCAS<sup>®</sup> application as of Dec. 15, 2022. Data are unavailable for examinees who applied to a DO-granting school only.

(Figure 4 notes continued on next page.)





- 2. Percentages describe examinees who provided information about their gender, race/ethnicity, and socioeconomic status on their medical school application. A total of 147 examinees did not identify their gender.
- 3. Race/ethnicity is unknown for 743 examinees.
- 4. The PREview exam was free for all examinees in 2020 and 2021. In 2022, there was a flat fee of \$100 for PREview exam registration; this fee was waived for examinees who qualified for the AAMC Fee Assistance Program. Data include examinees who participated in the AAMC Fee Assistance Program. Fee assistance status is unknown for 582 examinees. The AAMC Fee Assistance Program was available to examinees who are U.S. citizens, U.S. permanent residents, or students with Deferred Action for Childhood Arrivals (DACA) status whose reported total family income was 400% or less (previously, it was 300% or less) of the national poverty level for the examinee's family size. More information about the AAMC Fee Assistance Program can be found here: students-residents.aamc.org/fee-assistance-program/who-eligible-participate-fee-assistance-program.
- 5. The AAMC Socioeconomic Status (SES) Education-Occupation (EO) Indicator is one tool that medical schools may use to identify applicants who come from socioeconomically disadvantaged backgrounds. It is derived from information provided by applicants about their parents' and guardians' occupation and education levels. EO1 = Less than a bachelor's degree, any occupation; EO2 = At least a bachelor's degree; service, clerical, skilled, and unskilled occupation; EO3 = Bachelor's degree; executive, professional, or managerial occupation; EO4 = Master's degree; executive, professional, or managerial occupation; EO5 = Doctoral degree; executive, professional, or managerial occupation. Socioeconomic status is unknown for 4,133 examinees.
- 6. For repeater status, "Single attempt only" includes the scores from the examinees who took the PREview exam for the first time in 2020, 2021, or 2022 and did not test again. "Repeater" data include scores from the examinees who took the PREview exam for the first time in 2020, 2021, or 2022 and then tested at least one more time during this window.





Table 3 shows the percentage of applicants with and without PREview scores by gender, race/ethnicity, fee assistance status, and socioeconomic status group. There were some small differences in application participation across groups.

Table 3. Percentage of Applicants to Participating Medical Schools Who Reported PREview Scores by Gender, Race/Ethnicity, Fee Assistance, and Socioeconomic Status<sup>1</sup>

	Total Applicants to Participating Schools	Applicants to Participating Schools Who Had PREview Scores <sup>2</sup>	Applicants to Participating Schools Who Did Not Have PREview Scores <sup>3</sup>	
Characteristic	N	Percentage of Row Total	Percentage of Row Total	
Total	37,250	48% (17,748)	52% (19,502)	
Gender				
Male	16,015	45% (7,324)	55% (8,781)	
Female	21,020	49% (10,391)	51% (10,629)	
Race/Ethnicity				
White	14,108	44% (6,175)	56% (7,933)	
Black or African American	3,953	43% (1,695)	57% (2,258)	
Hispanic, Latino, or of Spanish Origin	3,783	47% (1,777)	53% (2,006)	
Asian	10,511	55% (5,818)	45% (4,693)	
American Indian/Alaska Native	391	38% (150)	62% (24)	
Native Hawaiian/Other Pacific Islander	204	65% (133)	35% (71)	
Fee Assistance				
Did not apply	29,669	46% (13,698)	54% (15,971)	
Applied, did not receive	1,286	51% (659)	49% (627)	
Received	6,023	54% (3,247)	46% (2,776)	
Socioeconomic Status				
EO 3-5 (higher SES)	24,077	48% (11,654)	52% (12,423)	
EO 1-2 (lower SES)	9,012	46% (4,189)	54% (4,823)	

1. Data reflect applicants from the 2022-2023 admission cycle who applied to at least one MD-granting school that participated in the PREview program as of Dec. 15, 2022. Data are unavailable for applicants who applied to a DO-granting school only.

2. Data include applicants who had a PREview score from the 2020, 2021, or 2022 PREview administration.

3. Data include applicants who did not have a PREview score from the 2020, 2021, or 2022 PREview administration.





# How do examinees prepare for the PREview exam?

The AAMC is committed to providing free resources to support all examinees' preparation for the PREview exam. <u>AAMC PREview preparation materials</u> include an examinee preparation guide, a full-length practice exam, a tutorial for the online testing system, a test day experience video, and the *2023* <u>AAMC PREview® Essentials</u> testing year guide.

The <u>AAMC PREview® Exam Examinee Preparation Guide</u> offers advice and strategies to help applicants prepare for the PREview exam. The <u>AAMC PREview® Exam Practice Exam Booklet</u> includes an official, full-length practice exam, scoring key, and scoring key rationales to help examinees become familiar with the exam format, the types of scenarios and items they will see on the actual AAMC PREview exam, and the process for evaluating and rating items. The practice exam booklet was developed in collaboration with subject matter experts in the medical school community. Its design is based on research about the effects of coaching on PREview exam performance. The research found that study participants were most successful in improving their performance (i.e., by one-half standard deviation) when they received detailed feedback-based coaching, which did not affect the validity of the test.<sup>1</sup>

During the 2022 administration, more than 90% of examinees who responded to the post-exam survey reported that they prepared for the exam; 62% reported spending three hours or less preparing. More than 70% of examinees used the AAMC's free preparation materials. Less than 5% of examinees reported using non-AAMC practice exams, and less than 1% reported using materials from a private company.

### How well do examinees score on the PREview exam?

Figure 5 summarizes PREview scores from all exams administered from 2020 to 2022. For the examinees who tested more than once from 2020 to 2022, all their scores are included. The mean PREview score was 5.00, and the standard deviation was 1.96. This result reflects a slight increase in the mean PREview score from prior years, though it is not statistically significant. This increase likely reflects greater examinee motivation to perform their best, given the shift from a pilot program to an operational testing program, the addition of a flat fee to register for the PREview exam, and an increasing number of participating schools.





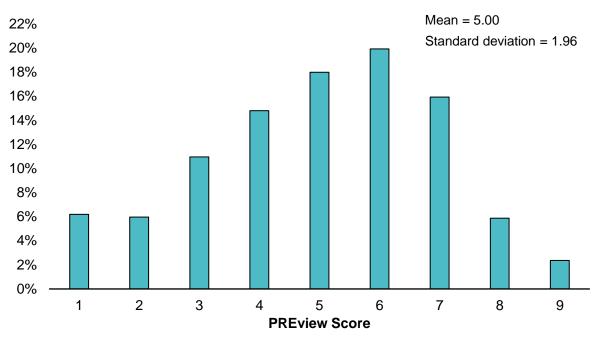


Figure 5. Summary of AAMC PREview scores for exams administered from 2020 to 2022.

Note: N = 36,843.

The total number of exams administered in 2020 to 2022 was 36,843.

Figure 6 gives additional details about examinees' total scores from 2020 to 2022. It summarizes PREview scores for examinees from different backgrounds and experiences, including gender and race/ethnicity, AAMC Fee Assistance Program status, and socioeconomic status. It also shows scores from examinees who tested under standard and nonstandard testing conditions and first- and second-attempt scores for examinees who took the exam more than once.

Figure 6 uses box-and-whisker plots to show the mean score, along with the minimum, 25th-, 75th-, and maximum-percentile scores. The minimum- and maximum-percentile scores are shown by the ends of the "whiskers," the 25th- and 75th-percentile scores are shown by the box (the left edge of each box shows the 25th-percentile score, and the right edge shows the 75th-percentile score), and the mean is shown by the vertical bar inside each box. For example, for female examinees, the minimum-, 25th-, mean-, 75th-, and maximum-percentile scores were 1, 4, 5.23, 7, and 9.

There is some variability in the mean PREview total scores for examinees from different backgrounds. The similarities and differences in these data are similar to those reported in the literature for situational judgment tests<sup>2</sup> and smaller than what is shown for other admission tests. However, the AAMC strives to do better and is taking steps to better understand differences in performance and explore ways to further reduce these differences.





Figure 6. AAMC PREview total scores for exams administered from 2020 to 2022, overall and by gender, race/ethnicity, socioeconomic status, fee assistance status, testing condition, and repeater status.<sup>1</sup>

	Overall (mean = 4.99; N = 36,843)	
Gender	Male (mean = 4.74; n = 13,651)	
Gender	Female (mean = 5.23; n = 20,560)	
	White (mean = 5.19; n = 12,390)	
	Black or African American (mean = 4.39; n = 3,768)	
	Hispanic (mean = 4.65; n = 3,472)	
Race/Ethnicity <sup>2</sup>	Asian (mean = 5.17; n = 11,186)	
Ameri	ican Indian or Alaska Native (mean = 4.87; n = 286)	
Native Hawaii	an or Other Pacific Islander (mean = 4.85; n = 207)	
	Did not apply (mean = 5.10; n = 21,457)	
Fee Assistance <sup>3</sup>	Did not receive (mean = 5.07; n = 6,795)	
	Received (mean = 4.74; n = 6,273)	
Socioeconomic	EO 3-5 (higher SES) (mean = 5.16; n = 22,652)	
Status <sup>4</sup>	EO 1-2 (lower SES) (mean = 4.81; n = 8,322)	
	Standard (mean = 5.02; n = 34,909)	
Testing Condition	Nonstandard (mean = 5.29; n = 198)	
	Single-attempt only (mean = 5.01; n = 33,426)	
Repeater Status⁵	Repeater, 1st attempt (mean = 4.55; n = 1,681)	
	Repeater, 2nd attempt (mean = 5.15; n = 1,681)	
		1 2 3 4 5 6 7 8 9

PREview Score

(Figure 6 notes are on the next page.)





#### Notes

- 1. The total number of examinees who took the PREview exam from 2020 to 2022 is 35,107. The total number of PREview exams administered from 2020 to 2022 is 36,843. For the 1,681 examinees who tested more than once (i.e., repeaters), information from their second attempt was included. Data reflect examinees who applied to at least one MD-granting school and reported information in their AMCAS<sup>®</sup> application. Data are unavailable for examinees who applied to a DO-granting school only.
- 2. Race/ethnicity is unknown for 743 examinees.
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# How precise are examinees' PREview scores and how should they be interpreted?

Three types of information are essential for interpreting PREview exam scores:

- Total score.
- Confidence band.
- Percentile rank associated with the score.

Details about the confidence band and percentile rank are included below.

#### **Confidence bands**

Like other measurements, PREview scores are imperfect measures of examinees' true levels of preparation. They are not perfectly precise. Examinee scores can be dampened by factors such as fatigue, test anxiety, and less-than-optimal test location conditions, or they can be boosted by recent exposure to some of the tested competencies.





The confidence band describes the precision of the PREview total score. It shows the range in which an examinee's true score probably lies. Reviewing applicants' scores with the confidence bands in mind prevents overinterpretation of small differences in test scores.

Review PREview scores with their confidence bands to avoid overinterpreting small differences between scores.

The PREview total score is reported with a confidence band of plus or minus one point. Adding and subtracting 1 point to a PREview total score of 7, for example, defines a confidence band that begins at 6 and goes to 8.

Figures 7 and 8 illustrate how confidence bands can be used to interpret PREview total scores. The reported score for each examinee is shown as a square. The confidence band around each examinee's score is shown by the dashed lines in the figure.

Figure 7 shows that examinee A scored 7, and examinee B scored 6. The confidence bands around these scores overlap. The overlap between the two confidence bands suggests that the two reported scores may not be meaningfully different from each other.

Figure 8 shows that examinee A scored 7, and examinee C scored 4. The confidence bands around their scores do not overlap, suggesting the two scores are more likely to be meaningfully different from each other (compared with scores for examinees A and B).

# Figure 7. Confidence bands for two examinees with similar reported scores on the AAMC PREview exam.

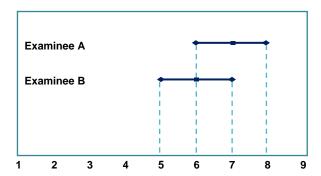
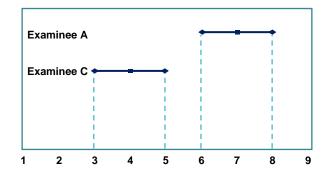


Figure 8. Confidence bands for two examinees with different reported scores on the AAMC PREview exam.



#### **Percentile rank**

The percentile rank shows how PREview scores of individual applicants compare with scores of others who took the exam. The appendix shows the current percentile rank table based on data from 2020 to 2022.

The percentile rank shows the percentage of test takers who received the same or lower score on the exam.

The percentile rank uses data from the previous three administration years. Basing percentile ranks on multiple previous administration years is a common practice in the standardized test industry. Because examinees change from one year to the next, the percentile ranks associated with scores may change





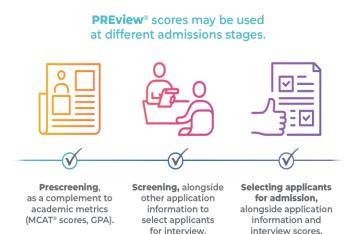
over time. Basing the percentiles on data from the past three administration years instead of one makes the results more stable and allows them to reflect year-to-year changes.

The methods that PREview developers use to write test questions and build and equate test forms keep the meaning of scores constant over test forms and time. The exam is not graded on a curve. No matter when applicants tested, whom they tested with, or what test forms they took, their scores have common interpretations. PREview scores describe applicants' understanding of effective and ineffective pre-professional behavior based on standards and expectations of medical school faculty and staff for entering medical students.

# How should admissions officers use PREview scores for holistic admission?

The PREview exam was designed to help admissions officers measure pre-professional competencies early in the admission process. However, PREview scores may add value throughout the admission process. They complement academic metrics and other application information to help medical schools see a more complete picture of an applicant.

Medical schools may incorporate PREview scores into their admission process in different ways that reflect their mission, goals, curricula, and applicant pool. Regardless of how they use PREview scores, medical schools should establish policies and procedures to ensure PREview scores are used in a fair and equitable manner for all applicants.



As medical schools start to incorporate PREview scores into their admission process, they should spend time learning what the scores mean in the context of their school's application and admission process and understanding how applicants with different PREview scores perform in medical school. Schools should consider PREview scores alongside other application information and assign appropriate weight to PREview scores when deciding whom to invite to interview or whom to accept.

In accordance with holistic review, PREview scores should be one of many data points schools consider. The PREview exam assesses some but not all critical competencies for medical student success.<sup>3</sup> Triangulating different sources of applicant information, such as letters of recommendation, personal statements, experiences, interviews, multiple mini interviews (MMIs), and PREview scores, will paint the clearest picture of an applicant's readiness for medical school, including strengths and opportunities for further development. When used in combination with other application components, PREview scores will help admissions committees identify applicants who are better prepared to learn both technically and professionally in medical school.





When evaluating applicants' understanding of preprofessional competencies, PREview scores provide different information than other components of the application. Some components of the application, such as personal statements or letters of recommendation, reflect an applicant's demonstration of pre-professional competencies or what they have done. Other components, such as interview or MMI ratings, reflect an applicant's observed performance or how they might behave in the future. In contrast, PREview scores provide information about applicants' understanding of pre-professional competencies, specifically knowledge of effective and ineffective preprofessional behavior in different situations.



Different parts of the application offer insight into

Admissions committees should interpret PREview scores in the context of other relevant application information and look for consistencies and inconsistencies in the stories these data tell.

- How did the applicant perform on the PREview exam?
- How did the applicant's letter writers describe the applicant's performance in pre-professional competency areas?
- What opportunities has the applicant had to learn and develop pre-professional competencies through their experiences?
- How did the applicant perform on the interview or MMI as it relates to pre-professional competencies?

#### How have medical schools used PREview scores in the admission process?

Medical schools have used PREview scores at different stages of the admission process and in different ways, depending on their specific needs and admission strategies. All schools have wanted to use PREview scores cautiously and take steps to avoid disadvantaging applicants as they learn more about the scores in the context of their application and medical school.

- Most schools used PREview scores later in the admission process to inform final admission decisions, but some considered PREview scores when selecting applicants for interviews.
- Schools assigned PREview scores lower weight than other parts of the application in their evaluation.
- Most schools considered PREview scores as a way to strengthen an application (i.e., "plus factor") rather than as a way to eliminate an applicant from further consideration.

Medical schools considered PREview scores alongside other application information to get a more complete picture of the applicant. In addition, they triangulated across different application components that provide pre-professional competency information, such as letters of recommendation, interview scores, and MMI ratings, to evaluate an applicant's pre-professional competence. In some instances, comparing PREview scores with MMI ratings prompted further consideration or additional discussion of an applicant, particularly when an applicant performed well on the PREview exam but received poor or modest MMI ratings.





Data across six medical schools that participated in the 2021 PREview administration reinforce how medical schools have reported using PREview scores. Table 4 shows applicants to the six participating medical schools who reported PREview scores in different score ranges and were accepted into one or more of the 2021 participating medical schools in the 2021-2022 admission cycle. Acceptance rates were higher for applicants with higher PREview scores than for those with lower PREview scores (18% vs. 10%), which suggests medical schools considered PREview scores as one of many data points in their admission decisions

# Table 4. Percentage and Number of Applicants With PREview Scores Who Were Accepted and Not Accepted Into at Least One Participating Medical School, by PREview-Score Range<sup>1,2</sup>

	PREview Score			Number of
	1-3	4-6	7-9	Number of Applicants
Accepted to at least one participating school	10% 288/3,007	13% 748/5,822	18% 407/2,332	1,443
Not accepted to at least one participating school	90% 2,719/3,007	87% 5,074/5,822	82% 1,925/2,332	9,718
Total applicants to participating schools	3,007	5,822	2,332	11,161

- 1. Correction: The sample sizes and percentages in Table 4 have been updated to correct prior miscoding of acceptance data. The updated table presents the same pattern of acceptance rates as previously reported.
- 2. The data are for applicants from the 2021-2022 admission cycle who were and were not accepted to at least one participating school. Applicants who did not report a PREview score from the 2020 or 2021 administration are excluded from this table. The most recent PREview score was included for applicants who had PREview scores from both administrations. There were 10,625 applicants with PREview scores from the 2021 administration and 536 applicants with PREview scores from the 2020 PREview administration.

# What is the relationship between PREview scores and other admission data?

This section describes the relationship between PREview scores and other admission data, such as Medical College Admission Test® (MCAT®) scores, undergraduate grade point average (UGPA), interview ratings, and MMI ratings. Studying the relationship between PREview scores and these data provides information about how they can work together to provide a more complete view of the applicant. Results suggest that incorporating PREview scores into the admission process, particularly in the pre-interview screening stage, may provide unique information about the applicant and could help identify applicants for further review.





#### How do PREview scores relate to MCAT total scores?

This section presents data for examinees who completed the PREview exam in 2020 to 2022 and who also completed the MCAT exam. Table 5 presents the percentage and number of examinees by top, middle, and bottom PREview-score and MCAT-total-score ranges. These data show that PREview and MCAT exams measure different things. When used together, PREview scores and MCAT total scores may provide a more complete picture of applicants and help identify applicants for further review. For example, applicants with higher MCAT total scores and lower PREview scores may merit further review of their professional readiness for medical school. Higher PREview scores may help identify applicants with potential professional readiness who otherwise may have been overlooked due to lower or more modest MCAT total scores and could be successful in your school with the appropriate academic support.

Considering PREview scores alongside MCAT total scores could help identify
applicants for further review of their academic and professional readiness for medical
school.

MCAT Total	PREview Score <sup>3</sup>			
Score <sup>2</sup>	1-3	4-6	7-9	All
≥ 507	11%	34%	20%	64%
	3,656/34,360	11,768/34,360	6,717/34,360	22,141/34,360
497-506	7%	14%	5%	26%
	2,503/34,360	4,798/34,360	1,549/34,360	8,850/34,360
≤ 496	5%	4%	1%	10%
	1,591/34,360	1,497/34,360	281/34,360	3,369/34,360
All	23%	52%	25%	100%
	7,750/34,360	18,063/34,360	8,547/34,360	34,360/34,360

- The shaded cells highlight examinees who may merit further review when admissions committees are considering both PREview scores and MCAT total scores. The table summarizes data from examinees who reported a PREview score from the 2020, 2021, or 2022 administrations and an MCAT total score (N = 34,360). The most recent PREview score and MCAT total score were used for examinees with multiple scores. MCAT total scores were not available for 747 examinees; these examinees were excluded from the table.
- 2. MCAT-total-score ranges are from the <u>Summary of MCAT Total and Section Scores</u>, in which 33% of MCAT total scores were equal to or less than 496 and 69% of MCAT total scores were equal to or less than 507 across all exams administered in 2020, 2021, and 2022 combined.
- 3. PREview-score ranges reflect data presented in the <u>Summary of AAMC PREview Professional Readiness</u> <u>Exam Scores</u>, in which 25% of PREview scores were equal to or less than 3 and 78% of PREview scores were equal to or less than 6.





#### How do PREview scores relate to interview and MMI ratings?

This section presents data from six medical schools that partnered with the AAMC to explore the relationships between PREview scores and other admission data during the 2021 PREview administration (2021-2022 admission cycle). Specifically, this section shows how PREview scores, MCAT total scores, and UGPAs correlate with interview and MMI ratings. Table 6 describes each type of admission data and the sample of applicants used to examine each type, which varies due to data availability.

Table 6. Summary o	f Admission Data
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Admission Data	Description	Sample
MCAT Total Score	Most recent MCAT total score	11,750 applicants with PREview scores from 2021 or 2020 (using most recent PREview score)
Undergraduate GPA	Cumulative undergraduate grade point average	11,764 applicants with PREview scores from 2021 or 2020 (using most recent PREview score)
Structured Interview Ratings <sup>1</sup>	Mean ratings across multiple interview questions designed to assess a variety of personal competencies (e.g., communication, teamwork, leadership)	416 applicants at one school who participated in the 2021 validity study
Multiple Mini Interviews (MMI) <sup>2</sup>	Mean ratings across multiple interview stations designed to assess various competencies, such as communication, reasoning, and pathway to medicine	1,465 applicants at three schools who participated in the 2021 validity study <sup>3</sup>

 One medical school that participated in the 2021 validity study provided data from non-MMI interviews. This school provided data from structured interviews, which included targeted interview questions and rating scales. The interview was defined as structured based on key attributes of structured interviews based on work by Campion et al.<sup>4</sup>

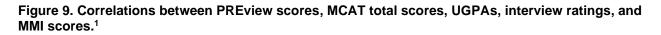
2. Three of six medical schools provided data from an MMI. Of these three, one school also provided the structured interview data described above.

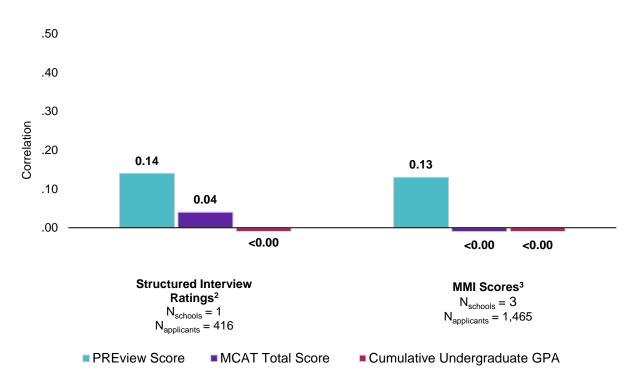
3. The total nonunique number of applicants combined across all three schools is 1,465.





Figure 9 displays the correlations between PREview scores, MCAT total scores, and UGPAs with structured interview ratings and MMI ratings. Results show small correlations between structured interview ratings and MMI scores with PREview scores and no correlations with MCAT total scores or UGPA. The pattern of correlations suggests that PREview scores correlate more strongly with other measures designed to assess similar personal and professional competencies than academic metrics, which are designed to measure a different set of important competencies and knowledge areas. Results also suggest that the PREview exam measures competencies distinct from what are measured in medical schools' structured interviews and MMIs. Results related to interviews should be interpreted with caution; correlations at a single school may not be representative of correlations across multiple schools.





#### Notes

- 1. Applicants' most recent PREview scores, most recent MCAT total scores, and UGPAs as of Dec. 15, 2022, were correlated with structured interview scores and multiple mini interview (MMI) scores. MMI analyses were conducted separately for each school; median correlations are reported.
- 2. Structured interview data are based on 416 applicants who applied to medical school in the 2021-2022 admission cycle (from one validity study school).
- 3. MMI data are based on 1,465 applicants who applied to medical school in the 2021-2022 admission cycle (the total nonunique applicants from three validity study schools).





# How well do PREview scores predict students' performance in medical school?

The AAMC is committed to studying the relationship between PREview scores and students' performance in medical school. Studying the relationship is particularly difficult due to a lack of medical school outcomes related to professionalism. While some courses are conceptually aligned with the competencies tested on the PREview exam, grades and other evaluations in these courses are often based on competencies not tested on the PREview exam. This is why the AAMC developed a performance evaluation tool to assess learners' performance on competencies tested on the PREview exam.

The AAMC and faculty at participating schools collaborated to develop a behaviorally anchored rating scale (BARS) for each competency. A definition of each competency was provided. Using this tool, faculty who supervised learners in small group settings during their first or second year of medical school provided ratings of learners' demonstration of competencies measured on the PREview exam. Ratings were made on a 5-point scale, with each proficiency level defined by behavioral examples. Thirty-nine faculty provided ratings for learners who entered in 2017, and 65 faculty provided ratings for learners who entered in 2017, and 65 faculty provided ratings, ratings were collected for research purposes only.

#### 2017 Validity Study Schools

The AAMC partnered with the following eight medical schools to conduct a longitudinal validity study of the PREview exam using a prototype of the exam:

- University of Minnesota Medical School Twin Cities Campus
- Washington State University Elson S. Floyd College of Medicine
- University of New Mexico School of Medicine
- Drexel University College of Medicine
- Rutgers Robert Wood Johnson Medical School
- Meharry Medical College
- University of Utah School of Medicine
- University of Alabama at Birmingham Marnix E. Heersink School of Medicine

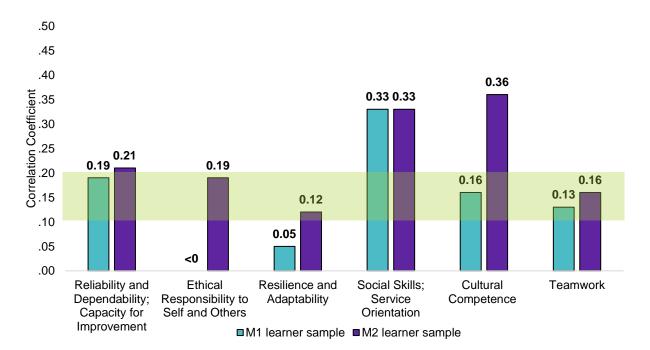
These schools varied in geographic location, public-private status, and matriculant pool size.





Figure 10 shows how PREview scores predict faculty ratings of learners' pre-professional competencies. The green shading indicates the size of correlations that would be expected between PREview scores and performance based on the literature about SJTs used in employment and higher education.<sup>5</sup> Analyses were conducted separately for learners in their first year (M1) and for learners in their second year (M2) of medical school due to differences in education and experience in medical school.





#### Notes

- 1. Sample from 2017 Validity Study. M1 sample size = 169-201; M2 sample size = 242-263.
- 2. M1 correlation for PREview scores and Ethical Responsibility to Self and Others ratings is -0.04.

3. The green-shaded area represents the expected range of correlations between PREview scores and performance (based on the literature).

The correlations between PREview scores and faculty ratings of learner performance are small to medium, as expected based on the SJT literature. These findings suggest that PREview scores are related to learners' performance in professional domains in medical school. Based on these findings, PREview scores could help schools identify applicants with the potential to demonstrate professionalism in medical school. However, additional research is needed to better understand these relationships given the relatively small number of participating schools and sample sizes. The AAMC has partnered with five medical schools that participated in the 2021 pilot administration to further explore how PREview scores relate to medical student performance.





## Conclusion and next steps

Over a decade ago, the AAMC and the medical school community identified a shared goal of developing an assessment of applicants' pre-professional competencies that was reliable, valid, and fair and could facilitate holistic review earlier in the admission process, at the pre-screening stage.

This guide presents results from the series of research studies and the evaluation of the three administrations so far, which demonstrate the validity and value of the PREview exam. This body of research shows that PREview scores may offer unique information not captured by other application components such as academic metrics, interviews, and MMIs. Results also suggest PREview scores can help admissions committees identify students with a greater readiness to learn, develop, and demonstrate professionalism in medical school.

As the program continues to move forward, the AAMC will continue its ongoing evaluation of the PREview exam to ensure the assessment adds value to medical schools' admission processes. Over the next few years, the AAMC is partnering with the five schools that participated in the 2021 administration to further explore how PREview scores predict medical school performance in the pre-clinical and clinical years. We look forward to sharing results of this research as they become available in the future.

After several years of strategic growth – from two schools in the 2020 administration to more than 20 schools in the 2023 administration – the AAMC will make the PREview exam available to all medical schools in the 2024 administration. We appreciate the community's partnership on this important initiative and look forward to our continued collaboration toward this shared goal.





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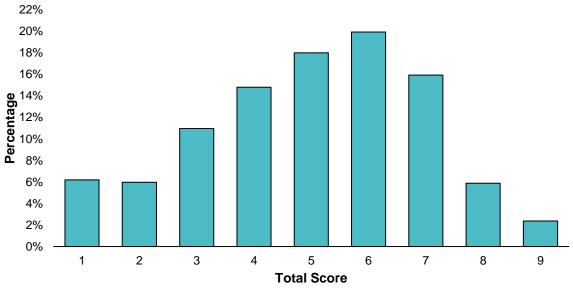
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### Appendix. Summary of AAMC PREview scores





Note: N = 36,843.

Table A. AAMC PREview Percentile Ranks in Effect Ma	av 1. 2023. Through April 30. 2024
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Scale Score	Percentile Rank
1	6%
2	12%
3	23%
4	38%
5	56%
6	76%
7	92%
8	98%
9	100%

**Note:** The column labeled "Percentile Rank" provides the percentage of scores equal to or less than each scale score point. These percentile ranks are based on all PREview results from the 2020 to 2022 testing years combined. Updates to the percentile ranks will be made on May 1 each year.