

# Using AAMC PREview ${ }^{\text {TM }}$ <br> Data in 2023 Medical <br> Student Selection 

SEPTEMBER 2022

# Using AAMC PREview™ Data in 2023 Medical Student Selection 

September 2022

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 comprise all 155 accredited U.S. and 16 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 employed across academic medicine, including more than 191,000 full-time faculty members, 95,000 medical students, 149,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences. In 2022, the Association of Academic Health Centers and the Association of Academic Health Centers International merged into the AAMC, broadening the AAMC's U.S. membership and expanding its reach to international academic health centers. Learn more at aamc.org.

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## Contents

Letter to Admissions Officers iv
Introduction 1
What is the AAMC PREview ${ }^{\text {TM }}$ exam? 1
Competencies 1
Format 3
How is the AAMC PREview exam scored? 4
Who has taken the AAMC PREview exam? 4
How do examinees prepare for the AAMC PREview exam? 6
How well do examinees score on the AAMC PREview exam? 7
How precise are examinees' AAMC PREview scores and how should they be interpreted? 9
Confidence bands 9
Percentile rank 10
How should admissions officers use AAMC PREview scores for holistic admission? 11
What is the relationship between PREview scores and other admissions data? 13
How well do AAMC PREview scores predict students' performance in medical school? 15
Conclusion and Next Steps 17
Notes 18
References 18
Appendix. Summary of AAMC PREview Scores 19

## 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 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 ${ }^{\text {TM }}$ professional readiness exam, formerly known as the AAMC Situational Judgment Test, 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 preprofessional competencies. After nearly a decade of research with many U.S. medical schools and two years of successful pilot administration, the AAMC is pleased to offer the PREview exam to a growing number of medical schools for the 2023 application cycle.

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 admissions 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 you incorporate the PREview exam into your admission process. We developed a suite of resources for admissions officers, including this guide, recorded training webinars, and individual training sessions with your admissions committees.

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

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| PREview ${ }^{\text {™ }}$

## 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 ${ }^{\text {TM }}$ 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 validity study with eight medical schools, which shows the validity of the exam. It presents evaluation results from the 2020-2021 pilot 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 ${ }^{\text {TM }}$ 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 collaborated with subject matter experts in the medical school community, including faculty, admissions officers, and student and diversity affairs officers, 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' expectations and standards for future medical school students.

## Competencies

The AAMC PREview exam assesses examinees' understanding of effective pre-professional behaviors across the following eight core competencies for entering medical students.

Figure 1. AAMC core competencies for entering medical students.


PREview ${ }^{\text {tu }}$
Professional
Readiness Exam
Table 1. Pre-professional Competencies Tested on the AAMC PREview Exam
$\left.\left.\begin{array}{|l|l|}\hline \text { Competency } & \text { Definition } \\ \hline \text { Service Orientation } & \begin{array}{l}\text { Demonstrates a desire to help others and sensitivity to others' needs } \\ \text { and feelings; demonstrates a desire to alleviate others' distress; } \\ \text { recognizes and acts on one's responsibilities to society locally, } \\ \text { nationally, and globally. }\end{array} \\ \hline \text { Social Skills } & \begin{array}{l}\text { Demonstrates an awareness of others' needs, goals, and feelings, } \\ \text { and the ways that social and behavioral cues affect peoples' } \\ \text { interactions and behaviors; adjusts behaviors appropriately in } \\ \text { response to these cues; treats others with respect. }\end{array} \\ \hline \text { Cultural Competence } & \begin{array}{l}\text { Demonstrates knowledge of sociocultural factors that affect } \\ \text { interactions and behaviors; shows an appreciation and respect for }\end{array} \\ \text { multiple dimensions of diversity; recognizes and acts on the } \\ \text { obligation to inform one's own judgment; engages diverse and } \\ \text { competing perspectives as a resource for learning, citizenship, and } \\ \text { work; recognizes and appropriately addresses bias in themselves } \\ \text { and others; interacts effectively with people from diverse } \\ \text { backgrounds. }\end{array} \right\rvert\, \begin{array}{l|l|l|}\hline \text { Teamwork } & \begin{array}{l}\text { Works collaboratively with others to achieve shared goals; shares } \\ \text { information and knowledge with others and provides feedback; puts } \\ \text { team goals ahead of individual goals. }\end{array} \\ \hline \text { Reliability and Dependability } & \begin{array}{l}\text { Consistently fulfills obligations in a timely and satisfactory manner; } \\ \text { takes responsibility for personal actions and performance. }\end{array} \\ \hline \text { Ethical Responsibility to } & \begin{array}{l}\text { Behaves in an honest and ethical manner; cultivates personal and } \\ \text { academic integrity; adheres to ethical principles and follows rules }\end{array} \\ \hline \text { and procedures; resists peer pressure to engage in unethical } \\ \text { behavior and encourages others to behave in honest and ethical } \\ \text { ways; develops and demonstrates ethical and moral reasoning. }\end{array}\right\}$
| PREview ${ }^{\text {™ }}$
Professional
Readiness Exam

## 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. Scenarios are set in educational, health care ${ }^{\text {a }}$ or other real-life settings. Each scenario calls upon examinees' knowledge or understanding of one or more pre-professional competencies.
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 that 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 <br> (1) | Ineffective <br> (2) | Effective <br> (3) | Very Effective <br> (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.

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## How is the AAMC 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 review scenarios and rate responses in the same way that examinees do, and their ratings establish the scoring key. During scoring, examinees' ratings are compared to subject matter expert ratings (i.e., the scoring key).
Examinees with higher PREview scores rated the effectiveness of responses more similarly to medical educators than examinees with lower PREview scores and therefore have a stronger understanding of effective and ineffective pre-professional 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 AAMC PREview exam?

In 2020, the AAMC launched a pilot administration of the PREview exam. Two medical schools recommended ${ }^{b}$ their applicants complete the PREview exam. In 2021, the pilot expanded to six medical schools, including one DO- and five MD-granting schools, as shown in Table 2. All participating schools recommended applicants complete the PREview exam as part of their medical school application.

Table 2. Medical Schools Recommending the AAMC PREview Exam During the 2020-21 Administrations

| Administration <br> Year | Medical Schools |
| :--- | :--- |
| $\mathbf{2 0 2 0}$ | - University of California, Davis, School of Medicine |
| $\mathbf{2 0 2 1}$ | - University of Minnesota Medical School, Twin Cities Campus |
|  | - Geisinger Commonwealth School of Medicine |
|  | - Morehouse School of Medicine |

During the 2020 and 2021 administrations, 18,550 examinees took the PREview exam, representing approximately $50 \%{ }^{\text {c }}$ of applicants to the participating medical schools. 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 in 2020-21, by gender, race/ethnicity, fee assistance status, socioeconomic status, testing condition, and repeater status. ${ }^{1}$


## Notes

1. The total number of examinees who took the PREview exam in 2020-21 is 18,550 . For the 703 examinees who tested more than once, 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® application. Data is unavailable for examinees who applied to a DO-granting school only.
2. Percentages describe examinees who provided information about their gender, race/ethnicity, and socioeconomic status on their medical school application. A total of 191 examinees did not identify their gender.
3. Race/ethnicity is unknown for 149 examinees.

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4. The PREview exam was free for all examinees in 2020 and 2021. Data includes examinees who participated in the AAMC Fee Assistance Program for medical school application. Fee assistance status is unknown for 8,915 examinees. The AAMC Fee Assistance Program was available to examinees who are U.S. citizens or U.S. permanent residents or students with Deferred Action for Childhood Arrivals (DACA) status whose reported total family income of $400 \%$ or less (previously $300 \%$ or less) than the national poverty level for their 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 (SES) 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 1,877 examinees.
6. For repeater status, "Single attempt only" includes examinees who took the PREview exam in 2020 or 2021 and did not test again. "Repeater" includes examinees who tested twice during the 2020 and 2021 administrations.

## How do examinees prepare for the AAMC PREview exam?

The AAMC is committed to providing free resources to support all applicants' preparation for the PREview exam. AAMC PREview preparation materials include an examinee preparation guide, a full-length practice exam, a tutorial for the online testing system, and the AAMC PREview ${ }^{\text {TM }}$ Essentials: Testing Year $\underline{2022}$ guide.

The AAMC PREview Examinee Preparation Guide offers advice and strategies to help applicants prepare for the PREview exam. The AAMC Practice Exam Booklet includes an official, full-length practice exam, scoring key, and scoring key rationales to help applicants become familiar with the exam format, the types of scenarios and items they'll 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 impact the validity of the test. ${ }^{1}$

During the 2020 and 2021 administrations, over $90 \%$ of examinees who responded to the PREview postexam survey reported that they prepared for the exam; $70 \%$ reported spending three hours or less preparing. Most examinees ( $68 \%$ to $73 \%$ ) used the AAMC's free preparation materials. Less than $5 \%$ of respondents reported using non-AAMC practice exams and less than $1 \%$ reported using materials from a private company.

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

Figure 5 summarizes PREview scores from all exams administered in 2020 and 2021. For the examinees who tested more than once from 2020 to 2021, all their scores are included. The mean PREview score was 4.84 , and the standard deviation was 1.96 .

Figure 5. Summary of AAMC PREview scores for exams administered in 2020 and 2021.


Note: $\mathrm{N}=19,253$.
The total number of exams administered in 2020 and 2021 was 19,253.
Figure 6 gives additional details about examinees' total scores in 2020 and 2021. 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-, $25^{\text {th }}$-, mean-, $75^{\text {th }}$-, and maximum-percentile scores were $1,4,5.04,6$, and 9 .
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There is variability in the mean PREview total scores for examinees from different backgrounds. However, there is a great deal of overlap in the scores of different groups. The similarities and differences in these data are similar to those reported in the literature for situational judgment tests ${ }^{2}$ and smaller than what is shown for other admission tests. The AAMC 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 2021, overall and by gender, race/ethnicity, socioeconomic status, fee assistance status, testing condition, and repeater status.


## Notes

1. The total number of exams administered from 2020 to 2021 was 19,253 . These results include scores from 703 examinees who tested twice in 2020 and 2021. Data reflects examinees who applied to at least one MD-granting school and reported information in their AMCAS® application. Data is unavailable for examinees who applied to a DO-granting school only.
2. Race/ethnicity is unknown for 171 examinees.
3. The PREview exam was free for all examinees in 2020 and 2021. Data includes examinees who participated in the AAMC Fee Assistance Program for medical school application and did or did not receive fee assistance. Examinees who did not participate in the AAMC Fee Assistance Program are shown in the "Did not apply for fee assistance". The AAMC Fee Assistance Program was available to examinees who are U.S. citizens or U.S. permanent residents or students with Deferred Action for Childhood Arrivals (DACA) status whose reported total family income of $400 \%$ or less (previously $300 \%$ or less) than the national poverty level for their 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.
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4. The AAMC Socioeconomic (SES) 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 1,877 examinees.
5. For repeater status, "Single attempt only" includes examinees who took the PREview exam in 2020 or 2021 and did not test again. "Repeater" includes examinees who tested once in 2020 and once in 2021.

## How precise are examinees' AAMC 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. Examinees 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 .
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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 form 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 and 2021.

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 two 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 two 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 preprofessional behavior based on standards and expectations of medical school faculty and staff for entering medical students.
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## How should admissions officers use AAMC PREview scores for holistic admission?

The PREview exam was designed to help admissions officers measure preprofessional competencies early in the admission process. PREview scores are intended to complement academic metrics to help medical schools see a more complete picture of an applicant.

Medical schools may incorporate PREview scores into their admissions 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.

PREview ${ }^{\text {TM }}$ scores may be used at different admissions stages.


Pre-screening, as a complement to academic metrics (MCAT ${ }^{\text {® }}$ scores, GPA)

applicants for interview, alongside other application information

Making final admissions decisions, alongside application information and interview scores

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. ${ }^{3}$ Triangulating different sources of applicant information, including 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 most likely to succeed at their school.

Different parts of the application offer insight into what an applicant did do, would do, and should do.


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When evaluating applicants' understanding of pre-professional 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 preprofessional 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 pre-professional behavior in different situations.

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 their 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 did medical schools use PREview scores in the 2021 administration?

In the 2021 administration, medical schools used PREview scores at different stages of the admissions process and in different ways, depending on their specific needs and admission strategies. All schools wanted to use PREview scores cautiously and take steps to avoid disadvantaging applicants as they learned more about PREview scores in the context of their application.

- Most schools used PREview scores later in the admission process to inform final admission decisions, but some considered PREview scores when selecting applicants for interview.
- Schools assigned PREview scores lower weight than other parts of the application in their evaluation.
- 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 to 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 mediocre MMI ratings.

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

This section describes the relationship between PREview scores and other admission data, such as undergraduate grade point average (UGPA), MCAT® scores, 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 that currently available data does not provide.
Data from this section came from two samples. Table 3 describes each type of admission data and the sample from which it was collected.
Table 3. Summary of Admission Data

| Admission Data | Description | Sample |
| :---: | :---: | :---: |
| MCAT Total Score | Most recent MCAT total score | 10,767 examinees who took the PREview exam in 2021 |
| Undergraduate GPA | Cumulative undergraduate grade point average | 10,123 examinees who took the PREview exam in 2021 |
| Unstructured Interview Ratings ${ }^{1}$ | Mean ratings across multiple interview questions designed to assess a variety of competencies (e.g., Service, Extracurricular/Other Activities, Research) | 171 learners at 1 school who participated in the 2017 validity study and entered medical school in 2016 or 2017 |
| Semi-structured Interview Ratings ${ }^{1}$ | Mean ratings across multiple interview questions designed to assess a variety of personal competencies (e.g., Communication, Ethical Responsibility, Leadership) | 107 learners at 2 schools who participated in the 2017 validity study and entered medical school in 2016 or 2017 |
| Multiple Mini Interviews (MMI) ${ }^{2}$ | Mean ratings across multiple interview stations designed to assess communication, reasoning, and pathway to medicine | 693 learners at 5 schools who participated in the 2017 validity study and entered medical school in 2016 or 2017 |

## Notes

1. Three of eight medical schools that participated in the 2017 validity study provided data from non-MMI interviews. One school provided data from unstructured interviews, which gave interviewers complete discretion regarding questions and often used undefined rating scales. The other two schools provided data from semi-structured interviews. Semi-structured interviews included targeted interview questions and rating scales. Interviews were defined as semi-structured based on responses schools provided to a 20 -item questionnaire describing the content assessed in their interviews and the process used to evaluate interview responses, including a checklist of key attributes of structured interviews based on Campion et al. ${ }^{4}$
2. Five of eight medical schools that participated in the 2017 validity study provided data from an MMI. Of these five, three schools also provided the unstructured or semi-structured interview data described above. These schools either included an unstructured or semi-structured interview in addition to the MMI or had an unstructured MMI station. Three schools in the study did not provide usable interview or MMI data.

Figure 9 displays the correlations between PREview scores and admissions data.
Figure 9. Correlations between AAMC PREview scores and other admission data.


2021 Administration
2017 Validity Study

Results of these studies suggest that the PREview exam measures competencies that are distinct from those measured by the MCAT exam, UPGA, and interviews. However, results related to interviews should be interpreted with caution due to small sample sizes. Supporting findings include:

- There is a small positive correlation between PREview and MCAT scores. While the two assessments measure different competencies, they share a common format. Both exams ask applicants to work with information presented in text to demonstrate reasoning and both are proctored multiple-choice exams.
- There is a small positive correlation between PREview scores and UGPA.
- There are small to moderate correlations between PREview scores and interviews, with correlations being higher for semi-structured interviews and interviews that assess competencies similar to the PREview exam.
- There is no correlation between PREview scores and MMI ratings in this sample. This finding was unexpected since both assessments purport to measure similar competencies. However, in this sample, MMI ratings had limited variance and measured a wider variety of constructs. More research with a larger sample is needed to understand this relationship.

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## How well do AAMC 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.

As such, the AAMC developed a performance evaluation tool to assess learners' performance on competencies tested on the PREview exam. 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.

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. 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 2016. Ratings were collected for research purposes only to mitigate the risk that faculty would not provide accurate ratings.

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 were varied in terms of geographic location, public/private status, and matriculant pool size.
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Figure 10 shows how PREview scores predict faculty ratings of learners' pre-professional competencies. The green shading indicates the expected size of correlations for PREview scores and performance based on the literature about situational judgment tests (SJTs) used in employment and higher education. ${ }^{5}$ 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.

Figure 10. Correlations between AAMC PREview scores and research-only faculty ratings of learners' performance.


## 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 can 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.

## Conclusion and Next Steps

Nearly 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 admissions process, at the pre-screening stage.
In collaboration with medical schools across the country, the AAMC has developed a meaningful assessment of pre-professional competencies that aligns with medical schools' standards and expectations for future entering medical students. Following eight years of research and development, the AAMC completed a successful two-year pilot administration of the PREview exam, reaching another milestone toward the community's shared goal.
This guide presents results from the series of research studies and the evaluation of the pilot administration, 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 or interviews. 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 four years, the AAMC is partnering with the six 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 18 schools in the 2022 administration - the AAMC will make the PREview exam available to all medical schools in the 2023 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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## Notes

a. While the PREview exam includes scenarios in health care settings, examinees do not need medical knowledge, knowledge of hospital protocols, or health care experience to understand the scenario and accurately evaluate the effectiveness of a response. All test content is reviewed to ensure prior health care knowledge or experience is not needed to perform well on the exam.
b. Medical schools recommended rather than required the PREview exam to give applicants flexibility, especially during the COVID-19 pandemic, and to prevent this new application component from deterring applicants from applying to their schools.
c. The $50 \%$ applicant participation was likely due to one or more factors, including the PREview exam being recommended, not required and some applicants being unaware of the exam prior to receiving a secondary application or interview invitation. The participation rate is expected to increase as the number of participating schools and those requiring the AAMC PREview exam increases.

## References

1. Zhang C, Sackett PR, Naemi BD. Rule-based versus feedback-based coaching for situational judgment tests. Int J Sel Assess. 2021;29(2):219-233. doi: 10.1111/ijsa.12321.
2. Whetzel DL, McDaniel MA, Nguyen NT. Subgroup differences in situational judgment test performance: a meta-analysis. Hum Perform. 2008;21(3):291-309. doi: 10.1080/08959280802137820.
3. 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. doi: 10.1097/ACM.0b013e31828b3389.
4. Campion MA, Palmer DK, Campion JE. A review of structure in the selection interview. Pers Psychol. 1997;50(3):655-702. doi: 10.1111/j.1744-6570.1997.tb00709.x.
5. McDaniel MA, Hartman NS, Whetzel DL, Grubb WL III. Situational judgment tests, response instructions, and validity: a meta-analysis. Pers Psychol. 2007;60(1):63-91. doi: 10.1111/j.17446570.2007.00065.x.

## Appendix. Summary of AAMC PREview Scores

Figure A. AAMC PREview total scores and percentile ranks in effect May 1, 2022, through April 30, 2023.


Note: $\mathrm{N}=19,253$.
Table A. AAMC PREview Percentile Ranks in Effect May 1, 2022, Through April 30, 2023

| Scale <br> Score | Percentile <br> Rank |
| :---: | :---: |
| 1 | $7 \%$ |
| 2 | $13 \%$ |
| 3 | $25 \%$ |
| 4 | $41 \%$ |
| 5 | $59 \%$ |
| 6 | $78 \%$ |
| 7 | $93 \%$ |
| 8 | $98 \%$ |
| 9 | $100 \%$ |

## Notes

- 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 and 2021 testing years combined.
- Updates to the percentile ranks will be made on May 1 each year.


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