The Medical College Admission Test (MCAT)

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Introduction

Standardized testing has been used to gauge the preparedness of students for medical school for almost ninety years. The current Medical College Admission Test (MCAT) has been a topic of controversy since its development. Several proponents for the examination claim it is a compelling and vital reflection of a student’s capability as a doctor, while critics argue that there are several flaws associated with the exam invalidate it. It is necessary to approach these two conflicting viewpoints with an open mind, as this standardized test is the only common factor on medical school applications. Several articles addressing this topic were analyzed and reviewed in order to attain a broader understanding of the advantages and disadvantages of the MCAT.

Validity of the MCAT to Predict Medical School Success

In “The Predictive Validity of Three Versions of the MCAT in Relation to Performance in Medical School, Residency, and Licensing Examinations: A Longitudinal Study of 36 Classes of Jefferson Medical College,” Dr. Callahan and her colleagues discuss the experiment they conducted to examine the validity of the Medical College Admission Test (Callahan, 2010). Their study focused on the three most recent formats of the MCAT, covering the years 1970 through 2010. They researched the revisions made to the exam each time and the ability of each test to predict a student’s success in both medical school and licensing examinations. While they found a correlation between performing well on the MCAT and performing well on licensing examinations, the constant revisions to the MCAT over the decades did not show any improvement in the test’s ability to predict success.

In fact, results indicated a decline in the MCAT’s capacity to predict scores on the National Board (NB) of Medical Examiners Exam Part 2 and on the United States Medical
Licensing Exam (USMLE) Step 2. Moreover, it cannot be overlooked that the found correlation coefficients for the Part 1 and Part 3 examinations were approximately 0.40 and 0.30, respectively. Both of these coefficients are relatively weak on a correlation scale of 0 to 1. Interestingly, the research indicated that the predictive validity coefficients were consistently higher for women than men.

In agreement with Callahan, the article “‘Healthy’ Medical School Admissions” discusses the poor legitimacy of the MCAT (“Healthy...Admissions, 2007.”) The article details various research studies that have discovered that the MCAT does not provide a suitable prediction of a medical practitioner’s clinical skills. The MCAT, partially designed to test memorized information, can only determine how well a student will perform in the first two years of medical school while the curriculum is based on intensive textbook readings. However, the article elaborates that the MCAT is confined to only the most basic medical school curriculum, and can therefore explain “only 9-16% of the variance in grades during the first two years” (“Healthy...Admissions, 2007”)

**Advantages Some Students Have To Do Better**

One of the flaws in the predictive measures of the MCAT is the privilege some students can get to increase their score through pricey MCAT preparatory companies. In “‘Healthy’ Medical School Admissions,” the issue that several preparatory classes exist with a “guarantee” to raise a student’s scores is covered. These companies take in thousands of dollars from students, and in return unveil “exclusive” secrets to achieve the perfect score of 45/45 on the MCAT, meanwhile binding their students with license agreements. For a test meant to gauge a student’s preparedness and qualifications for medical school, this skews results greatly. These
programs and study aids are very expensive and put several students at a disadvantage. These advantages misrepresent student’s natural abilities and capacity to do well in medical school, where there will not be prep courses available to train students every step of the way in studying necessary information.

Revisions to the MCAT

Due to the several revisions of the MCAT, the effectiveness of the examination has been questioned multiple times. Constance Holden revealed the views of a specific medical school in her review titled “Johns Hopkins Drops MCAT Requirement” (Holden, 1985). Johns Hopkins Medical University is currently ranked third out of the total 137 national medical schools. Although in present day the medical school does require applicants to take the MCAT, it is enlightening to find that one of the most prestigious medical schools considered dropping the requirement. Johns Hopkins Medical School thought that prospective medical students developed the “premed syndrome,” which pushed students to overemphasize the study of sciences, forsaking the humanities and general education.

The MCAT, which contains 104 science questions as compared to 40 verbal reasoning questions, only encourages this “syndrome.” This syndrome mirrors the “dehumanizing aspects of medical school.” The problem of admitting students that achieve perfect scores in certain sections rather than have a perfect balance of scores in all sections of the test has always been difficult to avoid. Additionally, Holden mentions that according to a prominent physician at Johns Hopkins, there is no data indicating a correlation between performance on the MCAT and clinical performance or success in a medical career.
In the article “Humanizing the MCAT,” further “needed” revisions to the MCAT are discussed (Robeznieks, 2011). Medical admissions committees are looking to gear students away from just science acumen, and instead encouraging students to broaden their knowledge in the social sciences. Thus, with a fifth revision to the MCAT, effective 2015, the AAMC has once again found a way to “improve” the examination’s ability to predict medical school success. The revision would include the replacement of the writing section with a section on “psychological, social and biological foundations of behavior.”

The AAMC believes that this test may replace the stereotypical applicant pool of students that are capable of solving all technical problems, yet lacking social skills to a group of more compassionate and empathetic students. This new section may also force “unapproachable” students – students that will later portray this characteristic while practicing medicine—to go beyond their comfort level and learn to relate to others. It is comforting to know that the AAMC is aware of some of the issues with the MCAT. The president of AAMC, Dr. Darrell Kirch, stated “The MCAT exam is certainly a reliable tool to measure cognitive ability—that is, ‘brightness’—in certain areas, but we all know how little it tells us about the attitudes, values and experiences that may make an applicant truly among the best.” It may be for the better that the MCAT will change to address these issues, and hopefully it will defy previous trends and finally provide a valid correlation between MCAT performance and readiness for the field of medicine.

Ways the MCAT is Abused in Admissions Decisions

In his article “Why 117 Medical Schools Can’t Be Right,” Richard J. Margolis addresses the fact that even the Association of American Medical Colleges (AAMC) acknowledges that at “at least three-quarters of those rejected [because of the MCAT] are fully qualified” to be
competent physicians (Margolis, 1977.) Margolis discusses the corruption behind the medical school admissions process, and how much more valuable connections can be rather than qualifications. Medical schools will readily accept donations and will look for students who will help the demographics of the school, gearing the admissions decisions towards elitism. As a consequence, many students are able to buy their acceptance letter, and underqualified minority students are more likely to be admitted over qualified white students. It is important for a school to maintain a diverse student body and environment, but when this becomes a requirement that is prioritized over qualifications, it is not justifiable. When such categories become the basis of acceptance into medical school, doctors that do not “care” anymore are produced by the institutions. Thus, although the MCAT is supposed to serve as an indicator for success, it is very often used to the disadvantage of a qualified student, signifying how unnecessary it is for the admissions process.

**Conclusion**

Although Callahan presents some statistical data in favor of the MCAT, the overall consensus among the five research articles points to a skeptical attitude towards the MCAT. All of the articles mention the fact that there is little correlation between performance on the MCAT and performance in medical school. I believe that in order to grasp a stronger understanding of this correlation, studies similar to Callahan’s at Jefferson Medical College should be performed. With further longitudinal statistical studies at different medical schools, a better and more definite connection can be made. By researching the way each group approaches studying for the exam, seeing how each group performs in classes associated with the MCAT like chemistry, biology, physics, and organic chemistry, and questioning students to get their insight on why
they believe the incongruity exists between academic knowledge and test scores, a greater understanding can be reached.

In conclusion, the MCAT has been very controversial since it was first administered in the 1920s. The emphasis medical schools put on this examination requires a more in depth analysis on the benefits and drawbacks to the examination. With further research, an ideal test can be created to satisfy the original purpose of the test of indicating how prepared a student is for medical school.
Works Cited:


