The Evolution of the Medical College Admission Test (MCAT Exam)

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This Last Page describes the 87-year evolution of the Medical College Admission Test (MCAT exam), the nationally administered standardized examination used as one part of the application process at the majority of U.S. and Canadian medical schools. Periodic reviews of this exam help ensure that aspiring doctors have the necessary foundations for learning in the ever-changing field of medicine.

The MCAT exam has undergone five revisions resulting in six versions; the sixth will launch in April 2015. The early MCAT exam focused on memory and scientific vocabulary, while the newest version tests scientific problem solving and adds concepts in the behavioral and social sciences. The 2015 version is scheduled for a content update in approximately seven years and a new version in 2030. The timeline below, which follows in part from McGaghie,1 highlights the major changes that characterized each version of the MCAT exam.

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<th>Year</th>
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| 1928 | - Named the “Scholastic Aptitude Test for Medical Students”
|      | - Introduced to reduce medical students’ high attrition rates1
|      | - Focused on memory, scientific vocabulary, and logical reasoning
|      | - Reported a single total score (representing performance on all sections) from 0 to 385
|      | - Test sections:
|      |   - Visual memory
|      |   - Memory for content
|      |   - Scientific vocabulary
|      |   - Scientific definitions
|      |   - Understanding of printed material
|      |   - Premedical information
|      |   - Logical reasoning
| 1946 | - Removed liberal arts content in favor of greater emphasis on scientific problem solving
|      | - Reported section scores on a scale of 1 to 15
|      | - Test sections:
|      |   - Science knowledge
|      |   - Science problems
|      |   - Skills analysis: reading
|      |   - Skills analysis: quantitative
| 1977 | - Shifts the focus from testing what students know to testing how well they use what they know
|      | - Includes a new behavioral and social sciences section
|      | - Tests new biochemistry concepts
|      | - Uses a different score scale than the two previous versions to avoid inappropriate comparisons
|      | - Reports section scores from 118 to 132 and sums them to create a total score, ranging from 472 to 528
|      | - Test sections:
|      |   - Chemical and physical foundations of biological systems
|      |   - Critical analysis and reasoning skills
|      |   - Biological and biochemical foundations of living systems
|      |   - Psychological, social, and biological foundations of behavior
| 1991 | - Introduced a “Writing Sample” section to provide information about each examinee’s ability to develop, synthesize, and present ideas clearly and logically
|      | - Included quantitative reasoning in the science sections, rather than as a stand-alone section
|      | - Reported writing sample scores on an alphabetical scale (J to T)
|      | - Reported the other three section scores on a scale of 1 to 15, which were summed to create a total score, ranging from 3 to 45
|      | - Test sections:
|      |   - Verbal reasoning
|      |   - Biological sciences
|      |   - Physical sciences
|      |   - Writing sample (removed in 2013)
| 2015 | - Named the “Professional School Aptitude Test” (In 1948, renamed the “Medical College Admission Test”)
|      | - Added verbal and quantitative sections and an emphasis on liberal arts through a “Modern Society” section
|      | - Reported section scores on a scale of 200 to 800
|      | - Test sections:
|      |   - Verbal ability
|      |   - Quantitative ability
|      |   - Science achievement
|      |   - Understanding modern society (in 1962, this became “General Information”)
| 2030 | - Throughout the years, the MCAT exam has emphasized different types of knowledge and skills reflecting contemporary thought on what is necessary to demonstrate readiness to learn in medical school.

Reference

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