

# Revisiting Written Submissions as Part of the Medical School Application: Paying Attention to Narrative Competence in Admissions Policies

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## ABSTRACT

Medical school admission committees are faced with the challenge of assessing medical school applicants' personal traits as revealed in the written components of their applications. These noncognitive qualities are difficult to measure, however, and concern about the efficacy of existing assessment methods has led to discussion in the literature. The authors of this Perspective suggest that the written application components continue to be valuable, albeit controversial. Reflective capacity and narrative competence, specifically as expressed in writing, are significant aspects of medical education and of being an effective communicator. The authors reviewed selected literature on the written application components used by English-language medical school admission committees in the United States, Canada, and Europe (e.g., writing samples, autobiographical essays, personal statements). They review key trends in the conceptualization of the written components of medical school applications and their use by medical schools in interpreting applicants' noncognitive traits. They then offer suggestions for enhancing the analysis, relevance, and predictive value of candidates' admission narratives within the medical school admission process. They assert that the written aspects of applications have the potential to indicate which candidates will develop into the competent, empathic, and reflective doctors that medical schools seek to educate.

Medical schools use various methods to assess medical school applicants. A candidate's intellectual capacity is judged primarily by her grade point average (GPA) and her MCAT score. Her personal traits, however, are typically determined using information gleaned from the written components of her application, such as her personal statement. Concerns about the efficacy of this assessment method have prompted discussion. Cohen,<sup>1</sup> for example, warns that because personal qualities are difficult to measure, they may be underemphasized to applicants. He believes it is possible to define and assess personal qualities so that they are not overlooked in the review of applications.

In Canada, social accountability and diversity among physicians have been identified as top admission priorities by the Association of Faculties of Medicine of Canada (AFMC).<sup>2</sup> The AFMC calls for Canadian medical schools to

enhance admissions processes to include the assessment of key values and personal characteristics of future physicians—such as communication, interpersonal and collaborative skills, and a range of professional interests—as well as cognitive abilities.<sup>2</sup>

To assist medical schools in their efforts to increase diversity and identify candidates who will make excellent physicians, researchers must improve upon existing methods for evaluating personal or noncognitive qualities of candidates. In this Perspective article, we review key trends in the conceptualization of the written components of medical school applications and their use by medical schools in interpreting applicants' noncognitive traits. We then offer suggestions for enhancing the analysis, relevance, and predictive value of candidates' admission narratives.

### **Identifying Key Trends in the Literature**

We conducted a selected literature search on written components used by medical school admission committees in the United States, Canada, and Europe using key words including *writing samples, letters of reference/support, autobiographical essays/personal statements in medical admissions, and premedical narratives*. (Initially, we reviewed articles discussing letters of reference because these letters speak to applicants' personal traits; however, we decided to focus on first person narratives for this paper.) In addition to this search, at our request, the research librarian at the College of Family Physicians of Canada (CFPC) conducted a focused search of works published from January 2000 through December 2010 in the MEDLINE, PsycINFO, and ERIC databases using the following Medical Subject Headings (MeSH) terms, text words, and their variations: *medical school admission criteria, college admission test; admissions schools, medical; students, medical; education, medical; medicine essays; writing: biography; autobiography; reflection; interviews; statements*. She also searched the Association of American Medical Colleges (AAMC) and AFMC Web sites for reports on admission procedures. Articles about selection for postgraduate/residency programs and non-medical disciplines (i.e., veterinary medicine) were excluded. We reviewed all of the articles the CFPC research librarian supplied based on this more focused search.

### **The Importance of Evaluating and Encouraging the Development of Noncognitive Qualities**

The literature reveals that some non-cognitive qualities are associated with success in the

clinical years of medical education. According to a recent survey of medical school admission officers, integrity, personal maturity, compassion, self-discipline, and cultural competence are among the personal attributes rated as important for success in medical school.<sup>3</sup> Peskun and colleagues<sup>4</sup> have demonstrated that the University of Toronto's nonacademic medical school admission assessments correlated significantly with rankings by the University of Toronto's Internal Medicine residency program four years later. Kulatunga-Moruzi and Norman<sup>5</sup> describe the importance of such noncognitive traits for clinical success in their examination of McMaster University's medical school application criteria. The autobiographical components evaluated included scores from simulated tutorials and personal interviews. Their results, however, indicate that their "admissions measures of communication and problem-exploration skills did not predict performance on the LMCC Part II Examination."<sup>5</sup> Kulatunga-Moruzi and Norman suggest that admissions and licensing may be evaluating different traits, or their "admissions process cannot measure these attributes in a valid manner."<sup>5</sup>

Medical school admission committees often use written components of applications--such as the autobiographical essay/personal statement, letters of reference, and the Writing Sample (WS) of the MCAT--to try to get a sense about applicants' personal attributes. Given the difficulty in fairly and reliably measuring characteristics that are qualitative in nature, some governing bodies of medical education are considering reducing written components such as the writing sample<sup>6</sup> in the admission process. McGill University's Faculty of Medicine, for example, requires and evaluates a 150-word summary of a longer personal narrative and a 300-word reflective piece of writing on three significant components of the applicant's CV.<sup>7</sup> These screening elements are used to determine which candidates are interviewed and form the basis for some of the questions asked in multiple "mini-interviews." The AAMC is expected to eliminate the WS from the MCAT in 2013,<sup>8</sup> and some medical schools are again favoring more quantitative systems, such as aptitude in the sciences or GPA, over qualitative assessments. McMaster University, however, gives GPA less weight than measures of personal traits.<sup>9</sup>

Noncognitive qualities such as verbal and non-verbal communication skills, emotional sensitivity, "compassion, integrity, concern for others, (and) interpersonal skills" are regarded as valuable traits in medical students in Canada and the United States.<sup>10</sup> Among these, reflective capacity may prove to be a good predictor of who will make a good doctor, and sophisticated rubrics exist for systematically assessing this attribute.<sup>11</sup> Although some may argue that reflexivity is a sign of personal maturity and is shaped by cultural and gender influences, we suggest that medical schools consider promoting this attribute as both desirable and learnable. To encourage reflection in the written components of applications, medical schools may wish to offer resources on how potential applicants could develop a more reflective stance during their premedical studies.

Rees and Sheard<sup>12</sup> found that medical students who believed that their communication skills could be improved, had positive views about learning these skills. Promoting the value of interpersonal qualities in doctors may encourage prospective applicants to develop their communication skills before and during medical school.

Developing reflective capacity and narrative competence, as expressed specifically in writing, is an important aspect of medical education and of being an effective communicator. Charon<sup>13</sup>

elaborates on Trautmann's work, suggesting that health professionals benefit from having narrative competence, or the ability to understand and accurately interpret patients' stories of illness. Narrative knowledge and skills enable physicians to demonstrate "empathic and effective care of individual patients, candid reflection, professional idealism, and responsible societal discourse about health policy."<sup>13</sup>

We believe that implementing early and accurate measures of narrative-based capacity would enable medical programs to enhance the selection, education, and training of their students. In our review of the literature, we observed trends among and strategies used by medical schools to better interpret applicants' non-academic qualities.

### **Interpreting Candidates' Noncognitive Qualities Using the Written Components of Medical School Applications**

Below, we summarize and offer our perspective on the key trends in the literature regarding medical schools' use of personal statements, onsite vs. offsite writing, and the MCAT WS to gauge applicants' non-academic qualities.

#### **The personal statement**

The personal statement or autobiographical essay is crucial to the first stage of the medical school admission process. The applicant has the opportunity to reflect on her abilities, goals, and motivations, while the admission committee gets insight into various aspects of the candidate's experience and personality as well as her intellectual and noncognitive traits (e.g., communications skills, narrative competence). Murphy and colleagues<sup>14</sup> note that, there is a gap in the literature on the predictive validity of the personal statement in later academic performance. They also assert that the personal essay can be used to evaluate an applicant's motivation; after admission, it can help to match the student with an advisor, determine his goals, and better understand his past experience.

The admission essay also has the potential to reveal aspects of the candidate's personality. Ferguson and colleagues<sup>15</sup> found that students who reported more personal information in their personal statement did better clinically.

Critiques of the obligatory entrance essay abound, however. Salvatori<sup>16</sup> notes that the written submission has limited reliability and is applied and rated differently across programs. Siu and Reiter<sup>17</sup> conclude that the personal statement is not an assessment tool that works with any reliability in terms of assessing applicants' capabilities.

Personal statements may also include the contributions of people other than the applicant. Some premedical students may even purchase polished application essays prepared by online consultants to whom they provide relevant background information. O'Neill et al.<sup>18</sup> note that some applicants may receive ghost editing of their offsite written submissions from friends or from consultants who professionally assess personal statements. Furthermore, autobiographical sketches may end up being generic and predictable (i.e., candidates produce what they think is expected), limiting how effective or predictive written these submissions can be.<sup>18</sup> How then can medical admission committees use personal statements to assess applicants' noncognitive abilities more accurately?

Albanese et al.<sup>19</sup> suggest that before applicants' personal qualities can be measured, these qualities must first be defined in measurable terms, which can prove difficult. In addition to defining measurable terms, they assert another challenge:

To properly interpret the personal statement, it is important to know whether applicants believe the personal statement allows them to accurately represent their personal characteristics that qualify them for the profession of medicine and whether the personal statement is a "group project" involving input from various sources.<sup>19</sup>

Although the majority of students Albanese et al. surveyed felt that their personal statements represented aspects of their personal qualities, many admitted to receiving input and editorial advice from others, which may have rendered their essays less personal or authentic.<sup>19</sup> Furthermore, given medical schools' rather open-ended guidelines for the personal statement, each applicant's essay may reveal entirely different qualities, thus making the assessment and comparison of applicants' narratives subjective and inconsistent. We believe that if medical schools were to provide candidates with better instructions regarding how the order of their strengths and concerns is significant, the admission essay would be more accessible for both applicants and admission committees.

Despite disagreements among experts concerning the validity or predictive value of the personal statement, this written component continues to play an important role in the admission process in most North American medical schools.

### **Onsite vs. offsite writing**

Some medical schools have proposed having applicants complete onsite writing tasks as a way to eliminate contamination from external assistance or coaching and thus increase reliability of the application's written components. Hanson et al.<sup>20</sup> found that applicants' performance on an autobiographical submission written offsite was significantly different from their performance in a controlled onsite exercise. O'Neill et al. suggest that "controlled on-site production of written motivation submissions might improve both their reliability and validity."<sup>18</sup> They conclude, however, that for the off-site submission, "restriction of range, ghost editing, insufficient sampling of content, too few ratings per applicant and inexperienced raters may have affected the generalisability of the written motivation negatively."<sup>18</sup>

In the 2007-2008 application cycle, Queen's University in Kingston, Ontario, used a standardized question about professionalism as an onsite writing prompt on the day of candidate interviews. For each candidate, the admission committee compared ratings of that onsite writing sample with scores on verbal responses to four standardized interview questions. (The study did not compare interview scores with ratings of offsite writing.) The researchers did, however, note significant correlations regarding applicants' communication skills and perceptions of physicians' professional roles.<sup>21</sup>

Although onsite writing ensures responses are candidates' own work, it is not a foolproof method for measuring applicants' noncognitive qualities. The time limit and regimented

writing environment may induce anxiety in some applicants, thus impairing their ability to communicate their qualifications and motivations sincerely. However, given that the medical profession can be stressful, we propose that onsite writing prompts may be useful in determining applicants' abilities to reflect and respond under stress.

### **Writing sample of the MCAT**

The MCAT Writing Sample (WS) aims to assess the applicant's ability to develop and present ideas in a coherent fashion. Gilbert et al.<sup>22</sup> explain that the WS measures the ability to develop a focus, synthesize ideas, distinguish relevant from irrelevant information, organize information logically, and write clearly onsite, in a time-limited exercise. They comment that the cognitive skills required to develop concepts in writing are those that doctors need to organize facts about patients during moments of decision-making.

According to the AAMC's MR5 Advisory Committee<sup>6</sup>, there are concerns about whether the WS assesses all of the written communication skills required in medical education, such as the ability to write patient histories, respond to queries, or even succeed on short-answer test questions.

Siu and Reiter<sup>17</sup> state that the WS does not provide predictive validity consistently, whereas Hojat et al.<sup>23</sup> and Peskun et al.<sup>4</sup> note that WS scores have been associated with some measures of clinical competence. Gilbert et al.<sup>22</sup> propose that the most valuable use of the WS would be to re-rank applicants after ensuring they meet cut-offs on the other sections of the MCAT. We wonder whether sections of other examinations--such as the Graduate Record Examination (GRE), with its emphasis on critical reasoning, close textual reading, and a broader knowledge of the humanities--may be of use as medical educators rethink what narrative-based screening tools can accomplish. We are not suggesting that the GRE should be a model for the medical admission examination, but rather that this exam could help inform medical educators as they develop different ways of assessing cultural and narrative competence in medical school applicants.

### **An Argument for Reflection in the Application**

Overall, as we have shown above, the written components of the medical school application have been proven to be only partially indicative of both cognitive and noncognitive qualities. Given the difficulty in evaluating personal qualities from subjective written sources, medical schools have experimented with alternative means of measuring candidates' noncognitive abilities. Ferguson et al.<sup>24</sup> concluded that applicants' personal statements were predictive of performance during the clinical years of medical school, and that personality traits, such as conscientiousness, correlated positively with both preclinical and clinical years. These authors thus advocate further research on incorporating personality testing into the application process.

In fall 2010, McMaster University introduced its Computer-based Assessment for Sampling Personal Characteristics (CASPer) to help determine which medical school applicants are interviewed. The timed, online test consists of questions of an ethical nature and functions as a type of personality screen to identify in all applicants "good decision-making, ethics, communication skills and cultural sensitivity."<sup>25</sup> McMaster regards this system so highly that

CASPer scores “are weighted nearly twice as heavily as grades”<sup>25</sup> and Verbal Reasoning scores on the MCAT.<sup>9</sup>

While there is a great need to develop effective and efficient methods like CASPer for evaluating noncognitive qualities, assessment of written components and narrative competence should not be dismissed from the application process. Although admissions committees face challenges when assessing personal statements that seem homogenous and even predictable, prospective students must reflect upon their experiences and motivations when composing them. Following Benbassat and Baumal’s<sup>26</sup> line of reasoning, potential applicants should be made aware of what to expect in medical training, but also they should also be encouraged to be honest with themselves about their actual qualities, abilities, and motivations. Based on that assertion, it might be argued that reflective writing exercises, such as the personal statement, could force applicants to consider their own suitability for the profession, to evaluate experiences and resilience objectively and then to assemble them in a coherent, meaningful manner. Benbassat and colleagues, however, essentially de-emphasize selection of students based on non-cognitive traits.

We continue to believe that the reflective essay may communicate a great deal about an applicant. The admission committee is offered insight into the candidate’s virtues and experiences, as well as how she formulates ideas. She may express aspects of her character through narrative sequences. In the personal essay, the candidate’s use of metaphor, analogy, and other rhetorical and creative devices can contribute to her authentic response to the writing prompt. Furthermore, the applicant has the opportunity to articulate what she deems significant or unique, but otherwise unaccounted for (or even unrequested), in her application. The candidate’s personal experiences and background, including issues pertaining to her identity, are relevant to how she will perform as a medical student and, ultimately, as a physician.

Indeed, the growing importance of reflective writing in medical education should not be overlooked. Wald et al. note that since narrative writing in internal medicine and emergency medicine residency programs encourages reflection, inclusion of reflective writing in preclinical curriculum would in turn, promote empathy and professionalism.<sup>27</sup> The written components of the application package may be the ideal place for applicants to communicate their ability to be reflective, or at least their desire to develop such a skill. Why not introduce the notion that narrative competence and reflective capacity are important physician attributes even before medical school begins?

In addition, published rubrics for more reliably assessing reflective capacity could be applied to applicant writing samples/narratives. One example is the Learning from your Experiences as a Professional (LEAP) rubric out of the University of California, San Francisco,<sup>28</sup> which promotes focused critical reflection for medical professionals. Learman et al.<sup>29</sup> conclude that rubric-scored exercises can reliably gauge self-reflection ability. In addition, text analysis software, such as Linguistic Inquiry and Word Count,<sup>30</sup> could potentially be used to analyze personality traits and capacity for insight within written submissions.

## **Suggestions for Improving the Predictive Value of Writing Components Within the Medical School Admission Process**

Onsite writing tasks, the personal statement, and the MCAT WS are valuable tools that medical school admission committees can use to acquire a wide array of information about a medical school applicant. As noted above, certain personal qualities that are communicated in written submissions are correlated with success in the clinical years of medical school. There is certainly room for improvement in the way that written components of the medical school application are composed, collected, and evaluated, however.

First, comparing texts that a candidate produces during onsite writing tasks on the day of the interview with the personal essay that candidate previously submitted would enable admission committees to more accurately assess the applicant's writing abilities and capacity to convey authentic personal traits. Ideally, writing prompts for onsite exercises would change from year to year and offer candidates the opportunity to reveal what makes them unique. Writing prompts could be similar to those used in reflective practice workshops at the University of Toronto that draw from "personal incidents" or are derived from CANMEDS professional roles.<sup>31</sup> Possible prompts include "Write about a mistake," "Write about an ethical dilemma," "Write about a situation that felt unprofessional," or "Write about a time when you did or didn't stand up for someone" (i.e., the CANMEDS Advocacy Role).

Furthermore, admission committees could define, delineate, and achieve consensus around specific personal qualities that they should seek when reviewing candidates' autobiographical essays. Each assessor should possess working/operational definitions of the desired qualities that include representative examples of behaviors and wording. Providing admission committee faculty with clear methodological guidelines about searching for evidence of such traits within the narratives would ensure that applicants are evaluated more accurately. During interviews, candidates could then be asked specific questions about highlights or inconsistencies in their submitted essay as well as the essay's authenticity and accuracy in portraying them. Interviewers may also find it useful to ask candidates about any information that they decided to leave out or considered risky to include.

In addition, admission committees may wish to recruit professionals whose work focuses on assessing the qualities that the medical education community agrees medical students should possess. A social psychologist whose research focuses on personality assessment and expressive styles/narrative competence would be a useful resource, for example. Consulting with scholars who understand that particular types of statements and rhetorical devices communicate certain personality traits of the applicant would facilitate more subtle evaluation of autobiographical essays. Professional writers (e.g., professors of English, literary and film theorists) are trained to analyze character, voice, and narrative style, and their input could add depth to the admission committee's interpretation of a personal statement. If the cost for such collaborative initiatives is a prohibitive factor initially, graduate students from humanities disciplines could assist with assessing medical applicants' personal qualities. These graduate students could review applicants' essays to provide insights about character and ethics drawn from their areas of study, thereby underscoring the need for ongoing dialog among medical faculties and the rich communities of scholarship that surround them.

The scope of qualities assessed in the autobiographical statement is more expansive than those assessed in the MCAT WS. The MCAT WS (until 2013) or a similar task instrument could continue to be used to evaluate a candidate's literacy, fluency in English, and capacity to formulate cogent arguments under pressure--qualities that differ from the noncognitive abilities and personal attributes sought out in the autobiographical essay. In the future, other types of written texts may be used to discern a candidate's narrative competence,<sup>13</sup> attachment style, emotional maturity, and honesty/authenticity. Such approaches are likely to emerge as the field and research scope of narrative-based medicine develop further.

While research indicates that reflective capacity is significant to the efficacy of medical students and health care professionals, some medical school applicants may be unaware or skeptical of this connection. If medical schools were to make more clearly known to applicants the value of narrative competence and reflection, applicants might take their written submissions more seriously. As such, in addition to an onsite writing test, admission committees could run an online tutorial or workshop in which candidates would be required to participate prior to applying. Perhaps this proposed method is not unlike McMaster's new CASPer online component, although further research into CASPer and its effectiveness are needed.

As suggested above, applicants may decide to leave out of their written submissions the personal content that they perceive as "risky," such as information on cultural background, sexual orientation, socio-economic challenges, or strategies they have used to cope creatively and adaptively with adversity. Admission committees should consider making it known that they are open to receiving such narratives. Not only do such personal details inform what makes a candidate unique, but they also enable committees to constitute classes of students with diverse backgrounds. We propose that developing and implementing reflective writing prompts that capture sexual, cultural, and socioeconomic characteristics and levels of (dis)ability—for example, "Write about a time when you felt different from others"--may go a long way toward creating first-year classes that are more representative of the communities these students will serve when they complete their training.

Although there is disagreement in the literature about the value of the written component of the medical school application, adopting a more rigorous approach to the narrative components of the medical school application may enable candidates to communicate and admission committees to learn a great deal about applicants' personal qualities. Reflective writing, in particular, has the capacity to reveal the extent to which applicants possess one of the significant qualities medical schools seek in their students. Improving the way the written components are administered and evaluated will positively influence medical school selection protocols. With such improvements, we believe that the written aspects of the medical school application have great potential to identify the applicants who are likely to develop into the competent, empathic, and reflective doctors that medical schools seek to educate.

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