Introduction:

Medical education is in a rapidly evolving state of incredible change, especially in the area of graduate medical education (GME). As the result of an agreement between the American Osteopathic Association (AOA), the American Association of Colleges of Osteopathic Medicine (AACOM) and the Accreditation Council for Graduate Medical Education (ACGME), there will be a single unified accreditation system in place by June 30, 2020.¹

The dynamic nature of the GME environment includes quantifiable and substantial impact on not only the osteopathic profession and osteopathic postgraduate (residency) training, but also upon future decisions that osteopathic medical (OM) students will need to make. Most notably, OM students are increasingly questioning the benefits/risks and potential consequences of taking or not taking the USMLE (United States Medical Licensure Exam) Step 1.

According to Kim Peck, MBA, director of academic and career guidance in the College of Osteopathic Medicine at Michigan State University (MSUCOM), “A vast majority of the students who make appointments to see me ask if they should take the USMLE. Usually, it’s the very first question that I get asked.”

In fact, not only has the question of taking the USMLE Step 1 to have a score available to share with residency program directors become more common, students are increasingly questioning whether or not to complete Step 1 and Step 2CK of the USMLE prior to applying for residency positions.

Between 1985 and 2006, the number of osteopathic medical students enrolled in ACGME training programs increased 419 percent, with more than 66 percent of all osteopathic medical school graduates training in ACGME programs.² From 2002 through 2012 the number of osteopathic medical students taking the USMLE Step 1 exam increased by 280 percent.³ Based on these recent trends, current projections are that between 55 and 65 percent of all second-year osteopathic students will take the USMLE Step 1 examination in 2015.

Peck has noted, “The number of our (MSUCOM) students who are taking the USMLE has essentially tripled in the past three
years. It is likely that 60 to 70 percent of our students will take USMLE Step 1 this spring.”

**Why Take the USMLE?**

The majority (70.2 percent) of osteopathic medical students (Class of 2010) who responded to a national survey reported that they believe that osteopathic medical students should take the USMLE. The most common reason cited for taking the USMLE is to “keep options open.”

The decision to take the USMLE is not binary (i.e., simply yes or no). It depends upon aspects unique to each individual’s situation. Each student needs to objectively evaluate the pros and cons of taking the USMLE Step 1. What is the likelihood that her/his score will actually open or close doors to future opportunities?

When questioned by students about whether or not they should take the USMLE, Peck reported, “After questioning students about their future plans, I commonly advise them to take the USMLE.”

**Potential Benefits**

There are a variety of credible reasons that influence students’ decisions to take the USMLE Step 1 and/or the other components of the USMLE. These motives often include the idea that a “good score” can increase a candidate’s competitiveness for a position in an ACGME residency program, providing more choices of program type and geographic location. Although the National Resident Matching Program (NRMP) Program Director (PD) Survey (2014) reports that 77 percent of ACGME residency programs accept Comprehensive Osteopathic Medical Licensing Examination (COMLEX) scores, certain specialties and some highly preferred geographic locations only consider osteopathic students who have taken the USMLE. The percentage is high in primary care specialties. As an example, 97 percent of Family Medicine program directors reported that they accept COMLEX. In contrast, the “We accept COMLEX scores” responses from PDs in Emergency Medicine, Orthopedics and Otolaryngology were only 63, 26 and 21 percent, respectively.

**Potential Risks**

While achieving a high USMLE score can increase residency availability and opportunity, getting a low score can do the exact opposite. Although it is not mandated that USMLE scores be reported to program directors during the residency application process, applicants should be honest when asked if they have
Will Taking the USMLE Step 1 Examination Strengthen My Residency Application?

taken the exam. Not reporting one’s score may set off red flags as to why this information was omitted.

Taking the USMLE requires additional preparation time. Further, there are additional expenses – registration fees and travel to examination sites – and the added stress associated with taking another high-stakes examination.

Program Directors’ Thinking

The decision as to whether a USMLE score is required for an ACGME residency application is determined by the individual program director. The uncertainty of the impact of not providing a USMLE score for program directors to review appears to be driving increasing numbers of osteopathic medical students to take the USMLE.

Based on a survey of Emergency Medicine residency program directors, Weizberg et al (2014)\(^6\) reported that 80 percent (78 of 98) of the respondents considered it extremely or somewhat important for osteopathic medical students to have taken the USMLE. Interestingly, the program directors who classified the completion of the USMLE as only “somewhat important” went on to qualify their responses by adding that they recommend to applicants that they provide USMLE scores.

Interpreting COMLEX scores

Based on feedback provided to us by residency applicants, one of the most common reasons offered by ACGME program directors to support the importance of having USMLE scores available is their perceived difficulty comparing USMLE and COMLEX scores.

Research that has attempted to predict USMLE scores from COMLEX scores through various formulas that convert COMLEX scores into USMLE scores is limited and has been met with conflicting interpretation of validity and reliability.\(^7\)\(^-\)\(^9\) The inability to directly compare scores makes it difficult for some program directors to use COMLEX scores to determine whether or not to interview osteopathic medical students.

Adding to this uncertainty is commentary provided by John Gimpel, DO, president of the National Board of Osteopathic Medical Examiners (NBOME) who reported, “Because of the different natures of the examinations, it is not possible - or even desirable - to make a direct numerical comparison between the scores of the COMLEX-USA examination series.

Guideline 2

The decision to take the USMLE adds the financial costs of the exam, as well as study aids; it requires additional time be allocated for studying and taking the exam, and frequently adds more stress to the lives of osteopathic medical students.
Primary and Secondary Uses

When licensure examinations were first implemented for physicians, their primary use was straightforward – to protect the safety of the public by ensuring that those individuals who were eligible for licensure had the skills and knowledge necessary to practice medicine.\(^{11}\)

As the numbers of applicants for residency positions continue to grow and the competitiveness of the selection process surges, there is increasing pressure on students to receive more than just a passing score on these examinations. Secondary uses of these scores include serving as “cut scores” by program directors when making the determination as to which students to invite for audition rotations, which applicants to interview and which applicants to place on their residency match lists.\(^{1,5,6,9,12}\)

Making YOUR Decision

Making the determination to take or not take the USMLE should be based on a number of individual, unique factors that must be as objective and evidence-based as possible.

Peck shared a list of variables that she uses to help students decide if taking the USMLE offers more potential advantages to them or if it is likely that more career doors will close based on their probable scores.

Combining her recommendations with our experiences and related literature on the subject, we offer a USMLE decision-making matrix (Appendix) that we believe will prove helpful to students trying to determine whether or not they should take the USMLE.\(^{13-15}\)

Taking the USMLE

Guideline 3

Taking the USMLE should be based on as quantifiable, objective and personalized information as one can secure.
Appendix – USMLE Decision-Making Matrix

From the following six tables select the one most accurate response for your ability / skill sets / future plans. Add your total point score. If your total score is greater than 20 it is likely that taking the USMLE Level 1 examination offers you more potential benefit than risk.

<table>
<thead>
<tr>
<th>Class Rank (cumulative percentile)</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; – 20&lt;sup&gt;th&lt;/sup&gt;</th>
<th>21&lt;sup&gt;st&lt;/sup&gt; – 40&lt;sup&gt;th&lt;/sup&gt;</th>
<th>41&lt;sup&gt;st&lt;/sup&gt; – 60&lt;sup&gt;th&lt;/sup&gt;</th>
<th>61&lt;sup&gt;st&lt;/sup&gt; – 80&lt;sup&gt;th&lt;/sup&gt;</th>
<th>81&lt;sup&gt;st&lt;/sup&gt; – 99&lt;sup&gt;th&lt;/sup&gt;</th>
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<tr>
<td>Points</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>10</td>
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<thead>
<tr>
<th>MCAT Score (total – 1&lt;sup&gt;st&lt;/sup&gt; attempt)</th>
<th>&lt;25</th>
<th>25 – 26</th>
<th>27 – 28</th>
<th>29 – 30</th>
<th>&gt;30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
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<tr>
<th>Test Anxiety (degree)</th>
<th>High</th>
<th>Moderate</th>
<th>Slight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
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<tr>
<th>Standardized Testing Ability (typical score; 1&lt;sup&gt;st&lt;/sup&gt; attempt)</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
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</thead>
<tbody>
<tr>
<td>Points</td>
<td>1</td>
<td>3</td>
<td>5</td>
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<thead>
<tr>
<th>Specialty Choice (current preference)</th>
<th>Primary Care</th>
<th>Non-Primary Care Specialty</th>
<th>Fellowship</th>
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</thead>
<tbody>
<tr>
<td>Points</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
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<thead>
<tr>
<th>Osteopathic Familiarity (number of DOs in program)</th>
<th>DOs every yr</th>
<th>DOs 4 of past 5 yrs</th>
<th>DOs 3 of past 5 yrs</th>
<th>DOs 1-2 of past 5 yrs</th>
<th>NO DOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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Note:
This matrix represents the combination of data, evidence, and opinions selected by the authors relating to the impact the USMLE could have upon an osteopathic medical student’s residency application, and is current as of March 2, 2015. Please be aware that this document does not serve as individualized career or education advice as the landscape of graduate medical education is continually changing. Further, the application and accuracy of this information is both situation and student dependent. Consequently, it is the responsibility of each individual student to contact a career advisor and/or program director prior to registering for the USMLE examination in order to obtain personalized information, recommendations and advice regarding his or her specific circumstances.
References


7. Slocum PC, Louder JS. How to predict USMLE scores from COMLEX-USA scores: A guide for directors of ACGME-accredited residency programs. JAOA 2006;106(9):568-569.


