

## EDITORIAL

# In the valley of the blind, the USMLE is king

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THE DUTCH HUMANIST PHILOSOPHER Erasmus published in Latin a collection of popular idioms, entitled “Adagia.” One of these “in regione caecorum rex est luscus” is translated as “in the land of the blind, the one eyed man is king” (7). A similar truism exists in most cultures. Value exists on a relative scale: if you are the best of all available options, you are the best option.

An editorial by Lujan and DiCarlo (2) appropriately disparages the increasingly obsessive focus on the United States Medical Licensing Examination (USMLE) Step 1 exam as a major factor in identifying candidates for residency positions. They correctly point out that USMLE step 1 scores are not correlated with other measures of clinical performance (4). Success as a physician entails much more than the ability to excel on a multiple-choice question test. The recent commentary in an *Academic Medicine* paper advances a similar stance (6), made more powerful because it was co-authored by the President and CEO of the National Board Of Medical Examiners (NBME), the group that develops and administers the USMLE examinations. The NBME and the exam are not the source of the problem.

The USMLE Step 1 is a lousy choice as a residency selection tool. The USMLE Step exams are the wrong test. The various components of the USMLE do an excellent job of assessing the minimum level of knowledge needed to progress in training, but all of the measurement precision and reliability are focused on the pass-fail threshold, the truly ‘high-stakes’ determination (3). As scores rise above this threshold, the precision and reliability are progressively lost. The same “high scores” valued by competitive residency programs are the least reliable aspects of the test. The test was never intended for that purpose.

An exclusive focus on knowledge to select aspiring physicians for a residency position is inappropriate and in reality does not happen. Medical schools embrace a competency-based education model, valuing the knowledge and also the skills and the attitudes necessary to be a successful resident (the end-point of medical school is the beginning point of residency). Knowledge is a necessary component, but is not of itself sufficient, and development of other competencies (1) are required of medical students. Advocating for one competency does not require the others to be abandoned. Assessment and documentation of all of these competencies in a meaningful way to allow comparison among all U.S. and international medical students is the real challenge, and one that is not being met.

Assessment and documentation of skills are particularly challenging. The disdain with which USMLE Step 1 is considered pales in comparison to the scorn currently being heaped on USMLE Step 2 Clinical Skills. This pass/fail examination requires students to travel to one of five testing centers in the U.S. and participate in a day-long series of simulated clinical encounters, the Objective Structured Clinical Exams. The significant expense of the test is amplified by travel and housing costs for students who do not live in one of those five cities. A petition to end USMLE Step 2 Clinical Skills, initiated by students and faculty at Harvard, gained 14,000 signatures in 1 mo (<https://medtechboston.medstro.com/blog/2016/04/15/the-fight-to-end-the-step-2-cs-exam>).

And we have not even considered the assessment and documentation of attitudes, including professionalism. Here there be dragons.

So, how did USMLE Step 1 end up ruling the land of the blind?

This is explained by understanding the denizens of the land. Residency directors are annually tasked with determining which of the 42,000 applicants entering the National Resident Matching Program should be granted an interview for one of the 10 or so positions in their program. In selecting applicants for interview, USMLE Step 1 scores are used by 93% of programs. Each applicant is also a unique individual with a compelling story. The interview adds an opportunity to assess other competencies, and characteristics such as interpersonal skills become more highly regarded than USMLE scores in ranking applicants (5). With the exception of the USMLE scores, there is no other common experience upon which to rank these 42,000 potential applicants. It is not that the USMLE performance is good: it is that examination is the only metric available for each applicant. In the valley of the blind. . .

A second point in the Lujan and DiCarlo editorial challenges the need for mastery of the content tested in the USMLE Step 1, in part because so little of it is used by any individual physician in daily practice. That argument can be extended to include most of the medical curriculum, including the majority of the clinical training (clerkships). The difficulty lies in the fact that most of the medical curriculum is for the undifferentiated physician. Only after students settle on a specialty does the “clinical relevance” of either the basic sciences or the clinical sciences become apparent. The time spent in the operating room in the surgery clerkship is of limited, if any, use to a practicing psychiatrist. Yet the behavioral science instruction, perceived as of limited use by aspiring surgeons, is now seen as essential.

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When we revised our medical curriculum, there was a significant tension between allocating time for the core competencies expected of all of our graduates and the competencies that were specialty specific and not required of every student. Not all of these core competencies are relevant to every medical specialty: if you are preparing to be an obstetrician, knowledge of male reproductive anatomy is of limited value. Pediatricians would have little use for geriatric medicine information. I am not stating that everything in the preclinical curriculum is relevant, but advocating a careful consideration of what core experiences are foundational. One interesting approach was our decision to have a return to foundational sciences month added to the M4 yr. This specialty-specific course will revisit the foundational sciences that are particularly relevant for the specialty that the student has selected.

Passing the four components of the USMLE licensing exam is necessary is not sufficient to obtain a license to practice medicine. In the United States, each state controls medical licensure decisions, but all 50 have agreed that the USMLE exams, administered by the National Board of Medical Examiners, are a required component in the licensure process. In addition to many other characteristics, a physician must be knowledgeable.

#### DISCLOSURES

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#### AUTHOR CONTRIBUTIONS

R.G.C. drafted manuscript; edited and revised manuscript; approved final version of manuscript.

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