Why Not Wait? Exploring the Implications of Delaying USMLE Step 1 Until After Completion of Core Clerkships

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Emerging Solutions and Workshops
Emerging Solution

Abstract Body:
Short Description: Optimal timing of Step 1 is unknown. Recently, several schools have undergone or are undergoing curricular revisions that shorten preclinical curricula to 12-18 months. Some of these schools have moved Step 1 after the core clinical clerkships. This session explores the rationale for change, logistics, outcomes, and lessons learned to help inform future decision making at other institutions.

Abstract:
Research concerning the optimal timing of Step 1 is limited. According to data published by the AAMC, in 2014-15, most accredited schools (90%) have their students take Step 1 during their M2 year.[i] Historically, this occurred right after completion of the basic science or preclinical curricula, after a study period of variable duration. At many schools, passing Step 1 is required to enter clinical clerkships. Recently, several schools have either undergone, or are undergoing, curricular revisions that shorten the traditional two-year preclinical curricula to 18 months or even one year. Some of these schools changed the timing of Step 1 to after completion of some or all of the core clerkships. Other schools, during their curricular reform efforts, are contemplating where to place Step 1. In the absence of published data to guide them, schools are looking at peer institutions for guidance, but it can be challenging to identify comparable institutions. Numerous recent queries on this topic have arisen on educational list serves, but the responses have been sparse. Schools want to understand and implement change based on current best practice. A study that investigated the performance of medical students from years 1, 3, and 4 on sample Step 1 USMLE questions demonstrated that students with more clinical experience performed better.[ii] This suggests that moving Step 1 after clerkships might improve scores, or at least that scores would not be worse. Pedagogically, students would be encouraged to deepen their basic science learning during clerkships, more closely linking this knowledge to clinical care, and fostering more life-long connections beyond the exam. Change based on educational theory without supporting data can be particularly anxiety provoking for students. The concern among educators is that students may lose a needed opportunity to consolidate basic science knowledge before clerkships, which may disproportionately affect struggling students. Some schools that moved Step 1 after clerkships are reporting improved scores, but this data is confounded by the other co-existing curricular changes that occurred. This emerging solutions session pulls together schools that have either moved, or are moving, Step 1 to explore the rationale for change, the logistics, early outcomes, and lessons learned to help disseminate best practices and inform future decision-making at other institutions.

Panelists / Institutional Description:
Michelle Daniel, Assistant Dean of Curriculum, University of Michigan School of Medicine. Michigan is transitioning from a 2 + 2 model to a 1 + 3 model. Students starting in 2015 will take Step 1 after completing all of their core clerkships.

Kim Lomis, Associate Dean of Undergraduate Medical Education, Vanderbilt University School of Medicine. Vanderbilt changed its curriculum in 2013 to one year of foundational science, followed by one year of core clinical rotations and Step 1.

Vicky Harnik, Associate Dean of Curriculum, New York University (NYU) School of Medicine. NYU transitioned to a new curriculum in 2010, resulting in a 1.5 year preclinical and 2.5 year clinical model. Students now take Step 1 within six weeks of finishing their core clerkships. While NYU students have historically scored better than the national average, the average Step 1 scores of the two cohorts who graduated under the new curriculum have increased significantly.

Arnyce Pock, Col (Ret), USAF, MC Associate Dean for Curriculum, Uniformed Services University of the Health
Sciences (USUHS). USUHS implemented a new curriculum in 2011, shifting to an 18-month preclinical curriculum. Students now take Step 1 after completing all of their core clinical clerkships. Two graduating classes have completed the new curriculum, and both classes demonstrated Step 1 scores that were significantly improved over the school’s historical baseline.

Colleen O’Connor Grochowski, Associate Dean of Curricular Affairs, Duke University School of Medicine. Duke has the longest experience (over 5 decades) of students who take one year of foundational science, and one year of core clerkships followed by Step 1. They have consistently high Step 1 scores.

Moderator: Owen Thompson, medical student class of 2019, University of Michigan School[MD1] of Medicine.

Additional Facilitators:
Peter Marzuk, Associate Dean of Curricular Affairs, Professor of Psychiatry, Weill Cornell Medical College
Tracy Bumsted, Associate Dean of Undergraduate Medical Education, Oregon Health and Science University
Amy Fleming, Associate Dean for Medical Student Affairs, Vanderbilt University School of Medicine
Mel Rosenfeld, Senior Associate Dean for Medical Education, New York University School of Medicine
Sibel Klimstra, Associate Dean for Academic Affairs, Weill Cornell Medical College
Gail Morrison, Senior Vice Dean for Education, Perelman School of Medicine at the University of Pennsylvania
Judy Shea, Associate Dean for Evaluation and Assessment, Perelman School of Medicine at the University of Pennsylvania
Michael L. Schwartz, Ph.D., Associate Dean for Curriculum, Yale University School of Medicine
Sally Santen, Assistant Dean of Evaluation and Assessment, University of Michigan School of Medicine

Session Plan:
After a brief introduction to the topic (5 min), Deans from 5 institutional exemplars at various stages in the change process of moving Step 1 will provide brief presentations (~4 min each) reviewing their institutions’ rationale for Step 1 timing, their curricular structure, the logistics of the change, outcomes (if available), and lessons learned. This will be followed by a panel discussion with a question and answer period (15 min). The audience will then engage in a strategy session (40 min). Tables of participants plus a facilitator will discuss: 1) the pedagogical pros and cons of moving Step 1; 2) the approach to moving Step 1 for the class at large (What should be done with the study period? Should timing of Step 1 be mandated? How does this affect timing of Step 2? How should this be presented to students? Should the change be mandatory? Should an alternative exam be offered for knowledge consolidation prior to clerkships such as the National Board of Medical Examiners (NBME) comprehensive basic science exam?); 3) Should low performing or “at-risk” students be handled differently? Notes will be recorded at each table and compiled by facilitators. The session will close with a report out of the most interesting ideas discussed at each of the tables (10 min). This will be disseminated to participants following the meeting in the form of a white paper, and will inform a Perspectives article on this important and timely topic.

Level of Audience: Expert
Focus of Presentation: UME

References:
[i] https://www.aamc.org/initiatives/cir/406430/10c.html


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