

Medical Education Research

'Is it enough to use the current in-house examinations in the preclinical curriculum for Step 1 prep?'

Authors: Brooke Shipley, Andrea Vallevand, Hong Gao and Yenya Hu

Background: USMLE has implemented a policy of eliminating 3-digit reporting. However, passing Step 1 on the first attempt remains critical in residency application and student well-being.

Early identification and longitudinally training the learners to self-assess, identify and patch knowledge gaps is essential for students and academic coaches.

Preliminary data demonstrated that 88% of students that passed all Customized Assessment Services (CAS) benchmarks passed the first comprehensive basic science self-assessment (CBSSA). Conversely, among the students with one or more CAS fails, only 44% passed the first CBSSA.

Objectives: A retrospective analysis was conducted to establish the relationship between in-house and CAS examination pass/fail benchmarks and the (CBSSA) pass/fail status at the end of the preclinical curriculum.

Methods: In-house, CAS and CBSSA scores were collected from a recent WFSOM cohort. The pass benchmark was operationalized at 70% for the in-house and CAS examinations and the CBSSA pass/fail was categorized based on the passing score (194).

In two separate odds ratio analyses, we identified benchmark fails in both in-house and CAS scores from seven Systems Pathophysiology (SP) blocks. CBSSA scores were categorized as pass or fail. The respective odds ratio contingency table categories were operationalized as CBSSA fail/benchmark fail, CBSSA fail/benchmark pass, CBSSA pass/benchmark fail and CBSSA pass/benchmark pass.

Results: CBSSA, in-house and CAS data from 134 students were collected. CBSSA results indicated 65.7% (n = 88) students passed and 34.3% (n = 46) failed the CBSSA. Scores from 134 students from 7 SP examinations equaled 938 in-house and 938 CAS data points. They were then assigned to their respective odds ratio contingency table categories.

Among the 46 (322 data points, 46 x 7) CBSSA fails, there were 4 (1.2%) in-house benchmark fails and 70 (21.7%) CAS benchmark fails. Among the 88 (616, 88 x 7) CBSSA passes, there were 5 (0.8%) in-house benchmark fails and 26 (4.2%) CAS benchmark fails.

Therefore, for any failure on in-house and CAS, the likelihood of failing the first CBSSA was 1.5 and 6.3, respectively.

Conclusions: The results from this study will inform students, academic coaches and course directors to improve the effectiveness of their assessment approach.