

SUBJECT EXAMINATION PROGRAM

COMPREHENSIVE BASIC SCIENCE EXAMINATION (CBSE)

SCORE INTERPRETATION GUIDE



NBME® subject examinations provide medical schools with a tool for measuring examinees' understanding of the basic sciences. Although these examinations are designed to be broadly appropriate as part of overall examinee assessment, course objectives vary across schools, and the congruence between subject examination content and course objectives should be considered when interpreting test scores and determining grading standards. Specifically, subject examination scores should not be used alone, but rather in conjunction with other indicators of examinee performance in determination of grades.

Subject Examination Scores

Because CBSE and the United States Medical Licensing Examination® (USMLE®) Step 1 cover very similar content, CBSE performance can be used in conjunction with other information to assess readiness for Step 1. As of February 2022, overall and content area performance on CBSE is reported using equated percent correct (EPC) scores, representing the percentage of content mastered. They are calculated as the percentage of items in the total content domain and specific content area domains that would be answered correctly based on an examinee's proficiency level.

EPC scores are statistically adjusted (equated) to account for slight variations in exam form difficulty, providing an accurate reflection of examinees' knowledge regardless of the CBSE form they took. EPC scores can be used to track school and examinee performance over time, making it possible to compare the scores of your examinees with those of nationally representative groups taking CBSE.

Precision of Scores

The total EPC score is the best available estimate of an examinee's overall performance on CBSE, but all measures include some level of imprecision. If an examinee tested again without learning or forgetting anything, the total EPC score would fall within one standard error of the estimate (SEE) of the original score two-thirds of the time. The total EPC score SEE for this examination is 4 points, and the likely score range resulting from this SEE is reported on the Examinee Performance Report. Content area EPC scores are less precise than the total EPC score.

Score and Performance Feedback

Roster Report

The Roster Report provides a total EPC score for each examinee and is provided for every administration. Summary information about the examinees from your administration and number of items scored are shown on each page. If there were at least 2 examinees, descriptive statistics and a frequency distribution of the total EPC scores are included.

A downloadable text file ("Download Scores") provides total EPC scores and content area EPC scores for each examinee and is also provided for every administration.

Content Area Report

The Content Area Report shows the average content area EPC scores for the examinees from your administration and a Step 1 comparison group, based on the estimated performance of a recent national cohort of Step 1 first-takers from LCME-accredited medical schools on CBSE. This report is provided if there were at least 5 examinees in your administration.

Item Analysis Report

The Item Analysis Report displays the general content of each item, the percentage of examinees from your administration who answered the item correctly, and the percentage of examinees from the Step 1 comparison group who answered the item correctly. This report is provided if there were at least 5 examinees for a single form administration.

A downloadable text file ("Download IA Detail") provides the same information as the PDF report and is also provided if there were at least 5 examinees for a single form administration.

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Examinee Performance Report

The Examinee Performance Report is provided for each examinee from your administration. This report provides a total EPC score, an estimated probability of passing Step 1 if testing within a week (i.e., with a similar level of knowledge), and a visual depiction of performance. For each content area, examinees receive their EPC score, the average estimated score of a recent cohort of Step 1 first-takers from LCME-accredited medical schools, an indicator of how their performance compared to that group (statistically lower, about the same, or higher), and the percentage of items in the content area (as a range). Since many factors (such as changing levels of knowledge) may impact performance on Step 1, the estimated probability shown on this report is not a guarantee of future Step 1 performance.

Examinee Question-Level Feedback Report

The Examinee Question-Level Feedback Report is provided for each examinee from your administration. This report shows the general content of each item, whether the examinee's answer was correct or incorrect, and a projected percentage of Step 1 examinees nationally who answered the item correctly. Items are sorted alphabetically by content description, the examinee's answer (correct or incorrect, with correct answers shown first), and the national percent correct value. Higher percentages indicate easier items.

A downloadable text file ("Questionlevelfeedback-all"), found in the "Examinee Question Level Feedback" zipped folder if there were at least 5 examinees for a single form administration, shows whether each examinee's answer to each item was correct or incorrect. This file also contains the general content of each item, the percentage of examinees from your administration who answered the item correctly, and the percentage of examinees from the Step 1 comparison group who answered the item correctly.

INSIGHTSSM

Starting in February 2024, in addition to being posted to the MyNBMESM Services Portal (MyNBME) for faculty access and review, the Examinee Performance Report and Examinee Question-Level Report will be made available to examinees via INSIGHTS, an interactive dashboard that allows examinees to download their individual Subject Exam score reports directly and explore their performance feedback with greater flexibility. Examinees can access INSIGHTS through the MyNBME Examinee Portal. An email notification with instructions for accessing INSIGHTS will be sent to examinees when results become available, 3-4 calendar days after results are delivered to medical schools.

Norms

Total academic year norms are provided for three relevant national groups to aid in the interpretation of examinee performance. The two most recent sets of norms that have been developed for this examination are provided for your convenience and are reported on the EPC score scale. Norms can also be found on MyNBME.