# • NBME<sup>®</sup> National Board of Medical Examiners Subject Examination Program

## **Score Interpretation Guide for Examinees**

### **Basic Science Examination**

The enclosed performance report lists your subject examination score and provides a performance profile to aid in self-assessment. NBME<sup>®</sup> subject examinations provide medical schools with a tool for measuring examinees' understanding of the basic sciences. Items on the examinations were written and reviewed by national test committees. Prior to publication, test forms are reviewed by a panel of course directors representing the content of each examination. 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.

#### Subject Examination Scores

The subject examination score is an equated percent correct score that represents mastery of the content domain assessed by the examination. It is calculated as a percentage of items in the total content domain that would be answered correctly based on an examinee's proficiency level on the test. The subject examination scores are equated across test administrations and are statistically adjusted for variations in test form difficulty. Consequently, these scores can be used to compare and track school and examinee performance over time.

The subject examination scores are placed on a classic percent correct metric to ease interpretation and use. This scale provides a useful tool for comparing your performance with that of a nationally representative group taking this examination as an end-of-course assessment. For recent administrations, the mean and standard deviation for first-time examinees from LCME-accredited U.S. and Canadian medical schools were approximately 70 and 12, respectively.

Please note that these scores cannot be compared to scores reported prior to August 2017 because they were on a different score scale.

#### Precision of Scores

Measurement error is present on all tests, and the standard error of measurement (SEM) provides an index of the (im)precision of scores. The SEM indicates how far the score you earn on the examination is likely to stray from your "true" proficiency level. The SEM is approximately 4 for this examination.

Using the SEM, it is possible to calculate a score interval that indicates how much a score might vary across repeated testing using different sets of items covering the same content. An interval that will encompass about two thirds of the observed scores for a given true score may be found by adding the SEM to a score and subtracting it from that score. For example, if your true proficiency on the examination is 75, the score you achieved on the examination will usually (two times out of three) fall between 71 and 79 (75 - 4 and 75 + 4).



#### **Examinee Performance Profile**

**Basic Science Examination** 

000000 - Generic Medical School

ID: 00000000 Name: Student A Test Date(s):mm/dd/yyyy Total Equated Percent Correct Score\*: 75

The score you received on this examination is shown above. This Performance Profile is provided to aid in self-assessment. The profile provides information regarding your performance compared to the performance of a comparison group of examinees on the major content areas of the examination. The comparison group includes first-time takers from LCME-accredited medical schools who took this examination as an end-of-course examination under standard testing conditions. The mean performance of the comparison group is represented by the vertical line.

Performance bands indicate areas of relative strength and weakness. Some bands are wider than others. The width of a performance band reflects the precision of measurement: narrower bands indicate greater precision. A **(II)** or **II)** symbol indicates that your performance band extends beyond the displayed portion of the scale. Because many of the content areas are based on a relatively small number of items, small differences in the location of bands should not be over-interpreted. If two bands overlap, performance in the associated areas should be interpreted as similar. Please note that many items may contribute to more than one content area. Use caution when interpreting differences in performance across content areas.

	Lower Performance	Average Performance	Higher Performance
Organ Systems			
Cardiopulmonary Systems			
Endocrine System			
Gastrointestinal and Nutrition Systems			
Hematopoietic and Neoplasia Systems			
Immunology			
Reproductive and Renal/Urinary Systems			
Skin, Musculoskeletal, and Nervous Systems			
Disciplines	·		
General Principles of Pathology			
Processes of Infectious Disease			
Systemic Pathology and Pathophysiology			