USMLE Score Interpretation Guidelines

Description of Examinations

Step 1* assesses whether the examinee understands and can apply important concepts of the sciences basic to the practice of medicine, with special emphasis on principles and mechanisms underlying health, disease, and modes of therapy. Step 1 ensures mastery of not only the sciences that provide a foundation for the safe and competent practice of medicine in the present, but also the scientific principles required for the maintenance of competence through lifelong learning.

Step 2 Clinical Knowledge (CK) assesses whether the examinee can apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision and includes emphasis on health promotion and disease prevention. Step 2 ensures that due attention is devoted to principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and competent practice of medicine.

Step 3 assesses whether the examinee can apply medical knowledge and understanding of biomedical and clinical science essential for the unsupervised practice of medicine, with emphasis on patient management in ambulatory settings. The inclusion of Step 3 in the USMLE sequence of licensing examinations ensures that attention is devoted to the importance of assessing the knowledge and skills of physicians who are assuming independent responsibility for providing general medical care to patients.

Understanding Your Score

Reported scores for Step 1, Step 2 CK, and Step 3 range from 1 to 300. Small differences in difficulty across forms and years are adjusted for using statistical procedures; thus, scores for a given Step are comparable across years and across forms. However, it is important to note that all USMLE examinations evolve over time in terms of test content, and that examinations taken at two substantially different points in time may vary somewhat in terms of inclusion or emphasis of certain content areas. USMLE stakeholders should avoid comparing scores that were obtained at dramatically different points in time. Because the content and format of each examination change over time, comparisons should not be made of individual scores separated in time by more than 3-4 years. **Table 1** shows the mean and standard deviation (SD) for first-takers from LCME-accredited US/Canadian medical schools who tested over the past 3 years**.**

*The score interpretation guidelines are intended for use with Step 1 attempts before January 26, 2022, after which the examination is reported as pass/fail only.

Updated 18-August-2022

Table 1. Means (SDs) First Takers from LCME-accredited US/Canadian Medical Schools	
Step 1	
Calendar Year	*Mean (SD)*
2019	232 (19)
2020	235 (18)
2021	231 (19)
Step 2 Clinical Knowledge	
Academic Year	*Mean (SD)*
2019-2020	245 (15)
2020-2021	246 (15)
2021-2022	247 (15)
Step 3	
Calendar Year	*Mean (SD)*
2019	227 (15)
2020	228 (15)
2021	227 (15)

The norm table (**Table 2**) enables you to determine the percentage of first-takers from LCME-accredited US/Canadian medical schools testing between January 1, 2019 and December 31, 2021 for Step 1 and Step 3, and between July 1, 2019 and June 30, 2022 for Step 2 CK who scored lower than a given USMLE Step Examination score. For example, to compare a given score with the scores of LCME-accredited US/Canadian first-takers on Step 1, locate the score in the column labeled **USMLE Score**. Read across the table to the percentile rank column labeled **Step 1**. An examinee with a Step 1 score of 225 is at the 31st percentile. The 31st percentile means that 31% of the Step 1 first-takers from LCME-accredited US/Canadian medical schools in the three-year cohort described previously scored lower than 225.

Norm tables are updated annually by dropping earlier groups of examinees and adding newer ones. Because the data can change through this update process, you should use the most recent norm table available on the USMLE website to obtain percentile ranks. Using the most recent norm table avoids confusion and ensures that everyone is viewing the same, current data.

Although percentile ranks for Step 1, Step 2 CK, and Step 3 are shown in the same norm table, it is important to note that scores on the three Steps are not directly comparable. For example, a score of 220 on Step 1 is not equivalent to a score of 220 on Step 2 CK or on Step 3. A comparison of scores across Steps is not appropriate.

Table 2. Norm Table: Based on LCME-accredited US/Canadian Medical Schools Testing Between January 1, 2019 – December 31, 2021 for Step 1 and Step 3 and July 1, 2019 – June 30, 2022 for Step 2 CK

USMLE Score	Step 1 (N=63,210)	Step 2 CK (N= 65,952)	Step 3 (N=58,671)
300	100	100	100
295	100	100	100
290	100	100	100
285	100	100	100
280	100	100	100
275	100	99	100
270	100	96	100
265	98	90	100
260	95	80	99
255	89	68	97
250	81	54	93
245	71	42	88
240	60	31	79
235	50	21	68
230	40	14	55
225	31	9	42
220	23	5	30
215	17	3	20
210	12	2	12
205	8	1	7
200	5	0	3
195	3	0	2
190	2	0	1
185	1	0	0
180	1	0	0
175	1	0	0
170	0	0	0
165	0	0	0
160	0	0	0
155 and below	0	0	0

Passing Scores

A pass or fail result is provided, as a USMLE recommendation, for each exam administration. Passing results are based on achievement of specified levels of proficiency established prior to administration of examinations. Statistical procedures are employed to ensure the level of proficiency required to pass remains uniform across forms of the examination. As noted in the *USMLE Bulletin of Information*, the score required to meet the recommended level of proficiency is reviewed periodically and may be adjusted without prior notice. Notice of adjustments is posted in the Announcements section of the USMLE website. Information about the current minimum passing scores is available at http://www.usmle.org/transcripts/ and information about passing rates is available at http://www.usmle.org/performance-data/.

Precision of Scores

Measurement error is present on all tests, and the standard error of measurement (SEM) provides an index of the imprecision of scores. 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 similar content. Plus and minus one SEM represents an interval that will encompass about two thirds of the observed scores for an examinee's given true score. Currently, the SEM is approximately 6 points for Step 1, Step 2 CK, and 5 points for Step 3.

The standard error of difference (SED) in scores is an index used to assess whether the difference between two scores is statistically meaningful. If the scores received by two examinees differ by two or more SEDs, it is likely that the examinees are different in their proficiency. Currently, the SED is approximately 9 points for Step 1, and 8 points for Step 2 CK, and Step 3.

The standard error of the estimate (SEE) is an additional index of the amount of uncertainty in the scores used to gauge the likelihood of performing similarly on a repeat attempt. If an examinee tested repeatedly on a different set of items covering the same content, without learning or forgetting, their score would fall within one SEE of their current score two thirds of the time. Currently, the SEE is approximately 9 points for Step 1, 8 points for Step 2 CK, and 7 points for Step 3.

Guidelines for Use of USMLE Step Scores for Selection Decisions

When comparing examinee performance, it is generally appropriate to consider Step examination scores in conjunction with other criteria such as course grades and faculty evaluations, rather than using test scores as the sole basis for decisions. Test scores should be viewed as approximate rather than exact measures of medical knowledge. Small differences in Step examination scores alone should not be used as the basis for selection decisions about examinees, and scores that are relatively old may not accurately reflect current knowledge and ability.