

READING THE NPLEX STATISTICAL SUMMARY REPORT

(How to get the most information from it)

Both the Part I and Part II reports have 22 columns.

- Column 1 is the number of items in each exam area (total and for each GEA and each SEA).
- Column 2 is the total number (all programs) of first time takers (1TT).
- Column 3 is the mean raw score of all first-time takers.
- Column 4 is the lowest raw score of all first-time takers.
- Column 5 is the highest raw score of all first-time takers.
- Column 6 is the percentage of first time-takers who passed overall (Comprehensive Mastery) and each GEA.

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- Column 7 is the total number (all programs) of second-time takers (2TT).
 - Column 8 is the percentage of second-time takers who passed overall (Comprehensive Mastery) and each GEA.

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- Column 9 is the total number (all programs) of retakers who are on their third or higher attempt (3+TT).
 - Column 10 is the mean raw score of three-plus-time takers.
 - Column 11 is the lowest raw score of three-plus-time takers.
 - Column 12 is the highest raw score of three-plus-time takers.
 - Column 13 is the percentage of three-plus-time takers who passed Comprehensive Mastery and each GEA.

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- Columns 14-24 provide the same information for your school alone (the column with the number of items is not included).

How can schools use this information?

- Deans can determine how well students at/graduates of their program did by comparing the passing rates (for Comprehensive Mastery and each GEA) for their students against the total. For example, if the TOTAL first time taker passing rate for DIAGNOSIS was 90% and the passing rate for DIAGNOSIS for a school's students was 75%, *perhaps* those students were not adequately prepared in diagnostic knowledge. If, however, you then noted that only four graduates of your program had taken the CCSE, you would see that only one graduate had failed. Furthermore, schools would have to see how their students/graduates performed over several administrations, because given the relatively small numbers of examinees, passing *rates* will probably vary significantly from cohort to cohort.

NOTE: Although GEA passing rates for first time takers on the CCSE are generally in the 90-99% range), the *mean* 12-year FTT **Comprehensive Mastery** passing rate for the CCSE is 82%. This discrepancy (between mean GEA passing rates and Comprehensive Mastery passing rate) is because different examinees pass different combinations of GEAs. For example, if the lowest GEA passing rate in is 91%, the *maximum possible* Comprehensive Mastery passing rate will be 91%. But not every examinee who passed this GEA with the lowest passing rate passed the other three GEAs. The Comprehensive Mastery passing rate will always be lower than or equal to the lowest GEA passing rate. In evaluating program effectiveness, looking at the GEA passing rates will provide information that is just as valuable as the Comprehensive Mastery passing rate.

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Deans can determine how well students at/graduates of their school did when compared to students at the other schools in each of the GEAs and the SEAs.

For example, if the mean score of **all** first time takers for the lab diagnosis SEA was 34 and the mean score for an individual school was 36, it appears that their school was doing just slightly better than the other schools.

- Deans can determine how well students at/graduates of their school did in one SEA compared to how well those same graduates did in another SEA.

For example, imagine that the mean score in botanical medicine at a single school was 38 and the mean score in homeopathy was 16. There are 50 botanical medicine items, and there are 25 homeopathy items so $38/50=76\%$ of botanical items were answered correctly and $16/25=64\%$ were answered correctly. It would appear that maybe the graduates of this school were not as strong in homeopathy as they are in botanical medicine, *but* there are two caveats:

- First, every examination is a unique combination of easy and more difficult items, and if the items selected in one SEA on a particular examination are difficult, 64% might represent a result equal to 76% of easier items. The examinations are cut scored to factor in the difficulty of the particular items on the examination.
- Second, evaluators have to look at trends over time, as summary statistics for a single exam administration provide only a single data point. Just as you would need to take a patient's BP several times to determine if s/he has chronic hypertension, you need to examine results on the NPLEX over time to determine if there is an abiding problem.

Prior to 2007, all NPLEX examinations were administered separately and each had its own cut score. If an examinee correctly answered the number of items that equaled or exceeded the cut score, s/he passed that examination. If s/he did not correctly answer that number of items, s/he failed that examination and was allowed to re-take only the examination(s) s/he failed. Because NABNE did not limit the number of times an examinee could retake an examination, a candidate could fail and retake a single examination several times over the course of several years before passing. If it took an examinee 3 years (6 attempts) to pass an examination, what was the state of her/his knowledge in the other exam areas 3 years after graduation? The practice of medicine requires *concurrent* knowledge of diagnosis **and** treatment modalities **and** other interventions. Because naturopathic medicine is holistic, the NPLEX Board did not think that testing each area separately captured a true picture of the graduate's readiness to practice. Subsequently, nine separate examinations were integrated into a single, case-based examination (the Core Clinical Science Examination - CCSE), which was more reflective of actual clinical practice.

Before the examinations were integrated, each examination (diagnosis OR botanical medicine OR emergency medicine, etc.) had its own cut score and, therefore, its own passing rate. For the integrated examination, nine specific exam areas (SEAs) were combined into four general exam areas (GEAs). This is the level at which the exam areas are cut scored, and consequently, this is the only level at which passing rates are available. We realize that the schools would like to have passing rates for the SEAs; however, given that, at most, there are three SEAs in a single GEA, the passing rate for a GEA provides a good estimate of what a passing rate would be for the SEAs in that GEA.