# Determining the Passing Scores for the California Pharmacist Licensure Examinations

The passing scores on both the California Pharmacist Jurisprudence Examination (CPJE) and the North American Pharmacist Licensure Examination (NAPLEX) are set by criterion-referenced methods.

The National Association of Boards of Pharmacy determines the passing score for the NAPLEX. The California State Board of Pharmacy is not involved in score setting for the NAPLEX. For information about NAPLEX scoring, please refer to the NABP Web site (<u>www.nabp.net</u>).

The information below describes how the California State Board of Pharmacy sets the passing scores for the CPJE.

# Your Score

The score earned on the CPJE is reported as a scaled score, which will range from 0 to 99. To pass the exam, a candidate must have a scaled score of 75.

## What is a scaled score and how is it determined?

A candidate does not need to get 75 percent of the items correct to pass the CPJE. Also, the examination is NOT graded "on a curve" so that 75 percent of the candidates will pass it.

At any time, the board has a number of different test forms in use. Some of these examinations may be harder than others. To adjust for the difficulty of different examination forms and to ensure fairness to all candidates, the board uses a criterion-referenced scoring process to determine the passing score for any form of the CPJE. This process produces a "raw passing score."

This raw passing score is then mathematically transformed so that the minimum passing scaled score equals 75. This is analogous to the way one adjusts numeric values in describing the boiling temperature when using Celsius and Fahrenheit temperature scales. The water still boils at the same temperature, regardless of the temperature scale that is used to measure the absolute temperature.

Whereas each form of the examination will have an independently set raw score, each raw passing score is transformed to a scaled passing score of 75. Therefore, a scaled score of 75 will be the **passing score** on any version of the examination.

The information below provides a fuller description of criterion-referenced scoring and scaling a test score.

#### Setting the Passing Score

The passing score on the CPJE is set through a process known as criterionreferencing. When adopting a criterion-referenced passing score, the board applies standards for competent practice to all candidates regardless of the form of the examination administered. This is the "state of the art" in passing score setting according to testing experts. For example, according to the Office of Examination Resources of the Department of Consumer Affairs, "Adoption of a criterion-referenced passing score may ultimately result in the licensure of candidates who have sufficient knowledge and experience to ensure public health and safety."

A group process is used to set the passing standard. The board's Competency Committee performs this task as part of its test construction responsibilities. The committee is comprised of pharmacists who are representative of all aspects of practice and each of California's schools of pharmacy.

The committee is led in examination development by a psychometric consulting firm, which is hired for expertise in test validation and development, and whose staff is educated and experienced in developing and analyzing occupational licensing examinations.

Criterion-reference standard setting begins with the establishment of a minimum acceptable level of competence for safe practice that candidates must possess to pass the examination. The intent of this methodology is to differentiate between a qualified and unqualified candidate for pharmacist licensure. The passing score is based on a minimum competence criterion that is defined in terms of the actual behaviors that qualified pharmacists perform.

Because the group of questions used on licensing examinations will likely vary in difficulty from one examination form to another, a fixed passing score or percentage such as 75 percent will not represent the minimally acceptable competence for all administrations of any examination. One important advantage of applying a criterion-referenced methodology is that the passing score is slightly lowered for an exam containing a larger number of difficult items and slightly raised for an examination containing a smaller number of difficult items. Without such adjustments, candidates who take the more difficult test forms would be placed at a disadvantage. Thus, the passing score provides safeguards to both the candidates and the public who are affected by the profession.

# Scaled and Raw Passing Scores

## Reporting Scores to Candidates

Once a criterion-referenced score has been determined, the board "scales" the score so that the passing score is adjusted to equal 75 scaled score units. All other scores are then similarly adjusted. Again, this adjustment is much like converting a temperature using the Celsius and Fahrenheit temperature scales.

Scaled scores can range between 0 and 99. Candidates who pass the exam earn scaled scores between 75 and 99. Candidates who fail the exam earn scaled scores between 0 and 74.

## Why Establish Scaled Scores?

The board needs to report data statistically on the performance of the candidates on the CPJE. To standardize the reporting, the board converts the raw score to a scaled score, such that the minimum raw passing score always equals a scaled score of 75.

The board will release only the scaled score.