

How Many Nurses Does It Take To Develop the NCLEX-PN® Exam ?

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The National Council of State Boards of Nursing (NCSBN) is responsible for developing the NCLEX examinations. In order to protect the public, Boards of Nursing use the NCLEX® to help ensure that the entry-level practitioner is safe to practice nursing. Therefore, it is essential that the licensure examination is current and reflects the competencies required for the newly licensed nurse to practice. Developing and updating the NCLEX-PN examination requires many nurses as shown in Figure 1 NCLEX-PN Examination Process. Using the 2006 NCLEX-PN examination cycle as an example, this article focuses on the steps involved in the development of the NCLEX-PN examination and describes the role of contributors during each step of the process.

Steps in Examination Development

In 2006, the first major step in developing the NCLEX-PN exam was a practice analysis, a large-scale survey of entry-level LPN/VNs, that described specific activities entry-level nurses perform on the job. According to testing and measurement standards, this step was necessary to help ensure the examination is based on the activities that are needed by the job incumbents, and not on non-job related activities.⁽¹⁾ To conduct the 2006 LPN/VN Practice Analysis Linking the NCLEX-PN® Examination to Practice, 11 subject matter experts (SMEs) who worked directly with entry-level LPN/VNs and who represented the major nursing specialty areas and practice settings as well as geographic diversity were empanelled to develop a comprehensive list of nursing activities.⁽²⁾ These nursing activity statements were developed by the SMEs through a review of daily logs (maintained by 47 entry-level LPN/VNs in various practice settings and specialty areas), job descriptions, orientation manuals, performance

evaluations, and institutional policies and procedures.. Following the development of the survey instrument, a sample of 6,000 entry-level LPN/VNs was drawn at random and the nurses were surveyed regarding the frequency and priority of activities they performed. There were 1,516 nurses who responded to the survey and 1,045 of the submitted surveys were used in the 2006 practice analysis results.⁽²⁾

The second major step was an evaluation by NCSBN's Examination Committee of the 2003 *NCLEX-PN Test Plan* using the results from the 2006 LPN/VN practice analysis. The Examination Committee consists of ten nurses with many years of nursing and regulatory experience. Based on the evidence from the practice analysis, the committee determined that it was necessary to recommend minor revisions to the 2008 *NCLEX-PN Test Plan*. This recommendation was then distributed to all of the boards of nursing for feedback (N= 59) along with the supporting evidence-based documents. (It should be noted that many nurses in practice and education serve on boards of nursing so it is difficult to have an accurate count of the number of nurses involved in this step of the process.) After receiving feedback from the boards, the committee made revisions to the proposed 2008 *NCLEX-PN Test Plan* and will bring a recommendation regarding the test plan to NCSBN's 2007 Annual Meeting for approval. (Each board of nursing has two votes.)

The third major step involves a Panel of Judges, which is comprised of 12 nurses who are mentors to entry-level LPN/VNs or are themselves entry-level LPN/VNs, to assist in recommending a passing standard to NCSBN's Board of Directors. As noted in *The Joint Standards for Educational and Psychological Testing*, it is important that the standard setting process include a criterion-referenced method such as the Angoff method that will be used by 2007 PN Panel of Judges.⁽¹⁾ The results of the standard setting

workshop along with other data will be used by NCSBN's Board of Directors to determine the 2008 NCLEX-PN passing standard. NCSBN's Board of Directors consists of nine nurses who have extensive nursing and regulatory experience.

Steps in Pretest Items Development

These next steps used in developing NCLEX-PN test questions (items) occur every year throughout the year and the number of nurses varies based on item pool needs. In the calendar year 2006, 59 items writers who were, for the most part, nursing educators familiar with the knowledge, skills and abilities needed by the entry-level nurse served on item writing panels. These nurses were selected from a large database of nurses who applied and were approved by their boards of nursing to serve on NCLEX item writing panels. The writers also validated the items using current nursing references such as textbooks, journals and guidelines. After the writers developed the items, the items were edited and a second validation was provided by nursing content staff from NCSBN's test service (N=7).

Next, additional and independent groups of expert nurses, item reviewers (N=30 nurses) evaluated the items. The item reviewers are nurses working in practice with the entry-level nurses, usually as mentor and preceptor to the newly licensed LPN/VN. These nurses help to ensure that regional variations in the items are removed, that the items reflect current practice, and that the content is important and appropriate for the entry-level nurse. The item reviewers, like the item writers, are approved by their board of nursing. The reviewers are convened in small groups so all of the members can participate and reach agreement in order to ensure that each item has one correct or best answer.

Prior to pre-testing the items, another group of individuals from various ethnic backgrounds reviews the items for sensitivity and fairness concerns.⁽³⁾

This group includes at least one nurse and several nurse consultants. The panelists review items in order to ensure that the item does not contain unnecessary content that might be considered insensitive, stereotypical and inflammatory.

Once all of these independent and mutually exclusive groups review the items, the items are pretested to gather statistical information. Over 400 entry-level LPN/VNs candidates who are educated in the United States and are taking the NCLEX examination for the first time are administered the items. Only those items meeting NCSBN's statistical criteria progress through the next steps.

In addition to reviewing all items prior to pre-testing to eliminate sensitive concerns, items which have been statistically flagged for potential bias are reviewed by another independent panel for Differential Item Functioning (DIF)--another type of fairness review.⁽⁴⁾ A DIF Panel consisting of participants from various ethnic backgrounds, a linguist and a nurse review the flagged items for potential bias. (Also, two nurses serve as consultants to the group.)

In order to ensure that the items are consistent with state nurse practice acts and entry-level practice expectations, another group of nurses from the boards of nursing which are able to review, examine items (N=30). The boards of nursing then submit any comments regarding the items to the Examination Committee.

The last independent and non-overlapping group of nurses who are necessary for the development of the NCLEX examination is the NCSBN Item Review Subcommittee (N=12). This group of expert nurses, nominated by boards of nursing, review all aspects of the newly developed items once more, prior to the item becoming operational. At this point in the exam development process, 2,334 nurses have provided or will provide input into the NCLEX-PN examination.

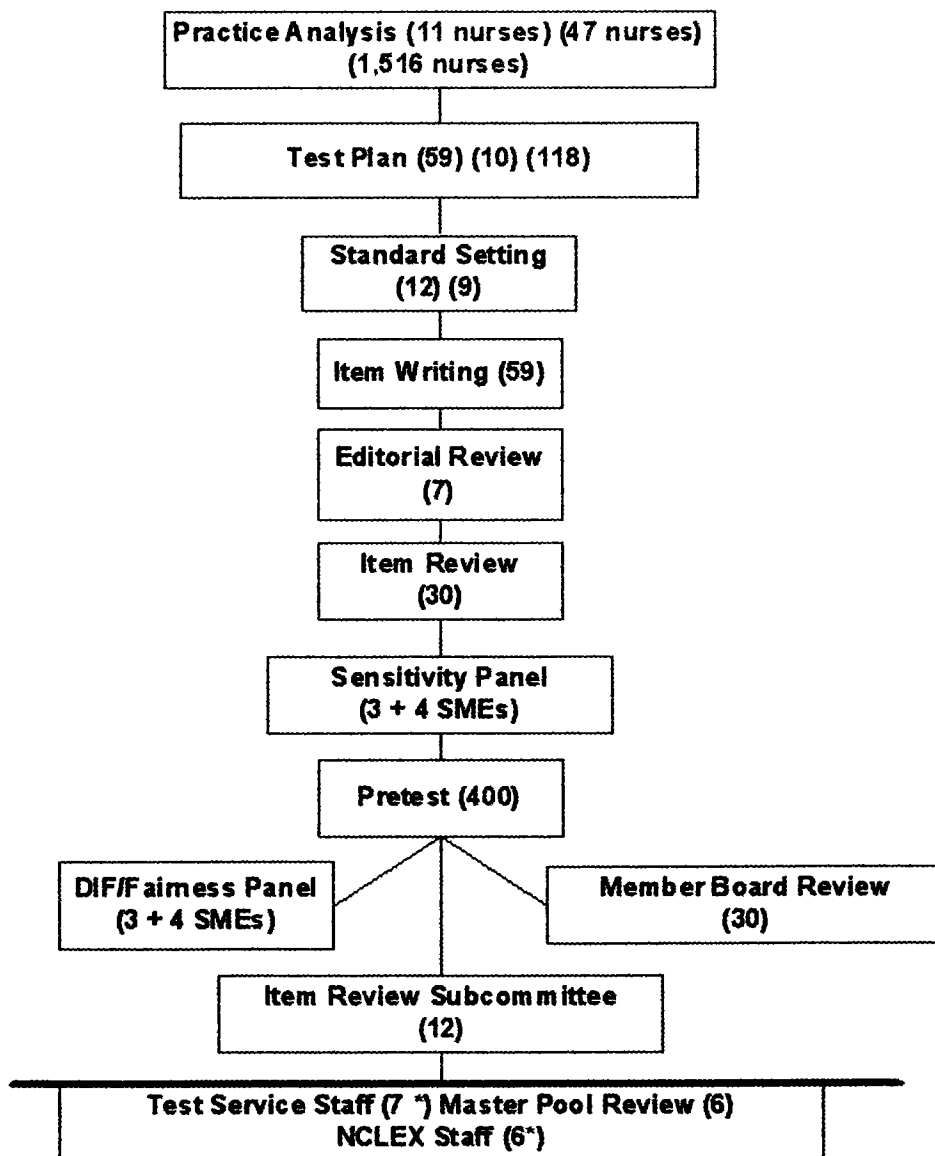
Steps in Maintenance of the Items

While it would seem that the role of nurses in the exam development process should end here, that is not the case as can be seen in Figure 1. The currency and validation of all NCLEX items must be maintained over time. When practice changes occur such as when CPR guidelines changed recently, all of the items in the NCLEX-PN item pool had to be reviewed for currency and consistency with current practice guidelines. Those few items that were not consistent with the new guidelines were removed from the item pool, revised and pretested again. (Note that this aspect of ensuring that

the items are current and accurate is repeated whenever there are changes in practice.) Additionally, all items are reviewed more formally by groups of Master Pool Reviewers (N=6 for 2006). The Master Pool Reviewers are nurses who are recommended to serve on the panel because of their expertise and previous experience as PN item reviewers.

Lastly, it should be mentioned that throughout all of these steps, the NCLEX Examination Department's six nurses, as well as the test service nursing staff, reviewed and monitored all aspects of the exam development

Figure 1. NCLEX-PN Examination Process



* Indicates Continuous Involvement

process. All of these steps and more are used to ensure that the NCLEX is a psychometrically sound and legally defensible examination. The NCLEX is a high-stakes examination from both the perspective of the nursing candidate who is seeking a license and from the public who expects all nurses to be competent. Each step is essential in order to validate and re-validate the exam and to ensure the exam measures the entry-level competencies of licensed practical/vocational nurses. There are many other quality control measures--too numerous to mention--that are used to ensure that the NCLEX-PN examination can provide a fair measure of the entry-level nurse's ability to practice safely and effectively.

So to answer the question, How many nurses does it take to develop the NCLEX-PN examination? The answer is 2,353 nurses will provide input into the development of the NCLEX-PN examination in the 2006 cycle! These nurse experts provide a variety of perspectives critical in the development and maintenance of the NCLEX examination.

Implications for Nurses and Nurse Educators

In this time of a nursing shortage, it is increasingly difficult for experienced nurses to receive time off from their practice in order to serve on an NCLEX panel. However, it is essential to the NCLEX process that nurses are involved and provide input into the development of the examination. And it takes a lot of nurses to make this happen! Nurses may become involved in the test development process by becoming active in their Board of Nursing. Also, interested nurses can participate in the NCLEX examination process by completing and returning any surveys about nursing practice. Nurses may apply to be item writers or reviewers by submitting an electronic application at <https://www.ncsbn.org/386.htm>.

References

1. American Psychological Association, American Educational Research Association, National Council on Measurement in Education. *The Joint Standards for Educational and Psychological Testing*. Washington, DC, Author; 1999.
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3. Wendt, A. and Kenny, L (in progress). *NCLEX® Testing in a Multicultural World: Fairness and Sensitivity Review*.
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NCLEX Updates For Nursing Educators

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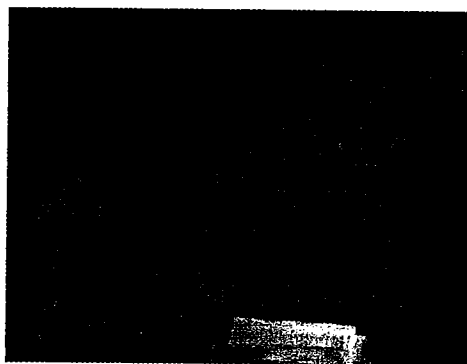
Director of NCLEX Examinations

The National Council of State Boards of Nursing (NCSBN) continuously develops test questions (items) for the NCLEX examinations in order to ensure that the examination content is current and accurate. In order to accomplish this task, nurses who teach or work in clinical practice are invited to attend item-writing workshops that are conducted throughout the year in Chicago, Illinois. Travel expenses are paid and contact hours are awarded for participating on a panel.

At these 4-day workshops, participants become skilled at writing items in the NCLEX style as well as innovative-type items that use alternate formats. In addition, participants will learn how to validate items for accuracy and how to compose items that are fair. Apply easily by completing an online application from the NCSBN Web site link at

<https://www.ncsbn.org/386.htm>.

The experience of serving on a panel and contributing to the nursing profession is positive and rewarding. Moreover, participants may apply the concepts learned as they develop items for their courses. Here is what Dodi Serafini from Colorado had to say about her experience as an item writer:



"This was a great process. I hope I made a contribution because I personally gained a lot of great information that will assist me and my students!!"

EDUCATIONAL THOUGHT

*"A good teacher explains...
A superior teacher demonstrates...
A GREAT teacher inspires.*

Unknown Quote

Strive for greatness in your teaching and inspire your students to greatness in practice. Educating is the greatest calling - inspire yourself!