Keeping the National Licensure Examinations Current

The Federation of State Boards of Physical Therapy (FSBPT) is responsible for developing and maintaining the National Physical Therapy Examination (NPTE) for physical therapists (PTs) and for physical therapist assistants (PTAs). Successful completion of the NPTE, the national licensure examination for the physical therapy profession, is an important step in the process of demonstrating that an individual is competent to perform as an entry-level practitioner.

The national licensure examinations measure the knowledge and skills required for safe and effective practice as an entry-level PT or PTA. The validity of the test results for indicating competence to provide safe and effective physical therapy services is contingent upon the degree to which (1) questions on each examination measure important knowledge and skills required for safe practice and (2) the proportion of questions measuring various knowledge and skill areas is commensurate with the importance of these areas to physical therapy practice.

A formal, systematic process referred to as an "analysis of practice" exists for determining the contents of a licensure examination (other names for this process include occupational analysis, task analysis, job analysis, and role delineation study). This process begins with the identification of work requirements for entry-level practitioners and ends with the development of a formal set of test specifications that delineates the knowledge and skills related to safe and effective entry-level practice.

Because physical therapy practice evolves, it is imperative that the contents of the licensure examinations be updated on an ongoing basis. Thus, a practice analysis must be conducted periodically to ensure that changes in entry-level requirements are incorporated into the licensure examinations. Revisiting the practice analysis regularly ensures that fewer test questions are included on skill areas of decreasing importance and that greater numbers of test questions address skill areas of increasing importance. The timeframe for updating a practice analysis varies by profession; for the physical therapy profession, this analysis is conducted at least every five years.

The 2011 Practice Analysis for the NPTE

In 2011, the FSBPT conducted practice analyses for its two national licensure examinations—for PTs and PTAs. This practice analysis was conducted in a manner very similar to the practice analysis conducted in 2006. The practice analyses, which constituted the first phase in updating the NPTE, included the following three steps.

• Step 1: Identify entry-level tasks and knowledge areas

- Step 2: Collect data on entry-level requirements
- Step 3: Update test specifications

Step 1: Identify entry-level tasks and knowledge areas

The first major step involved identifying tasks performed by entry-level licensees. Information from a variety of sources (e.g., documentation from the previous practice analysis, recent publications and white papers, discussions with PTs and PTAs) was compiled into preliminary lists of tasks performed by entry-level PTs and PTAs. Lists of the types of knowledge important for the successful performance of these entry-level tasks were also compiled. A 15-member task force for each examination reviewed, edited, and finalized these lists.

Sample Tasks and Related Knowledge

Select and perform tests and measures of cardiovascular function (e.g., blood pressure, heart rate, heart sounds)

- Knowledge of cardiovascular/pulmonary system tests/measures, including outcome measures, and their applications according to current best evidence
- Knowledge of the anatomy and physiology of the cardiovascular/pulmonary system as related to tests/measures
- Knowledge of pharmacological management of multiple systems, including polypharmacy
- Train in use of assistive devices (e.g., canes, crutches, walkers, wheelchairs, tilt tables, standing frames)
- Knowledge of anatomy and physiology of the musculoskeletal system as related to PT interventions, daily activities, and environmental factors
- Knowledge of the impact of co-morbidities/co-existing conditions on patient/client management (e.g., diabetes and hypertension; obesity and arthritis; hip fracture and dementia)
- Knowledge of applications and adjustments, indications, contraindications, and precautions of: Assistive and adaptive devices

Step 2: Collect data on entry-level requirements

The second step involved collecting data on the tasks and knowledge areas identified during the first step. Entry-level licensees—individuals licensed within the last five years—were asked to indicate how frequently they perform each task/activity and to rate the importance of successful performance of this task for providing safe patient care. Experienced licensees—individuals licensed for more than five years—were asked to indicate how important different knowledge areas are to successful performance as an entry-level practitioner.

The 53 U.S. jurisdiction licensing boards provided contact information from their rosters of licensees, and samples of PTs and PTAs were drawn randomly from this national mailing list so that the percentage of practitioners from each jurisdiction was proportionate to the percentage of individuals practicing in each jurisdiction (i.e., a stratified random sample). Later, the survey was opened to all members of the PT and PTA professions through announcements on websites and relevant periodicals. Web-based task and knowledge surveys were piloted in the spring and administered in the nationwide data collection effort between April 2011 and July 2011. Over 3,000 professionals participated in these surveys.

Step 3: Establish updated test specifications

A series of analyses was conducted to update test specifications for the PT and PTA examinations. Survey data were analyzed to identify activities that are critical for entry-level performance, that is, to identify frequently performed tasks that must be performed successfully in order to provide safe patient care. Similarly, knowledge areas that are important for successful entry-level performance were identified. The results of these analyses were used to construct draft test specifications, and the PT and PTA task forces were convened to review and finalize the specifications. Final review and approval by these content experts helps ensure that the final test specifications are appropriate. Although there were some organizational changes to the specifications, such as reclassifying items from the "Teaching and Learning" and some of the items from the "Research & Evidence-based Practice" sections into sections corresponding to the body systems to which they related, the content outline is very similar to the previous version.

The PTs and PTAs serving on the practice analysis task forces also were asked to link the critical knowledge areas and activities to help ensure that the knowledge areas are appropriately weighted on the examinations. In general, areas of knowledge that were identified as critical for successful performance based on survey respondents' ratings and that are required for greater numbers of critical activities received more weight in the test specifications, and areas of knowledge that are critical for successful performance but are required for fewer critical activities received less weight in the test specifications. The analyses took into account more factors than described here but generally followed this pattern.

The final step in updating the test specifications was to review the test specifications in light of environmental or policy issues expected to influence entry-level practice within the next five years and to make recommendations that address these considerations. The Board of Directors

reviewed the test specifications, along with these recommendations, at its December 2011 meeting.

Key Participants in the 2011 Practice Analysis

The FSBPT worked to ensure that the individuals contributing to the 2011 practice analysis were well qualified.

PT and PTA task forces

Separate task forces were established for each examination. Individuals serving on these task forces performed the critical role of developing the contents of the surveys and finalizing the test content outlines after the survey data were analyzed. The FSBPT contacted members of its jurisdiction licensing boards along with representatives in the profession (e.g., state chapters of the professional association, Section Presidents of the professional association) to recruit nominees for the task forces. Many well-qualified individuals were nominated for and applied to become members of these task forces. Fifteen individuals were selected for each committee; selection criteria were designed to ensure that the task force members were representative of the profession in terms of practice setting, specialty, geographic location, and demographic characteristics.

Oversight panel

In addition to the task forces, an oversight panel of six physical therapy professionals who are also knowledgeable about the NPTE (three each representing the PT and PTA examinations) was selected to provide guidance in the planning and carrying out of the project. The purpose of the oversight panel was to provide guidance to project staff and the PT and PTA task forces as they carried out their responsibilities.

Policymaking group

A group of policymakers was selected to review the new test specifications in light of environmental or policy issues expected to influence entry-level practice within the next five years. The group was asked to provide recommendations regarding factors pertaining to public protection that might influence the appropriateness of the updated test specifications.

Survey participants

The FSBPT worked with its 53 jurisdictions to establish mailing lists for all PTs holding active licenses and all PTAs holding active licenses or certificates. Stratified random samples of entry-level and experienced licensees (PTs and PTAs) were selected to participate in the task and knowledge surveys.

Human Resources Research Organization (HumRRO)

Human Resources Research Organization (HumRRO) was selected to conduct this study because of its extensive experience in conducting practice analyses across a wide variety of occupations and settings and also because of the high quality and thoroughness of its proposal. HumRRO had also successfully carried out the 2006 practice analysis.

Preparing Updated Examinations for 2013

Although the practice analyses were completed and the test specifications have been finalized, the process of updating the national licensure examinations will not be finished until updated test forms are administered to candidates. Three remaining steps are currently in progress:

- Step 4: Assemble test forms to measure updated test specifications
- Step 5: Set new cut scores
- Step 6: Launch updated examinations in January 2013

Step 4: Assemble test forms to measure updated test specifications

Once the test specifications were finalized and adopted by the FSBPT Board of Directors, test questions were assembled to measure the updated specifications. The Examination Development Committees for the PT and PTA examinations will meet multiple times from January through July, 2012, to review and finalize updated test forms. Each test form is reviewed on two separate occasions, once by internal content experts and once by the full committee, to ensure that the review is as complete as possible.

Step 5: Set new cut scores

Best practices in testing call for a review of the cut score any time changes are made to the contents of an examination. Thus, the FSBPT will conduct workshops to set new standards on the NPTEs in spring of 2012, after updated test forms have been assembled. Although the details are not yet finalized, the FSBPT plans to continue using criterion-referenced methods for setting its passing scores.

Step 6: Launch new examinations in January 2013

The final step in updating examination contents is to launch the new examinations at testing centers, providing ample time and notification to candidates regarding the nature and timing of these changes. The FSBPT will launch its updated test forms with new passing scores in January 2013.

Additional Information

The FSBPT will continue to provide information on the 2011 practice analysis and related activities in a variety of media:

- <u>www.fsbpt.org</u>
- FSBPT News Briefs
- FSBPT Quarterly Faculty Newsletter
- NPTE Workshop for Faculty, Alexandria, VA, March 9-11, 2012
- NPTE Workshop for Faculty, Alexandria, VA, September 28-30, 2012
- Others, yet to be announced