

NMTCB Report

Helen M. Drew, CNMT,
Chairwoman

Each year the Nuclear Medicine Technology Certification Board (NMTCB) seeks to identify experts outside the Board to assist in item writing. I feel it may be helpful to those in the profession considering becoming an item writer to review how item writers are selected by the Board, their responsibilities to the Board once they are selected, and how they can prepare for this important role in the examination development.

Item writers are selected on an annual basis prior to the initiation of each item development cycle. This occurs usually at the Fall Board meeting. Item writer nominees can be individuals with whom Board members have direct communication within his/her geographical location. Individuals who have been nominated for NMTCB Director and whose names have not been placed on the ballot are frequently invited to participate as item writers. In addition, any individual desiring to become an item writer for the NMTCB may attend an item writers' training workshop held periodically at the Society of Nuclear Medicine (SNM) Annual Meeting. Such a workshop is being planned for the SNM 35th Annual Meeting to be held in San Francisco, California on June 16, 1988. Attempts are made by the Board to have a wide geographical distribution of item writers. Individuals who have previously served as an item writer are renominated based upon the quality, quantity, and timeliness of submission of requested items.

Each Board member and item writer has special expertise and knowledge in a particular area of nuclear medicine in which he/she feels more comfortable and competent in writing items. Following publication of the 1983 Task Validation Study, four content areas of the Task List were identified and four Subgroups were formed. Each Subgroup is currently responsible for their particular Task List content area. The four subgroups are:

Group I—Radiation Protection and Radiopharmacy

Group II—Instrumentation

Group III—Imaging

Group IV—Nonimaging

As a new item writer, you would be asked to identify a content area in which you would feel most comfortable writing.

At the fall Board meeting, each Subgroup performs an item tally of their Item Bank and identifies the areas in which new items or alternate forms of an item are needed. Item writer assignments are then developed based upon the need of each particular subgroup. As an item writer, you may receive an assignment for one or two items or for four or five items depending upon your subgroup's needs.

In the spring of each year, item writers are sent a packet which includes an item writing assignment, *Item Writer's Guide*, item development forms, and a task list. Your item writing assignment will include the particular task by number for which items are to be developed, the skill level at which they are to be developed, and the number of items requested. You will be instructed to develop a multiple choice question that consists of a stem (in the form of a question or incomplete statement), four incorrect responses, and one correct response. To ensure that each item conforms to the professional principles and conventions of item writing, each item writer is asked to review and evaluate their written items with the standards described in the *Item Writer's Guide*.

The skill level at which an NMTCB item writer is asked to develop an item is based upon a three-level hierarchy of cognitive processing. Test items are developed as Comprehension, Application, or Analysis. The higher the level of cognitive competency to be measured, the greater the need for subject expertise in developing test items. An item written at the Comprehension level, the lowest level, deals with recall or recognition of factual information. Applying comprehension of knowledge to new situations is necessary to correctly answer questions written at the Application level. More complex skills involving both comprehension and application are required for items written at the Analysis level. As an item writer, it is

your responsibility to prepare items on the correct cognitive skill level and on the correct task requested.

After written items are returned to the Board, each Subgroup member is asked to review and edit each item. Physician Board members are asked to include a medical review. Item writing is a skill that must be developed through hard work and feedback. Furthermore, it is a job that requires time and practice. Valuable information is supplied in the *Item Writer's Guide*; however, attending the item writer's workshop held at the SNM Annual Meeting offers an opportunity for training and practice.

The primary goal of the NMTCB is to develop the best possible criterion-referenced certification examination in nuclear medicine technology. Development of such an entry-level examination requires the voluntary dedication and expertise of many individuals, both on the Board and in the professional community. Item writing is just one way an individual can serve their profession and continue to ensure that the NMTCB examination maintains its high standards.