

The NMTCB has committed to developing a certification examination for the first graduates of the Nuclear Medicine Advanced Associate (NMAA) program. We are on track to deliver this exam in 2011 and are currently in the process of developing “items” or questions that will later be considered for use. Each item will go through a two-phase process of editing and review. First, board members, medical experts, and psychometricians (persons who are expert in the design, administration, and interpretation of quantitative tests) review each item for medical accuracy, content, clarity, correctness of keyed response, and general significance in terms of the duties expected of a qualified NMAA. This review will also include a check of the references for accuracy and correct classification, as well as the quality of associated visuals. Finally, each item is examined for the possibility of any type of bias.

Once items have completed the first review and revision process, a predetermined number of them will be selected for inclusion in a field test of the examination. At this point, items will be gathered in quantities proportional to the major exam categories as defined in the content specifications. Once the items are gathered, their order will be randomized and the examination will be administered to a select group of pretest advisors who will be asked to answer each of the pretest items and comment on them. The final review process may be repeated several times as problem items are revised or replaced.

This process is not new to the NMTCB and is in use for each of the other examinations we offer. For the entry-level examination, as well as the nuclear cardiology technologist (NCT) and PET specialty exams, the NMTCB is constantly developing new items that go through this same practice of review and revision. Each year, a certain number of these items



are added to the pretest pool of the examination for which they are intended. Once enough psychometric statistics are gathered on an item, it is reviewed again and a decision is made as to whether it should be added to the operational item pool.

A relatively small number of the items that are developed actually make it to the intended examination. Some are not written well or cannot be validated with specific references. Some are very similar to existing items or are considered “enemies,” which means that they might give away the answer to an existing item. Some, despite our best efforts, just do not test well. For this reason, the NMTCB must develop many more items than we actually need for any given examination. For example, our current target is to develop between 400 and 500 items for the first NMAA exam, which, in final form, will probably consist of 200–250 items.

Most of the items that are developed for any of our examinations are contributed by volunteers. By far, the greatest contributors are current members of the NMTCB board of directors, who volunteer their time to sit on the board. However, item writing is not restricted to the board. Depending on need, the board typically hosts an item-writing workshop every year.

This year we gathered several volunteers in Albuquerque, NM, for an item-writing event where we produced nearly 150 new items for the entry-level exam.

The NMTCB also accepts and encourages individual item contribution from our certificants. In the “Resources” section of our Web site (www.nmtcb.org), we have a number of resources intended to help certificants who are interested in contributing items to NMTCB examinations. These resources include both an invitation to write items and packets about writing items for each of our exams. These packets include item-writing guidelines specific to each examination, as well as components of preparedness/content outlines and item submission forms. More recently, for each examination the NMTCB has introduced online item submission, which includes the ability to upload images and small video files. Questions with graphics are especially encouraged, and guidelines for images are included in the item-writing guidelines.

The rules for submitting items are simple. To have an item considered, you must be certified and active and in good standing with the NMTCB. In fact, to get to the online item submission forms, you must log in to our Web site with your last name and certification number. Once certification status is verified, prospective item writers are permitted to submit items for any of our examinations. We would prefer that a person submitting an item intended for the PET exam hold a specialty certification in PET and that a person submitting an item for the NCT exam hold NCT certification, but we will consider items from any qualified contributor.

The NMAA is an advanced-degree program, and graduates are expected to be advanced imaging practitioners. For this reason, the NMTCB has revised its expectations for item writers for the NMAA certification exam.

We are especially seeking persons who hold specialty certification in nuclear cardiology, positron emission tomography, and computed tomography. We are also looking for physician assistants, registered nurses, registered radiology assistants, physicists, and physicians. If you or someone you know qualifies and is interested in contributing items or participating in the review or pretest processes for the NMAA examination, please contact the NMTCB (board@nmtcb.org) and let us know. Developing the NMAA examination is a difficult and complicated process, and we will appreciate all offers of assistance.

There are a number of benefits for those who contribute items for any of the NMTCB examinations. For in-

stance, as an item writer, you will be nationally recognized for your contributions, thus enhancing your resume. You will be participating in the activities of a well-respected, national certification organization, which could serve as a springboard to nomination and selection to the board of directors. You will also have an opportunity to network with your colleagues from around the country. You may be invited to travel to item-writing workshops with expenses paid by the NMTCB. You will be enhancing your professional practice by keeping up to date on the most current, cutting-edge information about nuclear medicine technology. By contributing items you will demonstrate your commitment to excellence in nuclear medicine

technology, ultimately promoting quality patient care. You will learn how to write high-quality, reliable, and psychometrically sound examination questions—a talent that is useful in many other situations. Most importantly, you will be contributing to the development of a nationally recognized, highly respected certification examination in keeping with a founding principle of the NMTCB: “certification of nuclear medicine technologists by nuclear medicine technologists.”

David Perry, CNMT, PET

Executive Director

Nuclear Medicine Technology

Certification Board