Martha W. Pickett, CNMT Chairperson

hen you receive your annual renewal form from the Nuclear Medicine Technology Certification Board (NMTCB), you will be asked to complete a short survey asking your opinion about issues of interest to the board of directors. One of those questions addresses advanced competency exams. We have been asked in recent years about the possibility of offering advanced exams in such areas as cardiology, SPECT, and PET, and we would like to determine the level of this interest.

One aspect of advanced competency exams that deserves consideration is the cost associated with producing such an exam. Many health care professionals, nuclear medicine technologists included, spend years working to develop an expertise in specified areas and are interested in the formal recognition that comes with successfully passing an advanced competency exam. In today's market, however, the economic situation seems to indicate that further specialization in health care will not be encouraged. Thus, the benefit received from passing a specialized test may be personal satisfaction rather than a promotion or raise, and the financial burden for taking the test may rest with the technologist.

Developing a new test is a very expensive undertaking. When a national certifying body credentials a professional, the impact on that person's income can be significant. Not only the professional's salary but also his or her ability to practice may be affected. When a certifying body has an impact on someone's ability to earn a living, that body has a legal responsibility to ensure that its examination is a sound one. It is highly unlikely that an advanced exam will affect a nuclear medicine technologist's ability to work, but there is the possibility that a significant raise could be associated with successfully passing an advanced exam.

## Examination Dates The Nuclear Medicine Technology Certification Board 1994-1995

Year	Exam Date	Application Deadline
1994	June 25	April 16
1994	September 24	July 16
1995	June 24	April 15
1995	September 23	July 15
For more information or to request an application, contact:		
NMTCB 2970 Clairmont Rd, Suite 610 Atlanta, GA 30329-1634		
(404) 315-1739		
FAX: (404) 315-6502		

Developing an exam, whether the one we currently offer or an advanced specialty, is a very complex process. The test is not developed by people sitting around a table suggesting questions. The process begins with a task analysis in which practicing professionals are thoroughly surveyed as to where they work, what equipment they use, and exactly what they do. The survey is statistically evaluated to determine what kinds of tasks are widely performed by people in the field. These tasks then make up the basis of the exam.

The second step in the process is to develop questions or items. It is the NMTCB's practice to take advantage of the expertise of nuclear medicine technologists and have them assist in writing the items. Those items must then be edited, referenced, and entered in the computer bank of the testing agency. We use the services of American College Testing (ACT) for this purpose, and ACT oversees every detail of test development and test administration.

After the test items have been developed, they must be "field-tested." These new items are included as part of the regular exam but are not a part of the examinee's final score. All newly tested items are then statistically evaluated to judge their performance. For example, was the wording ambiguous? Were there two possible correct answers? Only after successfully being field-tested, does an item become a scoreable component of the exam.

The third step is administering the exam. The test must be developed from field-tested items, then printed and proofed in strictly confidential settings. Test centers must be found and test proctors hired. The examinees' qualifications must be verified. After the test is administered, it must be scored, and examinees must be notified of their scores.

Quality control takes time, so the overall test-creation process ranges from months to years. One can imagine that the cost for such an examination will reflect the time and effort it takes to develop and administer the test. And one can further imagine that if the number of examinees is very small, the cost per examinee will be quite high.

The components of test development as discussed above are but a fraction of what is involved. Every step must be statistically verifiable, and many double and triple checks are made throughout the process. Exam candidates are certainly under enough stress when they enter the test site, and they don't need a poorly written or developed test to compound that stress. So when you consider whether you would like the NMTCB to develop a specialty exam, you should also give some thought as to what it will be worth to you, both professionally and personally.