The year 2002 will go down in NMTCB lore as one of its most productive. Operations related to the computerized entry-level examination continued to run smoothly (although there were content issues associated with NRC regulation changes that had to be dealt with); the tough nuclear cardiology examination had its second annual administration and performed well; and the development of a PET specialty examination kicked into high gear. We expect that 2003 will be even busier and more productive as we attempt to move the specialty examinations into the later stages of development.

The Nuclear Cardiology Specialty Examination

The second administration of the NMTCB's Nuclear Cardiology Specialty Examination was given on June 15. It was given concurrently at two sites: Los Angeles during the Society of Nuclear Medicine's annual convention, and Atlanta, the site of the NMTCB home office. In LA, 31 candidates sat for the examination and in Atlanta, 34. Of those 65 individuals, 39 received passing scores producing a 60% pass rate for this edition of the examination. As is the case with the entry-level examination, all scores are converted to scaled scores to normalize for examination difficulty. A scaled score of 75 or higher is needed to pass the cardiac examination. Candidate scaled scores ranged from 59 to 92. This range is comparable to the range on the 2001 examination.

In an effort to reach more NMTs interested in taking the cardiac examination, the 2003 edition of the test will be administered at multiple sites throughout the nation on September 13, 2003. The board of directors has always been aware that many potential candidates are unable to travel to distant sites for one reason or another. After reviewing cost and personnel constraints, a distribution plan was employed which was designed to locate examination sites within driving distance for most technologists who work in the 48 contiguous states. Unfortunately for many of you who live in the western states, a considerable drive and overnight stay may still be required. For that we apologize.

A list of the administration sites can be found on the NMTCB website (www.nmtcb.org) along with application directions. The examination is scheduled later in



the year in order to give those interested in taking advantage of this national distribution additional time to plan and prepare.

For 2003 at least, the examination will remain pencil-and-paper. The NMTCB is actively evaluating various computer-based delivery methods. One promising option is giving a password-protected examination over the internet via junior college-based testing centers many of which are part of a common network. The use of these testing centers would provide a standardized testing environment and ensure examination security which would address the two major problems associated with allowing candidates to use their own computers at home.

Concerns About Fusion Imaging Training

On July 31 a consensus conference was held in New Orleans which focused on education, certification, and licensing standards for individuals who operate PET-CT scanners. The goal of the conference was to develop specific recommendations for the training and regulation of such personnel (1). In attendance were representatives from stakeholder professional organizations (SNM-TS, SNM, ASRT), certification boards (NMTCB, ARRT), educational program and NM clinic accrediting agencies (JRCNMT, JRCERT, ACR), state licensing agencies (Florida Department of Health, Arizona Board of Medical Radiologic Technology), and equipment or pharmaceutical vendors (Siemens Medical Systems, CTI Molecular Imaging, Inc., GE Medical Systems, CPS Innovations, PET.NET Pharmaceuticals).

The complete consensus statement and a

summary of the discussion can be found in this issue of JNMT so I won't waste column space reiterating all of what was discussed in that article other than to say that the group did come to a consensus as to who should be recognized as qualified to operate hybrid scanners. Their recommendation, identified as Consensus Statement No. 1 in the report, reads:

Personnel Qualified to Operate PET-CT Equipment: Any registered radiographer with the credential RT(R), registered radiation therapist with the credential RT(T), or registered nuclear medicine technologist with the credentials RT(N) or CNMT may operate PET-CT equipment after obtaining appropriate additional education or training and demonstrating competency. It is acknowledged that some individuals will require more extensive additional education and training than others (1).

Implied in this statement is a charge to the credentialing agencies to do their part in helping to evaluate the competency of PET-CT technologists and the effectiveness of PET-CT training programs. The representatives in attendance from the NMTCB and the ARRT met informally after the consensus conference to talk about the need for, and the possible development of, a PET-CT specialty examination. Since the NMTCB was already working on a PET examination and the ARRT already has a well-established CT advanced qualification examination, it became quickly apparent that a joint venture between the two organizations might provide the most efficient and effective avenue for creating an examination for credentialing PET-CT operators. Although the details of this exciting collaboration have yet to be worked out, both organizations have agreed to pursue this option.

If the above consensus statement is indeed adopted by most regulatory bodies, then creating a PET-CT examination will not be an easy task. Simply slapping together the NMTCB PET examination and ARRT CT examination and calling it a PET-CT examination won't work because of issues related the varying backgrounds of the individuals who could find themselves in a position to become PET-CT operators. Currently, to be eligible for the CT examination, one must already be a certified radiographer. The NMTCB's PET examination, which still in early development, is being designed under the assumption that those who sit for this examination will already be certified nuclear medicine technologists.

Simply relaxing the eligibility requirements for either the PET or the CT examination is not a viable solution. The eligibility requirements have a direct impact on the examination's content. Obviously, if one assumes a radiographer or NMT background, then items associated with those content domains need not be written. Only items specific to PET are being written for the PET examination. Knowledge of general nuclear medicine is not being assessed. The same is true for the CT examination.

Modifying the PET examination or CT examination specifications to include PET-CT items would greatly affect the education needed to pass the examinations. Expanding the PET and CT tests to cover PET-CT would require those who are only interested obtaining PET credentials to study CT and the associated general radiology principals, while those who are only interested in CT credentials would have to study PET and the associated basic nuclear medicine principles.

There are some issues to be ironed out. The first step is to perform a task-analysis of the PET-CT technologist's job responsibilities. This analysis will identify content unique to PET-CT and any content overlap between PET, general nuclear medicine, CT, general radiography, and, possibly, radiation therapy. Once the results of the task-analysis have been analyzed, it should be much clearer which direction the development of a PET-CT credential might take. The goal is to provide a path for someone trained in any of the disciplines identified in the consensus statement to be able to sit for and pass a qualification examination, once they have had the appropriate training.

Early discussion between the organizations led to talk about the possibility of some kind of modular examination. Participants envisioned an examination in which the candidate could, at the time of his or her application, select from a set of content modules that were adapted to their certification background—a build-your-own examination, if you will. A nuclear medicine technologist wanting to take a PET examination could apply to take a "PET for NMTs" module. This examination would not contain CT content and would assume the examinee had been already certified in nuclear medicine. A nuclear medicine technologist wanting to become credentialed in PET and PET-CT would opt for a "PET for NMTs," a "PET-CT," and a "Radiography basics for NMTs" module. A radiographer who has already taken the CT examination and who wants to also be credentialed in PET-CT would sign up for a "PET for CT techs," the "PET-CT," and the "nuclear medicine basics for CT techs" modules, and so forth

Please realize that this topic is currently just in the discussion phase and the final version of any PET-CT credentialing process may look nothing like this. At this point, I just wanted to let everyone know that the development process has been started and is moving forward.

REFERENCES

 The Society of Nuclear Medicine & The American Society of Radiologic Technologists, (2002). Fusion imaging: A new type of technologist for a new type of technology. www.snm. org/about/news_090502_1. html.

Contact Us

For further information on the NMTCB and its activities, please visit our website at www.nmtcb.org or contact the NMTCB office at: NMTCB, 2970 Clairmont Rd., Suite 935, Atlanta, GA 30329–1634; phone: 404-315-1739; e-mail: board@nmtcb.org.

