Nuclear Medicine Residency vs Nuclear Radiology Fellowship

Nuclear medicine is one of 26 Accreditation Council for Graduate Medical Education (ACGME) Residency Review Committees (RRCs) that establish program requirements for residency training. In the United States, 45 nuclear medicine residency training programs have a total of 145 residents. Each year the American Board of Nuclear Medicine (ABNM) certifies approximately 55 candidates who have completed a nuclear medicine residency and passed a certification exam. Radiologists are required to take 1 year of a nuclear medicine residency to be eligible to take the ABNM certification exam. The ABNM has been one of the primary boards of the American Board of Medical Specialists (ABMS) for more than 40 years.

Radiology is also one of the 26 ACGME RRCs and is responsible for radiology residency programs. This RRC also has subspecialty boards, one of which is called “Nuclear Radiology” and offers a 1-year fellowship. Since its inception, the purpose of this fellowship program was to train radiologists in nuclear imaging. Only 19 fellowship programs are accredited currently, with 10 residents in training. Fewer than 5 fellows per year have been certified by the ABR/nuclear radiology subspecialty board in recent years.

Residents who have successfully completed training in ACGME nuclear medicine or nuclear radiology fellowship programs are eligible for certification by the ABR/nuclear radiology subspecialty board. However, residents trained in the nuclear radiology fellowship programs are not eligible for certification by the ABNM. This is because the Nuclear Regulatory Commission does not accept nuclear radiology training as sufficient to automatically become an authorized radiation user. Additional training and experience must be documented. Physicians certified by the ABNM have “deemed” status and are automatically eligible to become authorized users.

The ACGME nuclear radiology residency program requirements have recently been extensively rewritten by the ACGME Radiology RRC. They are curiously nearly identical to the ACGME nuclear medicine program requirements and include both low- and high-dose $^{131}$I therapy for thyroid cancer and all other radiotherapies using unsealed sources, including parenteral therapies.

There is no legitimate educational rationale for making the program requirements of the 2 training programs identical, one that is a primary specialty and the other a subspecialty of another RRC. The ACGME Nuclear Medicine RRC, the ABNM, the American College of Nuclear Medicine, and the SNM are all working toward convincing the ACGME that the new nuclear radiology program requirements are unnecessary and not in the interest of optimal patient care and patient safety. It is hoped and expected that the ACGME will see it that way as well. In fact, it is difficult to identify a good rationale for a nuclear radiology fellowship at all. Trainees choose the best training programs available, and most radiologists have for many years chosen nuclear medicine residencies and not nuclear radiology fellowships.

Radiology leadership has never fully accepted nuclear medicine as an independent specialty and considers it a subspecialty of radiology. However, the ACGME and ABMS consider nuclear medicine a primary specialty. It is time for radiology leadership to begin to work together with nuclear medicine to devise the best educational experience to train future nuclear medicine physicians and to certify them.

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