

## The ABNM: Past, Present, and Future

I have stepped down after serving as executive director of the American Board of Nuclear Medicine (ABNM) for the last 10 years. George Segall, MD, is the new ABNM executive director. To help with the transition, I will be serving as executive director emeritus until the July 2014 Board meeting. Now seems like a good time to reflect on the past, present, and future of the ABNM.

### The Birth of the ABNM

Much more pain and emotion went into the birth of the ABNM than can be recounted here. The most complete history of the controversies and turmoil can be found in chapter 9 of the volume commemorating the 75th anniversary of the American Board of Radiology (ABR). The chapter is posted on the ABNM's website at [http://abnm\\_wordpress\\_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/ABR\\_NM\\_Chapter.pdf](http://abnm_wordpress_uploads.s3.amazonaws.com/wordpress/wp-content/uploads/ABR_NM_Chapter.pdf). Many of the controversies surrounding the formation of the ABNM remain relevant today.

In 1971, the establishment of the ABNM was approved, and the Board was incorporated without delay (lest the decision be reversed) in Delaware. The office was initially located within the SNM headquarters in New York, NY. The ABNM gave its first certification examination in 1972. From 1972 to 1976, physicians who had been practicing nuclear medicine were allowed to take the certification examination. A total of 2,800 physicians took and passed the certification examination during this 4-year "grandfathering" period. Since that time (Fig. 1), the number of physicians passing the ABNM certification exam has averaged about 74 per year, a figure that has remained remarkably constant (745 physicians certified over the last 10 years). The ABNM has certified 6,999 physicians since 1972 (with 40% of these certified between 1972 and 1976). In comparison, the number of nuclear radiology certificates issued has decreased from 61 per year in the decade from 1974 to 1983 to 5 per year in the last decade (Fig. 2).

The first ABNM president (a title since changed to executive director) was Joseph F. Ross, MD. In the early 1980s, the ABNM office was moved to Los Angeles, CA, where Dr. Ross was a faculty member at the University of California, Los Angeles. Dr. Ross served as president from 1973 to 1997. He was succeeded by William H. Bland, MD, who served as president/executive director from 1998 to 2004. I served as executive director from 2004 to 2014.

### The Last Decade

I became executive director at a time of great change for the medical board certification community. The American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME) adopted the 6 competencies (professionalism, patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, and systems-based practice) in the early 2000s. The identification of these 6 competencies highlighted the fact that

physicians needed more than medical knowledge to be good physicians. The boards had already recognized that a once-in-a-lifetime exam was no longer credible given the rapid advancement of medical knowledge. The ABNM issued its first time-limited certificate in 1992, requiring its diplomates to be re-examined every 10 years. The 6 competencies led to the concept of maintenance of certification (MOC), through which all the competencies would be periodically assessed.

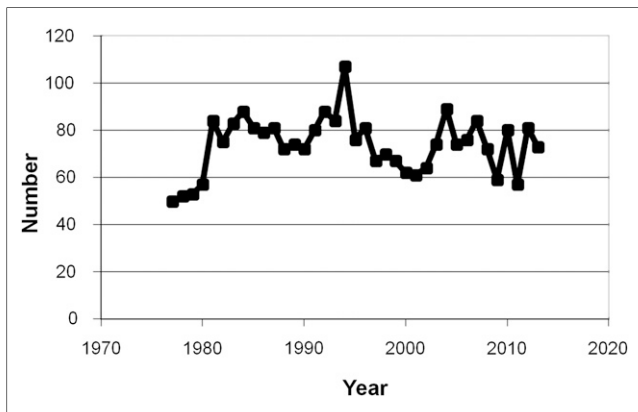
My first task as executive director was to develop an MOC program. A major obstacle was the lack of a database or web functionalities that could be used to track individual diplomates' MOC activities. The existing "database" of diplomates consisted of several wooden boxes of 3 × 5 index cards that had been filled out at the time of each diplomate's initial certification. By utilizing the resources of the ABMS and the SNM, we were able to create a reasonable digital database of our diplomates. Much of the office's efforts in 2004 and 2005 were directed at updating and adding to this database. By 2006, the database and our website (developed by the SNM) were in sufficiently good shape that we could begin our MOC program. As shown in Figure 3, the ABNM's MOC program continues to grow.

In 2005, I was confronted with another major challenge. Gloria Gordon, the administrator of the ABNM resigned. The office was still in Los Angeles, and interviewing candidates for this critical position in Los Angeles seemed impossible, so the Board agreed to move the office to Saint Louis (MO). Despite the fact that this meant that the Board would have to reinvent itself nearly from scratch, the move turned out to be a very good decision. Starting over allowed us to look at all Board operations and policies with fresh eyes. In addition, the Board's employees became Washington University employees, a status that carried 2 major advantages. We were able to use the resources of Washington University's human resources department to find an administrator and other necessary personnel. In addition, the Board's employees now received the same benefits as Washington University employees, instead of relying on the Board to cobble together health, retirement, and other benefits. In September 2005, Cindi Ade, a veteran Washington University employee, was hired as the ABNM administrator. She served in that position until 2012 and worked tirelessly on behalf of the Board. After Cindi's retirement, Maria Watts became the Board administrator. Today the office has 4 employees, compared with 2.5 when it was in Los Angeles.

In 2012, J. Anthony Parker, MD, PhD, became associate executive director of the ABNM. The Board was able to add him to the executive staff at no additional cost because



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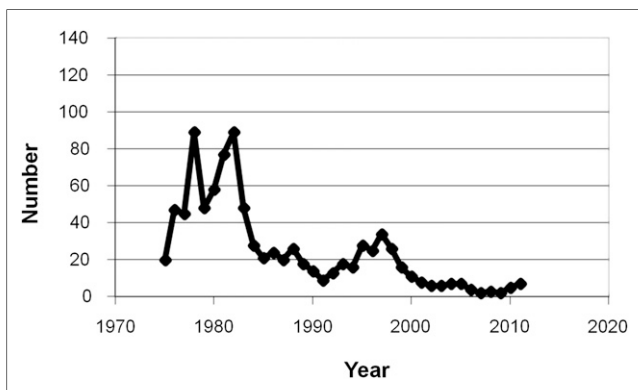
**FIGURE 1.** Number of candidates passing the ABNM certification examination, by year.

the executive director's position was decreased from a 0.5-FTE to 0.25-FTE status. Not only has Tony's hard work and expertise been extraordinarily valuable to the Board, the presence of an executive director and an associate executive director has provided more stability and continuity.

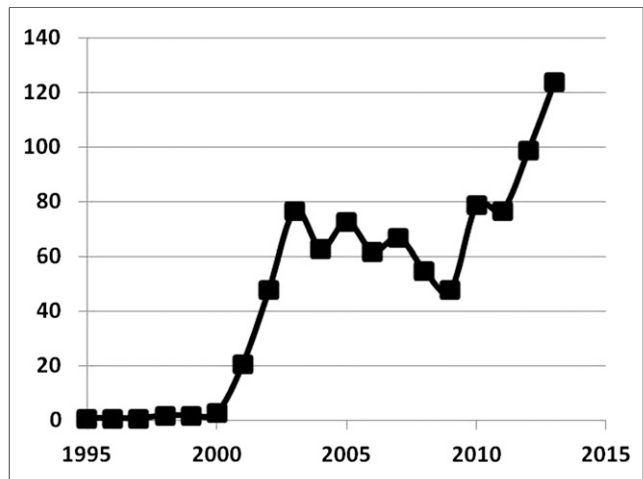
### The Future

I wish I could say that I have taken care of all of the major problems facing the Board and that George and Tony can now just coast. The truth is that much work remains to be done.

The future of the MOC program is one area that will require work. The current MOC program is well intended but can definitely be improved. One of the greatest weaknesses of the current MOC program is that it is not well integrated into medical practice. I am a great believer in the fact that systems produce exactly the results that they are designed to produce. In our current system far too many disincentives stand in the way of continuous quality improvement. For example, we all want to be better doctors and take time to learn and continuously improve our practices. The problem is that we receive no feedback on the extent to which the quality of our practice compares to that of our peers. A large body of literature documents the fact that professionals are not very good at self-assessment. Everyone wants to do a great job and believes he or she is



**FIGURE 2.** Number of candidates passing the Nuclear Radiology certificate examination, by year.



**FIGURE 3.** Number of individuals taking the ABNM Maintenance of Certification examination, by year.

doing so until presented with objective data to the contrary. Our current fee-for-service system guarantees that any time spent learning and improving cannot be spent generating income. Worse yet, we often have to pay to learn. With these disincentives, it is not surprising that MOC is regarded as a burden instead of an opportunity.

The system will not be changed by nuclear medicine alone. In my dreams, future MOC activities would be more like the training that an airline pilot receives. Once each year, nuclear medicine physicians would go on a 1-week sabbatical to a center of excellence. This sabbatical would be considered an essential part of their jobs. The first day or 2 would be spent in needs assessments to determine each physician's scope of practice and any recently introduced practices. Assessment tools would then be used to determine each physician's strengths and weaknesses relevant to current scope of practice. The remaining days would be spent providing education specifically focused on addressing individual weaknesses relevant to the physician's scope of practice. In my dreams!

Assessment tools depend on our ability to define and objectively recognize quality. Nuclear medicine is the only specialty with only 1 specialty-specific quality measure (correlating bone scans with relevant images). In 2014, the Center for Medicare and Medicaid Services (CMS) is requiring that physicians report on at least 9 quality measures to qualify for their Physician Quality Reporting System (PQRS) program. Because CMS is transitioning from an incentive-based system to a punitive system, nuclear medicine physicians may face a significant decrease in income if they cannot participate in CMS PQRS programs in the future. Up to now, CMS has been willing to accept only a single quality measure for nuclear medicine, but it is unlikely that this leniency will continue.

More important, we cannot develop assessment tools without defining quality. We have widely accepted assessment tools for medical knowledge (cognitive examinations—although even these have distinct limitations), but we have no widely

accepted nuclear medicine–specific tools to assess the other ACGME competencies. Medical knowledge metrics assess only what we know. Assessing what we do is more important. Having these assessment tools is essential if the quality of each physician’s practice is to be assessed.

I have always believed that the quality of nuclear medicine practiced by board-certified nuclear medicine physicians was higher than the quality of nuclear medicine practiced by physicians not certified by the ABNM. Because we do not have appropriate assessment tools, we cannot objectively document the truth of this assertion. In the future, quality rather than quantity will be highly valued (hopefully) in health care. Being able to objectively document the quality of care provided by board-certified nuclear medicine physicians would have an enormous impact on the future of nuclear medicine.

An important assessment activity would be to develop a national database so that physicians could compare their practices with those of peers. For example, a simple national database might collect from each practice information on administered activities for various nuclear medicine procedures. This database would provide feedback so that practices could compare their administered activities with those of their peers. As noted previously, we all believe we are doing the right thing—but are not very good at self-assessment. This simple database would provide objective feedback, and

participation in the database would be accepted as a quality measure. Getting experience with a simple database would be the first step in developing more complicated databases, such as one related to the quality of reports (e.g., whether reports contain essential elements) and accuracy of interpretation.

Finally, many of the controversies faced when the ABNM was established remain unresolved today. What organizational structure for nuclear medicine certification will provide the best nuclear medicine services to our patients? Most nuclear medicine studies (reportedly as high as two-thirds) are read by physicians (including cardiologists and radiologists) not certified by the ABNM. Hybrid imaging has changed the skill set required of nuclear medicine physicians and radiologists. Only about 25%–30% of our diplomates are certified in diagnostic radiology prior to passing the ABNM certification exam. How can we attract more diagnostic radiologists to the field? How can we make sure that the nuclear medicine physicians of the future have the education and training needed in a shrinking job market to best serve patients?

I think there are still a few things for George, Tony, and the Board to do.

*Henry D. Royal, MD  
Executive Director Emeritus*