From the Editor:
The 2013 Diagnostic Radiology Core Exam: Addressing Transition Issues
by Thomas A. Berquist, MD, ABR Trustee

In the last issue of *The Beam*, Dr. Duane Mezwa summarized some of the tools available to assist residents preparing for the new diagnostic radiology Core Examination. Since its inception, the ABR has worked to ensure that the Exam of the Future (EOF) meets the required psychometric standards. Equally important is providing the necessary information and assistance to residents to allow optimal preparation for the EOF.

In years past, the residents were totally focused on the separate physics and written examinations, which were not image rich and primarily tested factual information. What makes the new diagnostic radiology Core Examination so different, and what has the ABR accomplished to help you prepare for the new format?

The Core Examination is designed to test modality and organ system knowledge along with physics and patient safety. This approach has resulted in an examination grid that includes physics, patient safety, ten organ systems (MSK, GI, thoracic, genitourinary, neuro, pediatrics, cardiac, reproductive/endo, breast, and vascular/interventional), and six imaging modalities (MRI, ultrasound, nuclear medicine, radiography/fluoroscopy, CT, and interventional radiology). Therefore, 18 different sections need to be scored.

The increased number of sections has required a significant increase in the number of questions and the length of the examination to provide accurate psychometric evaluation. The new examination will be image rich and will provide a mix of questions. Forty percent of the questions will be factual, similar to the old written examination. The remaining 60 percent will test at a higher level (i.e., differential diagnosis and management concepts). In addition to multiple-choice questions, other types of questions will be included. The examination will consist of 660 questions and will be administered over one-and-a-half days at the Chicago and Tucson Exam Centers. Candidates will have their choice of two sessions: either September 30-October 1, 2013, or October 2-3, 2013.

How was this examination developed? Separate committees were configured with ABR volunteers and trustees to cover each organ system, physics, and patient safety, and additional individual experts were appointed for each imaging modality. The committees began their examination development process in 2009. Submitted questions were reviewed multiple times by the committees and ABR staff before selection for the examination. Questions on the
examination will be randomly placed, unlike the oral examination where candidates know the organ system before taking the examination.

The ABR has provided tools on its website to assist candidates in preparing for the examination ([www.theabr.org/eof-overview](http://www.theabr.org/eof-overview)). Study guides have been available for several years. These tools provide sample questions and the material that may be on the examination for all organ systems listed above, as well as physics, patient safety, and ultrasound. More recently, the ABR added examination blueprints that provide a breakdown of the estimated percentage of content in each of the exam categories. This will, for example, inform the candidates what percentage of the MSK examination may include trauma, tumors, arthropathies, etc.

Another important step in the process for the ABR and the candidates was to evaluate the new examination and develop the software tools to assist candidates in answering the questions. Therefore, as an initial step, we allowed oral board candidates in Louisville to take two pilot exams during their oral examination visits. This process provided the board with useful information about exam performance and allowed candidates who passed a given module in the pilot exam to pass if they conditioned the oral exam in the same area.

In 2011, candidates were provided modules in six clinical areas (breast, MSK, neuro, pediatrics, cardiac, and vascular/interventional). Candidates were allowed to choose one of categories at the time of registration. In 2012, modules were available from all clinical areas included in the new Core Examination. Candidates were assigned one category and could choose the second. To ensure that the ABR had a high number of examinees in each category, candidates were required to take the assigned module first.

The board was given psychometric data on how the questions performed, and the residents provided feedback on the examination. Resident surveys were completed for both years. In 2011, 89 percent of residents agreed or strongly agreed that the questions were clearly stated. In 2012, 90 percent of residents responded similarly. When asked if the level of difficulty of the questions was appropriate, 61 percent and 68 percent responded positively in 2011 and 2012, respectively.

Residents were also queried as to whether the practice provided by these pilot modules was useful. In 2011, 70 percent responded positively, and in 2012, 81 percent found the pilot modules helpful. It was also important to evaluate the examination computer interface functionality. Positive responses regarding the interface tools were received from 87 percent of residents in 2011 and from 91 percent of residents in 2012.

This year the ABR has added two additional tools to assist residents. First, there is a new practice examination on the ABR website ([www.theabr.org/dr-core-practice-exam](http://www.theabr.org/dr-core-practice-exam)). The practice examination uses the same computer interface and tools used in the ABR examination centers in Tucson and Chicago. It includes 109 sample questions with content from all areas on the Core Examination. The candidate can also become familiar with some of the new question types. It is important to note that anyone preparing for an ABR exam (MOC, Certifying, or Core) may find the practice examination useful.

Source: *The Beam*, Spring 2013 [www.theabr.org](http://www.theabr.org)
Second, two administrations of a Core Pilot Examination are being offered at the ABR Exam Centers on June 20-21 and June 24-25, 2013. The Core Pilot Examination will be provided only this year. Each administration will consist of two sessions lasting 5 hours and 15 minutes over the two-day period (June 20-21 and June 24-25). This is the exact length of the Core Examination that will be given at the same exam centers September 30-October 4, 2013. All candidates eligible for the Core Examination are also eligible for the pilot.

The pilot examination experience will provide excellent practice for candidates. The ABR will also provide feedback to candidates regarding areas that may require more study preparation before the Core Examination. In addition, the ABR will gain valuable information regarding exam performance. The data provided on exam performance will permit potential modifications to improve the content before administration of the first “real” Core Examination this fall.

Ask the Director:
How Is the ABR Aligning MOC with Your Life?
By Gary J. Becker, MD, ABR Executive Director

Okay, you never really wanted to participate in MOC. In fact, you never wanted to have to think about the ABR after you passed your certifying exam. But the world has changed, and you find yourself participating. You probably wish that the ABR would just make meeting all the requirements very simple and easy. That way, you’d be able to focus on rendering safe, high-quality care and taking steps to improve your practice performance, all without giving much thought to your certification status. If this is how you feel, you should know that as the ABR Board of Trustees modifies and improves the MOC program, that vision is precisely what is motivating them and bringing about the changes you desire.

Perhaps you practice in a large group. You wish that by simply participating in a department-wide or division-wide practice quality improvement project, you could get your MOC Part IV (PQI) credit as an individual. Done. Now you can easily find on the ABR website the instructions, template, and rules for group PQI projects, as well as the requirements for meaningful participation that enable an individual to earn credit by participating in a group project.
Perhaps you don’t even know how to get started on a PQI project, but you know you don’t have extra time to devote to creating a “science project.” Then the new PQI content on ABR’s website is just for you. It provides a step-by-step walk through the process that should leave no one wondering what to do or how to attest to what he or she has done.

Perhaps your group expects you to earn the MOC:PQRS incentive bonus for participating in MOC. ABR has made this easy for you, too, by becoming the only organization that is qualified to attest on your behalf that you have earned the bonus (or in future years, avoided the penalty). From the myABR home page, click on “Optional Programs” to find the path to MOC:PQRS. You will find that for any practice year in which you apply to earn the bonus, you must earn 30 Category 1 CME credits, one-third of which must be self-assessment CME (see below for explanation of AMA’s new definition of self-assessment CME). In the same year, you must also complete a PQI project and a patient-experience-of-care survey. Many different types of surveys done at the departmental or institutional level suffice to fulfill this requirement. If you have any questions about how to participate, just contact the ABR office at ABRMOCP@theabr.org.

Maybe you just can’t remember or don’t want to be bothered to get online periodically and check where you stand with your medical license(s), CME credits, attestation to the steps you have completed in PQI, or fee payment. This seems like a great deal of busywork. In fact, because you have so many partners in your group who collectively have so much busywork, your group has had to hire two new administrative assistants to keep up with licensure, insurance, hospital credentialing, delineation of clinical privileges, and MOC. If this is close to a description of you and your practice group, then you should know that ABR has developed just the thing for you: a Group Practice Administrator online tool designed specifically to enable one or more group practice administrator(s) (GPAs) to manage the MOC data for a number of physicians in a given group or an entire group.

As soon as a physician signs an online agreement that provides the GPA with access to his or her MOC data, the account can be managed by the GPA from that point forward. The only requirement is that the physician must sign onto his or her own account at least once per year to verify that the data are correct. And to ensure privacy, if the physician does not want the GPA or anyone else to have access to his or her MOC exam results, there is an opt-out feature that takes care of that. This new online tool is in beta testing now and is expected to be ready for wider use by about mid-2013. As an added incentive to participate in MOC, groups that have all members participating will receive a 10 percent discount on MOC fees beginning in January 2014. This Whole Practice MOC Discount has only two requirements: everyone in the group must be enrolled in MOC, and the group must use the MOC Group Practice Administrator online tool.

No one likes to take an examination. But a secure proctored examination remains the standard for MOC Part III. As long as you must take one, wouldn’t it be nice if you could take one tailored to your practice concentration, rather than one that includes many aspects of practice that are irrelevant to you? If you feel this way, then you should know that of all the specialties under the American Board of Medical Specialties (ABMS), not a single one has developed a practice-profiled modular exam as tailored to individual practice as that of diagnostic radiology. And diagnostic radiology is not the only ABR discipline that has committed to practice-profiled MOC examinations. The radiation oncology trustees are now in the planning stages for just such an
offering. The available choices may not precisely fit how you actually apportion time (percentages) in your practice, but you will be able to achieve a close approximation. On your exam day, you will automatically be assigned the correct set of modules. Password-protected exam results are provided for you online, generally several weeks after the MOC Exam.

If you are a diagnostic radiologist, you may be asking yourself, “Why doesn’t the ABR administer these exams in the Pearson VUE or Prometric commercial exam centers, so taking them will be more convenient for the diplomates?” Naturally, when ABR began to plan for its MOC exams, offering a distributed examination was on the top of our list of priorities. However, due to a variety of technical limitations that are beyond the scope of this article, we were forced to abandon that option. And, for several other reasons, exam administration in hotels or other temporary quarters on a periodic basis proved to be unfeasible or inadvisable. Ultimately, considering staffing needs, cost, convenience, networking, and display capabilities, etc., the ABR ended up in its two new exam centers in Chicago and Tucson. While the Board of Trustees wants to be able to offer widely distributed MOC Exams by the end of 2018, there are several key hurdles we must still surmount.

*If you have a lifetime certificate from the ABR and are contemplating entering MOC,* but are concerned about losing your certificate by failing an examination or by not meeting the requirements of MOC, relax. It is impossible for anyone to take your ABR certificate away, unless a state or jurisdiction in which you practice has taken disciplinary action against your license.

The ABR and the American Board of Medical Specialties are aiming to align MOC with your practice life in several other key ways. One is by working with the Federation of State Medical Boards on Maintenance of Licensure (MOL). As states begin to move toward a more robust system of re-licensure, we are working to ensure that by satisfying your MOC requirements in your specialty, you also will have satisfied your requirements for MOL. Second, as the federal government implements healthcare reform, CMS must transform the current system of physician reimbursement to a new system based on several types of measures: outcomes, efficiency, and patient experience-of-care. To do so, CMS needs a range of value-based payment modifiers that will be based on the best, most appropriate, and carefully selected measures. And CMS is turning to the specialty boards, including ABR, asking us to help them identify the most important things to measure. You should know we are committed to working with the ACR, SIR, ASTRO, and others to ensure that only the most important and appropriate measures are recommended.

Now you have learned at least a few ways in which the ABR is working to align MOC with your practice life. If you have any questions, please remember to email us at abrmopc@theabr.org.
ABR Launches New Interactive Site:  
myABR Replaces the ABR Personal Database (PDB)

The ABR is pleased to announce the launch of myABR, a new website for candidates and diplomates. If you previously had a Personal Database (PDB) account, you will use myABR in the same way – to view your exam results, update your contact information, attest to completion of ABR Maintenance of Certification (MOC) requirements, and sign up for optional MOC programs such as MOC:PQRS and Focused Practice recognition. Your myABR account also includes many new features, which are described below.

You can access myABR at [https://myabr.theabr.org/login](https://myabr.theabr.org/login), using the same user name (or your ABR ID number) and password for myABR that you previously used to log in to your PDB account. If you do not have a PDB account, you can set up a new myABR account by clicking the “Not Registered?” link on the myABR log-in page.

As of March 25, all information entered in your PDB, other than a display of past PQI projects, has been transferred to myABR. As part of the conversion to “continuous certification,” the PQI section of myABR has been updated to reflect a project-based approach. The ABR is currently working to convert the existing PQI project history into this new style so that all past PQI projects will also be shown in myABR.

We encourage you to explore myABR and provide us with your feedback. The link to a short feedback survey can be found at the top of each myABR page. If you have a question about MOC or how your public reporting status appears on myABR, please email to abrmocp@theabr.org, or call (520) 519-2152. If you are a candidate or a program coordinator, director, or chair and have a question about initial certification, please email icnotification@theabr.org or call (520) 790-2900.

New Features of myABR

- When you log in, the ABR database will know exactly who you are, where you are in the initial certification or MOC process, and what steps you need to complete. In other words, your myABR account will be tailored to YOU! It will also feature pop-up windows and frequently asked questions (FAQs) that provide additional information.

- A new function simplifying attestation to Practice Quality Improvement (PQI) project progress or completion will make complying with this part of MOC much easier.
• A customer service section will provide you with a history of your emails and other communications with the ABR from this point on. You will also be able to view a history of your ABR agreements and attestations.

• You will have the ability to upload documents such as state medical licenses and CME certificates.

Future myABR Features

The new features described above are just the beginning. The myABR site has been created with technology that will allow the ABR to add more features for you to conveniently access information and complete important tasks. Here are a few that are planned:

• Online exam registration process

• “Group MOC” process

• More online payment options

• A volunteerism portal

• Credit detail from the CME and ASTRO gateways

The new myABR website is the result of work by members of the ABR’s Information Technology Advisory Committee (ITAC) Website Subcommittee (see below) and staff Web Communications Team. With the launch of myABR, we will implement a continuous improvement model for our online communications portal as we strive to better serve ABR candidates, diplomates, and the public. Don’t forget to send us your feedback!

The ABR thanks the following ITAC Website Subcommittee Members for their valuable input:

• William W. Boonn, MD, Chief, 3D and Advanced Imaging, Thomas Jefferson University Hospital

• Duane G. Mezwa, MD, ABR Trustee and Chair, Diagnostic Radiology, Oakland University William Beaumont School of Medicine

• Richard P. Sharpe, MD, Diagnostic Radiology Resident, Jefferson University Medical School

• Christoph Wald, MD, PhD, Associate Professor of Radiology, Lahey Clinic, Tufts University Medical School

• Stefan L. Zimmerman, MD, Assistant Professor of Radiology and Radiological Science, Johns Hopkins University School of Medicine
Focus on DR – the “new” MOC exam...coming soon

by Kay H. Vydareny, MD, ABR Associate Executive Director, Diagnostic Radiology

Beginning in 2014, there will be several changes to the MOC examination. First, a new selection has been added to the practice-profiled portion of the examination – a general category. This category could be a good choice for candidates who do a “little bit of everything” in their practices.

Because of this addition, the ABR trustees thought that an examination that accommodated the wide variety of practice types that exist could be accomplished in three clinical practice areas, rather than the current four. Therefore, also beginning in 2014, a candidate will choose only three clinical practice areas in which to be examined.

As before, all three of these can be in the same area, three different areas, or a combination of two areas. If, however, a candidate chooses more than one module in a given area, he or she can expect that the first module will deal with primarily fundamental questions, while the second or third module in that category will consist predominantly of more advanced content.

To continue to have a psychometrically valid examination, the length of each module will increase: each will contain at least 60 scorable units. Clinically relevant physics questions and normals/normal variants will be included in every clinical practice module.

We also want to make certain that everyone is aware that a syllabus for the noninterpretive skills (NIS) module is available on the ABR website’s MOC study guides page (www.theabr.org/moc-dr-study). This module must be taken by all MOC examinees. All questions in the NIS module will be taken from this syllabus. For 2013, physics as it relates to the day-to-day practice of radiology is also included.

If you have any questions about these changes or the new NIS Syllabus, please contact the ABR by emailing abrmocp@theabr.org or calling (520) 519-2152.
Focus on Residents:  
Myths, Facts, and FAQs about the New ABR Diagnostic Radiology Core Exam  
By Duane G. Mezwa, MD, ABR trustee

The ABR’s new diagnostic radiology “Exam of the Future” is almost here! The first administration of the Core Exam—for residents who began their training in 2010—will be offered in Chicago and Tucson on September 30-October 1, 2013, and again on October 2-3, 2013.

Understandably, residents taking the new exam for the first time are nervous and aren’t quite sure what to expect. In this article, we’ll try to dispel some “myths” that seem to be floating around in cyberspace and answer some frequently asked questions that we’ve heard. Please remember that the best source of reliable information is always firsthand. You can find answers to most of your questions, as well as numerous study aids, on the ABR website at www.theabr.org. If you can’t find an answer there, please give us a call at 520-790-2900. We want to help you!

Myths and Facts

**Myth:** The passing rate for the radiology exams is a mystery.

**Fact:** Passing rates for the ABR’s initial certification exam in all three disciplines have been published on the ABR’s website for a number of years, as well as printed in our Annual Report. To find a history of diagnostic radiology passing rates for the past five years, go to http://www.theabr.org/ic-dr-score.

**Myth:** No one seems to know how the new Core Exam will be graded. It’s easy. The ABR will just fail the bottom 20 percent.

**Fact:** The ABR **DOES NOT** require that any specific percentage or number of candidates must pass or fail. The ABR has supported criterion-referenced rather than norm-referenced examination result interpretations for many years. Criterion-referenced interpretations compare performance to a specified content mastery criterion, while norm-referenced interpretations compare an examinee’s performance to that of other examinees (grading “on the curve”). Passing the ABR exams depends on the level of content mastery of each individual, and not on the performance of the other examinees in the group.
**Myth:** It’s pretty obvious that the solution to the “recalls issue” is to create a new Core Exam every year. Then, used exam forms could be distributed to all candidates to help them prepare for the next exam.

**Fact:** While this may seem logical, releasing all items on previous exam forms is impractical for three main reasons:

- High-quality questions that have performed well on previous exams add stability and predictability to the performance of a new exam when re-used with a mix of newly written questions.
- Poor performance of new items would be more likely to result in the need to delete questions during scoring; deleting items could lead to an exam form that does not conform to the exam blueprint.
- It would sacrifice the huge investment by volunteer experts who have donated their time and expertise to produce the exam items.

**Myth:** Board exams are just a bunch of medical facts that aren’t really relevant to current practice. The Core Exam will probably be more of the same.

**Fact:** Because the practice relevance of ABR examinations is very important, the ABR relies on committees of experts to validate exam content. In addition, the ABR added large-scale practice analysis surveys of practitioners in 2006. Practice analysis identifies activities that more frequently take place and are most critical to patient welfare. The ABR’s policy is to repeat its practice analysis surveys every three years and to consider the results in updating exam blueprints. From time to time, the ABR significantly revises its examination format, structure, and delivery method to improve validity—that is why the current diagnostic radiology exams are being changed. The new Core Exam will be much more image rich than the previous initial qualifying (“written”) exam, thus increasing clinical relevance.

**Frequently Asked Questions**

**Question:** If given on a different day with different questions, couldn’t a candidate’s Core Exam results also be completely different?

**Answer:** In recent years, the ABR has studied the reliability of all its exams, considering the levels of reliability attained and implications for false-positive and false-negative certification decisions. It has directed its volunteer committees to maintain reliabilities generally recommended for “high-stakes” examinations (.90 and above). Using previously administered items that have performed well and administering longer tests also enhances overall exam reliability by diluting the influence of poorly performing items.

**Question:** Since the ABR doesn’t give numerical scores, how can candidates who have to repeat part of the Core Exam maximize their preparation time?

**Answer:** Along with the pass/fail result, ABR score reporting has historically included performance information by category. “Written” exam reports have also included quartile information, allowing comparison of the examinee’s own performance level to the entire group taking the exam. For the new Core and Certifying Exams, enhanced graphic feedback reports will
be provided with information on each of the 18 categories tested on the exam. This will help examinees be aware of their personal areas of relative strength and weakness.

**Question:** If I don’t access every possible resource, including lists of previous exam questions, how can I hope to pass the Core Exam?

**Answer:** The ABR understands the need for appropriate preparation materials and guidance regarding the changes implemented in any new examination. In response, information on the ABR website regarding exam procedures has become more detailed, and the website also has several study aids for the Core Exam. Links to the following materials can be found at [http://www.theabr.org/eof-overview](http://www.theabr.org/eof-overview):

- Study guides with content outlines and sample questions
- Exam blueprints with percentages of items to be given in the major areas of the Core Exam
- A section and printable PDF on the “ABR Exam Experience” for all types of ABR exams
- A 110-item Core Practice Exam that replicates the new Core Exam in content distribution, item types, and software interface but is useful for any case-based, image-rich ABR exam

**Question:** Why does the ABR require all candidates to sign its new Exam Security Policy before taking the Core Exam?

**Answer:** The Exam Security Policy is not new. For many years, ABR examinees have signed a statement regarding exam confidentiality as part of their application form. The purpose of the policy is to create a “level playing field” for all examinees taking the Core Exam, as well as other ABR exams, meaning that each examinee encounters each item as a novel problem to address and solve based on his or her own understanding of the content. The public has a basic right to know that board-certified professionals have truly demonstrated competency in their fields, and not just that they are good at memorization. The Exam Security Policy specifies the behaviors that are permissible and impermissible before, during, and after exams.

For more FAQs and answers regarding the Core Exam, [click here](http://www.theabr.org).
Focus on Radiation Oncology: Reflections from Eight Years on the American Board of Radiology

By Bruce G. Haffty, MD, Radiation Oncology Trustee and Immediate Past President, ABR

My Early Days with the ABR

Approximately eight years ago, I received a call from the late and beloved Steve Leibel, MD, informing me that I had been selected to serve as a radiation oncology trustee of the ABR. I was highly honored that my peers had selected me to serve in such an important organization involved in the certification process for our specialty. Other than my experience in occasionally writing questions for the written examinations and serving as a periodic oral examiner, I knew little about the ABR, its operations, or the substantial evolution it would undergo over the next eight years.

Re-organization of the Examination Committees

When I first joined the ABR radiation oncology trustees in 2005, an expert trustee in each category essentially oversaw both the written and oral examination process for the initial certification (IC) exam. The trustee was also the primary reviewer for written examination questions that were submitted by a broad group of volunteer radiation oncologists. In addition, the trustee oversaw the assembly of the written exams and compilation of the oral exam, with periodic input from other oral examiners.

Since 1995 was the first year of issuing time-limited certificates in radiation oncology, Maintenance of Certification (MOC) was already mandated for “time-limited” certificate holders. However, 2005 was just the beginning of MOC awareness and formal implementation, which at that time involved not much more than taking a recertification exam every 10 years.

From approximately 2005 on, as noted below, the American Board of Medical Specialties (ABMS) rapidly began to roll out a more robust and comprehensive MOC program. In addition to the work related to oversight of the primary exam; creating, structuring, and monitoring the MOC programs; working on a growing number of ABR committees; and serving on ABMS committees, the workload for trustees expanded to the point where additional volunteer help was needed in order to maintain high-quality, relevant, and current IC written examinations, oral examinations, and written MOC examinations. Written and oral examination chairs were
recruited to work with the trustees in this process, and, more recently, each category established examination committees.

These committees represent a diverse group, from a gender, geographic, and interest perspective, that oversees the content and quality of the written IC and MOC examinations, as well as the oral examinations. The trustees manage the examination committees, which are headed by the written and oral examination co-chairs. This structure has been essential in ensuring that the content of all ABR exams is current, fair, relevant, and balanced. It should also be emphasized that professional psychometricians who work full time for the ABR, consistently evaluate and rate the validity, reproducibility, and quality of each component of the exams. This ensures a fair, balanced, and robust process is in place and provides reassurance to patients and other stakeholders regarding the credibility and quality of ABR examination processes.

**Rapid Evolution of Maintenance of Certification**

As noted above, in 2005 MOC involved little more than taking a re-certification exam every 10 years. The ABMS, which oversees all 24 specialty boards, was rapidly gearing up and moving toward a more rigorous and meaningful MOC program. Shortly after I arrived in 2005, the ABR and all of the other medical specialty boards submitted for approval to ABMS a robust MOC program that complied with guidelines for MOC established by ABMS.

Each board was asked to demonstrate that its diplomates maintained qualifications in their respective specialties by fulfilling requirements in four areas: professional standing (active license to practice), lifelong learning (CME and self-assessment modules), cognitive knowledge (passing a secure examination), and practice quality improvement (PQI). How each board defined, monitored, and implemented these programs varied, but committees within the ABMS attempted to provide direction and some consistency among specialties. The intention was to demonstrate to the public and other stakeholders that both primary certification and Maintenance of Certification by any ABMS specialty board ensured a fundamental level of professionalism, skills, knowledge, and competency.

Not only was practice improvement implemented, but patient and peer surveys are currently being integrated into the process. In an effort to incorporate practice improvement and quality projects in which entire departments or institutions may be involved, the ABR and many other boards are offering group or institutional quality improvement projects, and all participants in the project can receive credit for the project toward their MOC requirements.

Another major effort that has been implemented is recognition of participation in MOC—with completion of MOC activities beyond what is usually required—by the Centers for Medicare and Medicaid Services (CMS) for additional payment incentives. Over time, it is hoped that active and meaningful participation in MOC may also fulfill all requirements for state license renewal and could also serve as deemed status for other credentialing processes. Given that MOC is a robust and rigorous process that incorporates many aspects of what is expected of all medical professionals, including CME, self-assessment, periodic examinations, and practice improvement, the concept of meaningful active participation in MOC serving as deemed status for other licensing and credentialing programs is a reasonable goal that the ABR and all specialty boards of the ABMS are striving to achieve.
Many specialty boards have moved to a process termed “continuous certification” for their MOC programs. Nothing has really changed with respect to the requirements, but this procedure monitors individuals for meeting their requirements through shorter cycles, assuring that diplomates will not fall behind and lose certification. Additionally, diplomates are provided greater flexibility in meeting some of the program requirements. Clearly, the MOC program has evolved significantly for the ABR as for all of the specialty boards, and it will continue to evolve over time.

**Focused Practice Recognition in Brachytherapy**

Another major change that was recently implemented is the pilot program of Focused Practice Recognition in Brachytherapy, headed by the efforts of Beth Erickson, MD; Paul Wallner, MD; and a dedicated group of volunteers with interest and expertise in brachytherapy. Although not a bona fide subspecialty within radiation oncology, brachytherapy is an area where many diplomates focus their practice and have added expertise. Provided diplomates meet certain requirements, such as a minimal caseload of brachytherapy procedures in their practices, this pilot program allows them to provide evidence of additional competence in brachytherapy. It also offers a mechanism for practice quality improvement in this focused area of radiation oncology.

A core element of the pilot program is a national brachytherapy registry that will provide data to individuals for PQI projects, and to investigators for research into various aspects of brachytherapy. The pilot program will be reviewed by the ABMS in five years to determine the added value of Focused Practice Recognition in Brachytherapy and, if successful, it could pave the way for additional focused practice recognition programs.

**Future Directions**

**Move to a Modular Maintenance of Certification Exam**

Reflecting on our continuous certification process, it is clear that if diplomates maintain an active clinical practice, continue to participate in meaningful CME and self-assessment activities, and periodically evaluate critically and attempt to improve practice through practice quality improvement projects, they will remain up to date and competent, and the quality of patient care will improve. The dreaded “cognitive examination,” while clearly the element of MOC that is most feared, in my view is probably the least critical of the four fundamental elements. Nonetheless, this requirement creates the most angst among our diplomates.

One issue that arises about the cognitive written examination throughout all specialties is that many diplomates subspecialize, and a general examination may not be relevant to a practitioner who focuses his or her practice on one or two areas. Although radiation oncology does not have formal subspecialties, there are certainly practitioners who specialize in one or two disease sites. To address this issue over the next few years, the ABR trustees are committed to creating a modular, practice-oriented examination. Since one is expected to maintain some fundamental knowledge base across all of radiation oncology and our certification is in general radiation oncology, there will still be a requirement to take a portion of the examination in general.
radiation oncology. However, much of the examination can be devoted to one or two areas where a diplomate emphasizes his or her practice. We anticipate that these modular examinations will roll out over the next few years.

Transition from Louisville

While the entire ABR (diagnostic radiology, radiation oncology, and medical physics) underwent all these major transitions over the past decade together, our colleagues in diagnostic radiology (DR) experienced an even greater transformation in moving away from the oral examination to a final certification exam that is entirely computer based. This June will be the last full oral examination for the DR group in Louisville.

Although we in radiation oncology considered the possibility of transitioning to a computer-based examination, we have decided that given the nature of our specialty, an oral examination should remain an essential component in our certification process. In 2015 we will move from Louisville to an examination center in Dallas, which was designed specifically for oral examinations by the American Board of Obstetrics and Gynecology. Although we will all miss the traditions and stories of our Louisville experiences, we look forward to transitioning to this state-of-the-art oral examination venue.

Concluding Remarks

Clearly, substantial changes have taken place over the past decade. Keeping up with these changes and communicating to all our stakeholders regarding the evolution of the certification process has been a significant challenge for the ABR and its diplomates. In an effort to improve communications not only from the ABR to its diplomates, but from the diplomates and other stakeholders to the ABR, we have recently implemented Initial Certification and Maintenance of Certification Advisory Committees. These groups are composed of a broad diversity of diplomates, including private practitioners, academicians, residency directors, and others. These committees serve to provide enhanced, regular dialogue and communication between the ABR and all its stakeholders.

Since its inception in 1934, the ABR for most of its history provided a primary certificate demonstrating that at a single point in time, a diplomate had successfully completed training and achieved a fund of knowledge and a skill set to competently practice the specialty. Thereafter, except as volunteers and in some unusual circumstances, diplomates rarely dealt with the ABR.

Currently, we are committed to an ongoing relationship with the ABR throughout the duration of our professional careers. Demonstration of professional standing, lifelong learning, self-assessment, cognitive knowledge, and practice improvement continuously throughout a diplomate’s professional career entitles the diplomate to continuous certification by the ABR. This carries with it acknowledgment and trust in our professionalism and competence by our patients, the public, and other stakeholders.

Although the process is involved and requires effort on the part of the diplomates as well as the volunteers and staff of the ABR, given our robust, high-quality processes, the public and other
stakeholders will continue to value board certification as an essential validation of their physicians.

When I first came on the board in 2005, I had no idea how much effort the trustees, staff, and all of the dedicated volunteers of the ABR invest in this rigorous and worthy process. But I also did not appreciate how much impact the work we do has on the integrity of our specialty and, ultimately, on the quality of care we offer our patients. Without question it has been the most rewarding experience of my professional career, and I look forward to the continued health, prosperity, quality, and integrity of our specialty.

Focus on Medical Physics:

Maintenance of Certification for Medical Physicists

Component Two: Lifelong Learning and Self-Assessment

By Jerry D. Allison, PhD; Geoffrey S. Ibbott, PhD; and Richard L. Morin, PhD, ABR Medical Physics Trustees

The second part of Maintenance of Certification (MOC) focuses on lifelong learning and self-assessment. The major function of this part is continuing education. For physicists, continuing education developed later than it did for physicians. In the 1920s, it was recognized that continuing education was important because knowledge atrophied as one moved farther and farther away from training, and new medical skills needed to be learned. In 1934, urology became the first specialty to make continuing education mandatory.

As the need for continuing education evolved, the necessity of a regulatory body to ensure that education programs met some minimum standards was acknowledged. In 1981, the American Medical Association (AMA) created the Accreditation Council for Continuing Medical Education (ACCME). The Commission on Accreditation of Medical Physics Educational Programs (CAMPEP), which was incorporated in 1994, provides a similar role for medical physics continuing education standards.

Most states and many medical institutions made continuing education (CE) mandatory for physicians. A common requirement is an average of 50 hours per year. In medical physics, CE activities are part of the Mammography Quality Standards Act (MQSA) requirements, are
included in the American College of Radiology (ACR) accreditation process, and are required by many institutions and some states.

With the advent of time-limited certification for medical physicists in 2002, MOC became mandatory for new medical physicist diplomates. At that time, it was recognized that self-assessment should be a significant requirement of MOC because individuals tend to seek continuing education in areas where they are already comfortable, and not necessarily in areas where they are weak. As a consequence, they may ignore continuing education opportunities in the areas where they most need them. Thus, self-assessment modules (SAMs) were included in the MOC process to encourage diplomates to explore weaknesses in their knowledge. The original requirement was:

- 20 Self-assessment Modules (SAMs)
- 250 hours of continuing education over a 10-year MOC cycle

**General and Specific Issues with MOC Part 2 Continuing Education**

Certain general issues regarding continuing education have been observed in many areas. In terms of MOC requirements, one problem was that at seven years into the 10-year cycle, a diplomate could reach a point where it would be impossible to meet the requirements, and a loss of certification was inevitable. There was also an issue associated with the limited availability of SAMs. While it was not too difficult to complete 20 SAMs in 10 years, it was somewhat difficult to find SAMs in various areas of practice. The ACCME, the American Board of Medical Specialties (ABMS), and the ABR recognized these issues and revised the requirements for continuing education under Part 2 of MOC.

**Revised MOC Part 2 Requirements**

The general requirements for the revised MOC process are available on the ABR website ([www.theabr.org](http://www.theabr.org)). The biggest change is an increase in the number of required self-assessment continuing education hours and an expansion in the activities that may be considered self-assessment. The current requirement is 75 hours of continuing education credits in the past three years. At least 25 of the 75 CE credits must be self-assessment continuing education (SA-CE). SAMs will still be included in this category, and the ABR has been making it easier to qualify SAMs material. In addition, the ABR will count all AMA Category 1 CME activities in “enduring materials” (including web-based and print) and “journal-based CME” formats toward the MOC self-assessment requirement. According to recently adopted AMA policy for CME, these activities include the following features that suit them for use as self-assessment tools:

- They provide an assessment of the learner that measures achievement of the educational purpose and/or objective(s) of the activity with an established minimum performance level; examples include, but are not limited to, patient-management case studies, a post-test, and/or the application of new concepts in response to simulated problems.
They communicate to the participants the minimum performance level that must be demonstrated in the assessment in order to successfully complete the activity for AMA Physician Recognition Award (PRA) Category 1 Credit™.

They provide a reference to appropriate bibliographic sources to allow for further study.

Credits from the AAPM Virtual Library are an example of SA-CME, but there are many others as well. The ABR has been working with CAMPEP to make a clear distinction between CE and SA-CE on CAMPEP transcripts, but that will take some time.

How Part 2 Fits With Overall Continuous Certification

Under continuous certification, which was implemented in 2012, new ABR certificates no longer have “valid-through” dates. Instead, on each new certificate, the date of initial certification is noted and accompanied by the statement that “ongoing validity of this certificate is contingent upon meeting the requirements of Maintenance of Certification.” For each diplomate who is currently enrolled in MOC, continuous certification has replaced the 10-year MOC cycle.

Progress will be evaluated annually beginning March 15, 2016, using a rolling calendar-year “look-back” (see Table 1). As indicated in Table 2 below, the Part 2 look-backs cover the past three years for continuing education (SA-CE), and the Part 4 look-back covers the past three years for Practice Quality Improvement (PQI). (An important exception only for the first look-back in March 2016 is that credits obtained in 2012 will also be counted.) The MOC status of ABR diplomates is now posted on the ABMS website, following the 2013 look-back. Each diplomate is reported as:

- Meeting the Requirements of Maintenance of Certification
- Not Meeting the Requirements of Maintenance of Certification
- Not required to Participate in Maintenance of Certification (lifetime-certified diplomates)

The ABMS website refers users to the ABR website (www.theabr.org), where further information is found. The ABR’s website has been enhanced to include its own online verification database of our diplomates. Diplomates who are meeting the requirements of MOC will be listed as such. If they are not, they will be listed as “certified, not meeting the requirements of MOC.” If they do not remove the deficiency within one year, they will be listed as “not certified.” At any time, they can go back to the “certified, meeting the requirements of MOC” status by removing the deficiency. Lifetime certificate holders enrolled in MOC revert to their “certified, not required to participate in MOC” status if they do not meet the requirements.

**Table 1. How Does Continuous Certification Work?**

<table>
<thead>
<tr>
<th>MOC Year</th>
<th>Look-back date</th>
<th>Element(s) checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3/15/2013</td>
<td>Licensure or Professional Standing Attestation/Exam</td>
</tr>
<tr>
<td>2013</td>
<td>3/15/2014</td>
<td>Licensure or Professional Standing Attestation/Exam</td>
</tr>
<tr>
<td>2014</td>
<td>3/15/2015</td>
<td>Licensure or Professional Standing Attestation/Exam</td>
</tr>
</tbody>
</table>

Source: The Beam, Spring 2013 www.theabr.org

Page 18 of 26
Licensure or Professional Standing Attestation, CE/SA-CE, Exam, PQI, and Fees
Licensure or Professional Standing Attestation, CE/SA-CE, Exam, PQI, and Fees
Licensure or Professional Standing Attestation, CE/SA-CE, Exam, PQI, and Fees
Licensure or Professional Standing Attestation, CE/SA-CE, Exam, PQI, and Fees

Table 2. Status Check for “Meeting Requirements”

<table>
<thead>
<tr>
<th>Element</th>
<th>Compliance Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensure</td>
<td>At least 1 valid license or professional standing attestation in previous 5 years</td>
</tr>
<tr>
<td>CE</td>
<td>At least 75 Category 1 CE in previous 3 years</td>
</tr>
<tr>
<td>SA-CE</td>
<td>At least 25 Self-Assessment CE (SA-CE) in previous 3 years (included as part of the 75 CE credits)</td>
</tr>
<tr>
<td>Exam</td>
<td>Passed initial certification or MOC exam (for certificate being maintained) in previous 10 years</td>
</tr>
<tr>
<td>PQI</td>
<td>Completed at least 1 PQI project in previous 3 years</td>
</tr>
<tr>
<td>Fees</td>
<td>Current with MOC fees at any time during the previous 3 years.</td>
</tr>
</tbody>
</table>

MOC is a constantly evolving process that changes as the needs of the diplomates and the public change, but the ABR tries to minimize the frequency of such changes. The change to continuous certification should make MOC easier and more meaningful to diplomates. The ABR is always glad to answer questions about any aspects of certification or Maintenance of Certification.

MOC Questions: (520) 256-2152
abrmocep@theabr.org

Initial Certification Questions: (520) 790-2900
icnotification@theabr.org
The Summit that Survived a ‘Blizzard’

By Donna Breckenridge, communications director, ABRF

On the afternoon of Wednesday, March 6, 2013, a small group of people huddled around a table in the board room of a Marriott Hotel in Bethesda, Maryland, working to make a decision. The American Board of Radiology’s (ABRF’s) Summit on “Safe and Appropriate Medical Imaging: Partnering for a Patient-Centered Approach” was scheduled to start early the next morning and go through noon on Friday. But, as predicted, a mixture of snow and sleet (the weather report called it a blizzard) was significantly affecting travel across the country and had rolled into the D.C. area late the night before.

Luckily, this group of ABRF board members and staff had made it to the hotel before the bad weather started. But what about everyone else? Eighty-five people were scheduled to attend, most coming in later that day or early the next morning, and flights were being cancelled right and left. Even those who had planned to drive were worried about the road conditions.

As they discussed the situation, everyone looked out the window and watched as the sleet and snow continued to fall. Should they cancel the Summit, or should it go on with whoever was able to get there? In addition to the many attendees flying in, the keynote speaker, Dr. Don Berwick (former administrator of CMS) was trying his best to fly from the Virgin Islands to Boston, and then down to D.C. What if he didn’t make it? Or what if he got there, but there were few people to hear him speak?

Summit participants, as well as staff, had put in many hours of hard work over the past few months to prepare for this important meeting. In addition to the presentations and panels, participants had been divided into three breakout groups to focus on patient engagement, appropriateness, and safety. Facilitators (two for each group), recorders, and scribes had been meeting by conference call and posting their ideas on the Summit Wiki; they were well prepared to lead the groups and assist with the brainstorming and discussions. How would the momentum of this group be sustained if the Summit were to be cancelled? On the other hand, how could people be asked to brave a blizzard, risking life and limb to get there?

For their part, the airlines had a very narrow window of time to make the determination about cancellation of flights vs. leaving their schedules intact. As it turned out, they did make the call, and many of the flights into Washington, DC from major airports around the country were cancelled.
In the end, the Summit organizers made the right decision. Wednesday afternoon, they sent out a message to participants letting them know that the Summit would go on – even if it turned out to be a small group sitting around the same board table and discussing the issues informally – but to think of their safety first and not to worry about attending if travel proved to be impossible or too risky. Later in the day, the organizers learned that, by some miracle, one facilitator for each breakout group would be able to attend. By late Wednesday night, an abbreviated agenda, beginning with Dr. Berwick’s presentation at 11 a.m. the next day, had been distributed by email.

No one really knew what to expect when they woke up the next morning. Incredibly, the sun was shining, and there was no sign of snow, rain, or ice; evidently, the “blizzard” had fizzled out! (This became an item of national discussion since numerous changes across the country were guided by the national weather reports). Dr. Berwick arrived early and began to meet with the executive group assembled around 10 a.m., and then he joined the media briefing. Staff members checking people in at the desk watched in amazement as more and more participants filed in, happy to be there and ready to get started. As Dr. Berwick began speaking, hotel staff were summoned to bring in more chairs and tables to accommodate all the attendees, who were still arriving and crowding in to the smaller, downsized room.

After all was said and done, the March 2013 ABRF Summit was a huge success, with 55 individuals attending in person (approximately 65 percent of those registered). Dr. Berwick immediately set the tone with his inspirational speech, telling his audience that radiology is a “charismatic species” within healthcare, and that “if radiology were to change, it would change healthcare forever.”

Among other things, Dr. Berwick challenged his audience not to wait too long; to set clear aims for better care, better health, and lower costs; to establish bold, quantitative targets; to get patients and their families involved; and to be sure to engage young people in the dialogue. He also urged everyone to act as good citizens in a system that is concerned with good care, not payments. Finally, after considering the efforts individuals had made to attend the Summit, Dr. Berwick asked a very pointed question: “Why would a group of people come together to engage in a set of activities that could reduce their own income?” His answer: “Because they’re here for the patients!”

The remainder of the meeting focused on crystallizing the goals of a national alliance to bring safer and more appropriate care to patients. Some of these goals were developing through the breakout groups and their reports back to the larger group, as well as through presentations from those representing many domains within imaging. A number of excellent ideas and projects were enthusiastically proposed and debated, with the groups pledging to keep up the momentum, work toward the next steps, and present reports of their progress at the next Summit.

On Friday, Summit participants left inspired, energized, and even more committed to their vision of a national alliance focused on a medical imaging system that is optimized for patients. The ABRF looks forward to welcoming those who could not make it to the March Summit - as well as those who were able to attend - to the next Summit in Bethesda, on August 22-23. And, hopefully, there will be no blizzards in August!
For more information on the March 2013 Summit, go to www.abrfoundation.org/summit-March2013.
Study Aids for the Core Examination

Several study aids for the Core Examination, which will be administered for the first time this fall, are available on the ABR website. Just click the links below:

ABR Core Practice Examination

2013 Core Pilot Exam Information

Core Exam Study Guide

Further information on the Exam of the Future (EOF), including Core Exam Blueprints and EOF FAQs, can be found here.

The ABR Exam Experience

An overview of what happens on the days leading up to and including the exam day for various ABR examinations can now be found on the ABR website here. Examinees may refer to the appropriate section as they prepare to take an exam. Simply locate your exam and then click on its location, as indicated on the website.

American Board of Radiology elects two new trustees

The American Board of Radiology (ABR) has elected Stephen M. Hahn, MD, as a trustee for radiation oncology and J. Anthony Seibert, PhD, as a trustee for medical physics, both effective July 1, 2013. Dr. Hahn is chair and Henry K. Pancoast professor of radiation oncology at the University of Pennsylvania. Dr. Seibert has been a professor of radiology and medical physics at the University of California Davis Medical Center since January 1983 and is currently associate chair of radiology informatics.

Source: The Beam, Spring 2013 www.theabr.org
Page 23 of 26
Dr. Hahn will replace Bruce G. Haffty, MD, who is completing eight years of service as an ABR trustee, including two years as president-elect and two years as president of the ABR Board of Trustees. Dr. Haffty is professor, chairman of the Department of Radiation Oncology, and associate director of the Cancer Institute of New Jersey, Robert Wood Johnson Medical School. Dr. Seibert will replace Richard L. Morin, PhD, who is also concluding eight years on the ABR Board of Trustees, including two 2-year terms as secretary-treasurer. Dr. Morin is Brooks-Hollern professor in the Department of Radiology and professor of radiologic physics at the Mayo Clinic in Jacksonville, Florida.

A diplomat of the ABR in radiation oncology, **Dr. Hahn** is also certified in internal medicine and has been certified in medical oncology. As an expert in lung cancer and sarcoma, he has been an item submitter and an oral examiner since 2009. He has also served as co-chair for the initial certification “written” exam committee on the same topics.

Dr. Hahn earned his medical degree from Temple University School of Medicine and his undergraduate degrees from Rice University. In 1987, he completed his residency and served as chief resident of internal medicine at the University of California, San Francisco. He also completed a medical oncology fellowship at the National Cancer Institute (NCI) in 1991 and a radiation oncology residency at the NCI in 1994.

From 1993 to 1995, Dr. Hahn served as chief of the NCI’s Prostate Cancer Clinic, Clinical Pharmacology Branch, in Bethesda, MD, and as a senior investigator at the NCI. He also served as a commander in the NCI’s U.S. Public Health Service from 1989 to 1995.

A longstanding member of the American Society of Clinical Oncology, Dr. Hahn is also an active member of the American Society for Radiation Oncology, Radiation Research Society, the American Society of Photobiology, the American Association for Cancer Research, and the University of Pennsylvania’s John Morgan Society. He currently serves on the Board of Directors of the Radiation Oncology Institute and has been recognized repeatedly by *Best Doctors in America* and *America’s Top Doctors*.

A diplomat of the ABR in diagnostic and therapeutic medical physics since 1986, **Dr. Seibert** has actively participated as a volunteer within the ABR since 1995 as an oral examiner, former chair of the Diagnostic Radiological Physics Exam Committee, and current member of the General Radiological Physics Exam Committee. He earned his undergraduate and graduate degrees from the University of California, Irvine.

Dr. Seibert is past president and chair of the American Association of Physicists in Medicine. He has received numerous honors, awards, and funded grants, and also has been active in the American College of Radiology, the Radiological Society of North America, the Society for Imaging Informatics in Medicine, and the Institute of Electrical and Electronics Engineers. He assisted in the development and founding of the American Board of Imaging Informatics, where he is currently a member and chair of the Board of Trustees.

A prolific writer, Dr. Seibert is co-author of a popular physics text, *The Essential Physics of Medical Imaging*, and is extensively involved in physics education and training. He is credited with approximately 80 published papers and 100 published abstracts, as well as numerous book...
chapters. He recently served as associate editor and member of the editorial board for the journal Radiology.

**Volunteer Spotlight**

In this Volunteer Spotlight, we’d like to introduce you to **Stephen Simoneaux, MD**, a diagnostic radiologist at Children’s Healthcare of Atlanta and Emory University, who has volunteered for the ABR for more than 10 years. During that time, Dr. Simoneaux has been an image asset coordinator for pediatric radiology, an oral examiner, and an item writer for the CAQ (subspecialty) exam and the MOC exam. He has also served on the Category Steering Committee, as chair of the CAQ (Subspecialty) Committee, and on the Written Exam Committee—all in pediatric radiology. Years ago, he was also a proctor for the written exam.

When asked about his motives, Dr. Simoneaux said that volunteering for the ABR offers many rewards: opportunities to meet radiologists from other disciplines; the challenge of writing questions that are clearly understood, useful in discriminating between candidates, and interesting; an opportunity for service to the public by evaluating candidates for board certification; and a chance to impact the field of radiology for years to come by enhancing asset and item development for the board. He particularly enjoys meeting other radiologists and seeing interesting cases.

Dr. Simoneaux understands the unique contribution that volunteer service makes to advancement of the ABR mission. The content expertise that volunteers share in the process of serving could never be provided by any other means. It makes the process of candidate evaluation possible, and it ensures that quality exam materials will be available for future exam developers.

With respect to changes in the ABR exams, Dr. Simoneaux stated, “I am saddened to see the demise of the oral exam. The reasons for its replacement I understand, but selfishly, I will miss the collegiality of the interactions in the category and panel meetings, the casual interactions over afternoon cookies, and the reminiscing over the day’s activities during the evening social hour and the following dinner.”

**In Memoriam**

**Curtis Lee Sutton, MD**, of West Jefferson Medical Center in New Orleans, passed away on Wednesday, December 12, at Vidant Medical Center in Greenville, North Carolina. He earned his medical degree from the University of North Carolina and was board certified in diagnostic radiology and neuroradiology. Dr. Sutton was 53 years old.

Source: *The Beam*, Spring 2013 [www.theabr.org](http://www.theabr.org)
Former ABR trustee Dr. John Murray Dennis, died on January 17, 2013, of respiratory failure at Greater Baltimore Medical Center. Dr. Dennis was a national leader of radiology with the American College of Radiology and the American Board of Radiology. He was former dean of the University of Maryland School of Medicine, where his career spanned nearly half a century. He was 89.

“This is a very sad day for us,” said Dr. E. Albert Reece, vice president for medical affairs for the University of Maryland and dean of the University of Maryland School of Medicine. “He was someone who spent many years at Maryland, and even in his retirement he continued to attend major events. He was very loyal and continued to be extraordinarily engaged.”

Dr. Dennis was born and raised in Willards on the Eastern Shore of the Chesapeake Bay. After graduating from Pittsville High School, he enrolled at the University of Maryland, where he earned a bachelor’s degree in 1943. He earned his medical degree from the University of Maryland School of Medicine in 1945, and after completing an internship at the medical school, he graduated in 1946 from the Army School of Roentgenology.

From 1946 to 1948, Dr. Dennis served in the Air Force, where he was chief of radiology at the Station Hospital, Langley Air Force Base in Virginia. In 1948, after being discharged with the rank of captain, he began his radiology residency at the University of Maryland, studying under Dr. Walter Kilby. He completed a fellowship at the University of Pennsylvania and was certified by the American Board of Radiology in 1951.

Dr. Dennis began his professional career the same year at the University of Maryland School of Medicine as an instructor in the radiology department. Two years later, he was named professor and the first full-time chairman of the department, and he remained in that position for the next 22 years. In 1973, Dr. Dennis was appointed acting dean of the medical school and in 1974 was appointed the formal dean of University of Maryland School of Medicine.

During those decades, Dr. Dennis expanded his department, added members for nuclear medicine and radiation therapy, and accepted a larger group of residents for radiology training. The University of Maryland rose to be among the top third of medical schools, as measured by research grants, during his tenure. An editorial in The Baltimore Sun at the time of his retirement in 1990 said, “He, more than anyone, is responsible for the construction of a new Veterans Administration hospital on the UMAB campus.”

In the 1960s, Dr. Dennis was chairman of the American College of Radiology (ACR) council and rose to membership of the American Board of Chancellors. He became chairman of the board and then president of the ACR in 1976. In 1980, he received an ACR goal medal. Earlier in his career, he was an examiner for the American Board of Radiology and in the 1970s, served on the leadership of the ABR and its committees to improve its advancements.

In 1990, he resigned as the dean of medicine. Throughout his career, he lived on the north side of Baltimore with his wife, Mary Helen, and their four children.