

AMERICAN BOARD OF RADIOLOGY Maintenance of Certification Medical Physics

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The ABR Maintenance of Certification (MOC) Program for Medical Physicists

Today's Objectives:

- 1.) To review the components of the ABR MOC program as required for Medical Physicists.
- 2.) To review the process by which Medical Physicists may complete the MOC program.
- 3.) To provide the opportunity for asking questions !

The ABR Maintenance of Certification (MOC) Program for Medical Physicists

Target Audience:

- 1.) Diplomates who received time limited certificates (TLCs) in 2002, 2003, 2004.
- 2.) Individuals planning to take The ABR certification exams in the next several years.
- 3.) Diplomates with life-time certificates (certified prior to 2002) but who want to engage in The ABR MOC out of a sense of professional responsibility.
- 4.) ABMP diplomates with letters of equivalence who wish to seek ABR certification.

The ABR MOC Program

**ABR Headquarters Building
Tucson, Arizona**



URL: <http://theabr.org>

**On home page one finds: ABR-MOC button
Guides you to: ABR MOC Reference Document**

The ABR MOC Reference Paper for Radiologic Physicists

SPECIAL TOPIC

This document has been extracted from The ABR MOC Reference Document prepared by the ABR Maintenance of Certification Coordinating Committee and Executive Director: John E. Madewell, M.D.; Robert R. Harvey, M.D. (Executive Director); Stephen R. Thomas, Ph.D. (Chair); Larry E. Kist, M.D.; Gary J. Becker, M.D.; Christopher Merritt, M.D.; Lawrence W. Denis, M.D. The full ABR MOC Reference Document including information for Diagnostic Radiologists and Radiation Oncologists may be accessed on the ABR web site: www.TheABR.org

The American Board of Radiology Maintenance of Certification (MOC) Program in Radiologic Physics

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The ABR's MOC Initiatives

- 1998: Concerted efforts initiated by The ABR toward the development of its MOC process.
- A committee of Medical Physicists was appointed to assist The ABR in formulating its MOC program for Radiologic Physics.
- Dec 2001: The ABR convened a meeting to engage each of its sponsoring organizations (ACR, ARRS, AUR, RSNA, ASTRO, AAPM, ARS, AMA) in planning MOC.
- Jan 2004: The ABR sponsored meeting on "Implementing MOC: Issues and Strategies". Interactive involvement of societies in discussion of key issues for effective implementation of MOC as an inclusive process.
- Aug 2005: Summit meeting on issues concerning Self Assessment Modules (SAMs)

Time Limited Certificates (TLCs) – A Major Paradigm Shift

- Life-time certification based on a one-time successful passing of a cognitive exam is no longer considered adequate and is being replaced by TLCs incorporating a program of continuous professional development.
- Growing awareness that continuous professional enhancement is essential to ensuring high quality health care in era of rapidly advancing technology.
- Recognition that active programs and evidence-based measures are required to demonstrate that practitioners are remaining current in their fields.
- IOM Report on Medical Errors: Recommendation 7.2 calls for implementation of "periodic re-examination and re-licensing of doctors and other key providers".

Radiology's Perspective of MOC: Responsibilities

Consensus:

- The ABR is responsible for coordinating and administering MOC in radiology.
- Other radiology societies are responsible for establishing mechanisms for lifelong learning.

ABMS: Four Components of MOC

- **Component 1: Professional Standing**
 - Physicians; Unrestricted license
 - Physicists; Practice involvement documentation, or unrestricted license.
- **Component 2: Lifelong Learning and Self-Assessment**
 - The requirement to keep current in the field. Renewing & expanding knowledge, skills, competence, and performance for the purpose of improving the quality of patient care.
- **Component 3: Cognitive Expertise**
 - Examination process.
- **Component 4: Practice Performance (Dec 2004)**
 - Assessment regarding support of patient care.

ABMS: Six Competencies

- **Medical Knowledge:** Understand and apply appropriate radiologic physics techniques to meet the needs of patients, health care providers, and the health care system. Engage in continuous learning.
- **Patient Care:**
- **Interpersonal & Communication Skills:**
- **Professionalism:**
- **Practice Based Learning & Improvement:**
- **Systems Based Practice:** Realize that radiologic physics is one part of a continuum of patient care. Work towards integration and continuous improvement.

The ABR – Current MOC Status re Radiological Physics

- Beginning in 2002, all ABR certifications were time limited to 10 years.
- For Radiological Physics this includes:
 - ✓ Diagnostic Radiologic Physics
 - ✓ Therapeutic Radiologic Physics
 - ✓ Medical Nuclear Physics
- The MOC timelines and processes have been defined and are being configured for implementation in 2006.

1. Professional Standing

- Letters of attestation
- Documentation of licensure or other regulatory agency certification
- Documentation of expertise-based appointments or recognition.

2. LIFELONG LEARNING (LLL)

- Approved CE credits (Cat. 1 equiv.)
Usual CAMPEP or other
- Self-Directed Educational Projects (SDEPs) (15 credits per project)

2. LLL CREDITS OVER 10-YEAR PERIOD

- 1 ABR certificate = 500, 200 Cat. 1, 150 SDEP minimum
- 2 ABR certificates = 600, 250 Cat. 1, 195 SDEP minimum
- 3 ABR certificates = 700, 300 Cat. 1, 240 SDEP minimum

More SDEP Ideas!

1. Update my knowledge of quality control instrumentation and procedures
2. Learn about applications, quality control, safety standards and regulations related to the medical uses of lasers in response to new duties.
3. Understand the Privacy Act, the HIPAA regulations that emanate from it, and how these regulations impact on the practice.

More SDEP Ideas!

4. Expand my knowledge of PET or MR etc, its current and potential clinical applications, and the fusion of PET images with CT images.
5. Improve my knowledge of the scientific basis of the linear, no-threshold dose-response model of radiation injury, and current controversies associated with this model and its use to estimate radiation risks in humans.
6. Increase my understanding of duplex Doppler ultrasound and its applications in cardiology and cardiovascular medicine.

More SDEP Ideas!

7. Prepare and publish original work/research
8. Enhance my understanding of molecular imaging and its applications to molecular biology and genetics.
9. Prepare a lecture on (radiologic physics) for (medical residents)
10. Develop a clinical protocol for the use of (new technology)

3. Cognitive Expertise

- Expected to
 - maintain the essentials of core knowledge fundamental to the practice of Radiologic Physics, and
 - to remain up-to date on evolving technologies, protocols, procedures and techniques involving applications of physics in medicine.
- Fulfillment of these expectations will occur by evaluation of cognitive expertise utilizing a proctored, timed, web-based examination that will be administered in three parts for completion over the 10-year period.

3. Cognitive Expertise

- The examination format will be open book, 50 multiple-choice questions with content based on
 - 1) core knowledge (approximately 30%),
 - 2) current evolving technologies (approximately 70%).
- New cognitive exam modules will be available on a yearly basis.
- A diplomate who fails an exam will have the opportunity to retake the examination, offered in the next year.
- The three exam components must be successfully completed over the 10-year cycle.

3. Cognitive Expertise

- Open Book?
 - Correlates well with the practice of Medical Physics
 - Promotes an active learning process without memorization
 - Agrees with modern pedagogical approaches to graduate and professional education
 - Promotes practical knowledge and application in the use of information rather than memorization of facts
 - Will allow in-depth evaluation going beyond minimum competency requirements and provide a means to evaluate the candidate's mastery of technical resources in a reliable fashion

3. Cognitive Expertise

■ Exam Security

- Synchronized on one specific day across nation.
- Timed, web-controlled, not down-loadable, one candidate at a designated computer location.
- Assigned test-specific, site-specific password.
- Honor code affidavit sign-on process.
- Proctored - ABR authenticated diplomate with individual password.
- Honor code affidavit sign-out process

3. Cognitive Expertise

■ Logistics of the Exam

- The first exam will be available mid 2006.
- Diplomate eligible to take first module in the 2nd year following receipt of TLC.
- If they pass, must wait a minimum of 2 years before taking the next module.
- If they fail, they may take the exam the next year.

4. Performance of Practice

- The final configuration of and components for practice performance evaluation as applied to Radiologic Physics are under discussion.
- The program will be responsive to the guidelines for practice performance (PP) that have been established by the ABMS.

4. Performance of Practice

- Diplomates must provide information regarding their active participation in the profession of Radiologic Physics over the 10-year period.
- The PP program will be focused on the radiological physicist as a medical professional who contributes to and supports patient care
- The PP evaluation will be directed toward the diplomate's activities in fulfilling obligations in specific programs that have prescribed evidence-based standards and criteria.

Elements of the MOC Process

Concept of the Web-Based Process

- Application submission
- Maintaining files
- Review status
- Submitting Documents

Overview of The ABR MOC Process for Medical Physicists

- Enrollment automatic upon award of the initial certificate (diplomates with life-time certificates apply to enter).
- Continuous process throughout cycle (web based).
- Submission of documentation in final (10th) year. (Periodic reminders, reviews and audits will be offered as a facilitating service by The ABR.)
- Upon successful fulfillment of MOC requirements:
New certificate issued: "...<Name> has successfully fulfilled the requirements of this Board's MOC program and is certified as a Diplomate of The American Board of Radiology in <Specialty>."
- The new certificate will contain the new expiration date calculated as 10 years after the preceding certification.

Overview of The ABR MOC Process for Medical Physicists

Considerations should the candidate fail to satisfy the requirements for MOC:

- If all 4 components are not successfully completed, upon conclusion of the current period of certification, the candidate would no longer have ABR diplomate status.
- A 3-year reinstatement period will be allowed for the candidate to rectify deficits in their MOC program (no diplomate status during that time). Once all components have been successfully completed, certification will be reinstated and will expire 10 years beyond the date of expiration of the prior time limited certificate.
- If the candidate does not complete MOC within the 3 year reinstatement window, required to complete all parts of the primary certification exam to regain diplomate status.

Initiation of the MOC Process for Medical Physicists

- Full details are posted on The ABR web site.
- Program to be operational first quarter 2006.
- Diplomates receiving certificates in 2002, 2003, 2004 will participate in a 'prorated' program reflective of this delayed initiation. Enrollment is automatic for TLC holders. Letters from the ABR office providing details will be sent out by July 2005.
- Fees for a complete 10-year cycle:
Current schedule \$1700 (\$170/year)
(‘Prorated’ fees are posted on the website.)

Considerations for ABR Diplomates Holding Lifetime Certificates

- Under legal constraints, The ABR cannot change the original terms of issuance.
- The ABR actively encourages all “Older Diplomates” to voluntarily enter MOC. Enrollment forms are available on the web. Note: All ABR Trustees have enrolled.
- Through a personal sense of professional responsibility and potential requirements of employers, it is the expectation that a majority of diplomates in active practice will engage.

ABMP Diplomat Transition into The ABR MOC Process

Background: ABR/ABMP Agreement (2001)

- ABMP diplomates may request ABR Letters of Certification Equivalence (LoCE).
- Receipt of LoCE makes ABMP diplomate eligible for The ABR MOC process.
- For LoCE to be valid, ABMP certificate must be maintained.
- Upon recertification by the ABMP, diplomate may request a new ABR LoCE.
- New LoCE will have the same 5 year duration as the ABMP recertification.

ABMP Diplomat Transition into The ABR MOC Process

- ABMP diplomates with LoCE may enter The ABR MOC process upon application.
- During the MOC 10-yr cycle, ABMP certification must be maintained along with a valid LoCE.
- Upon successful completion of MOC, the ABMP diplomate will be awarded an ABR certificate and listed with the ABMS.
- All ABMP diplomates who want the LoCE are required to request one by 2006 and enroll in The ABR MOC process. After 2006, there will be no further opportunity for enrollment.

ABMP Diplomat Transition into The ABR MOC Process

- 2006 – 2015: ABMP with an expiring certificate would be recertified by the ABMP and could request a new LoCE with an expiration date matching the ABMP recertification if before 2015.
- For ABMP recertification in the period 2011 to 2015, all LoCEs issued expire 2015.
- In 2015, all ABMP diplomates who successfully completed the 10-yr ABR MOC cycle would receive an ABR MOC certificate.
- The LoCE mechanism would terminate in 2015.

In Summary re ABR MOC (1):

- MOC is a program for promoting the continuing competency of certified Medical Physicists.
- Since, the knowledge base and skills necessary to maintain current in the practice of medical physics are dynamic, there is the requirement to engage in self-assessment and provide a mechanism to document active participation in the continuous learning processes.

In Summary re ABR MOC (2):

- The ABR is committed to assisting Medical Physicists in fulfilling the expectations of patients and the public for demonstration of continued competence in the practice of our profession.
- The ABR will implement a fair and creditable process consistent with ABMS guidelines.
- The ABR MOC process is designed to:
 - Satisfy public and professional scrutiny,
 - Foster continuous professional development and practice improvement,
 - Take into account the high quality and diversity of the practice of Radiologic Physics.