ABR Update:
Initial Certification and Continuous Certification

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American Board of Radiology Mission

“To serve patients, the public, and the medical profession. . .”

“By certifying that its diplomates have acquired, demonstrated, and maintained a requisite standard of knowledge, skill, and understanding. . .”
Outline

Current Requirements

• Medical Physics Training
  - Didactic Education
  - Clinical Education

• Nature of Exams

• Exam updates
  - Part 1 & Clinical; Part 2; Part 3 – Oral

• Pass Rates

• Time Limits - Board Eligible

• Additional Certificates

• Continuous certification
Initial Certification
Medical Physics Training

Increasing Standardization
Medical Physics as a Profession

Standardized training is a key component of a profession.

- Physicians
- Lawyers
- Accountants
- Actuaries
- Architects
- Dentists
- Engineers
- Nurses
- Teachers
Certification

Medical Physics Training

Practice Years (MOC)

Clinical Training

Didactic Training

Retirement
Major Components

Didactic Education

Clinical Education
Major Components

Didactic Education
2012: CAMPEP accredited educational program

Clinical Education
Major Components

**Didactic Education**
2012: CAMPEP accredited educational program

**Clinical Education**
2014: CAMPEP residency
Current Requirements
Current Requirements

- Applicants for the Clinical Exam and Part 1 Exam must be enrolled in (or graduates of) one of the following CAMPEP Accredited Programs:
  - Graduate Education Program
  - Certificate Program
  - Residency

The candidate must be in good standing and the enrollment must be attested to by the program director.
Current Requirements

Applicants for the Part 2 Exam must have completed a CAMPEP Accredited Residency

Applicants for the Oral Exam must have passed the Part 2 Exam
Candidates from Previous Years

ABR usually allows candidates to finish under the requirements of entry date.

There are exceptions, but ABR usually gives 1-5 years notice.
Candidates from Previous Years

Candidates from 2013 and earlier can still use the “clinical experience” pathway

Candidates from 2011 and earlier do not require a CAMPEP education
Exams are “criterion referenced.”
Everyone who meets the “standard” passes.
In principle, everyone could pass or fail.
This can be compared to “norm referenced” where the purpose of the test is to rank the participants.
How Are Criteria Determined?

- Expert Analysis
- Practice Surveys
- Professional Guidelines
Passing Score

Set by Psychometric Analysis
Exam Updates
Clinical Exam

In 2014 the number of questions will increase to 75 from 60

The amount of time for the exam will increase by 30 minutes
## Exam updates

### Medical Physics Initial Certification (2014)

<table>
<thead>
<tr>
<th>Exam</th>
<th>Questions</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Part 1 &amp; Clinical</td>
<td>80 + 75</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Clinical Only</td>
<td>75</td>
<td>1.5 hrs</td>
</tr>
<tr>
<td>Part 2</td>
<td>80</td>
<td>4.5 hr</td>
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<tr>
<td>Orals</td>
<td>25</td>
<td>2.5 hr</td>
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</tbody>
</table>

*Note: Question numbers will vary slightly*
Part 1 and Part 2

Organization and content largely the same
List of Commonly Used Constants

A list of commonly used constants and physical values is provided for IC candidates for Parts 1 and 2.

This reflects common practice for medical physicists where constants are readily available.

See http://www.theabr.org/ic-rp-calc
Orals

Maintaining Location in Louisville
May 18-21 2014
May 12-15 2015
Categories and Content

The exam has a focus on clinical medical physics

The overall content of the orals will remain the same.

The DMP and NMP categories will be reorganized starting in 2015
# New Oral Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>DMP</th>
<th>NMP</th>
<th>TMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1</strong></td>
<td>Radiography, Fluoroscopy, and Interventional Radiology</td>
<td>SPECT &amp; hybrids, including gamma cameras</td>
<td>Radiation Protection and Patient Safety</td>
</tr>
<tr>
<td><strong>Category 2</strong></td>
<td>Computed Tomography</td>
<td>Radiation Protection</td>
<td>Patient-related Measurements</td>
</tr>
<tr>
<td><strong>Category 3</strong></td>
<td>Non-ionizing Techniques – MRI and Ultrasound</td>
<td>PET &amp; hybrids</td>
<td>Image Acquisition Processing &amp; Display</td>
</tr>
<tr>
<td><strong>Category 4</strong></td>
<td>Shielding, Radiation, and Protection</td>
<td>Radiation Measurements</td>
<td>Calibration, Quality Control, and Quality Assurance</td>
</tr>
<tr>
<td><strong>Category 5</strong></td>
<td>Radiation Dosimetry and Patient Safety</td>
<td>Clinical Procedures</td>
<td>Equipment</td>
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</tbody>
</table>
Pass Rates
Pass Rate (Percentages)
Pass Rate – Oral Examination

Oral (all)
Number of Candidates

- Part 1
- Clinical
- Therapy
- Diagnostic
- Nuclear
Time Limits and Board Eligibility
Concepts

- Replace “opportunities” with time limits
- Require additional education or training if candidate “times out”
- Make “Board Eligible” an official status
Part 1 and Clinical

• Approved to take Part 1 & Clinical after January 1, 2011
  - Must pass Part 1 & Clinical within 5 years of approval

• Approved to take Part 1 & Clinical prior to January 1, 2011
  - Must pass Part 1 & Clinical by Dec 31, 2016

• If you do not pass by the required date you must complete an additional year of education at an institution that has a CAMPEP accredited educational program before you can be approved to retake part 1
Part 1 to Part 2 Approval

The ABR does not have a time limit between passing Part 1 and being approved for Part 2
When one is approved for Part 2 or completes a CAMPEP residency one becomes “Board Eligible”

This is an official ABR and ABMS status and the candidate may describe themselves as “Board Eligible”

The ABR will report the candidate as “Board Eligible”
Board Eligible

• Approved after January 1, 2011
  • Must become certified within 6 years of approval

• Approved prior to January 1, 2011
  • Must become certified by December 31, 2016
  • If you do not pass by the required date you must complete an additional year of training at an institution that has a CAMPEP accredited residency program before you can be approved to be board eligible

• The ABR will show your status as “Not Certified and Not Eligible for Certification”
Additional Certificates

You may apply for additional certificates after 1 year of clinical training under the supervision of an ABR physicist.

You are then “Board Eligible” in additional discipline:

- Part 2
- Oral

You must become certified in the additional field within 6 years of approval or a year of clinical training at an institution that has a CAMPEP residency is required.
The Continuous Certification Process is updated from time to time. It is prudent to check the ABR website, www.theabr.org And your myABR for the latest news
Why Should I Enroll in CC?

- Demonstrates commitment to lifelong learning and self-assessment
- Allows the physicist to self-direct own continuing education
- Results in continuous quality improvement
- State licensing boards & institutions are becoming more interested in MOC as a way to reach their goals
CC helps further development of the six key areas:

1. Medical knowledge
2. Patient Care and Procedural Skills
3. Interpersonal and Communication Skills
4. Professionalism
5. Practice-based Learning and Improvement
6. Systems-based Practice
…through the four CC components

1. Professional Standing
2. Lifelong Learning and Self-assessment
3. Cognitive Expertise
4. Practice Quality Improvement
Significant Improvements for 2014

Certificates have no end date
Continuous involvement
Annual “Look-back”
  • Detailed in 2016
Much improved website (myABR)
  • Easier to enter information
  • Makes audits easier
  • Better reminders for diplomates
“Full” MOC annual look-back

MOC Annual Look-Back

- MOC annual look-backs began in 2013
- MOC annual look-back is March 15 of each year
- Look-backs reference the previous calendar year(s)
- MOC annual look-backs in 2013, 2014 and 2015 covers Part 1 (professional standing) and Part 3 (exam)
- First “full” MOC annual look-back occurs 3/15/2016
What happens if there is a deficiency?

Deficiencies can be corrected at any time

Certified, Meeting Requirements
Certified, Not Meeting Requirements
Not Certified

Not meeting at 1\textsuperscript{st} look-back
Not meeting at 2\textsuperscript{nd} look-back
Not meeting at 3\textsuperscript{rd} look-back and beyond

Reported on ABR and ABMS Websites
What happens if there is a deficiency?

Deficiencies can be corrected at any time

<table>
<thead>
<tr>
<th>Certified, Meeting Requirements</th>
<th>Certified, Not Meeting Requirements</th>
<th>Not Certified</th>
<th>Not Certified</th>
<th>Not Certified</th>
<th>...</th>
</tr>
</thead>
</table>

- Attestation
- 3 years of CME
- Exam
- PQI Project

Re-entry can be done at any time but all requirements must be done in a single calendar year

Reported on ABR and ABMS Websites
Part 1 – Professional Standing

State License

• Annual look-back over past 1 year

Professional Attestation

• Annual look-back over past 5 years
• Attestation Letters
  • Certified Physicist and
  • ABR-certified Physician

Simplified reporting via myABR
Part 2 – Lifelong learning and professional development

CE Credit

• 4-year look-back in first cycle (2016), followed by 3-year look-backs from then on

• 75 hrs of CE credit
  • 25 must be Self Assessment Continuing Education (SA-CE)
What is SA-CE?

• SAM’s
• Enduring Materials CME
• Self Directed Educational Projects (SDEP)
Sources for SAMs

- AAPM Annual and Spring Meetings
- RSNA and ASTRO Meetings
- AAPM on-line learning center
- ABR/ACR/RSNA/AAPM/ASTRO/ARR/ARS Online Modules on Ethics and Professionalism
Enduring CME

• Provides 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.

• Communicates to the participants the minimum performance level that must be demonstrated in the assessment in order to successfully complete the activity for CAMPEP or AMA PRA Category 1 Credit™.

• Provides a reference to appropriate bibliographic sources to allow for further study.
The key factor is that there is a post-test with a required score for successful completion.
Sources of SA-CE

The AAPM On-line Learning Center is an excellent example but there are other examples available from ASTRO, RSNA, SNMMI and ACR as well as many other societies and journals.

Because of the wealth of SA-CE that is available in the form of SAMS and the AAPM on-line learning center, all the SA-CE requirements can be obtained from the AAPM.
Self Directed Educational Projects (SDEPs)

Unchanged in general design and execution

May now be used as SA-CE

A template to make the design and record keeping easier is posted on myABR
SDEP template

Templates and example projects are available on the ABR website

Medical Physics
Self-Directed Educational Project (SDEP) Template

**IMPORTANT REMINDERS:**

You may use one SDEP per year toward fulfillment of your Part 2 MOC requirements.

You may claim up to 15 hours of CME and SA-CME, but the hours should not exceed the hours actually spent on the project.

When you complete your SDEP, you must sign log in to myABR and record your credit.

SDEPs must be prospective, but they do not need to be reviewed or pre-approved by the ABR.

Please do not submit this sheet to the ABR, but keep it in case you are selected for a random audit.

Project Title:

Date of Initiation:

Significance (Statement of Educational Need):

Initial Expectation and Planned Evaluation:
For Part 2 of MOC, a total of 75 CE credits must be earned every 3 years. At least 25 of the 75 credits must be SA-CME.

In addition to SAMs, Self-Assessment CE (SA-CE) has been broadened to include SDEP and “Enduring Materials.”
Part 3 – Cognitive Expertise

CC Exam

- 10-year look-back
- Exam can be taken any time
- Offered once per year

Exam is 30% basic and 70% current material. A good study guide is available online.

There is a robust study guide that is updated frequently.
Part 4 – Practice Quality Improvement Project

Complete One PQI Project

3-year look-back*

The first project must be completed by the 2016 look-back, and one project must be completed every three years afterward.
## Continuous Certification Summary

<table>
<thead>
<tr>
<th>Element</th>
<th>Compliance Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensure</td>
<td>At least one valid license in last year or professional standing attestation in previous 5 years</td>
</tr>
<tr>
<td>CE</td>
<td>At least 75 Category 1/CAMPEP CE in previous 3 years</td>
</tr>
<tr>
<td>Self-Assessment CE (SA-CE)</td>
<td>At least 25 of the 75 CE in previous 3 years must be Self-Assessment CE (SA-CE)</td>
</tr>
<tr>
<td>Exam</td>
<td>Passed CC exam 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 past 3 years</td>
</tr>
</tbody>
</table>
Thank you for your attention!

Questions and comments are welcome