Maintenance of Certification
Recent Changes

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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. . .”
Why MOC?

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

- Medical knowledge
- Patient Care and Procedural Skills
- Interpersonal and Communication Skills
- Professionalism
- Practice-based Learning and Improvement
- Systems-based Practice
...through the four MOC components.

- Professional Standing
- Lifelong Learning and Self-assessment
- Cognitive Expertise
- Practice Quality Improvement
### Evaluation Criteria for the Four MOC Components According to the Six General Competencies

|-----------------------------|--------------------------|------------------------------------------|------------------------|----------------------------------------------|
| **1. Medical Knowledge**    | At least one valid state license or professional attestation in previous 5 years | At least 75 Category 1 CE, including 25 Self-Assessment CE (SA-CE) | Achieve a passing score on the ABR cognitive Exam. | • Patient Safety  
   • Double Reading  
   • Practice Guidelines |
| **2. Patient Care and Procedural Skills** | At least one valid state license or professional attestation in previous 5 years | CE with review of new techniques and protocols | Achieve a passing score on the ABR cognitive exam, which includes patient care content. | • Patient Safety  
   • Double Reading  
   • Turnaround Time  
   • Practice Guidelines  
   • Referring Physician Survey |
| **3. Interpersonal & Communication Skills** | Self-Assessment CE (SA-CE) with emphasis on communications | | | • Patient Safety  
   • Double Reading  
   • Turnaround Time  
   • Practice Guidelines  
   • Referring Physician Survey |
| **4. Professionalism**      | At least one valid state license or professional attestation in previous 5 years | Self-Assessment CE (SA-CE) with content on professionalism | General questions about ethics and chart on professionalism | • Practice Guidelines  
   • Referring Physician Survey |
| **5. Practice-based Learning & Improvement** | Specific CE and Self-Assessment CE (SA-CE) developed for practice-based learning and improvement | General questions about essential core knowledge and practice improvement principles. | | • Patient Safety  
   • Double Reading  
   • Turnaround Time  
   • Practice Guidelines  
   • Referring Physician Survey |
| **6. Systems-based Practice** | Specific CE and Self-Assessment CE (SA-CE) developed for systems-based practice | General questions about CQI content. | | • Patient Safety  
   • Double Reading  
   • Turnaround Time  
   • Practice Guidelines  
   • Referring Physician Survey |
Significant Improvements for 2013

Certificates have no end date

Continuous involvement

Annual “Look-back”

- Detailed in 2016

Much improved website

- Easier to enter information
- Makes audits easier
- Better reminders for diplomates
Continuous Certification – Verified with “Look-backs”

Example CE credit look-back

Are there 75 hours of CE credit, including 25 hours of SA-CE credit, in the last 4 years?*

<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
</table>

Continuous Certification Begins

Look-backs are in March
First full look-back is in 2016

*4-year look-back in first cycle (2016), followed by 3-year look-backs from then on
What happens if there is a deficiency?

Deficiencies can be corrected at any time

Certified, Meeting Requirements

Not meeting at 1\textsuperscript{st} look-back

Certified, Not Meeting Requirements

Not meeting at 2\textsuperscript{nd} look-back

Not Certified

Not meeting at 3\textsuperscript{rd} look-back and beyond

Reported on ABR and ABMS Websites
Part 1 – Professional Standing

State License
• Annual look-back over past 5 years

OR

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)

**Quality Improvement SDEP**
- 10-year look-back
- 4-yr look-back in first cycle, followed by 10-yr look-backs from then on
What is SA-CE?

• SAM’s
• Enduring Materials CME
Sources for SAM’s

- 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
What is Enduring CME?

• 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 PRA Category 1 Credit™*.

• They provide 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, SMINM 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.
Part 3 – Cognitive Expertize

MOC Exam
• 10-yr look-back

Exam is 20% basic and 80% current material. A good study guide is available online.
Complete One PQI Project
3-yr look-back*

The first project must be completed by the 4th year, and one project must be completed every three years afterward.
Physicists have significant skills to contribute:

- knowledge of informatics
- quantitate analysis of data
- statistical process control

These skill can be very helpful to institutions but the physicist must be able to apply them to PQI projects.
Improving Physicist Skills in PQI

• Reading and self study
• Online courses
  Formal
  Society based
• Formal courses
  Technical schools
  Colleges and Universities
Documenting Physicist Knowledge

• PQI Related SDEP with a 10 year look-back
  • First is in year 4.
• This allows the physicist to obtain up to 15 SA-CE hrs. for learning about new developments in quality assurance
Component 4 – Practice Quality Improvement Projects

PQI projects must:

Be practice-relevant
Include focus on patients – care & safety
Use QI principles: plan-do-study-act
Generate an improvement plan
Implement the plan
Measure the effectiveness over time

Opportunity for integrated, practical physics
PQI Projects

Must have completed a project in last 3 years (4 years for first cycle)
**Initial Cycle**

1. Select Project
2. Collect Initial Data (Quantitative)
3. Analyze Data Determine Areas for Improvement
4. Formulate and Implement Improvement Plan

**Subsequent Cycles**

1. Collect Data (Quantitative)
2. Analyze Data Determine Areas for Improvement
3. Further Improvement Possible?

   - Yes: Repeat steps 1-3
   - No: Select New Project
Outline of Part 4 Continuous Certification for Medical Physicists

- Complete Learning Year and SDEP
- Begin 1st PQI Project
- Begin Continuous Certification Cycle

Annual Lookback Each Looks Back 3 Years

If there are deficiencies on a lookback your status changes to Certified Not Meeting MOC Requirements. If the deficiencies are not corrected by the next lookback you become Uncertified.

Begin 2nd PQI Project
Begin 3 PQI Project
Begin 2nd Learning Year

Annual lookbacks every year in March

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2
## 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 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 MOC exam in previous 10 years</td>
</tr>
<tr>
<td>PQI</td>
<td>Completed at least 1 PQI project in previous 3 years And 1 QI SDEP in last 10 years</td>
</tr>
<tr>
<td>Fees</td>
<td>Current with MOC fees at any time during the past 3 years</td>
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</tbody>
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