Well Maintained
ABEM’s Maintenance of Certification

LESSON 2

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OBJECTIVES
On completion of this lesson, you should be able to:
1. Identify the components of the ABEM MOC program.
2. Understand the evolution of ABEM’s MOC process.
3. Discuss methods to meet the Improvement in Medical Practice requirements.
4. Discuss ways to meet the Lifelong Learning and Self-Assessment requirements.
5. Discuss timing strategies for taking the ConCert Examination.

FROM THE EM MODEL
20.0 Other Core Competencies of the Practice of Emergency Medicine
20.2 Practice-Based Learning and Improvement

CRITICAL DECISIONS
■ What are the four components of Maintenance of Certification, and what are the best ways to satisfy the requirements?
■ What are the benefits and risk of taking the ConCert Examination early?
■ Why is it important to maintain certification?
■ What is the best way to satisfy ABEM’s Improvement in Medical Practice requirements?
■ Are there “fun” or “easy” ways to meet the Lifelong Learning and Self-Assessment requirements?

In response to public patient safety concerns, the American Board of Emergency Medicine (ABEM) developed an external assessment of cognitive skills to ensure that emergency care is meeting the highest standard. Since 2000, ABEM-certified physicians have been required to meet rigorous, specialty-specific standards predicated on Maintenance of Certification (MOC), episodic assessments of performance that extend beyond licensure and traditional continuing medical education.
The American Board of Medical Specialties (ABMS) requires all 24 medical specialty member boards to provide an MOC program to promote continuous professional development, and supply a periodic external assessment of each board-certified physician’s cognitive expertise. While differences in the specifics of each program vary, a consistent goal among all organizations is to ensure that clinicians are continually working to improve patient care.

**History of MOC**

When the ABMS was first formed, physicians who achieved board certification were issued lifetime certificates. In light of patient safety concerns described in the 1999 Quality of Health Care in American Committee of the Institute of Medicine (IOM) report, lifetime certification was felt to be insufficient for ensuring the highest standards of care. Due to rapid advances in medicine, career-long performance standards were no longer guaranteed by initial certification and annual continuing medical education (CME) activities, which typically are guided by the physician and may not address gaps in competency. Other than a state medical licensing board intervention, there was no mechanism for evaluating physician engagement in a career-long program of continuous professional development built on a set of national standards. Certification and periodic, external physician assessment became a fundamental concern to the public. As a result, the ABMS outlined a program of continuous professional development known as Maintenance of Certification. Subsequently, certification and MOC activities have been shown to enhance patient safety, improve the quality of clinical care, and reduce health care costs. Nonetheless, detractors (mainly in other specialties) suggest that continuous board certification is too time-consuming, too expensive, and irrelevant to their practices.

**Other Approaches**

ABEM makes changes to its MOC program based on participation, passing rates, and physician feedback. Annual diplomate surveys are conducted to evaluate the physician experience with each component of the program, and the ABEM MOC Committee regularly reviews the survey data and diplomate correspondence to determine what improvements should be made. Unlike diplomates of many other boards, physicians certified by ABEM have always been required to pass a secure examination to renew their certification every 10 years. ABEM also provides MOC credit for activities that emergency physicians are already doing during each shift. For example, many quality measures that The Joint Commission requires hospitals to monitor, including door-to-balloon time for the treatment of an acute myocardial infarction, can count toward the Improvement in Practice (IMP) requirement for MOC.

**Keeping ABEM’s MOC Program Relevant**

ABEM convened an MOC Summit of stakeholder organizations in emergency medicine in October 2014. Summit participants included representatives from the American Academy of Emergency Medicine (AAEM) and its Resident and Student Association, the Association of Academic Chairs of Emergency Medicine, the American Board of Medical Specialties, the American College of Emergency Physicians, the Council of Emergency Medicine Residency Directors, the Emergency Medicine Residents Association, the Residency Review Committee–Emergency Medicine, and the Society for Academic Emergency Medicine. Participants critically reviewed ABEM’s MOC program as well as ABMS’s MOC 2015 Standards. Roundtable discussions included recognizing strengths of the program and opportunities for improvement, assessing professionalism, identifying and filling competency gaps, enhancing relevancy, and adding value to the requirements.

**TABLE 1. Areas of ABEM Subspecialty Certification**

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<tr>
<th>Specialty Area</th>
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<tr>
<td>Anesthesiology Critical Care</td>
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<tr>
<td>Emergency Medical Services</td>
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<tr>
<td>Hospice and Palliative Medicine</td>
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<td>Internal Medicine-Critical Care Medicine</td>
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<td>Medical Toxicology, Pain Medicine</td>
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<td>Pediatric Emergency Medicine</td>
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<tr>
<td>Sports Medicine</td>
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<td>Undersea and Hyperbaric Medicine</td>
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Note: ABEM diplomates who pass one of the subspecialty examinations receive a certificate that is valid for 10 years.
Some of the dissatisfaction related to MOC in other specialties has stemmed from the assertion that the requirements are unrelated to daily practice or are too resource intensive. To the contrary, ABEM is developing ways to meet reporting requirements as seamlessly as possible. For example, the organization is working with ACEP to provide automatic IMP requirement credit for physicians who participate in the Clinical Emergency Data Registry (CEDR). CEDR houses data used to comply with federal quality measure reporting, enabling participating emergency physicians to monitor and assess their adherence to nationally established quality measures.

ABEM diplomates want to have a clear description of their pending MOC requirements. As a result, the board has created an online MOC personal page for each diplomate, which can be accessed from www.abem.org. From the personal access page, diplomates can view their emergency medicine certification, MOC requirements, and status at any time. Physicians are encouraged to contact ABEM directly if any questions arise about their MOC requirements.

Cost of MOC

The ABEM Board of Directors is cognizant of the costs associated with MOC, including the ConCert Examination. There has been no fee increase for Lifelong Learning and Self-Assessment (LLS) activities since 2011, and no increase in the cost of the ConCert Examination or any other service since 2012. The current fee for the ConCert Examination is $1,850. The annualized cost of ABEM MOC is comparable to the cost of other ABMS programs ($265 per diplomate, or about $5 per week).

ABEM certification is associated with higher professional reimbursement. More than 11,600 ABEM diplomates chose to participate in the Centers for Medicare & Medicaid (CMS) PQRS MOC bonus program from 2012-2014, resulting in a total of $3.8 million in added reimbursement, or an average of $7,000 for each ABEM-certified physician who participated. On average, ABEM certification is associated with an additional $7,000 in annual compensation per physician.

CRITICAL DECISION

What are the four components of Maintenance of Certification, and what are the best ways to satisfy the requirements?

There are four parts to Maintenance of Certification (Figure 1):
- Professionalism and Professional Standing
- Lifelong Learning and Self-Assessment
- Assessment of Knowledge, Judgement, and Skills
- Improvement in Medical Practice

Professionalism and Professional Standing

The Professionalism and Professional Standing component serves as a screening mechanism to ensure that board-certified physicians maintain professional behavior and have no sanctions against their medical license(s) by a state medical licensing board. Participants in the MOC process must hold a current, active, valid, full, unrestricted, and unqualified license to practice medicine in at least one jurisdiction in the United States, its territories, or Canada, and in each jurisdiction in which they practice. Participants also must report to the board all licenses they currently hold and/or previously held. This requirement is especially important for physicians working in multiple states, (eg, an emergency physician with a locum tenens practice).

Any license that is conditional, under probation, or limits the physician to a specific practice setting does not meet this MOC requirement. If even one of these licenses fails to comply with these standards, ABEM will revoke the diplomate’s certificate. Due to reporting among state medical boards through the Federation of State Medical Boards, a sanction against a physician in one state can result in another state also revoking the physician’s medical license, even though there is no action in the second state. Physicians also should be mindful that states may choose to suspend medical licenses due to civil or criminal matters unrelated to the clinical practice

Pearls

- Ideas for fulfilling the IMP component of MOC may be found in a dropdown menu on the ABEM website. Most clinically active emergency physicians likely will be able to select one of the available options based on performance measures already being tracked by their hospitals.
- Although each diplomate must complete four out of five available LLS activities during each five-year certification period, these activities may be performed in a group setting to allow discussion and enhance the educational value of this MOC activity.
- Diplomates may take the ConCert Examination during the fall administration in years six through 10 of their certification period in an effort to lessen the stress associated with taking a high-stakes test.
- CME credit may be earned for every LLS activity (from AAEM or ACEP), as well as both the Oral Certification Examination and the ConCert Examination (from the American Medical Association). Diplomates are encouraged to take advantage of this relatively low-cost CME option.
- There are specific pathways to regain certification. Anyone who is in this circumstance is encouraged to contact ABEM directly for assistance.
of medicine, including being charged with driving under the influence, domestic violence, or failure to pay child support.

**Lifelong Learning and Self-Assessment**

ABEM’s requirement for meeting the Lifelong Learning and Self-Assessment component is twofold. The first element is completion of four LLS activities within each five-year period of certification; the second is to obtain at least 25 American Medical Association (AMA) PRA Category 1 Continuing Medical Education (CME) credits per year. Of note, ABEM has removed the requirement for each physician to report an average of at least eight hours of annual self-assessment activities.

To enhance the value of this MOC requirement, ABEM provides a seamless option for obtaining CME credit for completed LLS activities from an external provider. The physician can obtain an average of 7 to 15 AMA PRA Category 1 Credits for each LLS activity, and may choose to receive these credits from the American Academy of Emergency Medicine or the American College of Emergency Physicians (ACEP). Sixty percent of diplomates take advantage of this CME opportunity.

The Lifelong Learning and Self-Assessment component is specifically designed to promote continuous learning for the practicing emergency physician. A list of 10 to 15 emergency medicine–relevant articles is released annually. The activity is designed to be self-study; however, many find that discussing the LLS readings in a group setting enhances the learning and retention of topics highlighted by the questions; this approach is encouraged by ABEM.

Each diplomate then takes an open-book test based on the readings, which consists of 20 to 30 questions. A physician has up to three opportunities per registration to pass each LLS test; a score of 85% or higher is considered passing. ABEM diplomates also may take the subspecialty LLS examinations for emergency medical services, pediatric emergency medicine, and medical toxicology if the physician has a particular interest in one of these areas. These subspecialty activities also count toward meeting MOC requirements (Table 1).

Ninety-eight percent of emergency physicians report that the LLS readings are relevant to emergency care, and 92% maintain that the information they learned changed their practices. Additionally, in response to diplomate feedback about how to improve the MOC experience, ABEM now provides the answer rationale for the LLS questions after the physician has completed and passed a given test.

**Assessment of Knowledge, Judgment, and Skills**

Physicians must pass the ConCert Examination during any one of years six to 10 of their certification. Taken at a proctored computer-testing center, the test is ABEM’s external assessment of the diplomate’s cognitive skills. It is a carefully designed examination with approximately 205 multiple-choice questions written by clinically active emergency physicians. Focusing on areas of everyday emergency medicine practice, more than 60% of the test’s questions require diagnostic processing, not simply fact recall.

Content for the examination is derived from The Model of the Clinical Practice of Emergency Medicine, the outline of the knowledge, skills, and abilities required of an ABEM-certified emergency physician. The model, which is reflective of clinical care, is developed and routinely updated through a collaboration between the key stakeholder emergency medicine organizations.

The test questions are written by a team of trained volunteer question (or “item”) writers, all of whom are board-certified emergency physicians. Items are then reviewed and edited by ABEM directors, who are clinically active professional physicians.
TABLE 2. Acceptable Types of Patient Care Practice Improvement (PI) Activities
Diplomates may complete PI efforts related to any of the measures or activities below. Others that are not listed may be acceptable, provided they follow the four steps ABEM requires.

**Time-Related (throughput time, length of stay, and other process time measures)**
- Door-to-doctor times (door-to-provider, door-to-evaluation)
- Emergency department length of stay for discharged psychiatric and transferred patients
- Throughput time improvement
- Time to disposition decision (admit, discharge, etc.)

**Infectious Disease-Related**
- Goal-directed sepsis pathway, use of the Sepsis DART toolkit, other sepsis guidelines
- Appropriate testing for children with pharyngitis
- Appropriate treatment for children with upper respiratory infection
- Antibiotic treatment for adults with acute bronchitis: avoidance of inappropriate use
- Antibiotic stewardship (includes selection, administration time, local resistance pattern identification, etc.)
- Blood culture before antibiotics

**Stroke-Related**
- Head CT within 45 minutes of arrival of stroke patient
- Thrombolytic consideration or use in eligible patients
- Door to puncture time for endovascular stroke treatment
- Stroke activations and care pathways

**Cardiac-Related**
- Door-to-balloon times for acute myocardial infarction (AMI)
- Fibrinolysis for AMI (median time and within 30 minutes)
- Transfer time to another facility for AMI intervention
- Aspirin at arrival for AMI or chest pain
- Median time to electrocardiogram (ECG) for AMI or chest pain
- Assessment for chest pain (including risk stratification, non-invasive testing and stress testing, diagnostic protocols for early rule-out, TIMI risk assessment)
- Improving care for patients with chest pain
- Cardiac resuscitation and post-resuscitation care
- Screening for high blood pressure and documented follow up
- Coagulation studies in patients presenting with chest pain with no coagulopathy or bleeding

**Appropriate Imaging**
- Appropriate CT use in minor blunt head trauma
- Appropriate CT use for abdominal pain in adults
- Appropriate imaging for renal and ureteral colic
- Appropriate imaging for trauma patients (includes NEXUS Criteria and Ottawa Rules)
- Use of imaging for low back pain
- Use of ultrasound for diagnosis for abdominal pain, pediatric
- Ultrasound determination of pregnancy location for pregnant patients with abdominal pain
- Appropriate use of neuroimaging for patients with primary headache, a normal neurological examination, and no trauma

**Communication — Patient Care**
- Patient call-back system
- Improving patient understanding of discharge instructions
- Improvements in response to Patient Experience of Care Survey results
- Safe sign-out between emergency physicians
- Transfer of care to other care provider (consultant, admitting physician, etc.)

**Pain Management and Sedation**
- Time to pain management for all pain, including long-bone fractures
- Reassessment of pain after administration of analgesia
- Procedural sedation safety (includes appropriate medication selection, checklists, etc.)
- Adherence to opioid prescribing recommendations for chronic pain
- Completion of “Prescribing Opioids in the Emergency Department” from EMpainline.org
- Use of statewide electronic pain medication prescribing system
- Evaluation for risk of opiate misuse

**Patient Safety, Error Reduction, and Complication Avoidance**
- Adherence to indications for central line insertion
- Prevention of central venous catheter-related blood stream infections
- Ultrasound use for central line insertion
- Appropriate Foley catheter use in the emergency department
- Medication error reduction, including ACEP module, “Preventing Medication Errors”
- Appropriate use of restraints and seclusion
- Reassessment of vital signs at discharge
- Planning safer and more effective aftercare, including ACEP module
- Reducing discrepancies between emergency physician and radiologist x-ray interpretation
- Notification of regional poison control center for poisoned patient

**Additional Common Measures and Activities**
- Left without being seen
- Unscheduled return visits to emergency department (including 72-hour returns)
- Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) processes
- Improvement of difficult airway management
- Management of the intoxicated or alcohol withdrawal patient
- Tobacco use screening and cessation
- Asthma pathways
- Emergency Medical Associates (EMA) Clinical Performance Improvement Program
- Unhealthy alcohol use: screening and brief counseling
Critical Decisions in Emergency Medicine

Improvement in Medical Practice

Improvement in Medical Practice emphasizes advancements that diplomats make in their work settings by focusing on areas of practice-based learning related to patient care and professionalism. ABEM offers IMP credit for practice improvement, or Practice Improvement (PI) projects that emergency medicine groups are already doing (Table 2).

First, the PI activity is required to be completed once during the first five years and once during the second five years of each 10-year certification period. The four required steps include 1) measure 10 or more patients with a specific condition or clinical situation; 2) compare this metric to a national standard of care; 3) implement an improvement in medical practice; and 4) reassess performance in achieving the practice performance metric.

A prior IMP activity was communication/professionalism (C/P). However, in June 2016, ABEM implemented a pilot that no longer required completion of a C/P activity for the MOC program. This pilot will conclude December 31, 2018, at which time it will be evaluated by ABEM and ABMS to determine whether this requirement will be permanently removed from the MOC program.

CRITICAL DECISION

What are the benefits and risk of taking the ConCert Examination early?

There are significant advantages and no downside to taking the ConCert Examination early. Moreover, diplomates who pass the test in the sixth year of their certification will remain certified until the end of their current certification period. That is, the certificate renews for another 10 years after the end of the physician’s current 10-year cycle, regardless of when the ConCert Examination is passed, provided that the other components of MOC continue to be fulfilled. Taking the test early also can reduce anxiety and may lead to more security in length of board certification. In fact, a physician may make five attempts before losing certification.

CRITICAL DECISION

Why is it important to maintain certification?

Although ABEM board certification is voluntary, the reality is that many hospitals, medical staffs, and third-party payors require it. Generally speaking, the patient does not choose his or her emergency physician. In light of this, maintenance of ABEM certification publicly demonstrates a career-long commitment to continuous professional development.

Certification also is an important element of professional self-regulation. Historically, physicians did not adequately address health care costs or quality; as a result, federal statutes and regulations were imposed. To maintain the privilege of professional self-regulation, medicine must demonstrate that specialty certification boards such as ABEM perform a summative assessment of physician cognitive skills and knowledge. The ConCert Examination does this effectively.

In addition, there is a learning benefit to the ConCert Examination. Physicians who took the 2015 test completed a voluntary, post-examination survey (96.5% response rate). Of the 2,511 respondents, 92.0% reported a benefit to preparing for and taking the ConCert Examination. Among all respondents, 90.4% reported that their medical knowledge was reinforced and/or improved.

There are pathways to regaining ABEM certification for physicians who allow it to lapse.11 If less than five years have passed since the date a certificate has expired and four or fewer LLS test requirements were missed while certified, certification may be regained by making up missed requirements. If it has been longer than five years since a certificate expired, or if more than four LLS test requirements were missed while certified, a physician must pass the ConCert Examination and then the Oral Certification Examination to
 regain certification. Physicians in these situations are encouraged to contact ABEM directly for assistance.

**CRITICAL DECISION**

**What is the best way to satisfy ABEM’s Improvement in Medical Practice requirements?**

Many consider Improvement in Medical Practice to be the easiest component of MOC to satisfy. Every emergency department, regardless of size or location, is beholden to performance metrics that monitor and guide practice changes designed to improve patient care. Sometimes, however, emergency physicians are unaware of the metrics that are being monitored by their particular hospital or department.

Examples of emergency department measures that meet this MOC requirement cover the entire spectrum of care, from tracking door-to-balloon times for the treatment of acute myocardial infarction, to screening for hypertension at the time of discharge. For physicians working in lower-acuity settings such as urgent care centers, meeting IMP requirements may be more challenging.

You can meet the PI requirement using your practice group data, provided that physician-specific data, including your own, is among the information tracked for improvement through your emergency department. ABEM has provided a dropdown menu of options from which you may attest your participation.

Should you choose to do so, ABEM allows you to submit individualized practice improvement attestations, which must include pre- and post-intervention data. Externally developed practice improvement activities also are available if you are not able to identify an appropriate option from ABEM’s list.

**CASE RESOLUTIONS**

**CASE ONE**

The ABEM MOC program meets the requirements set forth by the ABMS. In an effort to make the requirements relevant and less burdensome, ABEM incorporates the work that emergency physicians already are performing into MOC.

LLS articles may be submitted to ABEM by any diplomate for consideration. Multiple ABEM LLS test editors and physician representatives from AAEM and ACEP review each article to determine the relevance, likelihood to change practice, and suitability for CME. The list of potential articles is then narrowed to the best 10 to 15 articles relevant to emergency medicine practice.

CME activities historically were selected by the physician, with no assurance of addressing individual or specialty-specific gaps in competency. The only time a physician’s practice was assessed was in the event of a negative action taken by a state medical board. The selected LLS readings, with their associated optional CME, aim to ensure that physicians are up to date in their respective specialties and are maintaining the highest standards of care.

**CASE TWO**

Physicians may take the ConCert Examination as early as year six of their certification period. Taking the test early, rather than waiting until the final (or 10th) year of certification, offers several potential advantages and no downside. If you fail the examination prior to your certification end date, your board certification status is maintained—you are not decertified.

If you pass the ConCert Examination in year six of your certification, for example, you remain certified, and your certification will renew at the end of your current 10-year period. In essence, you are creating your own timeframe in which to pass the test.

**CASE THREE**

Satisfying the PI activity of the Improvement in Medical Practice component of MOC should be relatively easy for most emergency physicians. Whether you are working in an urgent care or in a busy trauma center, tracking physician performance is a common denominator. Measurements can include, for example, a Joint Commission’s Core Measure, an improvement in documentation, a doctor-patient communication measurement, or patient safety event reporting.

**CRITICAL DECISION**

**Are there “fun” and “easy” ways to satisfy the Lifelong Learning and Self-Assessment requirements?**

The Lifelong Learning and Self-Assessment component of MOC affords diplomates the option to enhance knowledge retention while networking with other emergency physicians. ABEM diplomates are encouraged to complete the LLS activities as a group, using the questions to help facilitate discussions of the reading content.

Many emergency medicine faculty and emergency department groups set aside time annually to complete the LLS requirement — tackling it over pizza, or converting the activity into a journal club for advanced physicians. The articles, which are relevant to the daily practice of emergency medicine, also provide an opportunity for earning CME credit — an added bonus.
Summary

Maintenance of Certification for ABEM-certified physicians aims to ensure the highest standards for the specialty of emergency medicine. ABEM continues to incorporate diplomate feedback into improvements in the MOC process in an effort to make the requirements more relevant and less burdensome.

Developed as a response to public patient safety concerns, the various components of MOC assess varied aspects of physician performance beyond licensure and traditional CME. Unrestricted state licensure remains the foundation of professionalism. The LLS activity features articles relevant to the day-to-day clinical practice of emergency medicine, and now allows ABEM diplomates to concentrate on particular subspecialties interest.

Taking the ConCert Examination early will not reduce your certification period, and could lessen the anxiety commonly associated with high-stakes examinations. The IMP component allows diplomates to select from a variety of options to document the numerous quality improvement activities many emergency physicians are doing already. ABEM will continue to monitor its MOC program, and welcomes any suggestions about how to improve the process.

Editor’s Note:
After this article was written, ABEM convened a retreat of its Board of Directors, followed by an MOC Summit that specifically addressed the Part III requirements of Assessment of Knowledge, Judgment, and Skills. This component is satisfied by passage of the ConCert Examination. Although no changes have been formalized as of the time of this printing, the next 18 months are likely to bring further adjustments or additions to the Part III requirements.

REFERENCES