

HEALTH POLICY REPORT

Ensuring Physicians' Competence — Is Maintenance of Certification the Answer?

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Pressed by their leaders, external stakeholders, and a public troubled by lapses in the quality of care and unsustainable cost increases, physicians are facing stiffer challenges in initiatives designed to link more closely the goals of learning with the delivery of better care and measures of greater accountability. The initiatives are works in progress being implemented by national accrediting organizations, state medical licensing boards, the federal government, and others,¹⁻⁵ but the most contentious among them (and the focus of this article) is the maintenance of certification (MOC) program sponsored by the American Board of Medical Specialties (ABMS) and its 24 member boards, which promote continuous professional development.⁶ MOC requires most certified specialists to seek recertification on a periodic basis — typically every 10 years — by successfully completing a four-part assessment designed to test their medical knowledge, clinical competence, and skills in communicating with patients. The MOC program was initiated in 2000, but the pace of recertification has accelerated since 2009. Approximately 375,000 board-certified specialists and subspecialists (about half the number that the 24 boards certified initially) meet MOC requirements, according to the ABMS.

Although the number of specialists engaged in the process grows by about 50,000 diplomates a year, the exercise also draws strong criticism from physicians who assert that MOC is too expensive and the process is too time-consuming. Another concern is a requirement that a secure examination (one of MOC's four parts) be completed without access to outside sources of information. This condition contradicts what medical students and residents are currently taught: they should take advantage of the best sources of information rather than rely entirely on their memory. Younger physicians also suggest that so-called grandfathers⁷ (generally specialists who

were certified before 1990 and received time-unlimited credentials) should also face the rigors of recertification (Eggen M: personal communication). Among 66,689 diplomates of the American Board of Internal Medicine (ABIM) who hold only time-unlimited certificates, only 1% have chosen to become recertified through MOC. The ABIM also certifies physicians who practice in 19 subspecialties. Since 1990, all certificates issued by the ABIM have required diplomates to complete MOC to remain certified. Two ABIM areas of specialty actually were established before 1990 without ever having issued time-unlimited certificates — critical care medicine in 1987 and geriatrics in 1988. Like ABIM, other specialties also report low recertification rates among their diplomates with time-unlimited certificates, including dermatology (8%), nuclear medicine (12%), plastic surgery (5%), and urology (1%). One of us holds a time-unlimited certificate and is enrolled in MOC.

More than 75 years ago, the ABMS and its predecessor organization began to build a national system of standards for educating medical specialists.⁸ As originally conceived, securing board certification was considered a once-in-a-lifetime challenge designed to show a doctor's competence after completion of residency training. Until 1969, all the ABMS-member boards issued lifetime specialty certificates, but as the skills necessary to practice medicine grew exponentially and research showed that, on average, the clinical skills of physicians decline over time,⁹ time-unlimited certification was called into question. Since its founding in 1969, the American Board of Family Medicine (ABFM) issued only time-limited certificates. Initially these certificates were valid for 7 years, but now they remain valid as long as a diplomate meets MOC requirements.^{10,11} As of 2000, the ABMS adopted MOC as a policy with general standards for all of its

member boards. Subsequently, the 24 boards began issuing time-limited certificates that were usually good for 10 years, but each board was on its own schedule, and the American Board of Pathology was the last to issue certificates, in 2006.

Over the 2000–2009 period, the ABMS and its board engaged in many discussions — some acrimonious — over what shape MOC should take and how it should be applied. A set of more detailed standards that establishes the broad framework of MOC was finally approved by the ABMS in 2009, but the individual boards were granted flexibility to design their own programs that recognized the characteristics of a particular specialty. For example, each board determines what its requirements are for participation in MOC and how it defines “meeting requirements.” To remain certified, all credentialed specialists except “grandfathers” were required to periodically document that they had maintained the core competencies considered necessary to deliver quality care. The MOC process is based on a set of six domains that were jointly developed and approved by the ABMS and the Accreditation Council for Graduate Medical Education (ACGME): medical knowledge, patient care and procedural skills, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice. The ACGME requires that these domains also apply to residents and fellows. These competencies are likewise being used by medical and other health professional schools to structure curricula, enhance assessment strategies, and define interprofessional collaboration.¹² In addition, the Joint Commission uses these six domains in its requirements for hospitals to evaluate the competence of the physicians on their medical staffs. And, of particular importance in the policy sphere, the Medicare Payment Advisory Commission proposed to tie one third of the graduate medical education (GME) support in Medicare to progress made on incorporation of these competencies into residency training. In a 2010 report,¹³ the commission noted that GME programs were implementing these steps, “though the progress . . . is slow,” and it recommended that “Medicare institute financial incentives to accelerate these efforts.”^{13,14}

The six competencies underpin the four MOC components adopted by the 24 boards as the pre-

ferred model design to maintain certification. Part 1, the first component, is licensure and professional standing. Specialists must hold a valid, unrestricted medical license in at least one state or jurisdiction in the United States, its territories, or Canada. The second component, part 2, is lifelong learning and self-assessment. Specialists participate in educational and self-assessment programs that meet specialty-specific standards that are set by their member boards. Part 3 is cognitive expertise. Specialists show, through examination, that they have fundamental, practice-related, and practice environment-related knowledge to provide quality care in their specialty. Part 4 is assessment of practice performance. Specialists are evaluated in their clinical practice according to specialty-specific standards for patient care. They are asked to document how the quality of care they provide compares with that of peers and national benchmarks, and then they apply the best evidence to improve the care they deliver with the use of follow-up assessments (Table 1). Given the flexibility granted to boards, they have adopted different approaches to their MOC processes. Differences have been most striking in the implementation of part 4. For example, successful approaches have used patient registries, practice audits, and peer review to meet the goals of part 4.

One new approach to part 4 will enable physicians who participate in quality-improvement programs sponsored by their institutions to receive MOC credit.¹⁵ In 2010, the three primary care specialty boards (the ABFM, ABIM, and American Board of Pediatrics) announced that the Mayo Clinic had been approved as the first “MOC portfolio sponsor,” a pilot project that has attracted widespread interest among other institutions and boards (Puffer J: personal communication). Under the project, called the Multi-Specialty MOC Portfolio Approval Program, the Mayo Clinic developed 138 quality-improvement projects in which 557 of its physicians participated in its first 2 years (Berger R: personal communication). These doctors receive MOC credit from the Mayo Clinic for their participation in these projects. An additional 10 organizations, including the Massachusetts General Physicians Organization, the Medical University of South Carolina, the Permanente Federation, and the University of Michigan, have been approved for participation. This new system of

achieving credit for MOC part 4 may strengthen this component of the MOC program because of stronger institutional support and integration of MOC with other assessment activities.

Individual boards are also revising their MOC programs. The most important change afoot is that engagement with the MOC process will be made more continuous, and diplomates will be required to participate on a more regular basis. Currently, about 74% of ABIM diplomates wait until the 9th year of their 10-year time-limited certification before they take action to recertify.¹⁶ The American Board of Emergency Medicine, the ABIM, and the American Board of Pediatrics are taking steps to require active MOC participation every 2 years.

Although the ABMS establishes its standards, as it says, “free of any professional or governmental body,” it has also recognized the value of minimizing redundant data-collection tasks required of physicians and raising the profile of MOC among a number of competing efforts to assess the quality of care and clinical competence of doctors. Thus, the ABMS concluded that it made sense to align MOC with efforts by Medicare to have physicians voluntarily submit performance measures that applied to the program’s beneficiaries. Using the Affordable Care Act as the vehicle, the specialty boards persuaded Congress to offer physicians a modest bonus if they participated in MOC “more frequently” than boards required to maintain their certification and also reported quality measures to Medicare’s Physician Quality Reporting System (PQRS). The leadership of the Centers for Medicare and Medicaid Services welcomed¹⁷ the linkage because participation in the PQRS has attracted fewer than 30% of physicians who have billed Medicare since its launch in 2007 and because MOC requires doctors to implement a quality-improvement intervention and then measures its effect on patient care. Physicians who participate in both MOC and PQRS are eligible to receive a 1.5% bonus in 2011 and a 1.0% annual bonus between 2011 and 2014, in addition to their regular Medicare fees. However, if physicians choose not to report these quality measures to the PQRS program by 2015 (using 2013 data), their Medicare fees will be reduced by 1.5% in 2015 and by 2.0% in 2016.

Another important alignment with MOC is an initiative of the Federation of State Medical

Boards (FSMB) and its 70-member licensing boards.¹⁸ In 2004, in a process that became known as “maintenance of licensure” (MOL), the house of delegates of the FSMB adopted a “seminal policy statement.”¹⁹ It declared, “State medical boards have a responsibility to the public to ensure the ongoing competence of physicians seeking re-licensure” within the scope of their practice. Currently, the primary relicensing standard used by almost all state and territorial boards requires physicians to complete a minimum number of hours of continuing medical education. Because of the divisive debate surrounding the proposed strengthening of licensing requirements, it was not until 2010 that the house of delegates of the FSMB approved a framework around which implementation of MOL would occur. At that point, the FSMB recommended that any physician who actively participated in the MOC process of his or her specialty board or the osteopathic continuous certification program of the American Osteopathic Association “could substantially meet” the more stringent requirements of MOL. The FSMB did not stipulate a start date for the implementation of its MOL initiative, and every state will face its own political and regulatory constraints. Only Massachusetts has announced a start date (2015), but it plans to begin with a voluntary program. Discounting the potential disruption of this change in the licensure process, Dr. Humayun Chaudhry, the chief executive officer (CEO) of the FSMB, said in an interview, “Meeting the requirements of MOL could be as simple as providing an attestation of their ongoing participation in certification maintenance activities of the ABMS’ boards or their counterpart in osteopathic medicine.” However, because more than 230,000 physicians are not certified by a specialty board or are “grandfathers,” the FSMB, its licensing boards, and collaborating organizations are working to identify other activities that would enable these doctors to seek license renewal, presumably through a process that includes documentation of continuous practice improvement.

The term “maintenance of certification” draws a variety of opinions from physicians that range from strong support to sharp criticism. Dr. Christine Cassel, the CEO of the ABIM, is an outspoken champion of MOC, as she emphasized in an interview: “The privilege of profes-

Table 1. Four Components of the Maintenance of Certification (MOC) Program.*

Board	MOC Cycle Length†, yr	Part 1: Licensure and Professional Standing	Part 2: Lifelong Learning and Self-Assessment‡	Part 3: Cognitive Expertise	Part 4: Assessment of Practice Performance§
American Board of Allergy and Immunology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, recent advances module, patient-safety module	Secure examination	Communication module, practice assessment and quality improvement
American Board of Anesthesiology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, online self-education and patient-safety modules	Secure examination	Case evaluation, simulation education
American Board of Colon and Rectal Surgery	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits (including credits in self-assessment)	Secure examination	Ongoing participation in national, regional, or local outcomes database or quality-assessment program
American Board of Dermatology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, patient-safety module, self-assessment	Secure examination	Practice performance module, quality-improvement impact review, patient survey, peer survey, patient-safety self-assessment
American Board of Emergency Medicine	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, literature review, online self-assessment test	Secure examination	Attestation to practice-improvement and communications and professionalism activities
American Board of Family Medicine (ABFM)	7–10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	Self-evaluation modules, simulation to assess clinical skills	Secure examination	Practice-improvement module for self-evaluation and improvement
American Board of Internal Medicine (ABIM)	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	Self-evaluation of medical knowledge modules	Secure examination	ABIM practice-improvement modules for self-evaluation and improvement, other ABIM quality-improvement activities
American Board of Medical Genetics	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, online self-assessment, literature review	Secure examination	Practice-improvement module for self-evaluation and improvement; performance and quality-improvement activities
American Board of Neurological Surgery	10 (three 3-yr minicycles plus a 10th yr)	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits and self-assessment examination	Secure examination	Completion of key case practice log, chief-of-staff questionnaire, self-assessment examination, and patient satisfaction and communication tool when it becomes available
American Board of Nuclear Medicine	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment test	Secure examination	Practice performance assessment project
American Board of Obstetrics and Gynecology	6	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	Reading assignments; must answer multiple-choice questions about content online for CME credit	Secure examination	Diagnosis-specific chart review modules; CME credits
American Board of Ophthalmology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits (including credits in self-assessment); patient-safety module, self-assessment tests	Secure examination	Practice-improvement modules relating practice patterns to diagnosis
American Board of Orthopaedic Surgery	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment test	Secure examination	Stringent peer evaluation and review process and submission of case list with performance indicators

American Board of Otolaryngology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment modules	Secure examination	Patient communications survey, professional survey, performance improvement modules
American Board of Pathology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment modules	Secure examination	Peer attestations regarding interpersonal and communication skills and professionalism, ethics, and effectiveness; performance improvement and quality-assurance activity
American Board of Pediatrics (ABP)	5 (examination every 10 yr)	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	Online self-assessment modules	Secure examination	Practice-performance module, patient survey
American Board of Physical Medicine and Rehabilitation	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment activities	Secure examination	Practice-performance project
American Board of Plastic Surgery	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment modules	Secure examination	Practice assessment and improvement
American Board of Preventive Medicine	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment modules	Secure examination	Quality-improvement module to assess practice and improvement in clinical practice, teaching, research, and administration
American Board of Psychiatry and Neurology (ABPN)	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment activities	Secure examination	Performance in practice, clinical module (chart review), and feedback module
American Board of Radiology (ABR)	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment modules	Secure examination	Practice quality-improvement program
American Board of Surgery	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment activities	Secure examination	Participation in surgical outcomes database and quality-assessment program
American Board of Thoracic Surgery	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, self-assessment examination	Secure examination	Participation in outcomes database, peer evaluation, case summaries
American Board of Urology	10	Maintenance of medical licensure throughout the cycle; evidence of professional credentialing, peer letters of reference may also be required	CME credits, online practice assessment	Secure examination	Practice log, peer-review questionnaires

* Through the MOC program of the American Board of Medical Specialties (ABMS), physicians keep their board certification current by maintaining a medical license, pursuing lifelong learning, demonstrating cognitive expertise, and assessing practice performance. The 24 member boards of the ABMS determine the particular activities their diplomates must participate in according to evidence-based guidelines, national clinical and quality standards, and specialty best practices, and these requirements may change periodically. This table is for general information purposes only. It is the responsibility of the reader to confirm the MOC requirements with the relevant ABMS member board or boards. Data are from the ABMS. CME denotes continuing medical education. † In most cases, cycle length refers to the period during which certain requirements for certification are to be completed. For ABP board-certified pediatricians, ABFM board-certified family physicians entering MOC in 2012 or later, and physicians initially board-certified by the ABPN or ABR in 2012 or later, maintaining certification is contingent on meeting the requirements for the MOC program of the specific member board, and therefore no specific end date to certification is provided. To maintain certification by the ABP, ABFM, ABPN, or ABR, physicians must successfully complete specialty-specific requirements throughout their ongoing MOC cycles. For physicians who were board-certified before 2012, implementation details are determined by each member board. ‡ The frequency of these requirements varies from an annual activity to an activity every 3 to 5 years. Requirements could include practice-relevant CME such as literature reviews, participation in a conference, online tests, self-assessment modules developed by a particular board or society, or all of these tasks. Milestones for the type and amount of CME credits vary among member boards. § The frequency of these requirements varies from an annual activity to a program in a specific year or years or during specific time intervals.

sional self-regulation is granted by society, we honor it through maintenance of certification.” In 2010, the *Journal* published a fictitious vignette involving a subspecialist who held time-unlimited ABIM certificates in both internal medicine and endocrinology.²⁰ In the vignette, the physician wrestled with whether he should enroll in the MOC program of the ABIM voluntarily to become recertified, and readers were invited to vote on the question. Of the 2512 votes cast, 63% advised the doctor against enrolling in MOC.²¹ In response to the poll, the depth of feelings among physicians over MOC — both pro and con — was apparent in many pages of comments posted on the *Journal*’s website.²² In three different views of MOC published in the same issue as the vignette,^{23–25} two expressed opposition to the current process, but all three essentially agreed, as one of them wrote: “The experts for and against MOC agree that the concept of recertification is sound — what they disagree about is the process.”²³ A second commentary, which recommended that the fictitious doctor not seek recertification, asserted that the current ABIM MOC process “falls short in terms of relevance and the time, effort, and expense it requires of candidates.”²⁵ MOC fees charged by boards over a 10-year period range widely. The fees at the higher level are those of the American Board of Plastic Surgery (\$4,820) and the American Board of Allergy and Immunology (\$4,300), and fees at the lower level are those of the American Board of Colon and Rectal Surgery (\$1,400) and the American Board of Surgery (\$1,250). The ABIM charges specialists \$1,675 and subspecialists \$1,840 to enroll in MOC. Of the ABIM’s total revenue of \$49 million in the fiscal year ending June 30, 2012, a total of 62.1% was derived from certification fees and 35.5% from MOC fees.

Dr. Jerome Kassirer, who served as chair of the ABIM board (1995–1996) and chair of its committee on assessment of practice performance, said the assessment panel devoted its efforts to developing physician self-assessment modules. In an interview, he said, “Unfortunately, in the 22 years since recertification was first introduced, self-assessment seems to remain the predominant mechanism of assessment, although I don’t think it makes the grade as an objective measure of performance ability.” Reflecting the perspective of a physician member-

ship organization, Dr. Steven Weinberger, CEO of the American College of Physicians, said that “the challenge for boards is to find the sweet spot for the design of MOC, where physicians are uniformly convinced that the process is relevant to their practices and clearly improves the quality of care they provide.” Dr. John Santa, who directs the Health Ratings Center of the Consumers Union, said, “We think the certification-accreditation processes make a difference to consumers but only modestly. The business models [of the specialty boards] can really undermine the perceived independence of their processes. I think the specialty boards do the best job of assessing physician competence through MOC, but it’s still a challenge.”

The MOC process is evolving in response to feedback from diplomates, ongoing dialogue within the boards of the ABMS, and pressures applied by external stakeholders. The commitment to improvement is apparent in the strategic priorities that have been approved by the ABMS board for MOC between now and 2015, including the development of more evidence that documents the effect on quality of care²⁶ and the acceleration of efforts to integrate MOC with the practice environment, health care institutions, the FSMB, and others. One major challenge that MOC (and the ABMS) does not emphasize in the pursuit of competence is how to slow the unsustainable increase in health care expenditures, a long-festering issue that has been neglected by physicians and society alike.²⁷ Dr. Weinberger has suggested that one incremental way to address the matter is for the ABMS to make “cost-conscious care and stewardship of resources” a competency with which physicians must more fully engage.²⁸

A choice facing the medical profession is not between the elimination of MOC and a return to less fettered self-regulation, but rather another potential fork in the road. As Dr. Robert Wachter, the new board chairman of the ABIM, put it in an interview, “If somehow MOC went away, it would be quickly replaced by more regulatory external bodies that ultimately would be more burdensome to physicians. What will ultimately make the entire MOC process less burdensome is having MOC count for all of the different entities that are, without question, going to be judging physician performance.” If that is indeed the case, the ABMS and its boards must

actively (and transparently) respond to the MOC concerns of all physicians, young and old alike, and accelerate its collaborative efforts with external organizations as they strive to navigate a complex system that melds professionalism, government regulation, and market forces.²⁹

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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