

## Maintenance of Certification Framing the Dialogue

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Maintenance of certification (MOC) is a continuous learning and testing process that aims to ensure that physicians keep abreast of the latest medical knowledge, develop improved practice systems, and perhaps most importantly, show a commitment to lifelong learning through a series of varied educational opportunities. Up until recently, many of these activities were assessed with an examination that occurred every 10 years. This examination has been termed “high stakes,” because failure on the examination could result in loss of certification, with possible loss of hospital credentials. Over the past several years, the value of MOC and the evidence behind the processes have been questioned and hotly debated. However, in 2014, the debate became much more intense after MOC requirements were amended to include a continuous certification process, which includes more frequent testing, annual fees, and inclusion of practice improvement models. Subsequently, in response to multiple concerns, the American Board of Internal Medicine (ABIM) and other member boards of the American Board of Medical Specialties (ABMS) have made substantive changes in the MOC process, but critics maintain that these are not enough and do not address the fundamental flaws in the MOC process (1). Furthermore, legislation has now been introduced in several states to limit the use of MOC in determining licensure, insurance reimbursement, and hospital credentialing (2). Georgia and Texas have enacted such legislation to various degrees (2). These legislative efforts have further polarized the issues and pit physicians against groups who want to closely regulate physician credentialing and certification, such as hospital groups, insurers, and the ABMS.

In this issue of the *Clinical Journal of the American Society of Nephrology*, three perspectives (3–5) on MOC are offered that frame the dialogue in various fashions and highlight where differences of opinion remain strong and contentious. It is important to note that, despite these differences, no one debates the value and critical importance of lifelong learning and practice improvement. Furthermore, most would agree that some mechanism should exist to assure the public and relevant stakeholders that physicians are competent to practice medicine. It is the specific methodology and approach of MOC as well as the fundamental question of physician self-regulation

that are at the heart of the debate. As an introduction to these four editorials, it is important to delineate some of the critical perspectives of each side of this debate.

Concerns regarding MOC include the following.

- (1) The cost of participating in MOC is high, and it is a financial and time burden to busy physicians. For instance, a study revealed that internists will incur an average cost of \$23,607 in MOC costs over 10 years (6). The cost for subspecialists was much higher (over \$40,000 for hematologists and oncologists). Time consumed in these activities account for 90% of the total MOC cost.
- (2) Some physicians are “grandfathered” out of the MOC process through an arbitrary cutoff date that allows them to remain certified without MOC participation. There is no evidence that these physicians who are not participating in MOC provide lower quality of care (7). For instance, one study could not show that MOC participation was associated with a difference in ambulatory care–sensitive hospitalizations, a measure of preventable hospital admissions (7).
- (3) A point of contention is that there is little evidence that MOC improves outcomes for patients or saves costs. It is important to note that high-quality data in this regard may be nearly impossible to attain due to difficulties in study design and outcome measurement (1). However, when it has been studied, conclusive evidence of MOC benefits has not been obtained (7,8). For instance, a study of primary care providers at Veterans Affairs medical centers could not discern a quality difference between those with time-limited and -unlimited ABIM certification (8).
- (4) The MOC testing process includes testing of a wide body of medical knowledge that is of questionable relevance to clinical practice. This is especially true for physicians who may have chosen to focus in on relatively narrow subspecialty disciplines. In these cases, a written examination may include a large number of questions that have little to no relevance for their actual clinical practice. Supporting this, a study of the 2010–2013 internal medicine MOC examinations revealed that nearly one third of the test items were discordant with the frequency of conditions seen in actual practice (9).

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- (5) Continuing medical education (CME) can provide the same degree of education and ensure that physicians are up to date and participating in lifelong knowledge acquisition without the burden of MOC and with greater flexibility. In fact, a review on the effectiveness of CME revealed positive outcomes in both professional practice and patient outcomes (10).
- (6) Local hospital credentialing boards have the best knowledge of physician performance and should have latitude in what criteria they use to credential physicians within their own systems. MOC should not be a required aspect of credentialing, and instead, its use should be at the discretion of local boards. In fact, at the core of competency-based assessment is the use of direct observation of physician performance, something that is likely best assessed at the local level with workplace-based tools.
- (7) The high-stakes examination of MOC is misaligned with adult learning concepts that stress internal motivation, self-direction, and integration of life experiences with content acquisition. Furthermore, clinical decisions are increasingly complex and dealt with through work in teams—something that multiple choice items cannot adequately test.
- (8) The utility of a closed book, secure examination focused on multiple choice items with a single best answer is questionable. Those items solely focused on medical knowledge could have been easily accessed and answered by physicians in an era when information is readily available through the Internet.

The proponents of MOC argue the following.

- (1) The MOC process and board certification are associated with higher standards of medical practice and ensure professional accountability. The rigor and discipline of the MOC process ensure physician competence in a manner that other processes cannot (11). With calls for increased oversight, transparency, and regulation of physicians in recent years, it is in the profession's interest to show that physicians can regulate quality, and MOC is a trusted and tested method for doing so.
- (2) The CME process and learning opportunities offered through CME are not rigorous enough to ensure ongoing competency. For example, CME postactivity tests are often so easy and poorly written that CME participants can gain credits for activities of little real benefit. CME activities are also very heterogeneous in terms of their quality.
- (3) The MOC process, which stresses continued learning, overcomes the inevitable decay in medical knowledge that occurs after training is completed (12). The MOC process also allows participants the opportunity to identify areas of weakness that can be addressed through a very broad portfolio of accepted activities.
- (4) MOC has been recognized by insurers, regulators, hospitals, patients, and caregivers as a standard of physician quality.
- (5) There is accumulating evidence on a positive relationship between MOC examination performance and quality of care. For instance, physician cognitive skills, as measured by MOC examination, are associated with higher rates of processes of care for patients on Medicare (13).
- (6) The ABIM has a rigorous and well studied methodology for examination development that ensures that high-quality

test items are used, that standards for passing are set, and that answers are well validated.

The editorials that follow discuss these points in more detail and lay out representative perspectives on this complex issue. It should also be stressed that this is a moving issue. To the credit of the ABIM and the ABMS, they have listened to the concerns of physicians and are actively changing the MOC process. For example, alternatives to the 10-year "high stakes" will be implemented in many specialties, and several MOC activities, such as practice assessment, are currently on pause as the ABIM reviews these areas. There is absolutely no doubt that the medical profession has to show its commitment to lifelong learning as well as the highest standards of professionalism and delivery of high-quality care. How this is accomplished will require active conversations, compromises, and continual reassessment. This is to the benefit of all physicians and our patients.

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