



Replacing Maintenance of Certification Exams: Demonstrating Expertise by Measuring Outcomes that Matter Most to Patients

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The debate about maintenance of certification (MOC) continues to accelerate, colored by overtones of financial impropriety,¹ claims of imperious regulators detached from clinical practice,² and a national antiregulation sentiment. Given the vehement criticisms of certifying boards' meddling in the practice of medicine, it is ironic that physicians have invited legislators into the mix, moving a family feud out of professional societies and into statehouses. The fractious tone of the debate threatens to eviscerate the value physicians gain through the validation of their expertise and the privilege of self-regulation. Although calmer discussion will inevitably emerge, legislation is often a toxic medication with a long half-life. The lasting impact of intemperate debate could dog physicians for generations.

Every serious person inside health care acknowledges that there are incompetent physicians practicing medicine, and structures must exist to stop the inept, larcenous, and malevolent from harming people. But beyond the black-and-white cases lies a vast gray pool in which the health outcomes being achieved by some clinicians are significantly below what those outcomes could, and should, be. The purpose of initial certification is to demonstrate competence and specialized expertise.¹ Maintenance of certification must shift away from its regulatory overtones and demonstrate ongoing value as a protection of the public and a credentialer of current, persistent expertise. The purpose of continuous certification must be to accelerate improvement and learning, supporting the professionalism of physicians while recognizing their unique role as healers. Those tasks cannot be achieved with the blunt tool of static tests or legislation, but instead require thoughtful, attentive effort guided collaboratively by physicians working to amend a system that has served the public and the medical profession well for more than a century.

The current model of ongoing certification relies heavily on periodic demonstrations of knowledge, such as the Demonstration of Ophthalmic Cognitive Knowledge examination for ophthalmologists. This standard has been justifiably criticized, both in questions about its overall suitability to ensure physicians' expertise and for its often clumsy execution. Although partisans on each side highlight the data supporting their view, there is little irrefutable scientific support tying ongoing certification with better health outcomes for patients, or even to more ambiguous measures of quality. To be fair, there are generally sparse outcome data in health care, but critics' comments have

some degree of merit.¹ Likewise, the process of continuous certification has been derided as overly time-consuming and expensive, and the tasks themselves criticized as "busy-work"³ unrelated to medical practice. Summing up both the criticisms and the challenges of effective continuous certification, Cook et al⁴ aptly capture the challenge: "Before we can expect physicians to truly embrace MOC, they will need to spontaneously recognize its relevance, coherence, integration, support, and, most importantly, value to themselves and the patients they serve."

The model must shift to one that empowers physicians in demonstrating the ongoing deepening of their expertise and learning of their own clinical care gaps. By enabling that demonstration of expertise, MOC confirms and renews the trust of society in physicians. Public trust in institutions, even ones as hallowed as medicine, is particularly fragile right now. The word of individual physicians, unsupported by demonstrated results and external validation, cannot be the only pillar of its support.

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Expertise is demonstrated through results, not test scores, suggesting that the path into the future will be based on measuring the health outcomes

of care and using those outcomes to guide learning and improvement. By moving beyond testing to outcome measurement, future certification can create the preconditions of learning, namely, clear evidence of both expertise and areas for improvement. Moreover, it can rely on the professionalism of physicians to avail themselves of learning opportunities and continuously improve their demonstrable expertise. Accelerating learning and supporting professionalism are aspects of the much sought after "sweet spot"⁵ of ongoing certification. Outcomes' supported certification also aligns physicians with patients who seek care to improve or protect health. Patients want physicians who can achieve those results, not simply physicians who are good at taking tests.

In place of a proctored, static examination, ongoing certification should be conditioned on physicians' measuring, and ultimately reporting, the outcomes of their care. Although these efforts will comprise a crucial element of their ongoing certification, mandatory outcome measurement is not for judging physicians but instead for each physician to identify those areas where he or she is defining the state of the art and those areas where the outcomes lag that state. To work, the system must grant physicians wide latitude in determining the outcome measures to track and must support outcome improvement efforts.

Having observed nascent outcome measurement programs for more than a decade, I would expect that over time, physicians will begin to share their results with colleagues, then peers, then the public. They will describe their choice of measures and modify them on the basis of experience and insight from others. Physicians who measure the outcomes of their care can identify areas where societies and boards can help accelerate learning, likely by highlighting needs for additional resources in quality-improvement methods, registries, and other outcome measurement tools and clinical mentoring opportunities.

While one obviously hopes that physicians measure the outcomes that matter most to the most patients, there is nonetheless wide latitude needed in selecting relevant outcome measures because of the nuances of specialized practice and the nascent level of outcome measurement in health care. One of the oft-voiced criticisms of existing continuous certification is that it struggles to be relevant for many medical and surgical specialists. This is a highly salient critique, considering that certification is about specialty expertise, not general knowledge of medicine. Testing that is too general, or too specific in a different specialty, simply will not have relevance. Although validated outcome measurement mechanisms exist across most medical specialties, they are frequently too cumbersome and time-consuming to be used effectively in routine practice settings. Physicians can, and should, be permitted to select subsets of these measures or develop and report new outcome measures that are most relevant to their patients.

Outcome measures are the most powerful and direct method of identifying expertise. Every good clinician already gathers information from patients about the outcomes that are most meaningful to those patients. The incremental step is to record those outcomes longitudinally, an activity that can fit naturally into the flow of clinical medicine. A further step will be to use that information to improve expertise.

Undoubtedly, collecting longitudinal outcome measures will impose a burden on physicians and their staffs, and that burden will be felt more sharply in small than large practices. Balancing burden and benefit dictates that this process evolves while remaining flexible and accommodating physicians. Measuring the outcomes that matter most to patients is a new frontier for many physicians, but these measures will obviate many of the meaningless or marginal quality metrics that presently consume so much time, money, and effort.

Expertise is demonstrated by results, not process compliance. To be meaningful, an ongoing certification process must be based on collecting meaningful outcome data, the health results of care. For example, clinicians would begin reporting rates of infection instead of tracking rates of adherence in infection control activities like hand-washing. Obviously, good clinical practice requires consistent use of demonstrated processes, but managing those activities is an important operational issue and not a demonstration of expertise. Moreover, process compliance, although easier to achieve, does not necessarily result in improved health outcomes.⁶

When properly organized, outcomes can be captured with a relatively small set of measures. Patients typically

define outcomes in terms of capability, comfort, and calm.⁷ Capability is protecting or enabling ability that is threatened or restricted by the patient's medical circumstances. Patients with asthma speak of being able to walk or go outside, while those with macular degeneration or diabetic retinopathy are concerned with being able to see. Comfort is a reduction in physical and emotional suffering. It includes reducing pain and the anxiety poor health induces. Calm describes the ability to continue living while receiving care; it is the absence of chaos. Measures of calm often include the number of days or amount of effort required to arrange and undergo treatment. Measures that address capability, comfort, and calm reflect the achievements of the physician and care team who treat the patient. Physicians occasionally will note that these outcomes reflect more than simply the expertise of the physician, and that is undoubtedly true. Every physician and every member of the care team have a shared responsibility for helping patients achieve better health. Improved health is, after all, the existential purpose of health care.

As measures evolve, it becomes easier to apply risk adjustments that reflect patients' initial conditions, including those that might affect patient adherence to medical advice and relevant socioeconomic factors. But risk adjustment is a second-order priority; it matters most when outcomes are being used to compare physicians. However, the primary purpose of measurement within the context of continuous certification is to improve a physician's expertise, not to judge it. Reputational safeguards must be established and zealously enforced to ensure that physicians' participation in outcome measurement is not used to damage their reputation or business. Sensitivity around this issue is justifiably great and should be agreed on collaboratively after thorough discussion and careful contemplation. Shifting from static testing to outcome measurement is a complex undertaking, best taken in small but regular steps that give ample time for adoption and adaptation.

Medicine has parallels to commercial aviation, where a pilot's expertise is regularly evaluated through systems that have evolved over decades. At present, most pilots' expertise assessments are done using a flight simulator, although every "near miss" or other aviation incident is carefully investigated and the pilot's handling and responses are evaluated. The intent of evaluating expertise is the same: ensure that these experts can safely and expertly complete the highly demanding tasks of their professions. Aviation, though, benefits from sophisticated, highly realistic flight simulators that precisely mimic the actual circumstances of piloting a plane. In lieu of similar capabilities in health care, outcome measures will remain the gold standard.

Continuing medical education (CME) is often endorsed as an element of continuous certification or suggested as a replacement for it. Proponents of replacing parts 3 and 4 of MOC and using CME alone to demonstrate continuous certification point out that CME is regulated by an independent entity, courses are designed to address educational gaps, and physicians can choose CME programs from a vast array of options, ensuring the opportunity to pursue courses of highest individual relevance.³ But it is undeniably true that many physicians cannot self-assess their educational

needs, particularly when so few have clinical performance information from meaningful outcome data.⁸ Continuing medical education, particularly if guided by the insights available through measuring and analyzing patients' outcomes, can augment physicians' knowledge and support improvements in expertise.

Continuous, ongoing certification, like every other aspect of medicine, should continue to evolve. It will improve what it does while also changing what it is doing. This will be particularly true of outcome measurement. When clinicians begin measuring their patients' health outcomes, they learn not only about the results but also about the measures. Evidence from cardiothoracic surgery and transplant is instructive: In the decades since outcomes have been mandated in those fields, both the effectiveness of care and the sophistication and accuracy of the measures have improved.

Baron and Braddock⁹ assert that "in an Internet-based world where anyone can become, for example, an ordained minister online, reliable credentials based on solid standards have become even more valuable." Ongoing certification has served physicians and their patients well and should be preserved. A system that replaces static, decennial tests with an ongoing effort to measure and analyze patient outcomes will underpin the needed solid standards and will allow certifying boards and their diplomats to work together to improve the effectiveness and efficiency of patient care.

Footnotes and Financial Disclosures

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References

1. Doroghazi RM. Negative secular trends in medicine: the ABIM maintenance of certification and the over-reaching bureaucracy. *Am J Med.* 2016;129:238-239.
2. Christman KD. Maintenance of certification: the elite's agenda for medicine. *J Am Phys Surg.* 2013;18:84-87.
3. Teirstein PS. Boarded to death — why maintenance of certification is bad for doctors and patients. *N Engl J Med.* 2015;372:106-108.
4. Cook DA, Blachman MJ, West CP, Wittich CM. Physician attitudes about maintenance of certification: a cross-specialty national survey. *Mayo Clin Proc.* 2016;91:1336-1345.
5. Iglehart JK, Baron RB. Ensuring physicians' competence — is maintenance of certification the answer? *N Engl J Med.* 2012;367:2543-2549.
6. Wiggins RE, Etz R. Assessment of the American Board of Ophthalmology's Maintenance of Certification Part 4 (Improvement in Medical Practice). *JAMA Ophthalmol.* 2016;134:967-974.
7. Wallace S, Teisberg EO. Measuring what matters: connecting excellence, professionalism and empathy. *Brain Injury Professional.* 2015;12(2):12-14.
8. Cook DA, Blachman MJ, West CP, Wittich CM. Physician attitudes about maintenance of certification: a cross-specialty national survey. *Mayo Clin Proc.* 2016;91:1336-1345.
9. Baron RJ, Braddock CH. Knowing what we don't know: improving maintenance of certification. *N Engl J Med.* 2016;375:2516-2517.

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