Board certification in internal medicine and cardiology: Historical success and future challenges

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Abstract

Board certification is at a critical juncture. As physicians face increased regulation and pressures from both inside and outside the profession, board certification and Maintenance of Certification (MOC) are coming under increased scrutiny from the public and the medical community. At this challenging time, it is important to remind ourselves what board certification is (and what it is not) and revisit the origins of this tangible expression of professional self-regulation, even as we contemplate how it needs to improve. Board certification has evolved over time and must continue to evolve; it is our collective responsibility as physicians that peer-developed standards meet the needs of both the profession and the public. In this article, we will reflect on the history of the American Board of Internal Medicine (ABIM), especially which related to Cardiology, and describe some of ABIM’s challenges and new directions.

Introduction

Board certification is at a critical juncture. As physicians face increased regulation and pressures from both inside and outside the profession, board certification and Maintenance of Certification (MOC) are coming under increased scrutiny from the public and the medical community. There is much skepticism about the evidence that MOC makes a difference in patient care [1–4]. There is a broad frustration among physicians that autonomy and respect for the profession are eroding [5–7]. At this challenging time, it is important to remind ourselves what board certification is (and what it is not) and revisit the origins of this tangible expression of professional self-regulation, even as we contemplate how it needs to improve. Board certification has evolved over time and must continue to evolve; it is our collective responsibility as physicians that peer-developed standards meet the needs of both the profession and the public. In this article, we will reflect on the history of the American Board of Internal Medicine (ABIM), especially which related to Cardiology, and describe some of ABIM’s challenges and new directions.

ABIM’s mission is “To enhance the quality of health care by certifying internists and subspecialists who demonstrate the knowledge, skills, and attitudes essential for excellent patient care.”
care.” It is the largest of 24 certifying boards recognized by the American Board of Medical Specialties (ABMS), certifying approximately one out of every four physicians in the United States [8]. As stated in its strategic plan, “ABIM is of the profession but for the public,” accountable both to the internal medicine community and to the public who trust in the physician-developed credential of board certification.

The historical legacy

ABIM was created in 1936 by a joint action of the American College of Physicians (ACP) and the American Medical Association (AMA) with the shared goal of distinguishing members practicing in the discipline of internal medicine who met a set of peer-established standards from those who had not. Internists wanted to elevate the discipline by setting standards designed to “raise the bar” for those in practice. The purpose of board certification was then and is now to issue a publicly recognizable credential that indicates an individual has met professionally determined standards in a defined discipline.

Although ABIM certification was initially offered only in general internal medicine, ABIM recognized from its inception the need to develop certification in internal medicine subspecialties. The 1938 ABIM information booklet stated ABIM’s intention to “inaugurate, as soon as practicable, similar qualification and procedure for additional certification in certain of the more restricted and specialized branches of internal medicine, as gastroenterology, cardiology,” etc., noting that “such special certification will be considered only for candidates who have passed the written examination required for certification in general internal medicine” [9].

ABIM’s motivations for developing its initial subspecialty boards were to set high standards for subspecialty training and practice as well as to keep subspecialties within the “house of medicine,” rather than fracturing internal medicine into multiple boards. In a 1940 letter, Walter Bierring, MD, the first Chairman of ABIM, expressed concern at the division of the surgical field into separate subspecialties. In contrast to the ABMS boards of Urology, Orthopedic Surgery, Neurosurgery, and Anesthesiology, “all of which might properly be subspecialties of the American Board of Surgery,” he noted that “our [ABIM’s] way has solved the problem so much better” [2]. As Stevens [10] has observed, “Internal medicine exists because it is organized.” The decision by internal medicine to keep all of its subspecialties together in the “House of Medicine” has made internal medicine the largest and most influential of the medical disciplines, and a unified program of certification throughout all of internal medicine has made “certification” interpretable across a variety of disciplines, increasing the power and salience of the credential.

In 1939, in response to a petition from the American Heart Association for ABIM to recognize Cardiology as a subspecialty of Internal Medicine and develop a cardiology certification program, Cardiology became the first subspecialty considered and approved by ABIM—soon followed by Tuberculosis, Gastroenterology and Allergy. The first ABIM subspecialty exams were administered in April 1941 and resulted in the certification of 26 candidates in Cardiovascular Disease, four in Tuberculosis (which was later renamed Pulmonary Disease), three in Gastroenterology, and one in Allergy. It was an entirely oral examination, administered by the members of the subspecialty boards themselves, involving witnessed encounters by candidates with actual patients. No additional internal medicine subspecialties were recognized by ABIM until 1972, when ABIM first administered exams in Endocrinology, Diabetes, and Metabolism; Hematology; Infectious Disease; Nephrology; and Rheumatology.

The approval of new ABIM subspecialties is currently guided by the New and Emerging Disciplines in Internal Medicine (NEDIM)-2 Report approved by the ABIM Board of Directors in 2006 as an update of the first NEDIM Report from 1993 [11]. Proposals for new subspecialties are typically initiated by medical societies. Once approved by ABIM, new subspecialties must then be approved by the American Board of Medical Specialties (ABMS). The number of ABIM subspecialties has risen to a total of 20. Of these, four are tertiary subspecialties of Cardiovascular Disease: Clinical Cardiac Electrophysiology (1992), Interventional Cardiology (1999), Advanced Heart Failure and Transplant Cardiology (2010), and Adult Congenital Heart Disease (2015). Each time a new subspecialty has been approved, it was the result of physician organizations or patient groups coming to ABIM to make the case that this facet of medicine needed to be defined and assessed to ensure patients knew who to go to for their unique care needs and that the field was “mature enough” to support such things as journals, separate training programs, and administrative organizational departments.

Since 1936, ABIM has regularly changed what it does to ensure it continues to achieve its mission “to enhance the quality of health care by certifying internists and subspecialists who demonstrate the knowledge, skills, and attitudes essential for excellent patient care.” Standards that define what it means to be an internist cannot—and should not—last forever. The first ABIM exam (Fig.), a written essay test with eight questions, would be unfamiliar and perhaps not passable by most internists practicing today.

The process for earning certification in Cardiovascular Disease has also changed dramatically over time. Until 1972, the subspecialty board exams consisted solely of an oral component, with no written subspecialty board examination. Candidates for subspecialty certification had to pass the written Internal Medicine exam, the oral Internal Medicine exam, and then an oral subspecialty exam. Cardiology was the first subspecialty board to propose a written subspecialty exam. The first question from that first 1972 written examination involved interpreting a single-channel ECG for a patient with intermittent dizziness and syncope 3 weeks status post mitral valve replacement who had been discharged on digoxin and quinidine. ABIM discontinued the oral examinations in 1972 in all disciplines (including Internal Medicine) except for Cardiology, which had both a written and oral component to the exam until 1976. After much deliberation, the Cardiology Board discontinued the oral exam after research could not demonstrate its psychometric validity, coupled with the challenge of administering an in-person clinical examination of two patients each to the growing number of cardiologists. The ABIM Cardiology Board
has a long history of requesting more stringent requirements for training and certification than the other subspecialties. In 1978, the Cardiology Board advocated for setting a higher standard on the written Cardiovascular Disease exam, making it harder to pass. (Ultimately, this motion was disapproved by the Board of Directors, in one of many discussions about whether ABIM should be certifying for “competence” or “excellence.”)

As what certified interns (or subspecialists) need to know and do has changed, so have the requirements for obtaining—and maintaining—the credential. Initially, ABIM issued “lifetime” certifications that did not require recertification. In 1968, motivated by recent studies about physician performance and “an internal sense of conscience about the unevenness of quality of care” being delivered without oversight, the ABIM Board of Directors made the decision to discontinue issuing “lifetime” certifications [3]. At that time, the Board concluded that ABIM did not yet have the capacity to develop a comprehensive recertification program [12]. It was not until 1986 that the ABIM Board of Directors voted to begin issuing “time-limited” certifications that would require recertification every 10 years, becoming the 18th ABMS board to do so. By that time, there were increasing demands from the public that physicians be held accountable to more continuous requirements for certification [3].

The current role of ABIM

ABIM has two core functions that are self-reinforcing: defining disciplines and setting standards. Defining a discipline is not an abstract exercise: creating standards that need to be met is to define what one has to know and do to call oneself Board-certified in that discipline. Boards live at the intersection of generalism and specialization: the Board “movement” itself began as an effort to differentiate “specialists” from the broad swath of largely generalist 19th-century licensed physicians [13]. And as physicians increasingly specialize and limit their practice to particular areas, Boards are one vehicle for both recognizing new subspecialties (e.g., “Advanced Heart Failure and Transplant Cardiology”) and maintaining coherence for the overall discipline. Is someone who only does echocardiography “still” a cardiologist? The answer cannot be found in any book or statute but rather is embodied in the practical judgment of cardiologists who define what requirements must be met to maintain that designation. Physicians who specialize often seek a board credential to “recognize” their area of focus, and they also often want to retain their identity within their original discipline. Boards struggle to balance the tribal call of historic identity with the need to issue a credential that speaks to which skills have actually been maintained.

As a physician-led standard-setting organization, ABIM’s role differs from that of regulatory agencies. Unlike medical licensure, board certification is linked to accredited specialty training. Licensed “Physicians and Surgeons” are authorized to remove brain tumors, manage HIV, or replace heart valves. As a practical matter, what keeps physicians from doing those things—in addition to our own judgment—is a “sub-regulatory” medical ecosystem of credentialing, privileging, and network development, much of which relies on recognition by a credible, independent third party, often—but not always—ABIM.

Though standard setting organizations across multiple industries often have their roots in membership organizations, they typically insulate themselves from the pressure of dues-paying members by becoming independent organizations with self-perpetuating governance that relies on experts in the field to set standards. Inevitably, tension develops between the standard setters and the members of the membership organizations that created them. A well-functioning certifying Board needs to be insulated without being insular, listening carefully to those who seek to meet its standards yet remaining independent and evidence-based in the standards and processes it sets.
Maintenance of certification

Just as the kinds of certifications (in terms of both periodicity and type) have changed, ABIM’s Maintenance of Certification (MOC) program has also continued to evolve. The most recent change—one that has provoked considerable protest—is the decision to make the credential more continuous by requiring evidence of ongoing engagement in learning and improvement on a more frequent basis and incorporating patient voice and safety requirements into the program. Experience in the 10-year MOC program showed that most doctors did not engage with MOC until year 8 or 9 of their 10-year cycle. A more continuous program is not only more credible to the public, but it helps the program work in the way it was initially intended, rather than in a burst of significant activity (with considerable demands on physicians’ time) once every 10 years. It creates a formal, recognizable, peer-created framework for “keeping up” in the discipline, something to which internists and cardiologists have always been committed.

Several changes to the program were introduced on January 1, 2014, including the discontinuation of 10-year certificates. The validity of certifications issued in 2014 and after is contingent upon meeting more continuous MOC requirements, which consist of more frequent participation in activities to assess medical knowledge and practice. At the same time, diplomates can use many non-ABIM pathways to meet those requirements—including programs from medical societies and health systems. ABIM now reports publicly whether diplomates are “Meeting MOC Requirements” based on successful completion of these activities at specified intervals. The goal remains to create a professionally recognized framework for distinguishing those who meet a peer standard from those who do not or choose not to.

When ABIM rolled out recertification and time-limited certifications in the late 1980s, the Board made the decision to honor certifications that had been issued without expiration dates, thus creating the “grandfathers and grandmothers,” individuals who had received their credentials prior to 1990. ABIM has sought ways to engage these individuals in the MOC process for many years. The new MOC requirements do not take away the certification of physicians with “lifetime” certifications, but ABIM now reports whether all physicians, including grandfathers, are “Meeting MOC Requirements” on a continuous basis.

The new requirements are grounded in evidence that there is a problem, and look to learning theory for a solution. Studies have shown that a physician’s ability to independently and accurately self-assess is poor [14,15] and that physicians’ overconfidence inhibits their diagnostic accuracy [16]. A high-stakes exam makes it imperative that physicians maintain their knowledge and become better aware of what they do not know in ways that self-assessment may not. Johnson and Lipner [17] have recently discussed variation in pass rates and the standard setting process.

As of October 1, 2014, over 150,000 ABIM diplomates are currently enrolled in MOC. This represents an increase of 50,000 physicians since the new requirements were launched in January 2014. Over 9500 of these physicians are “pure grandfathers” who hold no time-limited certifications and thus do not have to participate in MOC to remain certified.

Excluding physicians over the age of 70 years and those who are known to be deceased or retired, 75% of ABIM diplomates who hold at least one time-limited certification are enrolled in MOC. Of the “pure grandfathers,” 21% are enrolled, versus only 2% who were engaged in MOC prior to the January launch.

Of the 25,799 ABIM diplomates who have ever certified in Cardiovascular Disease, 74% are enrolled in MOC. This number includes cardiologists who are considered “grandfathers” and those with time-limited certifications (both current and lapsed). Of the 7725 diplomates who are “grandfathered” in Cardiovascular Disease, 47% are enrolled in MOC.

Among physicians in the cardiology sub-subspecialties, there are 7151 diplomates who have ever certified in Interventional Cardiology, of whom 86% are enrolled in MOC; 2591 diplomates who have ever certified in Clinical Cardiac Electrophysiology, of whom 85% are enrolled in MOC; and 484 diplomates who have ever certified in Advanced Heart Failure and Transplant Cardiology, of whom 87% are enrolled in MOC.

None of the cardiology sub-specialty certifications are “grandfathered”; 19% of those ever certified in Interventional Cardiology and 12% of those ever certified in Clinical Cardiac Electrophysiology have lapsed in their respective sub-specialty. No certifications in heart failure have lapsed, as these certifications were first issued in 2010 and will not expire until 2020 at the earliest. Of the interventionists who have lapsed, 64% are enrolled in MOC, versus 91% of the non-lapsed. Of the electrophysiologists who have lapsed, 63% are enrolled in MOC, versus 88% of the non-lapsed.

The future of MOC

The internal medicine community has collectively raised a number of valid questions and appropriate concerns about the MOC program. To discuss some of these concerns, ABIM convened a summit in July 2014 attended by representatives from 26 medical societies, including the American College of Cardiology, American Society of Echocardiography, Heart Failure Society of America, Heart Rhythm Society, and Society for Cardiovascular Angiography and Interventions. The ABIM Board and Council will be making several changes based directly on the issues raised by cardiologists and other internal medicine colleagues. Some of them have already been carried out or are in process of implementation; others will be implemented as soon as operationally feasible. These changes and commitments include the following: increased flexibility on exam deadlines for physicians who attempt and fail; more CME options for medical knowledge/skills assessment; enhanced feedback on exam scores; increased transparency of ABIM financial information; reduced data collection in the practice assessment requirement; evolving the Patient Survey requirement to a Patient Voice requirement, while providing multiple pathways—including use of existing physician-level patient surveys that may have already been performed by a hospital or health system—to meet it; and researching and testing ways to ensure the exam better reflects practice and is maximally relevant.
Some physicians have called for the discontinuation of the MOC exam altogether, while others have called for preserving the examination and abolishing all the other aspects of the program. At its meeting in June 2014, the ABIM Board of Directors clarified its position on the various parts of the MOC program by unanimously passing a Resolution stating:

The Maintenance of Certification (MOC) program sets a standard of competency for internal medicine and its specialties. The MOC program includes summative and formative assessment. The MOC exam is a summative assessment that sets an absolute standard... and Knowledge and Practice Assessment (Parts 2 and 4) of MOC are formative assessments.

To make the secure exam a more helpful feedback mechanism, ABIM is introducing enhanced exam score reports—to be made available in spring 2015—that provide physicians with more detailed exam performance data on their strengths and weaknesses in the clinical content domains measured in the exam. Through research and physician focus groups, ABIM is exploring the level of detail and categories of information that physicians would find most useful to inform their ongoing learning. ABIM is also actively looking for other opportunities or enhancements to the examination and is working with the community to explore those ideas.

There has been a great deal of feedback from the community about the Practice Improvement Modules (PIMs) and the practice assessment requirement. As such, this is the area of the MOC program that will likely change most dramatically in the next 12–24 months. The ABIM Board’s position is that quality improvement is critical to any physician’s practice. For many years, the only time physicians had numerator–denominator data on the rates at which certain outcomes were achieved was in the research setting. The advent of information technology, first for billing and now for patient care, has made this kind of data core to modern medical practice, and it is now readily available to clinicians in their daily lives. Learning how to create and use these data to support an ongoing process of improvement is a relatively new skill now widely expected of all physicians [19].

Studies have shown that fewer than 30% of physicians examine their own performance data and try to improve [20]. The practice assessment requirement helps ensure that all physicians who participate in MOC are meaningfully engaged in Quality Improvement (QI). For physicians who do not regularly engage in QI, the Practice Improvement Modules (PIMs) give them tools to evaluate the quality of care they provide.

At its meeting on October 12, 2013, the ABIM Board of Directors resolved that “The purpose of Part 4 is meaningful engagement in quality improvement; the Board’s role is to verify meaningful participation.” This resolution shifts the focus of practice assessment activities from collecting and sharing data with ABIM to working with data in the diplomate’s own practice setting. As this policy is translated into practice and actual programs, doctors will have even more options for demonstrating meaningful engagement in QI with less emphasis on individual data collection and reporting, especially for physicians already engaged in QI activities. To further enhance the relevance of the practice assessment products to each subspecialty, ABIM has also reorganized its Specialty Boards. This move will separate the Exam Writing Committees from Specialty Boards which will now take responsibility for the full range of assessment within their disciplines. This will make the “non-exam” parts of the process more relevant to practitioners in each discipline.

In order to reduce the redundancy of the MOC practice assessment component for physicians who may already be engaged in QI in their practice group or health system, ABIM is recognizing an increasing number of third-party programs and activities to satisfy this requirement, offering several mechanisms for diplomates to report on activities they are doing on their own. Options for cardiologists include the ACCF FOCUS: RNI tool [21], the TEAM-A Atrial Fibrillation PIM [22], the ACCP: VTE Performance Improvement tool [23], the AAFP Hypertension METRIC module [24], the Joslin Cardiometabolic Risk activity [25], and using measures from ACC-NCDR registries to complete the Self-Directed PIM [26].

The new “Meeting MOC Requirements” status reporting is another area that has received pushback from the community. Many have questioned how a “grandfathered” physician can be “Not Meeting Requirements” for a program in which they are not required to participate. ABIM is now working closely with ABMS to develop a better rubric to reflect ongoing engagement in lifelong learning and continuous professional development as embodied in the structure of the MOC program.

With physicians participating in MOC in record numbers, it is critical for ABIM to ensure that the MOC program is meaningful, relevant, and evidence-based. ABIM has had a long commitment to research that both informs the certification and MOC processes and examines their impact on internists and our patients. While there are numerous studies linking Board Certification with quality of care [27–29], there is limited research to date on the impact of MOC on patient outcomes [30,31]. ABIM has a continuing and robust research program around MOC, and we welcome well-designed research from others as well.

Just as Board certification has come to function as a publicly credible credential attesting to the sound training of physicians, MOC will strive to be a publicly recognizable credential attesting to the fact that a given physician is keeping up in their discipline in a peer-defined way. With dramatic changes in knowledge and technology, coupled with dramatic changes in expectations of what it means to be a good physician, MOC will focus on the essential elements of change that current practitioners need to master, including information technology, teamwork, procedural skills, communication, and ongoing improvement. Given the variability of practice and practice settings, and the rapid evolution of the health care system, this is guaranteed to be challenging, and there are today a paucity of validated tools to assess the outcomes that matter to all of us. But a sovereign profession that regulates itself and takes pride in its professionalism will need to continue to strive toward that goal or we, as a profession, will see others take on that role.
Conclusion

ABIM's Board of Directors have maintained their commitment to enhancing the MOC program to maximize its relevance and value to physicians and patients, and have reaffirmed their intent to respond to the feedback received from the community. ABIM's MOC offerings will continue to evolve to reflect changing knowledge and practice expectations and different technologies for assessment, and to find ways to recognize high-value activities physicians are already doing. Through a new initiative called Assessment 2020, ABIM is actively reaching out to physicians and the broader community to help define what competencies physicians will need as the field of medicine continues to evolve and how best to assess them. There is an open invitation to participate in the conversations around the future of physician assessment at http://assessment2020.abim.org.

In the past, the government and others have, at times, questioned the ability of the medical profession to regulate itself [3,32]. With recent increases in governmental oversight and public scrutiny of health care, the privilege of physician self-regulation is perhaps at its most vulnerable. ABIM Board members past and present have had an acute awareness of the responsibility inherent in ABIM's joint accountability to the profession and to the public. As John Benson, MD, President of ABIM from 1975–1991, observed in 1983, "I continue to marvel at the sense of authority that is bestowed on us by the profession and sense the terrible obligation of preserving that" [3]. If as a profession, we cannot work together to demonstrate that we can set meaningful standards for ourselves, others outside the profession will take over this role with regulations that will likely be less relevant and informed than our own. We will never have perfect assessment tools, and both certification and MOC will always be works in progress. Just as continuous improvement is expected of all practicing cardiologists, ABIM is committed to continue to improve the quality and value of all of the assessment programs.

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