# **Maintenance of Certification and Licensure: Regulatory Capture of Medicine**

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grew up in a blue collar inner city "broken home," and worked continuously from age 14 onward. I paid my way through catholic high school and public university, learning German as a premedical prerequisite. Financial aid allowed me to go to Germany as a "Junior Year Abroad" student. I was admitted after 1 semester into a premier medical program of the Albert Ludwig Universität Freiburg, founded in 1457, completing my American Bachelor of Science in Biology in Germany over the next 3 semesters. I then traveled to New Zealand for medical externship for 6 months.

As a medical student, I was qualified to work as a nurse after completing a 2-month rotation in clinical nursing as required by my program. During my semester breaks, I often worked 11-hour shifts as a night nurse on the surgical ward. My record was 30 consecutive 11-hour night shifts. This work, along with periodic red cell and plasma donations, allowed me to finance my medical study in Europe.

I am a foreign medical graduate. I completed the required Educational Commission for Foreign Medical Graduates, Federation Licensing Examination, and multiple English tests to secure U.S. licensure (despite being U.S. born and raised and graduating with a Bachelor of Science degree from the University of Michigan), as well as certifying in Anesthesiology (1989) and recertifying in 2005.

None of this makes me a better physician, I do that personally. As a better physician, I can simply pass these tests without preparation. The waste of time and money to jump these hurdles seems unnecessary and possibly even offensive. While currently in full compliance and participating in Maintenance of Certification (MOC), I decided to investigate this certification and recertification process.

I passionately, actively learn every day. Today, at age 59, 12-hour workdays, including night, weekend, and holiday calls, are not only common but are expected contract parameters of an employed physician. This is still amazingly better

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Funding: None.

The author has no conflicts of interest to declare.

All statements are the author's own opinion and do not reflect endorsement by the Cleveland Clinic.

Reprints will not be available from the author.

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Copyright © 2014 International Anesthesia Research Society DOI: 10.1213/ANE.00000000000000061

than the 24/7/365 demands on rural primary care physicians. Learning has been mostly limited personally over the years by access to journals and time to read. I have never learned specifically or systematically for or from the board certification process. Who has the time?

While mine may be a unique story, these efforts merely demonstrate typical histories of many, and perhaps most, contemporary colleagues and trainees pursuing any medical career. We physicians are driven, intelligent, and self-sufficient professionals. We seek and learn the information needed to improve and maintain the clinical knowledge and skills needed to practice safely and avoid patient detriment and lawsuits. My personal story and international experience has relieved me of most American-centric limitations on perspectives (i.e., that the American Board of Medical Specialties [ABMS] certifications are only important in the United States and play no role in European practice). Clearly, many other countries provide health care at less cost and higher standards and provide greater longevity to citizens. I have experienced this in Europe personally. I have never in 30 years of professional endeavor been asked by any patient whether I was certified. I doubt any significant capture of board certification market share in Europe will occur, even as the American Board of Anesthesiology (ABA) launches the ABA international LLC as a separate entity to

During my 30 years of primarily academic practice, I have seen the Federation of State Medical Boards (FSMB) successively increase their testing market scope and share using regulatory capture of licensing and credential verification (Fig. 1). The United States Medical Licensing Examination has expanded into 3 parts, increasing costs and complexity for all physicians. The FSMB, in 2010, attempted to introduce their pilot Maintenance of Licensure (MOL) program in Ohio as the premier state, proposing continual testing programs to capture physicians repeatedly for life. Although certification is a major industry in the United States, serving only to reassure citizens of "quality" in most areas of life and medicine in particular, recertification is a relatively new and unproven phenomenon. Lawyers would sue to prevent any such attempt to impose such mandates and with good reason, while physicians have typically remained passive and compliant. This is changing.

The FSMB's program, and subsequently the MOC program, has been actively and rapidly opposed by state medical organizations in Ohio and now other states. I personally chose early to investigate the issues and review the Ohio's Medical Board's 2011 data. My review demonstrated that the main issue with problem doctors was not competency,

(from: http://www.fsmb.org/edusvc\_annualmeeting-2013.html)

After attending the FSMB Annual Meeting, participants will be able

- identify and discuss dynamics that may influence how medical and osteopathic boards will regulate physicians in the future;
- describe strategies being used by medical and osteopathic boards to protect the public; and
- investigate options for improving state medical and osteopathic board performance and effectiveness in protecting the public.

Figure 1. Federation of State Medical Boards (FSMB) Annual Meeting prospectus—testing, regulation, and no physician teaching.

but overwhelmingly due to alcohol or substance abuse (48%), criminal actions (17%), or bootstrap (referral) actions from other state boards (7%). When I specifically requested under the Freedom of Information Act all documents from the Medical Board's fiscal year 2011 that documented any issue of incompetency, I was forwarded 6 records from 5 physicians. One doctor was retired (all information was protected). Three doctors had problems with "sexual boundaries." One left the state and remained in active neurosurgical practice after reaching "state threshold of 2 lawsuits/license cycle." With 182 disciplinary actions from >42,000 licensed physicians in Ohio, incompetency remained clearly a rare instigating problem. Review of the records indicated that only 2 of these disciplined physicians were actually incompetent among all licensed physicians, an incompetency rate of 0.005%. What evidence supports the view that testing all 42,000 doctors in Ohio would have identified the 2 doctors who were allegedly incompetent?

Unless there is unequivocal evidence that testing and recertification is both accurate and sensitive in identifying incompetent physicians, I believe testing every physician at significant cost to identify the rare physician with significant knowledge deficits wastes our increasingly rare resources. Lacking data on sensitivity and efficacy, recertification is little more than an unproven and likely unneeded medical test. I wish to present my findings for review and refer readers to www.changeboardrecert.com for a comprehensive listing of articles and information regarding this topic.

Like most physicians, I favor lifelong learning and board certification requirements (as a tool to expand the scope of residency training beyond mere on-the-job training and into a scientific endeavor) documenting "achievement of consultant status," as was true of my 1989 lifelong certification. I and others have clearly found recertification and the associated prescribed MOC programs to be individually diverse in implementation, untested, unnecessary, ethically questionable, and lucrative to academic-based physicians, board corporations, and national medical specialty societies. In my view, this latter triad can be thought of as the "certification industrial complex." The certification industrial complex produces board products that we are compelled to purchase. The cost of these products includes the financial profits to corporate entities producing tests and MOC products for purchase. However, the costs also include reimbursement to our academic colleagues' travel to resort areas to function as oral examiners

or administrators of these programs. While continuing medical education (CME) credits have become readily available over the Internet, less expensive and even free of charge, in 2007, CME gross receipts totaled U.S. \$2.5 billion, representing a significant opportunity for financial capture and growth to this certification industrial complex.

While MOC has been a self-asserted "gold standard" of competency by the ABMS, the justification for this costly bureaucratic and anticompetitive program remains theoretical, rather than scientific. The lack of evidence supporting this expensive medical test has resulted in increasing opposition from working physicians. The virtual absence of the ABMS programs outside the United States is testimonial that excellence is possible without the imposed costs of that bureaucracy. The ABMS has lobbied Congress to demand their products of all physicians to avoid financial disadvantage in payments, while simultaneously declaring the whole program to be voluntary. Perhaps they have pressured Congress into ensuring their monopoly, rather than providing scientific evidence that supports their position, because no one can or wishes to finance attempts to scientifically validate the usefulness of the certification industrial complex.

A recent press release from the ABMS<sup>a</sup> in response to an article in the New England Journal of Medicine was questioningly entitled: "Is Maintenance of Certification the Answer?"<sup>2</sup> The question whether recertification is of any value has remained surprisingly unanswered, despite decades of attempts to validate this theory by the many leaders of the ABMS and especially the American Board of Internal Medicine (ABIM).3 Any discussion of MOC requires understanding that the ABIM pioneered recertification, first proposing voluntary recertification in 1970. In 1986, after concluding that many physicians refused to comply with voluntary recertification, the ABIM introduced time-limited certification in 1990. In 2000, the ABIM mandated recertification of all of their executive personnel. This year the ABIM pioneered the concept of continuous MOC, proposing it as the industry standard for all medical specialists. Similarly, the MOL agenda of the FSMB parallels the ABIM trajectory with ever-increasing testing impositions and regulatory capture of foreign and American medical students and licensure applicants founded in the programs of the FSMB over the past 4 decades. The recertification of physicians now presents an opportunity for FSMB to expand into repeated testing throughout a physician's career, that is, a United States Medical Licensing Examination part IV as the Special Purpose Examination, because currently 25% of all licensed physicians in the United States are not board certified. Less than 1% of physicians with lifelong certificates have recertified. The ABMS indicated in 2010 that less than half of all physicians were enrolled in MOC. Primary certifications remain the mainstay of the \$374 million cumulative board income reported on Internal Revenue Service 990 forms in 2011 (the most recently available for review, Table 1).

<sup>&</sup>lt;sup>a</sup>American Board of Medical Specialties. Additional Resources about the ABMS Maintenance of Certification @program (Response to NEJMarticle — 12/27/2012).Available at: http://www.abms.org/News\_and\_Events/Media\_Newsroom/  $Releases/release\_ABMSCertification and MOCS tatement post NEJM\_122612.$ aspx. Accessed February 28, 2013.

Table 1. 2011 Income Data from Internal Revenue Service 990 Forms Retrieved from Guidestar.com (Accessed June 7, 2013)

	Employee data			
	Gross receipts	Profits/revenue	Net assets	Executive salary
Certifying corporation	(millions)	(millions)	(millions)	(thousands)
FSMB	38	-0.72*	14.2	467
ABMS	14.8	1.55	11.9	562.5
Pediatrics	27.1	3.7	46.1	933
Anesthesiology	13.6	1.2	17.6	272
Internal medicine	49.3	<b>-1.7</b> *	-45.4*	787
Family medicine	55	2.8	48.9	728
Radiology	19.2	-0.28*	30	660
Psychiatry and neurology	33.2	6.3	50.4	827.3
Medical genetics	0.564	-0.127*	1.6	Not reported
Obstetrics and gynecology	14	2	31.8	566
Emergency medicine	39.1	4.3	22.9	532.2
Surgery	12	-1.7*	12.1	670
Orthopedic surgery	12	1.3	25.2	493
Nuclear medicine	1	0.055	2.2	110
Pathology	10	0.86	9.3	406
Thoracic surgery	2	0.059	10.1	277.3
Physical medicine and rehabilitation	4.3	0.91	9.9	437
Urology	2.6	0.664	5.7	135
Plastic surgery	3.2	-0.084*	3.12	315
Ophthalmology	7.6	0.659	5.1	366
Colon and rectal surgery	0.702	0.094	0.589	77
Otolaryngology	5.9	1.4	7.1	494
Dermatology	2.7	1.2	6.2	140
Neurological surgery	2.8	0.097	2.6	173
Preventive medicine	1.3	0.133	2.7	193
Allergy and immunology	1.7	0.285	3.6	103
Non-ABMS American Boards	±.,	0.200	0.0	100
American Association of Physician Specialists	2.9	-0.224*	2	261
National Board CRNA	14.8	1.7	11.2	228
Oral pathology	0.096	15	0.472	No salaries paid
Oral and maxillofacial surgery	5.5	0.573	2.97	107
Podiatric surgery	5.5	0.861	9.75	217
Facial plastic and reconstructive surgery	0.639	0.037	0.676	131.5
Spine surgery	0.047	-0.009*	0.064	No salaries paid
Cosmetics surgery	0.223	-0.085*	-0.092*	54
Board of Osteopathic Medical Examiners	31.6	0.5	12	353.6
Lower extremity surgery	0.236	-0.003*	-0.026*	87
Pediatric neurological surgery	0.03	0.002	0.020	No salaries paid
Hair restoration surgery	0.184	0.022	0.06	31
Abdominal surgery	0.025	0.022	0.138	No salaries paid
Laser surgery	0.023	0.019	0.054	3.5
Eye Surgery	0.003	0.015	-0.046*	No salaries paid
Total non-ABMS/FSMB boards	47.762	16.812	28.703	1322.6
Totals all known boards	459.826	45.973	386.523	12,501.9
Totals ABMS and affiliates	374.064	29.881	343.62	10,712.3
Totals Abins and anniates	314.004	29.001	J45.02	10,112.3

FSMB = Federation of State Medical Boards; ABMS = American Board of Medical Specialties; CRNA = certified registered nurse anesthetists.

\*Deficits.

Physicians struggle daily to clinically ascertain costs and risks versus benefits in patient care. We would never suggest that every patient should receive bispectral index, transesophageal monitoring, pulmonary atrial catheterization, intraarterial monitoring, central venous pressure monitoring, blood cross-match, or even hemoglobin and serum chemistry testing. We always consider risk versus benefit because these tests are clinically useful only in at-risk patients. Indiscriminant application might be reassuring to many patients or physicians and very profitable to industry, but just is not indicated. Even the yearly physical examination has recently been found lacking beneficial effects.

There is considerable irony that the ABIM is pushing their affiliated ABIM Foundation's initiative, the "Choosing Wisely" program, to reduce unnecessary medical events, testing, and contain cost, while at the same time vigorously thrusting their expensive and unproven high stakes recertification on all physicians. What would the Choosing Wisely program advise about the ABIM's recertification programs, or even board certification itself, that are expensive and lack any evidence of efficacy. The lack of outcome-based scientific support raises significant questions regarding

 $<sup>^</sup>b\!\!$  Choosing Wisely. Available at: http://www.choosingwisely.org/. Accessed May 28, 2013.

recertification's ultimate value. While my lifelong certificate obtained in 1989 certified me "to be qualified to serve as a consultant in Anesthesiology," my more recent recertification awarded me merely "Maintenance of Certification in the Specialty of Anesthesiology." The ABMS boards have now transitioned from documenting consultant competency to being a portal to enrollment in their corporate brand of lifelong learning.

### **MOC: RESEARCH VERSUS MARKETING**

The ABMS emphatically stresses that multiple articles support MOC. A quick review of these proffered ABMS articles readily identifies the authors as overwhelmingly ABMS paid executives and/or hired paid consultants.4c

These corporate authorships mitigate scientific validity and introduce significant bias into these retrospective database interpretations, as would occur for any proprietary medical device or drug.5 At best, they can statistically substantiate only associations and not causality. Negative studies may never be published. Publication further occurs in journals owned, edited, managed or supported by organizations strongly influenced by ABMS senior staff or national societies, otherwise exhibiting significant financial interests in proprietary and endorsed products associated with recertification programs.<sup>4,c</sup> Executive members of ABMS boards are frequently found to serve as executives of all national medical societies, associated journal editorial boards, and many academic departments. Corporately sponsored/ authored publications of both FSMB and ABMS affiliates, financed with the \$374 million in ABMS' gross annual receipts, repeatedly support a significant corporate advertising campaign, without significant opportunity for opposing views from practicing physicians.<sup>6,7</sup>

In 2002, the ABMS unsuccessfully attempted to validate board certification itself, via meta-analysis coauthored by 2 ABMS (executive and associate) vice presidents documenting, "Few published studies (5%) used research methods appropriate for the research question," and "Perhaps one lesson to be learned from this review is the need to thoughtfully examine this recertification process to document its value."8 Cochrane Collective Database Review (another quality indicator) also fails to support MOC or board certification validity. The only ABMS-funded prospective randomized study found in the Cochrane database (yet missing from ABMS listing), however, did document "no benefit regarding primary outcome" from the specifically studied practice improvement module.9 These facts together emphasize significant scientific limitations supporting validation of the ABMS program, despite ABMS insistence to the contrary.

### PRACTICE IMPROVEMENT MODULES— **BREACHING ETHICAL RESEARCH STANDARDS?**

MOC practice improvement modules require physicians to define subset populations in their practice, where patient care might be improved. A plan is introduced for selected

patients, and changes in care are introduced. Data are collected to specifically demonstrate quality improvements in one's own practice to the ABMS to enable recertification. This practice improvement modules method is initiated to facilitate the individual physician's personal certification, that is, personal gain.

Practice improvement modules constitute an experiment: changing practice to demonstrate a positive result. This experimentation occurs without any institutional review or written informed consent. Patients unknowingly assume the costs and risks of the practitioner's experiment. Without IRB oversight, review, and approval, practice improvement modules violate the Nuremberg Code of 1947<sup>d</sup> (safeguarding humans from experimentation) and the Declaration of Helsinki.<sup>e</sup> This represents a significant moral concern.<sup>10</sup> No individual rigorous review of methods, adverse outcomes, risks, or costs is mandated or occurs.

As a physician working for an internationally recognized center of medical excellence, I should not be allowed to tamper with proven protocols merely to meet ABMS requirements for my very personal recertification needs. For example, perhaps I want to change my practice to improve (reduce) hemoglobin A1c levels. Thus, I become more aggressive with insulin management to achieve this worthy goal. However, we know that tight control of insulin can be extremely dangerous and the burden of treatment associated with therapeutic complexity and risk of harms increases with lower targets.<sup>11,12</sup> Such experimentation with changing insulin management to meet personal recertification needs may result in fatalities. Is such tinkering with standard practice worthwhile, ethical, or even likely to improve quality?

## **REGULATORY CAPTURE OF PHYSICIANS**

Recent attempts by the testing/regulatory corporation, the FSMB Inc., to legally mandate MOC nationally with testing every 5 years exemplify regulatory capture: monopolies or special interest groups co-opting policymakers, or political bodies (e.g., regulatory agencies), to further their own ends.<sup>13,14</sup> While current board certification is generally a prerequisite for hospital privileges and applicant hiring, informed physicians are now proactively pushing to prohibit bylaws that require recertification compliance as documented by resolutions passed at the 2013 annual meeting of the American Medical Association (AMA) in Chicago, IL. Passage of anti-MOC-MOL resolutions in New York, New Jersey, Iowa, Michigan, North Carolina, Oklahoma, and recently Florida followed Ohio's State Medical Society's lead in recent years. These are specific examples of the rising concern among working physicians that unproven certification restrictions and costs are becoming mandated by private and corporate interest groups. These efforts strive to place time-limited certificate holders on equal ground with grandfathered lifelong certified physicians. Nationally, the Association of American Physicians and Surgeons and Doctors for Patient Care have led the opposition, followed

<sup>&</sup>lt;sup>c</sup>ABMS Maintenance of Certification® (ABMS MOC®) Updated March 20, 2013 Myths & Facts. Available at: http://www.abms.org/maintenance\_of\_certification/pdfs/ABMS\_MOCMythsFacts\_3-20-13.pdf. See LISTS 1–5 (Qualidigm, Middletown, CT [Drs. Wang, Meehan, and Ho and Ms. Tate]). Accessed January 16, 2014.

<sup>&</sup>lt;sup>d</sup>The Nuremberg Code. Available at: http://history.nih.gov/research/downloads/nuremberg.pdf. Accessed May 28, 2013.

eWMA Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Subjects. Available at: http://www.wma.net/en/30publications/10policies/b3/index.html. Accessed May 28, 2013.

by AMA actions at the annual meeting in Chicago, IL, in 2013. Examples of physicians losing hospital privileges and/or the ability to participate with insurance programs including Medicare over recertification have been noted. This led the Association of American Physicians and Surgeons to file a lawsuit on behalf of the national membership against the ABMS in April of 2013 seeking redress on multiple issues regarding conspiracy and restraint of trade (see United States District Court for the District of New Jersey Docket No. 3:13-cv-2609-PGS-LHG). While the FSMB's MOL program (linking participation to the ability to practice) goes further than the ABMS currently voluntary certification proposals, neither protects against lawsuits nor insures competence, while both limit competition from noncertified physicians and intimidate physician compliance with ABMS programs.<sup>15</sup> The ABA has now expanded testing, which requires mandatory passage of their part 1 test before allowing completion of any residency training program. This undermines any appearance of voluntary participation and provides a clear trend for the future.

Renowned contemporary medical leaders simply never need MOC to secure their newest or next position, their reputation suffices. Thus, certification is mostly a marketing mechanism for employment, required by industry insiders and overwhelmingly ignored and unappreciated by the general population. Multiple ABMS executives themselves have published statements indicating long-term failure to recertify or participate in MOC, complying only when it has become a recent job requirement as ABMS officers, individual chief executive officers (CEOs) having been paid 6 and 7 figure salaries (Table 1). <sup>16,17</sup> The chairman of the American Board of Pediatrics received \$1,241,588.00 as annual income, when, in 2009, the board's corporate deficit (expenses-revenues per the 2009 filed Internal Revenue Service 990 forms) was documented at \$2,713,406.00. <sup>18</sup>

These salaries pale in comparison to the \$374 million yearly expenditure for ABMS certifications. The current 2013 ABMS and FSMB physician CEOs were not enrolled in MOC and have never recertified as of January 2013, as verified by ABMS databanks found at the ABMS and ABIM Web pages to verify a physician's certification. This strongly undermines any personal statement regarding conviction of certification's personal value versus corporate profits from ABMS programs. One might argue that these CEOs are no longer practicing medicine. However, why should the many administrative physicians be required to submit to the MOL or MOC protocols and costs to maintain licenses necessary to work in administrative or research positions? On the contrary, executives in the certification industrial complex, along with our academic colleagues pushing for certifications, are typically not those practicing full time and maintaining their clinical skills. This push for certifications by executives in the certification industrial complex may be simply reflecting their myopic prejudice arising from their academic distance from practice, when often treating patients only several hours per day, week, or month, if at all. Those physicians near retirement may be economically and inappropriately forced to retire, rather than to maintain a full license and ABMS certification protocol. With the 10-year certification intervals, retirement may become an economic enticement at 10-year intervals from first certification.

The ABMS has, nonetheless, actively and effectively lobbied Congress to pass Physician Quality Reporting System-MOC (PQRS-MOC) legislation, requiring ABMS MOC compliance for payment. The ABA openly disclosed that the 0.5% initial PQRS-MOC benefits would not cover the costs of MOC, which is soon slated to become a 2% penalty for nonparticipants. f Only 9 specialty boards had fulfilled PQRS-MOC requirements to become providers, leaving all other 15 physician specialist groups (ABA included) exposed to reap only PQRS-MOC's future penalties, because 2013 is the prescribed index year required for such protections.<sup>g</sup> Only recently did the ABA attain provider status despite openly declining to do so in 2010, declaring then "Based on its understanding of the current CMS requirements, the ABA does not believe that the additional requirements for the MOC bonus will have a sufficient impact on patient care, nor will the reimbursement bonus justify the additional time and resource burden on its diplomates."f Many individual ABMS specialty affiliates opposed transitioning to time-limited programs but succumbed to ABMS corporate directives to comply or lose ABMS accreditation and these exclusive franchise rights.

While the ABMS argues that MOC is inexpensive, the ancillary cost of travel, study, time away from patient care, locums coverage, and busywork are quite significant. However, these minor costs are deemed insignificant, if the benefit is a measurable improvement in patient care. The burden of proof for any claim rests with the claimant. If the ABMS believes there is value to offset the costs, then it has the burden of proof to support this claim and this claim remains to be conclusively demonstrated by objective and reproducible means.

The restrictions on educational freedom are also very concerning. The following ABMS quote exposes certification's spurious value "FACT: ABMS recognizes that regardless of the profession—whether it is health care, law enforcement, education or accounting—there is no certification that guarantees performance or positive outcomes." The ABMS testing industry should be forced to compete with traditional CME educational programs on a level field (capitalistic competition), to insure medical quality, without imposing regulatory capture. The ABMS, with >168 individual certifications and growing, cannot dictate effective and comprehensive lifelong learning programs for every individual physician in every specialty, given the wide range of practice environments, patient needs, and medical scope. Failure to financially or physically maintain multiple certifications could lead to limitations in the scope of an individual physician's practice. These certification hurdles are traditionally addressed during vacation or personal time, hurting the personal lives of physicians, straining marriage and family commitments. As certification programs typically require travel to major cities, the cost and distances involved will

<sup>&</sup>lt;sup>f</sup>The American Board Of Anesthesiology, Inc. Maintenance of Certification and Physician Quality Reporting System Requirements. Available at: http://www.theaba.org/pdf/MOC\_PQRS.pdf. Accessed February 28, 2013.

<sup>&</sup>lt;sup>8</sup>Qualified Maintenance of Certification Program Incentive Entities for 2012. Available at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/Fully-Qualified-2012-MOC-Posting-Document-Rev-11282012.pdf. Accessed February 28, 2013.

further restrict single and multispecialist availability and patient care, especially in rural regions.

With pass rate variations from 77% to 98% among the multitude of individual ABMS certifications offered, MOC cannot be a fair and basic requirement for licensure under MOL, third party payments, or hospital privileges. This is likely to most seriously limit physicians in rural practice who must cross-cover beyond 1 simple specialty to provide community care. As more certifications for increasingly restrictive practice parameters are developed and must be then maintained under the ABMS/FSMB protocols, restrictions on the scope of individual practice will increase in proportion to the certification requirements that limit scope of individual practice. As the certification industrial complex becomes increasingly profitable, more vendors will also follow.

The American Board of Physician Specialties (http:// www.abpsus.org) has been a relatively large entity certifying physicians since 1950, now certifying 16 specialties including anesthesiology. The American Osteopathic Association/ Bureau of Osteopathic Specialists (http://www.osteopathic. org) also has been certifying osteopathic physicians since 1939, now in 18 specialties. An additional 13 non-ABMS American Boards can be found for various specialties (Table 1). National Boards have appeared after Senator Rand Paul first formed an ophthalmologic national board. These certifications are only of value to those who want or demand them. The public at large is unaware of any significance to the term board certified, which has meaning only to medical professionals.<sup>19</sup> The 2003 Gallop pole funded by the ABIM found that less than one-third of all respondents ever checked whether their physicians were certified. Standardized recertification tests really measure factual knowledge from textbooks and testing ability in computerized testing situations at significant expense, but not real-time patient interactions and clinical acumen. They clearly do not assure quality care, as malpractice lawsuits are readily found with certified physicians. The large number of noncertified physicians remains a major stumbling block for the FSMB MOL program. Currently, 25% of all U.S. physicians including anesthesiologists, who have never certified, are providing valuable and necessary care throughout this country.20,21

Experience is of value. Textbook knowledge is often outdated at printing, with guidelines radically changing in only months. Expert clinicians frequently disagree with practice guidelines, which are tested in MOC examinations.<sup>22,23</sup> For example, we have recently seen complete and rapid turnabout in a number of accepted guidelines: prostate-specific antigen screening, mammography screening, tight perioperative glucose control, routine perioperative β-blockade, aggressive pain management, and other guidelines designed for mass application.<sup>11,12,24-29</sup> Recently, the phenomenon of medical reversal (rejection of accepted medical practice on renewed repeat study) not only causes one to question the value of certifications, but also to question the entire historic basis on which ABMS supportive studies have based their research.<sup>28,29</sup>

### **OVERREGULATION VERSUS BEST PRACTICE**

The concept of MOC directly ignores the increasing regulation, oversight, hospital employment, and above all, the delegation of medical care to (less expensive) nonphysicians with less education (physician assistants, nurse practitioners, certified registered nurse anesthetists, optometrists, midwives, etc.). The imposed MOC costs hurt the economic competitiveness of the physician compared with nonphysician providers, entice early physician retirement, and reduce physician availability during remote training/testing episodes. It is counterproductive to increase demands on the most educated providers of health care, while allowing nonphysicians to practice medicine after abbreviated educational programs and licensing under reduced expectations, often outside the state medical boards oversight. Reducing costs in health care cannot be obtained by increasing selectively the overhead of those best able to provide expert medical care. Recertification is always simply a promise without any guarantees, while costs in dollars paid and time spent to comply with these programs are exploding. In our specialty, the American Association of Nurse Anesthetists continues to actively assert equal quality of care at a lower cost and has made significant inroads with passage of laws to assure equality in payment for independent medical practice in 17 opt-out states (Table 2).

The New England Journal of Medicine openly discussed and surveyed physicians whether voluntary recertification was desirable. It was resoundingly rejected. 30,31 This type of discussion and survey should occur among every specialty to ascertain exactly the position of the practicing professionals regarding this imposition. When voluntary recertification resoundingly failed, time-limited certification was introduced alongside ABMS longstanding endorsement of lifelong certificates. ABMS executive nonparticipation has been widespread and well documented, testifying to the spurious value of recertification to those pushing this profitable agenda.32,33

Traditional CME programs generated \$2.5 billion in registration fees alone in 2007, representing a significant financial testimonial to widespread physician lifelong learning.34 MOC is no longer simply a traditional board certification, but clearly attempts to capture the much larger educational market by mandating education through ABMS-approved courses provided by selected providers.

## Table 2. Seventeen "Opt-Out" States Allowing **Certified Registered Nurse Anesthetists** Independent Practice of Anesthesia Order and Date of Opt Out

Nebraska—February 2002 Idaho-March 2002 Minnesota—April 2002 New Hampshire—June 2002 New Mexico—November 2002 Kansas—April 2003 North Dakota—October 2003 Washington—October 2003 Alaska—October 2003 Oregon—December 2003 Montana-Jan, 2004 South Dakota-March 2005

lowa—December 2001

Wisconsin—June 2005 California—June 2009 Colorado—September 2010 Kentucky-April 2012

The American Society of Anesthesiologists' Web site is overwhelmingly populated by Maintenance of Certification in Anesthesiology® (MOCA®) products, while only a few years earlier, only sporadic offerings of board review courses were to be found. MOC is an amalgam of multiple, new, unproven individual products (currently/continually under development) of the ABMS individual affiliates.<sup>1,35</sup> The ABMS continues to assert that board certification is voluntary, while individual practice realities significantly conflict with this assertion. There is and has been nothing wrong with lifelong certification validating residency training and consultant status.33 The marketing strategy of time-limited certificates imposing regulatory capture on competent colleagues, who pass the test daily with every patient encounter but must repurchase yearly programmed materials and certificates every 10 years, are unwarranted, arbitrary, wasteful in time, money and patient contact hours, and unproven. Especially offensive are the requirements of patients and physicians to waive significant rights simply to subscribe to the ABMS certification protocols. Patients are not informed of their subjugation, costs, or risks when included into practice improvement modules and remain grossly unaware of certification status.<sup>19</sup>

Statements abound that the ABMS is uniquely suited to protect medicine from the intrusion of some outside regulatory body, which will impose unwarranted, harsher regulations on physicians. Dr. Robert Wachter, the immediate past board chairman of the ABIM, recently reiterated: "If somehow MOC went away, it would be quickly replaced by more regulatory external bodies that ultimately would be more burdensome to physicians." The only certainty is that if physicians do not actively oppose counterproductive private interests, these will succeed. Multiple organizations already regulate physicians: hospital administrations/bylaws, insurance mandates, city-state-county police, courts, patient satisfaction surveys, federal and state governments, health departments, the Joint Commission, pharmacies, paraprofessionals, Drug Enforcement Agency, etc. 20

The AMA CME Physician Recognition Award program and state licensure requirements served for decades to document continuing education. I am unaware of scientific evidence specifically documenting failure of this program, especially as several states have no CME requirements (Colorado, Indiana, Montana, New York, South Dakota), yet provide modern medical care to their citizens, including multiple centers of excellence.

Physicians have been committed to lifelong learning, teaching, and full-time practice. Physician competency is demonstrated by successful daily outcomes, not by the purchase of educational products, top doctor advertisements (printed in every airline magazine), or certificates decorating the wall. Anesthesia has never been safer, despite treating patients with ever-increasing comorbidities. Surgical impositions demand all day surgeries, cavity insufflations with extreme positioning, transports to and from magnetic resonance imaging scanners, and anesthesia in increasingly remote locations. Our practice demands astute attention to detail, knowledge of physiology, and compulsive preparation. Hospital-based anesthesia is under multiple levels of oversight, leaving incompetence rife for immediate exposure. Physicians are further overextended with long work

hours, leaving little opportunity to participate in endlessly increasing and meaningless certification process. MOC programs physically remove physicians from patient contact and increase costs. These penalties are particularly burdensome in rural areas and critically underserved primary care practices.

With fixed and declining reimbursement, doctors do not need corporations conscripting physicians into yet another expensive program created without meaningful input by the majority of practicing physicians themselves. As a proprietary and copyrighted corporate product, ABMS MOC is uniquely immune from inspection, investigation, validation, or rational influence by practicing physicians.1 The ABMS establishes its standards admittedly, free of any professional or governmental body.2 Under the guise of unproven "Higher Standards, Better Care®," physicians must simply take ABMS word that such testing is of value and demanded by the public. In the name of cost containment, less educated paraprofessionals, supported by administrators, are replacing physicians, dictating policy, making institutional decisions, and writing guidelines, while delegating the medical-legal liability onto physicians as deep pocket management.36 Physician graduate medical education funding is experiencing reductions, while federal funding of physician assistants and nurse practitioners expands.

## MAINTENANCE OF CLINICAL COMPETENCE VERSUS MOC/LICENSURE

It is appropriate for every individual physician to freely choose adult self-education of value to his/her professional needs. Increasing administrative impositions in this age of doing more for less under the threat of MOL requires organized opposition to ensure patients and physician rights. Ohio physicians demonstrated strong opposition and effectively organized against MOL in 2012, which is being repeated in other states. Fourteen Ohio medical organizations representing >15,000 physicians united and defeated the FSMB, Inc.'s MOL Ohio pilot program and ousted the zealously supportive State Medical Board of Ohio's executive medical director that very same day.<sup>20</sup>

Board certified is past tense. Certify once and pursue costeffective lifelong learning in the library, on the Internet, in Hawaii, or as best meets your needs. Intelligent physicians must remain competent without corporate/government oversight to survive. State medical boards already impose enough significant and regionally determined educational requirements on continuing education. ABMS and FSMB currently produce no physician educational materials, only internally validated and copyrighted tests and without public transparency (Fig. 1). The prime directive or apparent goal or advantage of ABMS programs is validation by their self-declared standard. Should the existing CME program structure be updated, standardized, or verified to emulate the ABMS goals of testing to reassure the public, this can be implemented openly. Preferably inexpensive, useful, and highly accessible Internet courses offered competitively via multiple vendors throughout each year, possibly verified with commonplace photo, password, or fingerprinting mechanisms, would serve this need and eliminate ABMS monopolistic impositions. There is no reason that the certification industrial complex should have a monopoly.

Successful military simulation training uses realistic videogames at standard computer terminals. This suggests that complex medical simulation training software development for the home or practice could optimize access and cost, over the expensive, fixed, 9 to 5 staffed, and distant medical simulation/examination centers using using actorpatients.<sup>1,37</sup> Experienced physicians benefit patients by personally researching new horizons and developments, not regurgitating reference knowledge in tests.

Publication of specialty-specific, informative, concise and clinically important validated summaries (not political, business-oriented, or esoteric and preclinical research findings) of each past year, with open, electronic access to all clinical journals after 12 months, would greatly facilitate information acquisition online to busy clinicians. Open minds and discussion are needed in all specialties to facilitate the dynamic future development of effective, readily accessible, competitive, useful, and inexpensive educational mechanisms for practicing physicians in their home and office.

Simply continuing traditional or legacy monopolistic corporate programs is not the future of medical excellence or innovation. We live in the age of advanced technology. Telemedicine and ubiquitous electronic medical records provide universal access via the Internet. Perfection in medicine is unattainable, while mistakes, questions, and failures will continue to occur due to physician, system, and patient inadequacies in the medical equation. Everyone dies. Quality life-years from cost-effective care are becoming paramount.

Expensive testing appears to be the course of our ABA, Inc. (ABA) corporate program. Oral and written decennial recertification testing episodes using actor-patients in Objective Structured Clinical Examination and simulation laboratories, as well as unconsented patient experimentation (practice improvement modules), remain of questionable instructional validity to experienced physicians. This may also represent overtly expensive and resource-consuming methodology in this Internet/video/virtual reality age of cognitive learning.38,39 The ABA just opened a large new headquarters with substantial testing facilities, including 20 Objective Structured Clinical Examination sites. Examination fees are \$3650 for 2014 and appear profitable: the ABA, Inc., in 2009, consumed 10% of all ABMS gross receipts, while administrating to only 5% of all physician specialists. The ABA, Inc., is expanding into worldwide testing as ABA International, LLC.<sup>1,40</sup> ABA first-time pass rates averaged 83% ± 4% ranging from 76% to 88% since 2006 and were significantly lower ranging from 67% to 80% when all tested are lumped together.1

Will uncertified anesthesiologists and grandfathers be allowed to work alongside certified registered nurse anesthetists (who by definition are all certified) with the physician shortage looming and increasing ABMS requirements? Only 75% of anesthesiologists are currently certified, <40% with 10-year certificates, of which not all are currently enrolled in MOC.<sup>20,21</sup> The ABMS indicated that only half of all physicians were enrolled in MOC in 2010.

Testing scenarios will never meet the acuity, variability, urgency, and importance of routine patient encounters mastered daily in practice and as evidenced by each successful patient care episode. As simulation is an essential component

of MOCA® >35,000 anesthesiologists practice in the United States, only 10-year time-limited certifications have been issued since 2000, and with residency graduate class sizes between 1000 and 1500 per year, the stated rate of simulation participation of 1600 physicians through 2012 is indicative of very limited participation in MOCA and/or simulation. 41,42 These objective data stand clearly in opposition to assertions founded in proprietary board data and assurances.

While I have never been asked by a patient in 30 years of practice whether I was board certified, many patients were happy to know they were under my care as an experienced anesthesiologist (doctor-not a student, resident, or paraprofessional caregiver with lesser skills), especially one with compassion and skill.<sup>19</sup> I will continue maintaining my abilities out of personal and professional conviction, but without further personal subjugation to the certainly well-intentioned corporate MOCA® prerogatives.

Practicing physicians must take control of the extraneous forces now to ensure quality and meet patient needs at the local level (on top of the heavy clinical workload). We must preserve the sanctity of individual patient care. Ultimately, we will benefit as patients ourselves, as nearly everyone eventually becomes a customer in the medical system. I am quite happy, knowing I live with the best health care in the world available to me, in my personal practice, today.

#### **DISCLOSURES**

Name: Paul Martin Kempen, MD, PhD. **Contribution:** This author wrote the manuscript. **Attestation:** This author approved the final manuscript. This manuscript was handled by: Steven L. Shafer, MD.

#### **REFERENCES**

- 1. American Board of Anesthesiology. ABA News-Celebrating 75 Years. March 2013 Newsletter
- 2. Iglehart JK, Baron RB. Ensuring physicians' competenceis maintenance of certification the answer? N Engl J Med 2012;367:2543-9
- 3. Wasserman SI, Kimball HR, Duffy FD. Recertification in internal medicine: a program of continuous professional development. Task Force on Recertification. Ann Intern Med 2000;133:202-8
- 4. Chaudhry HJ, Talmage LA, Alguire PC, Cain FE, Waters S, Rhyne JA. Maintenance of licensure: supporting a physician's commitment to lifelong learning. Ann Intern Med 2012;157:287-9
- 5. Lehman RS. Nullius in verba: don't take anyone's word for it. JAMA Intern Med 2013;173:1049-50
- 6. Kempen P. Maintenance of licensure. Ann Intern Med 2013;158:219
- 7. Chaudhry HJ, Talmage LA, Rhyne JA. Maintenance of licensure-Reply. Ann Intern Med 2013;158:219
- 8. Sharp LK, Bashook PG, Lipsky MS, Horowitz SD, Miller SH. Specialty board certification and clinical outcomes: the missing link. Acad Med 2002;77:534-42
- 9. Simpkins J, Divine G, Wang M, Holmboe E, Pladevall M, Williams LK. Improving asthma care through recertification: a cluster randomized trial. Arch Intern Med 2007;167:2240-8
- 10. Vollmann J, Winau R. Informed consent in human experimentation before the Nuremberg code. BMJ 1996;313:1445-9
- 11. Finfer S, Liu B, Chittock DR, Norton R, Myburgh JA, McArthur C, Mitchell I, Foster D, Dhingra V, Henderson WR, Ronco JJ, Bellomo R, Cook D, McDonald E, Dodek P, Hébert PC, Heyland DK, Robinson BG; NICE-SUGAR Study Investigators. Hypoglycemia and risk of death in critically ill patients. N Engl J Med 2012;367:1108-18

- 12. Lipska KJ, Montori VM. Glucose control in older adults with diabetes mellitus-more harm than good? JAMA Intern Med 2013;173:1306-7
- 13. Federation of State Medical Boards. Report from the Maintenance of Licensure Implementation Group. Euless, TX: Federation of State Medical Boards, 2011
- 14. Dal Bó E. Regulatory capture: a review. Oxf Rev Econ Policy
- 15. Wallace DA. Occupational licensing and certification: remedies for denial. William Mary Law Rev 1972;14:46-127. Available at: http://scholarship.law.wm.edu/wmlr/vol14/iss1/3
- Johnson DH. Maintenance of certification: confession of a grandfather. J Oncol Pract 2012;8:203-4
- 17. Brennan TA. Recertification for internists-one "grandfather's" experience. N Engl J Med 2005;353:1989-92
- 18. American Board of Pediatrics. 2009 IRS 990 form, part VII. http://www.changeboardrecert.com/tax-returns.html. Accessed January 16, 2014
- Kempen PM. Why do patients select and stay with their doctor? Implications regarding board certification and Maintenance of Certification and of Licensure (MOC/MOL). J Am Phys Surg 2012:17:53-56
- 20. Kempen PM. Successful opposition to Maintenance of Licensure: the Ohio experience as an educational template. J Am Phys Surg 2012 17:103-6
- 21. Dutton RP. So what have we learned? An update from the AQI. American Society of Anesthesiologists Newsl 2011;75:40-42
- 22. Frager MS. Author's view of MOC unrealistic. Med Econ 2012;89:12
- 23. Baiardini I, Braido F, Bonini M, Compalati E, Canonica GW. Why do doctors and patients not follow guidelines? Curr Opin Allergy Clin Immunol 2009;9:228-33
- McNaughton-Collins MF, Barry MJ. One man at a time-resolving the PSA controversy. N Engl J Med 2011;365:1951-3
- 25. Warner E. Clinical practice. Breast-cancer screening. N Engl J Med 2011;365:1025-32
- Maerz LL, Akhtar S. Perioperative glycemic management in 2011: paradigm shifts. Curr Opin Crit Care 2011;17:370–5
- Devereaux PJ, Yang H, Yusuf S, Guyatt G, Leslie K, Villar JC, Xavier D, Chrolavicius S, Greenspan L, Pogue J, Pais P, Liu L, Xu S, Málaga G, Avezum A, Chan M, Montori VM, Jacka M, Choi P; POISE Study Group. Effects of extended-release metoprolol succinate in patients undergoing non-cardiac surgery (POISE trial): a randomised controlled trial. Lancet 2008;371:1839-47

- 28. Prasad V, Vandross A, Toomey C, Cheung M, Rho J, Quinn S, Chacko SJ, Borkar D, Gall V, Selvaraj S, Ho N, Cifu A. A decade of reversal: an analysis of 146 contradicted medical practices. Mayo Clin Proc 2013;88:790-8
- 29. Garner S, Littlejohns P. Disinvestment from low value clinical interventions: NICEly done? BMJ 2011;343:d4519
- 30. Levinson W, King TE Jr, Goldman L, Goroll AH, Kessler B. Clinical decisions. American Board of Internal Medicine maintenance of certification program. N Engl J Med 2010;362:948-52
- 31. Kritek PA, Drazen JM. Clinical decisions. American Board of Internal Medicine maintenance of certification program-polling results. N Engl J Med 2010;362:e54
- 32. Buscemi D, Wang H, Phy M, Nugent K. Maintenance of certification in internal medicine: participation rates and patient outcomes. J Community Hosp Intern Med Perspect 2012;2:19753
- 33. Brennan TA, Horwitz RI, Duffy FD, Cassel CK, Goode LD, Lipner RS. The role of physician specialty board certification status in the quality movement. JAMA 2004;292:1038-43
- 34. Accreditation Council for Continuing Medical Education. Annual Report 2010
- 35. Frager MS, Scherz H, Eck A. Physician quality and maintenance of certification. JAMA 2012;308:2562; author reply 2562-3
- 36. Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine; Institute of Medicine. The Future of Nursing: Leading Change, Advancing Health. Washington, DC: The National Academies Press, 2011
- 37. Johnson S. Video Games Play Role in Military Training. Wichita Falls, TX: TimesRecordNews, 2012
- 38. Patrício MF, Julião M, Fareleira F, Carneiro AV. Is the OSCE a feasible tool to assess competencies in undergraduate medical education? Med Teach 2013;35:503-14
- 39. Gallagher CJ, Tan JM. The current status of simulation in the maintenance of certification in anesthesia. Int Anesthesiol Clin 2010;48:83-99
- 40. Kempen PM. Maintenance of Certification (MOC), Maintenance of Licensure (MOL) and Continuing Medical Education (CME): the regulatory capture of medicine. J Am Phys Surg 2012;  $17:72-\bar{5}$
- 41. Steadman RH, Berry AJ. Simulation and MOCA: ASA and ABA perspective, after the first three years. ASA Newsl 2013;77:30-32
- 42. Schubert A, Eckhout G Jr, Tremper K. An updated view of the national anesthesia personnel shortfall. Anesth Analg 2003;96:207-14