

Maintenance of Licensure:
Protecting the Public, Promoting Quality Health Care

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Introduction

The practice of medicine in the United States, according to the 2010 edition of *A Guide to the Essentials of a Modern Medical and Osteopathic Practice Act* of the Federation of State Medical Boards (FSMB), is “a privilege granted by the people acting through their elected representatives.”¹ Citing public health, safety and welfare, and the need for protection of the public from the “unprofessional, improper, incompetent, unlawful, fraudulent and/or deceptive practice of medicine,” the *Essentials* document – formally adopted by the FSMB’s House of Delegates – acknowledges the historical and constitutional role of the state medical and osteopathic boards “to provide laws and regulations to govern the granting and subsequent use of the privilege to practice medicine.”

While the granting of the initial privilege to practice medicine is generally viewed as a robust process along a rigorous continuum of medical education encompassing both undergraduate and graduate training, with multiple assessments and decision points that must be cleared along a prescribed pathway, the process for the subsequent use of that privilege has been the focus of increasing commentary and suggestions for improvement. This article summarizes the background and history by which the FSMB adopted, in April of 2010, a seminal policy recommendation outlining a framework by which state medical and osteopathic boards could require physicians with active medical licenses to periodically demonstrate their ongoing clinical competence as a condition for licensure renewal.

Medical Regulation in Service to the Public

While the earliest instance of medical regulation in the Americas dates to 1649,² and the first local government license to practice medicine was adopted in 1760 in New York City,³ the authority of state governments to regulate health care in the United States dates to the adoption, in 1791, of the 10th

Amendment to the Constitution: “The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.”

Some states initially gave local medical societies the power to examine and license prospective doctors,⁴ while others bestowed such a right to medical schools. The notion that medical licensure and discipline should best be regulated by state-appointed licensing boards, the majority of whom today have public members on their voting bodies, rather than medical societies (which ostensibly represent the interests of practicing physicians) or medical schools took several decades to gain traction. It has been postulated that what ultimately caused medical regulation, alongside coincidental public health legislation, to flourish between 1850 and 1900 was a combination of two factors: a failure of pure free-enterprise theory and the contribution of science.⁵ While “good” goods, like “good” doctors, should have ultimately driven out “bad” ones in a free market, a better informed public was no longer willing to wait that long; people also became aware of the fact that danger lurked in bad food and bad water, an awareness prompted by the discovery of germs, that prompted calls from many corners for better protection from poor sanitation as well as “bad” doctors.

The FSMB, since its establishment in 1912 as the umbrella organization for all state medical and osteopathic licensing boards in the United States and its territories, has actively promoted or supported during its long history such activities as stronger entrance criteria for medical schools, improvements in undergraduate medical education, closure of under-performing medical schools following the 1910 Flexner Report, passage of state medical practice acts, the formation of the American Board of Medical Specialties (ABMS) and the Educational Commission for Foreign Medical Graduates and, in 1991, the creation – in partnership with the National Board of Medical Examiners (NBME) – of the United States Medical Licensing Examination (USMLE). Physicians with the D.O. (doctor of osteopathic medicine) degree usually take the Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA) of the National Board of Osteopathic Medical Examiners (NBOME).

The FSMB, as stated in its current mission, seeks to lead by “promoting excellence in medical practice, licensure, and regulation as the national resource and voice on behalf of state medical boards in their protection of the public.” The FSMB has more recently served the public and its 70 state medical and osteopathic boards through the development of a national database of licensed physicians and physician assistants, a disciplinary alert service, a Federation Credentials Verification Service (FCVS) and a Uniform Application to speed state processing of licensure applications and facilitate license portability without infringing the states’ autonomy or rights. Adoption of an MOL framework by the FSMB, within this context, is consistent with state medical boards’ desire to protect the public and promote quality health care with robust standards for physician licensure.

Medical Regulation to Promote Health Care Quality

There are many obvious and apparent reasons to explain why the United States does not have the best health care system in the world (e.g., insufficient access to primary care services, a lack of coordination of health care delivery, defensive medicine practices, etc.) despite all of its expenditures in this sector.^{6,7} The

quality of the health care that is delivered, however, is an area of inquiry that has garnered great attention primarily in the last two decades. These analyses have sometimes offered specific recommendations to medical educators, health care leaders, medical regulators and federal and state government officials to help reform the health care workforce, decrease medical errors and promote best practices among health care providers. Many of these reports have also made specific recommendations about the standards and practices for renewal of medical licenses.

In 1995, the Pew Charitable Trust Health Professions Commission recommended that states “require each licensing board to develop, implement and evaluate continuing competency requirements to assure the continuing competence of regulated health care professionals.”⁸ In 1999, the Institute of Medicine (IOM) said that consumers generally believe they are protected within the health care arena because “licensure and accreditation confer, in the eyes of the public, a “Good Housekeeping Seal of Approval,” and suggested greater assessment of the physicians’ performance of skills after initial licensure.⁹ Two years later, the IOM observed that in a profession with “a continually expanded knowledge base,” a mechanism was needed to ensure that practitioners remain up to date with current best practices.” It also noted that medical regulation, when properly conceived and executed, “can both protect the public’s interest and support the ability of health care professionals and organizations to innovate and change to meet the needs of their patients.”

Rationale for Enhanced Medical Regulation

In the United States and United Kingdom, according to a survey of 18 countries conducted last year, more than 80% of the public consider physicians to be trustworthy.¹⁰ To continue to earn such high regard in a climate of greater accountability and regulation, consistent with their own professional obligations to remain competent and up-to-date, physicians need to demonstrate to their patients and peers what most are already doing. The rationale to do so, however, is multifaceted and not limited to well-intentioned policy reports or professional obligations. While unequivocal, comprehensive and robust research in support of a multi-component program for maintenance of licensure is not yet available, simply because no medical regulatory authority has fully implemented such a plan, there is growing evidence in the medical literature about 1.) the practice of physicians over time, and 2.) the value of enhanced continuing medical education or continued professional development. Both of these categories are addressed by the FSMB’s MOL framework.

Several studies over the years have found, for instance, that practicing physicians who perform a lower volume of clinical or surgical procedures, or who have less experience with specific conditions or diseases, have higher rates of complications compared with their physician colleagues. As one researcher and his colleagues hypothesized in 1987, in the treatment of disease it would appear that practice makes perfect.¹¹ Kimmel and colleagues in 1995 studied more than 19,000 patients undergoing coronary angioplasty procedures by interventional cardiologists at cardiac catheterization laboratories across the United States and Canada and, after adjusting for case mix, found an inverse association between cardiac catheterization laboratory procedure volume and major complications.¹² An inverse association between

the number of coronary artery bypass graft surgeries performed by cardiac surgeons and subsequent mortality rates, after adjustment for clinical risk factors, has also been described.¹³¹⁴¹⁵

In a 1996 study of 403 adult male patients with the Acquired Immunodeficiency Syndrome (AIDS) who were cared for by 125 primary care physicians, after controlling for the severity of illness and the year of diagnosis, patients cared for by physicians with the most experience had a 31 percent lower risk of death than patients cared for by physicians with the least experience.¹⁶ Nash and colleagues found a lower mortality rate from acute myocardial infarction among patients of both primary care physicians and cardiologists who had higher patient volumes than those physicians who provided care for this condition less frequently.¹⁷ A study by Tu and colleagues in 2001 found that patients with acute myocardial infarction who are treated by “high-volume admitting physicians” for that condition are comparatively more likely to survive at 30 days and at one year.¹⁸ And Freeman and colleagues found a substantial variation in the clinical outcomes of gastrointestinal endoscopy based on the ongoing case volume of the gastroenterologist.¹⁹

Likewise, Choudhry and colleagues conducted a systematic review of the relationship between clinical experience and quality of health care in 2005 and found that physicians who have been in practice longer may be at risk for providing lower-quality care and that this subgroup of physicians may benefit from quality improvement interventions.²⁰ While underperformance among physicians is neither very well studied nor defined, it has been suggested that age-related cognitive decline and impairment due to substance use disorders and other psychiatric illness may contribute to underperformance, diminishing physicians’ insight into their level of performance as well as their ability to benefit from an educational experience.²¹

As for enhanced continuing medical education (CME) and continued professional development (CPD), the Johns Hopkins Evidence-based Practice Center for Healthcare Research and Quality conducted a systematic review of the effectiveness of such education and reported in 2009 that multimedia, multiple instruction techniques and multiple exposures to content were associated with improvements in physician knowledge.²² There is also evidence that such CME/CPD practices are effective in changing physician performance,²³ though more research is needed that focuses on the specific types of media and educational techniques that lead to the greatest improvements in performance. In a Cochrane database review of 81 trials looking at continuing medical education, Forsetlund and colleagues concluded that strategies to increase attendance at educational meetings, using mixed interactive and didactic formats, and focusing on outcomes that are likely to be perceived as serious may increase the effectiveness of educational meetings.²⁴

State medical and osteopathic boards have occasionally struggled with a subset of physicians with active licenses who are no longer clinically active, and looked at how clinical inactivity should be defined, identified, monitored and communicated or shared with the public. In a 2007 telephone survey of 64 state medical and osteopathic boards in the United States, excluding its territories, Freed and colleagues found that only 22 state licensing boards (34%) query physicians regarding clinical activity at both initial licensure and licensure renewal with the majority of boards permitting physicians to hold or renew an

unrestricted active license to practice medicine, although they may not have cared for a patient in years.²⁵ A comprehensive program for maintenance of licensure, if adopted by all state medical and osteopathic boards, could logically and objectively demonstrate which physicians are engaged in clinical activity and how much - a derivative benefit that would be useful for healthcare workforce analyses and predictions. A special committee commissioned this year by Freda Bush, M.D., FSMB Board Chair, to look at physician re-entry and related issues on behalf of state medical and osteopathic boards should also be helpful in framing the context and offering guidance.

A rationale for a more robust or enhanced program of medical regulation is not only predicated on the need to protect the public and promote quality health care delivery. It has been argued that profligacy in the care of one patient within an increasingly cost-contained health care system or organization could lead to less adequate care for another patient.²⁶ A program to promote the ongoing clinical competence of actively licensed physicians could support the adoption, or awareness, of best practices in the management of all patients and their illnesses. A less obvious impetus for state medical and osteopathic boards to embrace changes and improvements in medical regulation is the concern that if they don't, others may. Medical regulation outside the bounds of state licensing authority could in turn, as one observer notes, lead to damaging effects to patients and society.²⁷ As representatives of the people of the state, usually appointed or elected by state officials (i.e., governor), state medical and osteopathic boards are sworn to protect the public and promote quality medical licensure and discipline. Any improvements or changes in licensure renewal should logically and appropriately be led, and guided, by state medical and osteopathic boards. The FSMB can assist by facilitating the development of policies and procedures, encouraging common practices while respecting states' autonomy and collaborating with health care organizations with expertise in physician assessment, public safety and practice performance.

Evolution of Maintenance of Licensure

All actively licensed physicians in the United States and its territories are currently required to renew their license every one to three years, depending upon the requirements of their state medical or osteopathic board.²⁸ Currently, most state medical and osteopathic boards use a variety of information sources to document and verify the competence of physicians seeking licensure renewal: prescribed hours of accredited continuing medical education (CME), information that is usually self-reported but sometimes verified by random audits; hospital privilege reports; disciplinary data banks - such as the Federation of State Medical Boards' (FSMB) Board Action Data Bank or the National Practitioner Data Bank; patient complaints; and medical malpractice reports.

In May of 2003, following discussions centered around the need to improve the capability of state medical and osteopathic boards to protect the public and promote quality health care, the FSMB, under its Board Chair, Thomas D. Kirksey, M.D., convened a special committee to make recommendations about the possibility of a system for the periodic assessment of the ongoing clinical competency of actively licensed physicians, what came to be known as "maintenance of licensure" (MOL).²⁹ Following discussions and review of existing practices, the committee recommended a substantive policy statement

that was adopted, the following year, by the FSMB's House of Delegates: "State medical boards have a responsibility to the public to ensure the ongoing competence of physicians seeking relicensure."³⁰³¹

Beginning in 2005, the FSMB sought input and commentary from leaders and representatives of major health care organizations and federal and state governmental agencies to consider options and programs by which state medical and osteopathic boards should or could implement maintenance of licensure. During the last seven years, multiple discussions, meetings and conferences have been held, with periodic surveys of state medical and osteopathic boards to continuously gauge their concerns and interests. To perform a comprehensive review and to make final recommendations to the Board of Directors on the FSMB MOL initiative, the FSMB, under then Board Chair, Martin Crane, M.D., convened an Advisory Group on Continued Competence of Licensed Physicians in 2009. The Advisory Group was charged to issue an opinion to the FSMB Board of Directors concerning FSMB's Maintenance of Licensure initiative and, more specifically, whether the framework proposed in the report of the Special Committee on Maintenance of Licensure was feasible, reasonable, consistent with a series of guiding principles adopted by FSMB's House of Delegates in May 2008 and suitable for use by state medical boards in assuring the continued competence of licensed physicians.

The Maintenance of Licensure framework adopted by the FSMB House of Delegates in 2010 notes that as a condition of license renewal, physicians "should provide evidence of participation in a program of professional development and lifelong learning that is based on the general competencies model: medical knowledge, patient care, interpersonal and communication skills, practice-based learning, professionalism and systems-based practice." One of the framework's guiding principles is that "maintenance of licensure should not compromise patient care or create barriers to physician practice."

Discussion and analysis is now underway with an FSMB-sponsored MOL Implementation Group that is guided by the framework and which receives regular input from an advisory council of chief executives from related health care organizations. A draft report from the MOL Implementation Group that outlines specific options for state boards will be reviewed this summer by the FSMB's Board of Directors, then by state medical and osteopathic boards and then by other stakeholders in health care and in government. It is anticipated that a starter (pilot) plan for MOL may be initiated by interested state medical and osteopathic boards as early as the end of the calendar year.

Components of Maintenance of Licensure

While the specific details, methodologies and options by which state medical and osteopathic boards could implement a program for Maintenance of Licensure is being formulated at press time, several themes have emerged around the three specific components identified in the MOL framework document adopted by the FSMB's House of Delegates.

The first component of MOL, **reflective self-assessment**, addresses physicians' professional obligation to commit to lifelong learning to maintain their skills and acquire updated knowledge affecting their practice. This could involve the use of an assessment tool such as an accredited continuing medical education (CME) pre-test, as one example, to identify needs or opportunities for improvement, followed by a tailored improvement activity based on those outcomes. State licensing boards will likely need to modify or enhance, where appropriate, their existing CME requirements.

While the second component of MOL, **the assessment of knowledge and skills**, does not mandate the passage of a secure or proctored examination as part of its second component, it notes that physicians enrolled in the ABMS' Maintenance of Certification (MOC) program, or the American Osteopathic Association Bureau of Osteopathic Specialists' Osteopathic Continuous Certification (OCC) program, could substantially comply with a state licensing board's expectations for MOL. Because more than 30% of actively licensed physicians are not specialty board certified,³² most physicians with time-unlimited ("grandfathered") specialty certificates have chosen not to become recertified³³ and a plurality of physicians with time-limited specialty certificates are not seeking renewal of specialty board certification,³⁴ state licensing boards will need to consider additional options (e.g., computer-based clinical case simulations, hospital procedural privileging, etc.) for physicians to demonstrate ongoing clinical competence. The FSMB's MOL Implementation Group, guided by the adopted framework and its advisory council, is reviewing those options now.

For the third component, **performance in practice**, physicians could use data derived from their own practices supplemented by practice improvement activities already being implemented by specialty societies, hospitals, physician groups and quality improvement organizations. As this component is similar to the fourth part of MOC and the "Practice Performance Assessment" part of OCC, state boards may elect to substantially qualify licensees engaged in such activities. According to Kathleen Sebelius, Secretary of Health and Human Services, 20 percent of doctors and 10 percent of hospitals currently use basic electronic health records.³⁵ As "meaningful use" regulations to promote electronic health records and health information technology advance,³⁶ and data driven changes in physician practice gradually take hold, component three of MOL is also the most likely to evolve over time. Regina Benjamin, M.D., MBA, U.S. Surgeon General and Past Chair of the FSMB's Board of Directors, recently wrote of her prior experience with health information technology and how "practicing medicine became easier for the clinicians and better for the patients" following the adoption of electronic health records in her private practice setting.³⁷

As the MOL Implementation Group deliberates the specifics of how the states could proceed with MOL adoption, the group's members have agreed that the overall process of implementation by the states should be evolutionary, not revolutionary, while recognizing the need to be anticipatory.

International Perspectives on MOL

The same year that the FSMB's House of Delegates adopted its statement of responsibility in relation to the ongoing clinical competence of physicians, the Federation of Medical Regulatory Authorities of Canada (FMRAC) adopted its framework for maintenance of licensure, a program called revalidation by some Canadian provincial authorities. The FMRAC announced in 2004 that all licensed physicians in Canada must participate in a recognized revalidation process in which they demonstrate their commitment to continued competent performance in a framework that is fair, relevant, inclusive, transferable and formative. The Revalidation Working Group that studied the issue said, "The demonstration of ongoing

competence and performance of physicians is a pillar of professional self-regulation.”³⁸ Several Canadian provinces have mandated that physicians participate in an educational program, such as the Royal College of Physicians and Surgeons’ Maintenance of Certification program or the College of Family Physicians’ Maintenance of Proficiency program, to maintain licensure.³⁹ Physicians in these programs report their participation in educational activities annually, with random audits of the documentation by the colleges and/or a peer review process involving office visits by physician colleagues.

In England, where the administration of Henry VIII passed legislation in Parliament aimed at regulating and licensing medical practitioners that endured without any amendments for 300 years,⁴⁰ the General Medical Council began in 1998 to develop a means by which doctors’ practices could be appraised and objectively assessed annually over a five-year period as a mandatory condition for what it also calls revalidation.⁴¹ While formal implementation of such a system has now been delayed by a year under the newly elected government in the United Kingdom, when it gets underway it is expected to include as part of its appraisal of physicians several elements: colleague and patient feedback, continuous professional development (CPD) records and a clinical audit, all within a quality assurance process overseen by Medical Royal Colleges and Faculties and various health systems regulators. It is expected to be a single process for both general practitioners and specialists, regulated by the General Medical Council and implemented within local hospitals with specialist standards set by the individual Royal Colleges.⁴²

Other nations, such as Australia, New Zealand and Ireland are in various phases of implementation of similar programs for maintenance of licensure. All international medical regulatory authorities will differ in the details of how they implement ongoing clinical competence assessment of physicians but it will be helpful and appropriate for these nations to share best practices, lessons learned, and research emanating from implementation of such programs, perhaps supported by the International Association of Medical Regulatory Authorities, for which the FSMB serves as Secretariat. While the medical regulatory laws may be different around the world, notions of medical professionalism, quality health care, and protecting the public are substantially aligned.

Concluding Thoughts

A system by which physicians with active licenses to practice medicine in the United States will be required over time to periodically demonstrate ongoing clinical competence in their area of practice as a requirement for renewal of licensure is going to become reality in the near term.

As Cyril Chantler notes with respect to the growing global movement within the medical regulatory community to establish assessment programs for ongoing clinical competence, “Physicians need trust more than regulation, but it is up to them to introduce systems that are comprehensive and fit for most purposes but not too bureaucratic or burdensome.”⁴³

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