

## REPORTS OF THE COUNCIL ON MEDICAL EDUCATION

The following reports, 1–10, were presented by William A. McDade, MD, Chair:

### 1. COUNCIL ON MEDICAL EDUCATION SUNSET REVIEW OF 2005 HOUSE POLICIES

*Reference committee hearing: see report of [Reference Committee C](#).*

#### **HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS AND REMAINDER OF REPORT FILED**

At its 1984 Interim Meeting, the House of Delegates established a sunset mechanism for House policies (Policy G-600.110). Under this mechanism, a policy established by the House ceases to exist after 10 years unless action is taken by the House to retain it. The objective of the sunset mechanism is to help ensure that the AMA Policy Database is current, coherent, and relevant. By eliminating outmoded, duplicative, and inconsistent policies, the sunset mechanism contributes to the ability of the AMA to communicate and promote its policy positions. It also contributes to the efficiency and effectiveness of House of Delegates deliberations.

At its 2012 Annual Meeting, the House amended Policy G-600.110, which now reads as follows:

1. As the House of Delegates adopts policies, a maximum ten-year time horizon shall exist. A policy will typically sunset after ten years unless action is taken by the House of Delegates to retain it. Any action of our AMA House that reaffirms or amends an existing policy position shall reset the sunset “clock,” making the reaffirmed or amended policy viable for another 10 years.
2. In the implementation and ongoing operation of our AMA policy sunset mechanism, the following procedures shall be followed: (a) Each year, the Speakers shall provide a list of policies that are subject to review under the policy sunset mechanism; (b) Such policies shall be assigned to the appropriate AMA Councils for review; (c) Each AMA council that has been asked to review policies shall develop and submit a report to the House of Delegates identifying policies that are scheduled to sunset; (d) For each policy under review, the reviewing council can recommend one of the following actions: (i) Retain the policy; (ii) Sunset the policy; (iii) Retain part of the policy; or (iv) Reconcile the policy with more recent and like policy; (e) For each recommendation that it makes to retain a policy in any fashion, the reviewing Council shall provide a succinct, but cogent justification (f) The Speakers shall determine the best way for the House of Delegates to handle the sunset reports.
3. Nothing in this policy shall prohibit a report to the HOD or resolution to sunset a policy earlier than its 10-year horizon if it is no longer relevant, has been superseded by a more current policy, or has been accomplished.
4. The AMA Councils and the House of Delegates should conform to the following guidelines for sunset: (a) when a policy is no longer relevant or necessary; (b) when a policy or directive has been accomplished; or (c) when the policy or directive is part of an established AMA practice that is transparent to the House and codified elsewhere such as the AMA Bylaws or the AMA House of Delegates Reference Manual: Procedures, Policies and Practices.
5. The most recent policy shall be deemed to supersede contradictory past AMA policies.
6. Sunset policies will be retained in the AMA historical archives.

The Council on Medical Education’s recommendations on the disposition of the 2005 House policies that were assigned to it are included in the Appendix to this report.

#### RECOMMENDATION

The Council on Medical Education recommends that the House of Delegates policies that are listed in the Appendix to this report be acted upon in the manner indicated and the remainder of this report be filed.

## APPENDIX - Recommended Actions on 2005 and Other Related House of Delegates Policies

<i>Policy Number</i>	<i>Title</i>	<i>Recommended Action</i>
HOUSE OF DELEGATES' POLICIES		
H-045.993	Support of Residencies in Aerospace Medicine	Sunset. There were four residency programs in this subspecialty in 2005, when this 1987 policy was retained; there are five such programs today. AMA policy in support of residency increases in fields of need supersedes the need for specific mention of and support for this field.
H-180.956	Physician Privileges Application - Timely Review by Managed Care	Retain; still relevant.
H-200.983	Health Manpower	Sunset; "Manpower" is an outmoded term, and the AMA has numerous policies that supersede the intent of this policy, including <a href="#">H-200.956</a> , Appropriations for Increasing Number of Primary Care Physicians; <a href="#">H-295.956</a> , Educational Grants for Innovative Programs in Undergraduate and Residency Training for Primary Care Careers; <a href="#">H-200.997</a> , Primary Care; and <a href="#">H-200.977</a> , Establishing a National Priority and Appropriate Funding for Increased Training of Primary Care Physicians.
H-220.980	Credentialing Procedure	Retain, still relevant, but edit as noted: "The AMA encourages the <del>JCAHO</del> <u>Joint Commission</u> to continue to monitor medical staff credentialing procedures..."
H-220.989	Physician Credentialing	Retain, still relevant, but edit to read as follows: "The AMA encourages the <u>Joint Commission</u> <del>JCAHO</del> to develop standards ..."
H-225.960	Voluntary Use of Hospitalists and Required Consent	Retain; still relevant.
H-225.969	Disputes Between Medical Supervisors and Trainees	Sunset; superseded by Council on Ethical and Judicial Affairs (CEJA) Opinion <a href="#">E-9.055</a> , Disputes Between Medical Supervisors and Trainees.
H-230.964	Physician Credentialing and Privileging	Sunset; superseded by Guidance on New Procedure for CME, available on the AMA website: <a href="http://www.ama-assn.org/ama/pub/education-careers/continuing-medical-education/physicians-recognition-award-credit-system/cme-help/guidance-new-procedure-cme.page">http://www.ama-assn.org/ama/pub/education-careers/continuing-medical-education/physicians-recognition-award-credit-system/cme-help/guidance-new-procedure-cme.page</a>
H-230.972	Physician Credentialing and Privileging	Sunset; items 1 and 2 are superseded by <a href="#">H-230.964</a> , Physician Credentialing and Privileging, which reads, in part, "Individual character, training, competence, experience, and judgment should continue to be the criteria for granting general or procedure-specific clinical privileges." Item 3 is reflected in Guidance on New Procedure for CME, available on the AMA website. Items 4 and 5 were accomplished.
H-255.989	A Program for Exchange Visitor Physicians	Retain, still relevant; other policies do not address the specific items as listed.
H-255.991	Education for Foreign Physicians	Sunset; superseded by <a href="#">H-255.987</a> , Foreign Medical Graduates, <a href="#">H-255.988</a> , Report of the Ad Hoc Committee on Foreign Medical Graduates, <a href="#">H-250.993</a> , Overseas Medical Education Developed by US Medical Associations, <a href="#">H-255.998</a> , Foreign Medical Graduates, <a href="#">H-255.986</a> , Foreign Medical Graduates in Residency Programs, and <a href="#">H-255.999</a> , Final Report of the Ad Hoc Committee on Foreign Medical Graduate Affairs.
H-295.877	Medical Treatment of Prisoners of War and Detainees	Retain; still relevant.
H-295.879	Improving Sexual History Curriculum in the Medical School	Retain, still relevant, with edits as shown: Our AMA ... "(2) supports <u>public messaging</u> <del>the creation of a national public service announcement</del> that encourages patients to discuss concerns related to sexual health with

		their physician and reinforces its commitment to helping patients maintain sexual health and well-being.”
H-295.907	Managed Care and Graduate Medical Education	Retain, still relevant, but edit as noted: 1) “The American Medical Association will encourage <del>AMA representatives to Residency Review Committees and to the Accreditation Council for Graduate Medical Education to request that these bodies</del> review the impact of the changing health care environment....” 2) Revise title as follows, to reflect the policy’s content: “The Impact of the Changing Health Care Environment on Graduate Medical Education.”
H-295.918	Strengthening Education in Geriatrics	Sunset; superseded by <a href="#">H-295.981</a> , Geriatric Medicine, which reads: “1. Our AMA reaffirms its support for: (a) the incorporation of geriatric medicine into the curricula of medical school departments and its encouragement for further education and research on the problems of aging and health care of the aged at the medical school, graduate and continuing medical education levels; and (b) increased training in geriatric pharmacotherapy at the medical student and residency level for all relevant specialties and encourages the Accreditation Council for Graduate Medical Education and the appropriate Residency Review Committees to find ways to incorporate geriatric pharmacotherapy into their current programs. 2. Our AMA recognizes the critical need to ensure that all physicians who care for older adults, across all specialties, are competent in geriatric care, and encourages all appropriate specialty societies to identify and implement the most expedient and effective means to ensure adequate education in geriatrics at the medical school, graduate, and continuing medical education levels for all relevant specialties.”
H-295.920	Academic Freedom	Still relevant; rescind and append to <a href="#">H-295.923</a> , Medical Training and Termination of Pregnancy.
H-295.923	Medical Training and Termination of Pregnancy	Retain, with revisions to incorporate <a href="#">H-295.920</a> , which is being sunset in this report, to read as follows: “The AMA supports the education of medical students, residents and young physicians about the need for physicians who provide termination of pregnancy services, the medical and public health importance of access to safe termination of pregnancy, and the medical, ethical, legal and psychological principles associated with termination of pregnancy, although observation of, attendance at, or any direct or indirect participation in an abortion should not be required. <u>Further, the AMA supports the opportunity for residents to learn procedures for termination of pregnancy and opposes efforts to interfere with or restrict the availability of this training.</u> ”
H-295.926	Support for Development of Continuing Education Programs for Primary Care Physicians in Non-Academic Settings	Retain with revisions, as shown below: “The AMA: (1) supports development, where appropriate, of programs of education for medical students and faculty in non-academic settings, making use of telecommunications as needed; (2) encourages that medical schools provide faculty development programs that are designated for <i>AMA PRA Category 1 eCredit™</i> ; and (3) encourages that teaching continue to be accepted for <i>AMA PRA Category 2 eCredit™</i> <u>when not designated for <i>AMA PRA Category 1 Credit™</i>.</u> ”
H-295.980	Clinical Training in STD for Medical Students/Physicians in Training	Retain; still relevant.
H-300.959	Physician Participation in the AMA Physician’s Recognition Award	Retain; still relevant.
H-300.969	Uniform Standards for Continuing Medical Education	Retain; still relevant.

H-300.984	Abuses of the Continuing Medical Education System	Sunset; no longer relevant. The ACCME no longer uses the “Essential Areas and Elements” to accredit CME providers.
H-305.930	Residents’ Salaries	Retain; still relevant.
H-305.942	The Ecology of Medical Education: The Infrastructure for Clinical Education	Retain; still relevant.
H-305.948	Direct Loan Consolidation Program	Retain; still relevant.
H-305.971	Discrimination Against Resident Candidates Based on Graduate Medical Education Medicare Funding	Retain, still relevant, but revise to read as follows: “The AMA urges <del>hospitals and</del> residency programs to use <u>the qualifications of residency applicants</u> as a basis for filling available positions, and not the <u>eligibility or level of future status of the Medicare component</u> to graduate medical education funding.”
H-305.990	AMA Foundation Scholars Fund	Sunset; no longer relevant. The funding structure has shifted such that monies no longer flow through medical school deans but rather are dispersed directly to the students, obviating the need for the policy.
H-305.991	Repayment of Educational Loans	Retain; still relevant.
H-310.924	Fellowship Application Reform	Sunset; superseded by <a href="#">D-310.958</a> , Fellowship Application Reform, which reads: “Our AMA will: (1) continue to collaborate with the Council of Medical Specialty Societies and other appropriate organizations toward the goal of establishing standardized application and selection processes for specialty and subspecialty fellowship training; and (2) continue to encourage all subspecialties to use the same application cycle and such application cycle should commence only in the final year of residency for programs of less than 5 years, or in the final 2 years of residency for programs of 5 years or longer. (CME Rep. 5, A-09)”
H-310.943	Closing of Residency Programs	Retain; still relevant, but with the following edits, to delete items 2 and 6, as these are already reflected in Accreditation Council for Graduate Medical Education Institutional Requirements, and to add items 4 and 7, to incorporate items 2 and 4 from <a href="#">D-310.972</a> , Protection Against Delayed Residency Program Closure, which is being sunset in this report: “The AMA: (1) encourages the Accreditation Council for Graduate Medical Education (ACGME) to address the problem of non-educational closing or downsizing of residency training programs; <del>(2) encourages the ACGME to develop guidelines for the institution to follow in such closings or reductions that provide for adequate notification and out placement service (such as resource contacts, transfer assistance, and financial assistance);</del> <del>(3)</del> reminds all institutions involved in educating residents of their contractual responsibilities to the resident; <del>(4)</del> encourages the ACGME and the various Residency Review Committees to reexamine requirements for “years of continuous training” to determine the need for implementing waivers to accommodate residents affected by non-educational closure or downsizing; <del>(4)</del> <u>will work with the American Board of Medical Specialties Member Boards to encourage all its member boards to develop a mechanism to accommodate the discontinuities in training that arise from residency closures, regardless of cause, including waiving continuity care requirements and granting residents credit for partial years of training;</u> (5) urges residency programs and teaching hospitals be monitored by the applicable Residency Review Committees to ensure that decreases in resident numbers do not place undue stress on remaining residents by affecting work hours or working conditions, as specified in

		Residency Review Committee requirements; (6) <del>urges institutions that initiate significant reductions in graduate medical education programs (in excess of 20 percent of the trainee complement or in excess of 10 percent of trainees for a given year), or that voluntarily close programs, be requested prior to or at the time of the reduction to file a concise summary of its educational impact with the Accreditation Council for Graduate Medical Education or the relevant Residency Review Committees; and (7)</del> opposes the closure of residency/fellowship programs or reductions in the number of current positions in programs as a result of changes in GME funding; and (7) <u>will work with the Centers for Medicare and Medicaid Services (CMS), ACGME, and other appropriate organizations to advocate for the development and implementation of effective policies to permit graduate medical education funding to follow the resident physician from a closing to the receiving residency program (including waivers of CMS caps), in the event of temporary or permanent residency program closure.</u> ”
H-310.988	Adequate Resident Compensation	Retain.
H-310.991	Assistance in Completion of Residency Programs	Sunset; superseded by <a href="#">H-310.943</a> , Closing of Residency Programs.
H-310.993	Resident Participation on Hospital Committees	Retain; still relevant.
H-310.994	Curriculum Orientation of Medical Staff Membership in Teaching Programs	Retain; still relevant.
H-310.995	Anonymity for Resident Inquiries to Residency Review Committees	Retain; still relevant.
H-350.963	Minority Physician Recruitment	Sunset; superseded by <a href="#">H-350.969</a> , Medical Education for Members in Underserved Minority Populations.
H-365.995	Competence in Occupational Medicine of Hospital-Based Physicians Assigned to Occupational Medicine Practice	Sunset; no longer relevant.
H-405.965	Essentials for Approval of Examining Boards in Medical Specialties	Sunset; superseded by D-275.973, Essentials for Approval of Examining Boards in Medical Specialties.
H-405.995	Administration and Supervision of Rehabilitation Units	Retain; still relevant.
H-425.982	Training in the Principles of Population-Based Medicine	Retain; still relevant, with edit as shown, as the AMA is not currently developing such initiatives: “The AMA will continue to monitor and support the progress made by medical and public health organizations in championing disease prevention and health promotion; and will <u>support efforts</u> <del>continue to develop initiatives</del> to bring schools of medicine and public health back into a closer relationship.”
H-435.954	Impact of US Medical Liability Premiums on Clinical Medical Education	Retain; still relevant.
H-440.969	Meeting Public Health Care Needs Through Health Professions Education	Retain; still relevant.
H-460.989	Animals as Experimental Subjects	Retain; still relevant.
H-475.985	Protecting the Integrity of General Surgery as a Specialty	Retain; still relevant.
H-480.988	Allocation of Privileges to Use Health Care Technologies	Retain; still relevant.
HOUSE OF DELEGATES’ DIRECTIVES		
D-255.989	Expeditious Security Clearance and Visa Processing of Physicians	Sunset; superseded by <a href="#">H-255.988</a> , Report of the Ad Hoc Committee on Foreign Medical Graduates and <a href="#">D-255.991</a> , Visa Complications for IMGs in GME.
D-275.973	Essentials for Approval of Examining Boards in Medical Specialties	Retain; still relevant.
D-275.975	Sharing of Medical Disciplinary Data Among	Retain; the International Association of Medical

	Nations	Regulatory Authorities is still active in this area and has several policy statements on data sharing. The FSMB is also a member of this association and acts as its secretariat.
D-295.954	Teaching and Evaluating Professionalism in Medical Schools	Sunset. Directive #1 has already been fulfilled by the LCME, through accreditation standard MS-31-A, which expects medical schools to define the professional attributes that students are required to develop and to assess medical students' attainment of these attributes; and Standard MS-32, which asks schools to define standards of conduct in the teacher-student relationship and to monitor violations of these standards by students, faculty, residents, and others in the learning environment. Directive #2 has also been fulfilled by the LCME: Accreditation standards are reviewed at least every five years, by LCME policy, and schools are reviewed using the standards at least every eight years. Directive #3 is superseded by <a href="#">H-295.961</a> (3), Medicolegal, Political, Ethical and Economic Medical School Course, which reads, in part, "An assessment of professional and ethical behavior, such as exemplified in the AMA Principles of Medical Ethics, should be included in internal evaluations during medical school and residency training, and also in evaluations utilized for licensure and certification." Directive #4 is outside the purview of the AMA. Directive #5 is not needed; these organizations have not attempted to develop a fee-based professionalism examination.
D-295.955	Educating Medical Students about the Pharmaceutical Industry	Sunset; this directive was accomplished through dissemination of this information to the medical education community.
D-295.957	Medical Student and Resident Physician Education about Pharmaceutical Advertising to Health Professionals	Sunset; the CEJA opinions under which this directive was based have been superseded by more recent opinion, and the AMA curriculum that is referenced, "What You Should Know About Gifts to Physicians From Industry," is no longer available.
D-310.972	Protection Against Delayed Residency Program Closure	Sunset; items 1 and 3 are already policy of the Accreditation Council for Graduate Medical Education; items 2 and 4 are being incorporated into <a href="#">H-310.943</a> , Closing of Residency Programs (in this report).
D-310.976	Negative Impact on Surgical and Procedural Education from Revised CMS Interpretive Guidelines for Informed Consent	Sunset; this directive was accomplished by communication from the AMA to the organizations noted.
D-435.979	Impact of US Medical Liability Premiums on Clinical Medical Education	Sunset; superseded by <a href="#">H-435.954</a> , Impact of US Medical Liability Premiums on Clinical Medical Education.

#### HOUSE OF DELEGATES' POLICIES

##### H-045.993, Support of Residencies in Aerospace Medicine

The AMA offers its encouragement and assistance to the Congress, the Executive Office, NASA, the Department of Defense, and the FAA in providing support to residency training programs in aerospace medicine. (Res. 19, I-87; Reaffirmed: CME Rep. 2, A-05)

##### H-180.956, Physician Privileges Application - Timely Review by Managed Care

Our AMA policy is that:(1) final acceptance of residents who otherwise are approved by a health plan should be contingent upon the receipt of a letter from their program director stating that their training has been satisfactorily completed; (2) health plans which require board certification should allow the completing resident to be included in their plan after showing evidence of having completed the required training and of working towards fulfilling the requirements in the time frame established by their respective Board for completion of certification; and (3) Medicare, Medicaid, and managed care organizations should (a) make final physician credentialing determinations within 45 calendar days of receipt of a completed application; (b) grant provisional credentialing pending a final credentialing decision if the credentialing process exceeds 45 calendar days; and (c) retroactively compensate physicians for services rendered from the date of their credentialing. (Res. 708, A-01; Modified Sub. Res. 701, I-01; Reaffirmed: Res. 809, I-02; Reaffirmation A-05)

**H-200.983, Health Manpower**

It is the policy of the AMA to (1) use its influence to convince the Administration and Congress of the continuing need for federal support for the education and training of primary care physicians, including reauthorization of federal programs under Title VII to help meet manpower requirements for primary care physicians; and (2) use its influence to encourage federal funding to promote educational and training opportunities for primary care and increase the field strength of the NHSC in medically underserved urban and rural areas. (Res. 112, I-90; Reaffirmed: BOT Rep. GG, I-92; Reaffirmed: CME Rep. 2, A-03; Modified: CME Rep. 7, A-05)

**H-220.980, Credentialing Procedure**

The AMA encourages the JCAHO to continue to monitor medical staff credentialing procedures to include clearly delineated authority to an elected physician of the medical staff for access, review and judgment over contents, to ensure that the individual medical staff member's credentials file contains only well documented and appropriate data and does not include information that is immaterial, misleading or of questionable value. (BOT Rep. C, I-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed: CLRPD Rep. 1, A-05)

**H-220.989, Physician Credentialing**

The AMA encourages the JCAHO to develop standards that permit hospital medical staffs to establish educational needs as one of the criteria for medical staff privileges in teaching hospitals, to assure an appropriate number and variety of patients for educational purposes. (Sub. Res. 82, I-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

**H-225.960, Voluntary Use of Hospitalists and Required Consent**

It is the policy of our AMA that the use of a hospitalist physician as the physician of record during a hospitalization must be voluntary and the assignment of responsibility to the hospitalist physician must be based on the consent of the patient's personal physician and the patient. (CME Rep. 2, A-99; Reaffirmation I-99; Reaffirmed: Res. 812, A-02; Reaffirmed with change in title: BOT Rep. 15, A-05; Reaffirmed in lieu of Res. 734, A-05)

**H-225.969, Disputes Between Medical Supervisors and Trainees**

The AMA has adopted the following guidelines with regard to disputes between medical supervisors and trainees: (1) Clear policies for handling complaints from medical students, resident physicians, or other staff should be established, as outlined in the recommendations of the AMA's Guidelines for Establishing Sexual Harassment Prevention and Grievance Procedures and Council on Ethical and Judicial Affairs (CEJA) Opinion 9.031; "Reporting Impaired, Incompetent or Unethical Colleagues." Grievance Committees or other mechanisms for handling complaints should provide for participation by peers of the medical student or resident physician complainant. (2) Policies for handling complaints should include adequate provisions for protecting the confidentiality of complainants when possible. Retaliatory or punitive actions against those who raise complaints are unethical and are a legitimate cause for filing a grievance with the appropriate institutional committee. (3) Mechanisms for adjudicating disputes requiring immediate resolution should be in place. Disputes requiring immediate resolution are defined as those involving serious errors in clinical or ethical judgment, or physician impairment, that result in a threat of imminent harm to the patient or to others. Third party mediators of such disputes may include the chief of staff or the involved service, the chief resident, a designated member of the institutional grievance committee, or, in large institutions, an institutional ombudsperson largely outside of the established hospital staff hierarchy. (4) In accordance with item 3, medical students, resident physicians, and other staff should refuse to participate in patient care ordered by their supervisors in those rare cases in which the orders reflect serious errors in clinical or ethical judgment, or physician impairment, that result in a threat of imminent harm to the patient. In these rare cases, the complainant may withdraw from the care ordered by the supervisor, provided that withdrawal does not itself threaten the patient's immediate welfare. In any event, it is essential that the student, resident physician, or staff member communicate his or her concerns to the physician issuing the orders and, if necessary, to the appropriate persons for mediating disputes requiring immediate resolution, as defined in item 3 above. Retaliatory or punitive actions against complainants are unethical and are a legitimate cause for filing a grievance with the appropriate institutional committee. (5) Access to employment and evaluation files should be carefully monitored to remove the possibility of inappropriate alteration or tampering. Resident physicians should be permitted access to their employment files and also the right to copy the contents thereof, within the provisions of applicable federal and state laws. (CEJA Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

**H-230.964, Physician Credentialing and Privileging**

The AMA supports the following general guidelines: I. PREAMBLE The practice of medicine is dynamic and continues to evolve. Additional training may be required to integrate techniques or procedures that are new to the individual physician. The purpose of this document is to provide unifying guidelines for institutions/organizations offering continuing medical education programs and to provide information about training in new procedures for which the physician will request new or expanded privileges. These guidelines are not intended to document competency in a specific procedure. II. INTRODUCTION Continuing advances in the medical sciences and technology have resulted in the development of an array of new technical procedures in patient care, including minimal access surgical procedures. This phenomenon has not only increased the necessity for rapid dissemination of information and instruction regarding the new technologies and procedures but it has triggered a growing number of requests for new or expanded clinical privileges. To ensure safe and effective patient care and to provide assistance to those charged with granting new or expanded clinical privileges, the medical community recognizes the critical need to have appropriate educational standards for training leading to the acquisition of new clinical skills. This training should be accessible, without discrimination, to all physicians in every specialty, who have the appropriate education, training, experience, and

documented competence. Moreover, to maintain proficiency in interventional techniques and to enhance technical expertise, an ongoing commitment to continuing medical education is crucial.

### III. GENERAL GUIDELINES FOR INSTITUTIONS/ORGANIZATIONS

The general guidelines, which have been established by the American Medical Association in collaboration with participating medical specialty societies, should be followed by institutions/organizations sponsoring continuing medical education clinical skills training activities regardless of specialty. The skills training activities must be sponsored by an organization accredited by the ACCME or a state medical society, or be approved for Prescribed Credit by the American Academy of Family Physicians for family physicians. Further, any individual skills training activity must demonstrate that it is in substantial compliance with the general guidelines applicable to all clinical skills training activities and the special guidelines, developed by and applicable to clinical skills training activities within a particular medical specialty for physicians in that specialty. The educational activities that meet these guidelines will be listed in a national registry maintained by the AMA in coordination with the appropriate national medical specialty society. The instruction may take place in either (a) a formal learning activity, i.e., course, or (b) a defined clinical preceptorship. Many times both modalities will be used. Ideally, formal learning and a preceptorship will be followed by observation of the practitioner in his/her own setting. These general guidelines provide practical guidelines to educators in designing clinical skills training activities. They also provide guidance to faculty in evaluating and assessing individual skills acquisition. The process could be useful to credentialing bodies, as one factor in determining whether or not a physician completing a given activity should be granted specific privileges.

#### IIIa. Educational Components.

The provider will have a mission of providing procedural learning activities for physicians. The teaching of skills acquisition may be through 1) specific formal courses, 2) a clinical preceptorship, or both.

##### 1. Formal Courses

###### 1a. Learning objectives.

There must be a stated set of objectives for each educational activity. These should conform to accepted practice as defined by the specialty/ subspecialty societies. The skills objectives to be taught must be defined as tasks, successful completion of which can be objectively assessed.

###### 1b. Site/Operations.

The site of the educational activity must be physically adequate to meet the stated objectives and to provide appropriate facilities for the number of participants enrolled.

###### 1c. Qualifications of faculty.

The director of the educational activity and the faculty must be knowledgeable in educational methodology, have the appropriate qualifications, and necessary clinical and/or laboratory expertise to teach the subject matter of the course. These qualifications must meet institutional and specialty/ subspecialty society specifications. There must be an appropriate ratio of clinical faculty to trainees in order to assure that the course objectives are met and to enable documentation of the learner's achievement of these objectives. The director of the educational activity, under the guidance of the sponsoring organization, has the responsibility for setting objectives, curriculum development, faculty and staff appointment, and development of evaluation criteria. The director of the educational activity must disclose directly to the trainees, in advance, any relationships with industry.

###### 1d. Qualifications of trainees.

The trainees must have background knowledge, basic skills, and clinical experience relevant to the tasks to be learned. The trainees may be required to provide documentation of the above. If appropriate, the trainees may be pre-tested to demonstrate eligibility.

###### 1e. Curriculum.

There must be a written curriculum which should include a list of skills to be acquired, definitions of skill levels and a defined method of progressing from one skill level to the next. Supplemental resource materials (e.g., a bibliography, reprints, videos) must be included or referenced in a syllabus given to all trainees. An educational activity must contain didactic instruction, supported by published or peer-reviewed data in the following areas as they apply to the stated objectives: \*R = required information \*\*D = desired information

- Patient selection (R)
- Indications and contraindications (R)
- Historical considerations (D)
- Instrumentation (R)
- Techniques/adjunctive techniques (R)
- Cost considerations/cost effectiveness (R)
- Content validity (R)
- Management of complications (R)
- Documentation methodology (R)
- Pre- and post-procedure care (R)
- Follow-up policies (R)
- Analysis of outcomes (R)
- Current research (D)

Appropriate components of a skills laboratory may include, but are not limited to:

- Reading material and syllabi
- Didactic sessions
- Inanimate model practice
- Animate laboratory instruction and practice
- Equipment familiarity
- Video, CD ROM, and audio tape instruction/practice
- Procedure observation
- Simulator/virtual reality models
- Interactive computer programs
- Self-assessment exercises

###### 1f. Duration of training.

The length of the formal educational activity or course should be proportionate to the complexity of the skills to be learned, in order for the trainee to demonstrate the achievement of the defined objectives, and to provide familiarity with the patients and diseases requiring evaluation.

###### 1g. Documentation.

The director of the educational activity must provide each trainee with a written summary verifying his/her successful achievement of the defined objectives and specifying the method of measuring that achievement (e.g., passing a post-test). This information may be provided, upon written request, to a credentials committee of a health care organization.

##### 2. Preceptorship in a Clinical Setting

###### 2a. Learning objectives.

The clinical preceptorship must have stated objectives. The objectives must include a program outline and a proposed list of tasks and skills to be addressed during the training period.

###### 2b. Site/Operations.

The preceptorship site must have a sufficient patient population and facilities to adequately educate the trainee. The preceptorship must be sponsored by an accredited health care organization or a recognized national medical society with a CME accreditation program.

###### 2c. Qualifications of preceptor.

The physician preceptor must be appropriately privileged and have documentable clinical experience in the procedure(s) and/or technique(s) in the particular, field of expertise. The preceptor has the responsibility of setting objectives, developing curriculum, overseeing instruction and practice of skills, demonstrating technique and clinical procedures, and evaluating the trainee under the overall responsibility of the sponsoring organization. The preceptor must disclose directly to the preceptee, in advance, any relationship with industry. The preceptor must have primary responsibility for the care of the patient and is obliged to supervise not only procedures in which the trainee participated but also the appropriate peri-procedure care. There must be written evidence of informed consent by the patient, which allows a trainee to be involved in his/her care. As an alternative, evidence of institutional review board research approval must be on file which conforms with the institution's policies and protocols dealing with human research involving patient procedures.

###### 2d. Qualifications of trainee/preceptee.

The trainee must have background knowledge, basic skills, and clinical experience relevant to the tasks to be learned. The trainees may be required to provide documentation of the above. In addition, the trainee must have a current and valid license to practice medicine, or meet local requirements for waiver of licensure. The trainee should be able to provide evidence of current liability coverage, hold current



clinical privileges in an accredited health care institution, and should have completed an accredited residency training program. Alternatively, the trainee could provide verifiable evidence of equivalent training and/or board certification. 2e. Curriculum. Preceptorship training must be rigorous and based on clinical experiences. Training should include didactic and technical components and may be supplemented with teaching tools at the preceptor's discretion. Most importantly, a preceptorship should include an appropriate number of opportunities for the trainee to both assist and serve as primary operator in the designated procedure and/or technique. 2f. Duration of preceptorship. Training should be proportionate to the complexity of the skills to be taught in order for the preceptee to demonstrate the achievement of the defined objectives, as well as to provide familiarity with the patients and diseases requiring evaluation. 2g. Documentation. The preceptor must document in writing both qualitative and quantitative descriptions of the trainee's experiences. This should include the skills acquired and the number of procedures in which the trainee assisted or served as primary operator. Documentation stating that the procedures were satisfactorily performed must be provided to the preceptee. This information may be provided, upon written request, to a credentials committee of a health care organization. A log of activities kept by the trainee and reviewed by the preceptor and/or credentialing body could assist in the privileging process- Sponsoring institutions must maintain permanent records of preceptees in order to make these available to appropriate authority bodies on request- A certificate of appropriate continuing medical education credit may be provided by the sponsoring organization, if appropriate. 2h. Indemnity. It is the dual responsibility of the preceptor and the trainee to secure appropriate authorization from the host institution and, if necessary, to secure appropriate indemnity coverage. IIIb. Quality Assurance. Health care institutions awarding new or expanded privileges to physicians on the basis of such newly acquired skills must establish a program providing on-going review of the physician's performance, as part of their overall quality assurance program. IIIc. Overall Program Assessment. Every provider of the above described educational activities must regularly evaluate the degree to which its goals are being met as well as evaluate its overall outcomes and be prepared to report these to the appropriate organizations (e.g., AMA, medical specialty societies, and the ACCME). Such evaluations should be systematically documented to ensure that the educational activity is preparing qualified practitioners (e.g., number of procedures performed by each preceptee in the year following the preceptorship, percent complications, etc.). The assessment process must include evaluation of courses and faculty by trainees. IV. SPECIFIC GUIDELINES (to be developed, in collaboration with specialty/subspecialty societies) (CME Rep. 7, I-95; Reaffirmed and Modified: CME Rep. 2, A-05)

#### H-230.972, Physician Credentialing and Privileging

The AMA: (1) reaffirms the position that clinical procedures be performed only by physicians with appropriate education, training, experience and demonstrated current competence; (2) supports the position that physicians be assessed on the basis of their education, training, experience and documented competence; (3) in coordination with national medical specialty societies, will pursue the development and application of appropriate guidelines for continuing medical education that is directed toward procedural competence; (4) in collaboration with national medical specialty societies, will organize a national conference to delineate principles for credentialing physicians to perform specific clinical procedures; and (5) in coordination with national medical specialty societies, will develop a process to evaluate educational programs that educate physicians to perform new procedures or procedures which are new for that physician. (CME Rep. 8, I-93; Reaffirmation A-05; Reaffirmed: CLRPD Rep. 1, A-05)

#### H-255.989, A Program for Exchange Visitor Physicians

(1) It is the AMA's policy to separate the issues involved in the support of alien physicians participating in exchange visitor physician programs for purposes of education, training and/or research followed by return to their native lands from the issues involving US citizens who are graduates of foreign medical schools and alien physician graduates of foreign medical schools who seek permanent residence in the United States. (2) The AMA urges government and private funding of the physician exchange visitor program under the auspices of an appropriate organization that will: consider the range and type of medical education and health care needs of those foreign nations sending exchange visitor physicians; the means to evaluate the level of knowledge and needs of prospective participants in graduate medical education programs; and identify truly outstanding public health, geographic medicine, basic medical science, and clinical training programs to answer the needs of the visitor's native land. (Res. 107, I-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-255.991, Education for Foreign Physicians

After reviewing the past and present status of medical education for physicians of other countries, the AMA adopts the following statement: (1) Medical education in the US, consistent with available resources, should recognize and respond to the unique needs of foreign physicians and the environment in which they practice. (2) A first priority for the improvement of medical education in all countries should be directed toward the development of opportunities for medical education at all levels, undergraduate, graduate, remedial, and continuing, within the system of medical education existing in the individual foreign nation or region. (3) US physicians, when resources are available, should be encouraged to contribute to medical education conducted in other countries at the undergraduate, graduate, remedial and continuing levels. (4) The accredited residency program directed toward practice within the US is an educational modality which should be limited to foreign physicians who can be expected to apply what they have learned in the US to the education or practice needs of their own country. (5) Recognition should be afforded graduate programs, tailored to the individual needs of the foreign physicians not involving significant responsibility for the care of patients, and thus obviating the need for foreign physicians, otherwise qualified, to pass the Visa Qualifying Examination. (6) Opportunities for exchange visitor programs of all types pertaining to the improvement of medical education should be compiled and made available to both foreign physicians and US physicians who may have an interest in participating in such programs. (7) Since continuing medical education is of universal importance, efforts to make

educational materials available on an even wider basis, such as the foreign language editions of JAMA, deserve commendation. (CME Rep. C, I-85; Modified by CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-295.877, Medical Treatment of Prisoners of War and Detainees

Our AMA encourages medical schools to include ethics training on the issue of medical treatment of prisoners of war and detainees. (Sub. Res. 10, A-05)

#### H-295.879, Improving Sexual History Curriculum in the Medical School

Our AMA (1) encourages all medical schools to train medical students to be able to take a thorough and nonjudgmental sexual history in a manner that is sensitive to the personal attitudes and behaviors of patients in order to decrease anxiety and personal difficulty with sexual aspects of health care; and (2) supports the creation of a national public service announcement that encourages patients to discuss concerns related to sexual health with their physician and reinforces its commitment to helping patients maintain sexual health and well-being. (Res. 314, A-05)

#### H-295.907, Managed Care and Graduate Medical Education

The American Medical Association will encourage AMA representatives to Residency Review Committees and to the Accreditation Council for Graduate Medical Education to request that these bodies review the impact of the changing health care environment on the feasibility of meeting accreditation standards related to patient volume, number of procedures to be performed, residency program size, and the requirement for the presence of residency programs in other disciplines. (CME Rep. 7, A-97; Modified: CME Rep. 7, A-05)

#### H-295.918, Strengthening Education in Geriatrics

The AMA supports education in geriatric medicine, with defined curriculum content, goals, and objectives; and encourages enhanced training in residency programs for patient care of the elderly and that the leadership of specialty societies and continuing medical education centers encourage joint educational activities in geriatrics-related topics. (Res. 306, A-95; Reaffirmed: CME Rep. 2, A-05)

#### H-295.920, Academic Freedom

The AMA supports the opportunity for residents to learn procedures for termination of pregnancy and opposes efforts by other persons or organizations to interfere with or restrict the availability of this training. (Res. 301, A-95; Reaffirmed: CME Rep. 2, A-05)

#### H-295.923, Medical Training and Termination of Pregnancy

The AMA supports the education of medical students, residents and young physicians about the need for physicians who provide termination of pregnancy services, the medical and public health importance of access to safe termination of pregnancy, and the medical, ethical, legal and psychological principles associated with termination of pregnancy, although observation of, attendance at, or any direct or indirect participation in an abortion should not be required. (Res. 315, I-94; Reaffirmed: CME Rep. 2, A-04; Modified: CME Rep. 2, A-14)

#### H-295.926, Support for Development of Continuing Education Programs for Primary Care Physicians in Non-Academic Settings

The AMA: (1) supports development, where appropriate, of programs of education for medical students and faculty in non-academic settings, making use of telecommunications; (2) encourages that medical schools provide faculty development programs that are designated for AMA PRA Category 1 credit; and (3) encourages that teaching continue to be accepted for AMA PRA Category 2 credit. (CME Rep. 3, A-94; Reaffirmed: CME Rep. 2, A-05)

#### H-295.980, Clinical Training in STD for Medical Students/Physicians in Training

The AMA urges medical schools to provide supervised training in sexually transmitted diseases for all medical students and physicians in training. (Sub. Res. 88, A-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-300.959, Physician Participation in the AMA Physician's Recognition Award

It is policy that: (1) the AMA, state medical societies, and specialty societies in the AMA House of Delegates publicize and promote physician participation in the AMA Physician's Recognition Award; and (2) that all physicians participate in the AMA Physician's Recognition Award as a visible demonstration of their commitment to continuing medical education. (CME Rep. 1, I-93; Reaffirmed with change in title: CME Rep. 2, A-05)

#### H-300.969, Uniform Standards for Continuing Medical Education

The AMA (1) will continue its efforts to develop uniform standards for continuing medical education; and (2) will solicit input from all state medical associations, medical licensure boards, and national specialty organizations concerning the development of the most appropriate uniform standards for continuing medical education. (Res. 313, A-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed in lieu of Res. 901, I-05)

H-300.984, Abuses of the Continuing Medical Education System

The AMA urges accredited providers of continuing medical education to accept the responsibility for careful compliance with the “ACCME’s Essential Areas and Elements” in order to prevent abuses of the continuing medical education system. (CME Rep. C, A-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed and Modified: CME Rep. 2, A-05)

H-305.930, Residents’ Salaries

Our AMA supports appropriate increases in resident salaries. (Res. 307, A-05)

H-305.942, The Ecology of Medical Education: The Infrastructure for Clinical Education

The AMA recommends the following to ensure that access to appropriate clinical facilities and faculty to carry out clinical education is maintained: (1) That each medical school and residency program identify the specific resources needed to support the clinical education of trainees, and should develop an explicit plan to obtain and maintain these resources. This planning should include identification of the types of clinical facilities and the number and specialty distribution of full-time and volunteer clinical faculty members needed. (2) That affiliated health care institutions and volunteer faculty members be included in medical school and residency program resource planning for clinical education when appropriate. (3) That medical school planning for clinical network development include consideration of the impact on the education program for medical students and resident physicians. (4) That accrediting bodies for undergraduate and graduate medical education be encouraged to adopt accreditation standards that require notification of changes in clinical affiliations, in order to ensure that changes in the affiliation status of hospitals or other clinical sites do not adversely affect the education of medical students and resident physicians. (CME Rep. 13, A-97; Modified: CME Rep. 2, I-05)

H-305.948, Direct Loan Consolidation Program

The AMA supports the Individual Education Account/Direct Loan Consolidation Program. (Res. 312, I-95; Reaffirmed: CME Rep. 2, A-05)

H-305.971, Discrimination Against Resident Candidates Based on Graduate Medical Education Medicare Funding

The AMA urges hospitals and residency programs to use qualifications as a basis for filling available positions, and not the status of the Medicare component to graduate medical education funding. (Res. 126, I-88; Modified: Sunset Report, I-98; Modified: CME Rep. 7, A-05)

H-305.990, AMA Foundation Scholars Fund

The AMA urges that all student recipients of monies from the AMA Foundation Scholars Fund be made aware of the source of these funds, and that medical school financial aid offices and medical students be informed of the existence and activities of the AMA and the Medical Student Section. (Res. 134, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed and Modified with change in title: CME Rep. 2, A-05)

H-305.991, Repayment of Educational Loans

The AMA (1) believes that it is improper for any physician not to repay his or her educational loans; (2) urges increased efforts to collect overdue debts from the present medical student loan programs in a manner that would not interfere with the provision of future loan funds to medical students; and (3) encourages medical school financial aid officers to counsel individual medical student borrowers on the status of their indebtedness and payment schedules prior to their graduation. (Sub. Res. 47, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

H-310.924, Fellowship Application Reform

Our AMA supports the concept of a standardized application and selection process for fellowship training positions. (CME Rep. 6, A-05)

H-310.943, Closing of Residency Programs

The AMA: (1) encourages the Accreditation Council for Graduate Medical Education (ACGME) to address the problem of non-educational closing or downsizing of residency training programs; (2) encourages the ACGME to develop guidelines for the institution to follow in such closings or reductions that provide for adequate notification and out-placement service (such as resource contacts, transfer assistance, and financial assistance); (3) reminds all institutions involved in educating residents of their contractual responsibilities to the resident; (4) encourages the ACGME and the various Residency Review Committees to reexamine requirements for “years of continuous training” to determine the need for implementing waivers to accommodate residents affected by non-educational closure or downsizing; (5) urges residency programs and teaching hospitals be monitored by the applicable Residency Review Committees to ensure that decreases in resident numbers do not place undue stress on remaining residents by affecting work hours or working conditions, as specified in Residency Review Committee requirements; (6) urges institutions that initiate significant reductions in graduate medical education programs (in excess of 20 percent of the trainee complement or in excess of 10 percent of trainees for a given year), or that voluntarily close programs, be requested prior to or at the time of the reduction to file a concise summary of its educational impact with the Accreditation Council for Graduate Medical Education or the relevant Residency Review Committees; and (7) opposes the closure of residency/fellowship programs

or reductions in the number of current positions in programs as a result of changes in GME funding. (Sub. Res. 328, A-94; Appended by CME Rep. 11, A-98; Reaffirmed: CME Rep. 7, A-06; Appended: Res. 926, I-12)

#### H-310.988, Adequate Resident Compensation

The AMA believes that housestaff should receive adequate compensation by their training programs. (Sub. Res. 124, A-85; Reaffirmed by CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-310.991, Assistance in Completion of Residency Programs

The AMA supports efforts to assist residents in finding new positions, in the event of reductions in the number of residency positions. (Sub. Res. 106, I-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

#### H-310.993, Resident Participation on Hospital Committees

The AMA encourages hospitals with graduate medical education programs to include residents on hospital executive, fiscal and other committees. (Sub. Res. 37, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed and Modified: CME Rep. 2, A-05)

#### H-310.994, Curriculum Orientation of Medical Staff Membership in Teaching Programs

The AMA believes that teaching programs in hospitals with residencies throughout the US should incorporate information on the privileges and responsibilities of medical staff membership into their education program's orientation materials. (Res. 142, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

#### H-310.995, Anonymity for Resident Inquiries to Residency Review Committees

The AMA supports a detailed procedure to guarantee anonymity of a resident physician who initiates an inquiry by a residency review committee into the conduct of a residency program, to protect residents from reprisals and program directors from unfounded complaints. The procedure includes a mechanism for the resident who elects to forward a complaint to the residency review committee (RRC), outlines options for RRC action; and identifies possible final actions open to the RRC. (CME Rep. C, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

#### H-350.963, Minority Physician Recruitment

Our AMA (1) supports national efforts to improve the health services to underserved minority communities; and (2) encourages recruitment of qualified underrepresented minorities to the profession of medicine. (Res. 320, A-05)

#### H-365.995, Competence in Occupational Medicine of Hospital-Based Physicians Assigned to Occupational Medicine Practice

The AMA recognizes the broad fields encompassed in the practice of occupational medicine and commends those who seek formal training in this specialized field. (Sub. Res. 106, A-83; Reaffirmed: CLRPD Rep. 1, I-93; Reaffirmed: CME Rep. 2, A-05)

#### H-405.965 Essentials for Approval of Examining Boards in Medical Specialties

The AMA endorses the eleventh revision of the Essentials for the Approval of Examining Boards in Medical Specialties (as presented in CME Report 5, A-00). (CME Rep. 5, A-00; Reaffirmed: CME Rep. 2, A-10)

#### H-405.995, Administration and Supervision of Rehabilitation Units

The AMA believes that (1) third party coverage for the administration and supervision of patient rehabilitation in the office, hospital, and free-standing units should continue to be determined by physician competence based on training and experience, and should not be denied on the basis of specialty certification; and (2) the determination of criteria for qualification in the administration and supervision of rehabilitation units should be based on competence gained by training and experience, and should not be arbitrarily restricted by specialty designation. (Res. 44, I-85; Reaffirmed CLRPD Rep. 2, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-425.982, Training in the Principles of Population-Based Medicine

The AMA will continue to monitor and support the progress made by medical and public health organizations in championing disease prevention and health promotion; and will continue to develop initiatives to bring schools of medicine and public health back into a closer relationship. (CME Rep. 5, I-95; Reaffirmed: CME Rep. 2, A-05)

#### H-435.954, Impact of US Medical Liability Premiums on Clinical Medical Education

Our AMA opposes increases in medical liability insurance premiums based solely on preceptor or volunteer faculty status. (CME Rep. 2, I-05)

#### H-440.969, Meeting Public Health Care Needs Through Health Professions Education

(1) Faculties of programs of health professions education should be responsive to the expectations of the public in regard to the practice of health professions. Faculties should consider the variety of practice circumstances in which new professionals will practice. Faculties should add curriculum segments to ensure that graduates are cognizant of the services that various health care professionals and alternative delivery systems provide. Because of the dominant role of public bodies in setting the standards for practice, courses on health policy are appropriate for health professions education. Additionally, governing boards of programs of education for the health professions, as well as the boards of the institutions in which these programs are frequently located, should ensure that programs respond to changing societal needs. Health professions educators should be involved in the

education of the public regarding health matters. Programs of health professions education should continue to provide care to patients regardless of the patient's ability to pay and they should continue to cooperate in programs designed to provide health practitioners in medically underserved areas. (2) Faculty and administrators of health professions education programs should participate in efforts to establish public policy in regard to health professions education. Educators from the health professions should collaborate with health providers and practitioners in efforts to guide the development of public policy on health care and health professions education. (BOT Rep. NN, A-87; Reaffirmed: CSA Rep. 8, A-05)

#### H-460.989, Animals as Experimental Subjects

The AMA encourages medical school faculty who use animals in the education of students to continue instruction of students on the appropriate use and treatment of animals. (Res. 93, I-83; Reaffirmed: CME Rep. 2, A-05)

#### H-475.985, Protecting the Integrity of General Surgery as a Specialty

AMA policy is that general surgery is a single specialty, distinct from other surgical specialties and that general surgery should be recognized as such by state regulatory agencies. (Res. 317, A-05)

#### H-480.988, Allocation of Privileges to Use Health Care Technologies

The AMA (1) affirms the need for the Association and specialty societies to enhance their leadership role in providing guidance on the training, experience and knowledge necessary for the application of specific health care technologies; (2) urges physicians to continue to ensure that, for every patient, technologies will be utilized in the safest and most effective manner by health care professionals; and (3) asserts that licensure of physicians by states must be based on scientific and clinical criteria. (BOT Rep. F, I-88; Reaffirmed: CME Rep. 8, I-93; Reaffirmed: CME Rep. 2, A-05)

### HOUSE OF DELEGATES' DIRECTIVES

#### D-255.989, Expeditious Security Clearance and Visa Processing of Physicians

Our AMA will: (1) lobby the relevant federal agencies to process J-1 and B-1 visa applications and security clearances more expeditiously for IMGs already accepted into residency programs than those in the general pool of visa applicants; (2) lobby the relevant federal agencies to issue J-1 visas to IMGs for the entire duration of their residency program up to a maximum of 7 years; and (3) urge federal agencies and residency programs not to discriminate against any IMGs, particularly those from Pakistan. (Res. 236, A-05)

#### D-275.973, Essentials for Approval of Examining Boards in Medical Specialties

Our AMA approves the twelfth revision of the Essentials for the Approval of Examining Boards in Medical Specialties. (CME Rep. 1, I-05)

#### D-275.975, Sharing of Medical Disciplinary Data Among Nations

Our AMA will, in conjunction with the Federation of State Medical Boards, support the efforts of the International Association of Medical Regulatory Authorities in its current efforts toward the exchange of information among medical regulatory authorities worldwide. (Res. 318, A-05)

#### D-295.954, Teaching and Evaluating Professionalism in Medical Schools

Our AMA will: (1) strongly urge the Liaison Committee on Medical Education (LCME) to promptly create and enforce uniform accreditation standards that require all LCME-accredited medical schools to evaluate professional behavior regularly as part of medical education; (2) strongly urge the LCME to develop standards for professional behavior with outcome assessments at least every eight years, examining teaching and evaluation of the competencies at LCME-accredited medical schools; (3) recognize that evaluation of professionalism is best performed by medical schools and should not be used in evaluation for licensure of graduates of LCME accredited medical schools; (4) continue its efforts to teach and evaluate professionalism during medical education; and (5) actively oppose, by all available means, any attempt by the National Board of Medical Examiners and/or the Federation of State Medical Boards to add separate, fee-based examinations of behaviors of professionalism to the United States Medical Licensing Examinations. (Res. 304, A-05)

#### D-295.955, Educating Medical Students about the Pharmaceutical Industry

Our AMA will strongly encourage medical schools to include: (1) unbiased curricula concerning the impact of direct-to-consumer marketing practices employed by the pharmaceutical industry as they relate to the physician-patient relationship; and (2) unbiased information in their curricula concerning the pharmaceutical industry regarding (a) the cost of research and development for new medications, (b) the cost of promoting and advertising new medications, (c) the proportion of (a) and (b) in comparison to their overall expenditures, and (d) the basic principles in the decision making process involved in prescribing medications, specifically using evidence based medicine to compare outcomes and cost effectiveness of generic versus proprietary medications of the same class. (Res. 303, A-05)

#### D-295.957, Medical Student and Resident Physician Education about Pharmaceutical Advertising to Health Professionals

Our AMA will encourage all medical schools and residency programs to educate their students and resident physicians on the possible effects of pharmaceutical advertising and interaction with health professionals and on alternative unbiased sources of

information about pharmaceutical products through the AMA curriculum, “What You Should Know About Gifts to Physicians From Industry.” (Res. 302, A-04; Reaffirmed: Res. 303, A-05)

D-310.972, Protection Against Delayed Residency Program Closure

Our AMA will: (1) Work closely with the Accreditation Council for Graduate Medical Education to contribute to, review and comment on any new ACGME policies related to residency closures, regardless of cause. (2) Work with the American Board of Medical Specialties to encourage all its member certifying boards to develop a mechanism to accommodate the discontinuities in training which arise from residency closures, regardless of cause, including waiving continuity care requirements and granting residents credit for partial years of training. (3) Work with the ACGME to monitor closing programs, including encouraging programs to immediately notify residents of pending closures and to promptly transfer residents to alternate accredited programs as soon as feasible with the least disruption to training; and strongly encourage programs which accept transferred residents to minimize extensions to total training time. (4) Work with the Centers for Medicare and Medicaid Services (CMS), ACGME, and other appropriate organizations to advocate for the development and implementation of effective policies to permit graduate medical education funding to follow the resident physician from a closing to the receiving residency program (including waivers of CMS caps), in the event of temporary or permanent residency program closure. (CME Rep. 7, A-06; Reaffirmed: CME Rep. 4, A-09; Modified: CCB/CLRPD Rep. 2, A-14)

D-310.976, Negative Impact on Surgical and Procedural Education from Revised CMS Interpretive Guidelines for Informed Consent

Our AMA will: (1) cooperate with other interested parties to strongly express its concerns regarding the potentially negative impact on medical education of Sections 482.24(c)(2)(v) and 482.51(b)(2) of the Centers for Medicare and Medicaid Services (CMS) State Operations Manual based on the May 21, 2004 revisions; (2) cooperate with other interested parties to encourage CMS to immediately revise or further clarify Sections 482.24(c)(2)(v) and 482.51(b)(2) of the CMS State Operations Manual and communicate to CMS our desire to assist in the development of new language which both protects patient autonomy and preserves the appropriate flexibility of attending physicians in the teaching environment; and (3) strongly discourage JCAHO from adopting language in its accreditation standards similar to language in Sections 482.24(c)(2)(v) and 482.51(b)(2) of the CMS State Operations Manual based on the May 21, 2004 revision. (Res. 321, A-05)

D-435.979, Impact of US Medical Liability Premiums on Clinical Medical Education

Our AMA will actively investigate the ongoing impact of the medical liability crisis on the availability of full-time and volunteer clinical faculty for undergraduate and graduate medical education. (CME Rep. 2, I-05)

**2. UPDATE ON MAINTENANCE OF CERTIFICATION AND  
OSTEOPATHIC CONTINUOUS CERTIFICATION  
(RESOLUTION 920-I-14)**

*Reference committee hearing: see report of [Reference Committee C](#).*

**HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS  
IN LIEU OF RESOLUTION 920-I-14 AND  
REMAINDER OF REPORT FILED**

*See Policies H-275.924 and D-275.960*

Substitute Resolution 920-I-14, Principles of Maintenance of Certification, introduced by the Pennsylvania Delegation and referred by the American Medical Association (AMA) House of Delegates (HOD), stated that specialty boards, which develop Maintenance of Certification (MOC) standards, may approve curriculum, but should be independent from entities designing and delivering that curriculum, and should have no financial interest in the process.

Policy D-275.960 (12[b]), An Update on MOC, Osteopathic Continuous Certification (OCC) and Maintenance of Licensure (MOL), asks that our AMA prepare a yearly report regarding the MOC process.

Policy D-275.960 (6), An Update on MOC, OCC, and MOL, called on our AMA to solicit an independent entity to commission and pay for a study to evaluate the impact that MOL and MOC requirements have on physicians' practices, including but not limited to: physician workforce, physicians' practice costs, patient outcomes, patient safety, and patient access. The policy requests that this study look at the examination processes of the American Board of Medical Specialties (ABMS), American Osteopathic Association (AOA), and Federation of State Medical Boards (FSMB), and also that the study be presented to the AMA HOD, for its deliberation and consideration, before any entity, agency, board, or governmental body requires physicians to sit for MOL licensure examinations.

## BACKGROUND

The Council on Medical Education has prepared single reports covering both MOC/OCC and the principles of MOL for the past six years.<sup>1,2,3,4,5,6</sup> However, MOC, OCC and MOL are distinctly different processes, designed by independent organizations with different purposes and mandates. While MOC and OCC describe programs that address continued specialty certification for allopathic and osteopathic physicians, MOL principles, once implemented by each licensing authority (state medical board), will define the process by which physicians are to meet requirements for renewing their medical license. To provide greater clarity and avoid confusion about the relationship between MOC/OCC and MOL, the Council on Medical Education will address these issues separately in its reports, beginning with the 2015 Annual Meeting of the HOD. This report will address Resolution 920-I-14 as well as the mandate of Policy D-275.960 (6) as it relates to MOC/OCC, and also provide an update on the most recent activities on this topic. As shown in Appendix A, the AMA has extensive policy on MOC and OCC.

As part of the effort of the Council on Medical Education to monitor the implementation of MOC and OCC, Council members—along with the Board of Trustees and AMA staff—have participated in numerous meetings, including the ABMS Committee on Continuing Certification, ABMS Forum on Organizational Quality Improvement, Association of American Medical Colleges July 22 Webinar, Aligning Maintenance of Certification (MOC) and Performance-based CME with On-going Quality Improvement, ABMS 2014 Conference, the Specialty Society-Board Summit Engaging in Lifelong Learning, and the 2015 American Board of Anesthesiology MOC Summit.

## MAINTENANCE OF CERTIFICATION (MOC): AN UPDATE

### *Emerging Data and Literature Regarding the Value of MOC*

Physicians generally recognize the need for MOC and support the need for ongoing formative assessment and feedback.<sup>7,8</sup> AMA policy reinforces the need for ongoing learning and practice improvement. However, there have been differences of opinion about the efficacy of MOC implementation in improving physician care and patient outcomes. Some question whether the process is relevant to contemporary clinical practice or meaningful as a measure of physician and health care quality. The ABMS member boards moved to more continuous processes for assessing competence because it became clear that: 1) medicine as well as public and political pressures were evolving rapidly; 2) evidence suggested that the knowledge and skills of many physicians decline over time; and 3) testing physicians every 10 years was not enough to ensure they would keep up to date with advances in medical practice.<sup>7</sup> The MOC program is based on sound theoretical rationale,<sup>9,10</sup> and evidence supports the components of MOC.<sup>10</sup> The ABMS member boards are developing MOC requirements that are supported by evidence-based guidelines, national clinical and quality standards, and specialty best practices.

Because the MOC program has been introduced gradually during the last decade, the evidence that results from longitudinal data collection is just beginning to emerge. Evidence in the literature suggests a correlation between physician board certification/MOC examination performance and performance in practice.

A webinar in December 2014, facilitated by the editors of *JAMA*, covered the findings from two recent research articles that look at the relationship between MOC and measures relevant to patients and physicians. Although the main findings from one small study showed no differences in the process measures between the 71 physicians with time-limited certification from the American Board of Internal Medicine (ABIM) and the 34 physicians with time-unlimited certification,<sup>11</sup> the finding from a larger study showed a two percent cost reduction for a cohort of Medicare beneficiaries associated with time-limited certification.<sup>12</sup> In an overview of both studies, Lee pointed out that, “the 2% reduction in spending is as large or larger than the savings recorded by the Medicare accountable care organizations in their first 2 years.” Thus, it can be concluded that recertification might have actually helped physicians become more efficient.<sup>13</sup>

In response to comments that the evidence supporting MOC is “ambiguous at best,”<sup>14</sup> Weinberger commented that “the important value of the MOC program is to have extra incentives to have the physician reviewing and integrating clinical information and updates that he or she might not necessarily do.”<sup>15</sup> Few MOC critics argue against the need for some structure to help and encourage physicians to stay up to date and improve their actual skills, but MOC has been viewed as an unnecessarily complex process that is misaligned with its purpose.<sup>7</sup> Some have suggested that thoughtful integration of the MOC program into the physician’s busy professional life is needed so the expense and time commitment are reasonable.<sup>13</sup> Continuous study of its evidence will be important in

identifying improvements to the program, especially to be able to keep pace with advances in clinical practice, technology, and assessment.<sup>9</sup>

The ABMS Research and Education Foundation has been engaged in research efforts to support MOC. In 2011, ABMS staff and physician volunteers developed a comprehensive review process and criteria to provide a more complete and balanced perspective about the evidence for dissemination to the profession and the public. In general, studies to be included in the review process had to represent original research and address one or more of the following three areas: 1) board certification; 2) conceptual framework and initial structure of MOC; and 3) current MOC programs. In addition, they had to have a reasonable research design and methodology (e.g., studies with fewer than 20 participants would not qualify). More specific inclusion criteria modeled after the Agency for Healthcare Research & Quality's 2007 study on effectiveness of continuing medical education (CME) were applied to research related to MOC Part II. After reviewing more than 700 research studies, approximately 200 were recognized as addressing the established criteria and were grouped into three categories: 1) the value of board certification; 2) support of the conceptual framework and initial structure of MOC; and 3) validation of current MOC programs. The other 500 studies did not meet the established criteria.<sup>16</sup> A second phase of the project aims to identify research gaps. The intent is to develop research questions to guide subsequent studies of the effectiveness of programs for MOC. The ABMS Evidence Library, which houses the references and annotations of the research compilation, is available at: [evidencelibrary.abms.org/](http://evidencelibrary.abms.org/)

#### *ABMS Multi-specialty MOC Portfolio Approval Program™*

The ABMS Portfolio Program ([mocportfolioprogam.org](http://mocportfolioprogam.org)) provides a streamlined approach for hospitals and health care organizations to support physician involvement in quality improvement (QI) initiatives by allowing physicians from multiple specialties the opportunity to receive credit in their programs for MOC. Because the Portfolio Program allows hospitals and health care organizations to apply Part IV MOC to team-based, multi-specialty projects that physicians are already engaging in at their organizations, it eases the burden on physicians by reducing duplication of QI projects and promotes organizational effectiveness and efficiency through team-based initiatives. Furthermore, there are no additional costs to physicians who participate in the program.

Currently, 21 ABMS member boards are participating in the program. The Portfolio Program has approved 650-plus QI projects, and more than 4,000 physicians have received MOC Part IV credit for participation, with many more in process; 39 health care organizations are active Portfolio Sponsors.

Applicant organizations are considered based on the maturity, strength, and support of their internal QI program, and must be able to ensure that physicians meaningfully participate in QI activities. In addition, they must meet the reporting requirement, as outlined in the Portfolio Program Standards and Guidelines. The AMA submitted a formal application for the ABMS MOC Portfolio Program in January 2015 and expects to be a full member of the program by mid-2015. More information about the application process is available at: [mocactivitymanager.org/](http://mocactivitymanager.org/)

#### *Alternatives to the Secure, High-Stakes Examination for Assessing Knowledge and Cognitive Skills in MOC*

In June 2014, the ABMS and the AMA facilitated an unprecedented meeting that brought subject matter experts in physician assessment together with representatives from the Council on Medical Education, AMA sections, and representatives of nearly all ABMS member boards to further discuss the value of MOC Part III as well as practice-relevant and innovative concepts that could potentially enhance or replace the current thinking around the secure, high-stakes exam requirement of MOC. The meeting was structured around open dialogue, productive discourse, and new ideas and innovations shared by the various boards and educational experts in attendance. The meeting's positive outcomes reflect the promise of continued future collaborative dialogue among all key stakeholders to ensure physician competency and continued high-quality patient care. A MOC Part III White Paper, summarizing the meeting and reflecting on next steps, is currently being drafted.

The ABMS has commissioned an External Assessment Task Force to explore opportunities for innovation in member boards' external assessment practices and methodologies, and to disseminate best practices in the development and implementation of rigorous alternatives to currently constructed MOC examinations. The 19-member task force has completed phase 1 of its charge, which included conducting a comprehensive assessment of the current practices and innovations mapping to the 2015 Standards for the Program for MOC and identifying innovative methodologies being used by member boards to evaluate core competencies. In phases 2 and 3, the



committee will form work groups to examine issues such as what the core purpose of external assessment should be, how to improve relevance to physician practice, and how best to integrate core competencies within external assessments. Other innovations being explored include blueprinting and modularization techniques that facilitate customization of exam content to reflect focused practices; access to materials similar to those used at the point of care; remote testing; reduction of travel expense and inconvenience; and improved performance feedback to guide educational and development plans.

On February 3, 2015, the ABIM announced that the Internal Medicine MOC exam is being updated. The update will focus on making the exam more reflective of what physicians in practice are doing, with any changes to be incorporated beginning in fall 2015, and with more subspecialties to follow. Other initiatives being pilot tested and/or implemented by the ABMS and its member boards are described in Appendix B.

#### *How the ABMS is Assessing the Time/Administrative Burdens Associated with MOC Participation*

The ABMS member boards recognize concerns that physicians have voiced over the cost of MOC. For example, in February 2015, the ABIM announced that MOC enrollment fees will remain at or below the 2014 levels through at least 2017. The MOC participation fee (which includes the cost of CME, time away from the office, etc.) varies depending on which activities are chosen to complete CME to meet MOC requirements.

A 2013 Massachusetts Medical Society task force report reflecting research conducted by expert staff documented that the direct and indirect costs of MOC, as well as redundancy, may pose an additional burden on physicians and impact access to patient care due to time away from physicians' practices. Using examples taken from internal medicine and specialty practice (cardiology) involved in completing requirements for MOC every 10 years, the report showed that the direct costs range from \$3,720 to \$6,521; indirect costs (based on time spent, excluding travel, for live sessions, which is variable) range from \$20,000 to \$46,656; and hours ranged from 200 (20 hours/year) to 216 (22 hours/year).<sup>17</sup>

Information received verbally from the ABMS, however, suggests that across the 24 ABMS member boards, the average annual participation fee is \$300. This fee includes the cost of the secure, high-stakes examination (over 10 years). It should be noted that the participation fee is in line with or, in some cases, significantly less than similar fees paid by other professionals, such as lawyers, pilots, and accountants. For example, the cost for certification by the National Board of Legal Specialty Certification ([nblsc.us](http://nblsc.us)) includes a \$400 application fee and a separate \$400 examination fee. There is an annual fee of \$265 after the application is certified. In addition, attorneys must complete 45 hours of continuing legal education (CLE) during the three years prior to certification; these costs vary depending on which activities are chosen to complete CLE.

In its 2015 Standards for Programs for MOC, the ABMS recognizes that physicians have multiple expenses associated with ongoing learning and assessment, including the recertification exam and CME requirements, and is working with its member boards to identify learning and assessment redundancies among these multiple interests. The Portfolio Program (described above) represents one way in which the member boards are actively working to identify learning redundancies and streamline processes to reduce overall MOC costs. Moving to remote testing and modularization of exams may also have an impact on reducing costs.

#### *ABMS Member Boards' Policies Regarding Multiple Certifications*

In 2015, the ABMS Member Board Program for the MOC review process was launched. This review process will allow the ABMS to collect additional information on boards' policies pertaining to multiple certifications. Notable policies will be shared among the boards to facilitate the adoption of appropriate/best practices. The Council on Medical Education supports the ongoing efforts by the ABMS to streamline MOC for Diplomates with certification by multiple boards. The Portfolio program (described above) represents another way in which member boards are actively working to identify redundancies and streamline processes. In addition, ABMS member boards, such as the American Board of Pediatrics, currently give credit for work completed for other member boards (i.e., American Board of Medical Genetics and Genomics), and work completed on certain topics, such as asthma, will count for multiple boards.

The AMA is also taking steps to assist physicians who hold multiple certifications. In October 2014, the AMA launched a beta version of the STEPS Forward™ (**S**olutions **T**oward **E**ffective **P**ractice**S**) practice transformation

series, a practice-based series that allows physicians to earn CME credit for completing online learning modules. STEPS Forward™ leverages findings from the AMA-RAND study, “Factors affecting physician professional satisfaction and their implications for patient care, health systems and health policy” ([ama-assn.org/ama/pub/about-ama/strategic-focus/enhancing-professional-satisfaction-and-practice-sustainability.page](http://ama-assn.org/ama/pub/about-ama/strategic-focus/enhancing-professional-satisfaction-and-practice-sustainability.page)). The goal is to provide physicians with relevant strategies that can improve practice efficiency and achieve Triple Aim outcomes—better care, better health and lower cost as well as greater professional satisfaction. The AMA Physician Practice Sustainability Program is currently pilot testing STEPS Forward.™ A full launch is planned for June 2015. As part of its application to the ABMS Portfolio Program, the AMA is also developing modules that physicians will be able to utilize for MOC Part IV.

### *MOC Part II: Self-Assessment and Lifelong Learning*

Although educational curricula may be offered by the member boards, most boards depend on the medical societies to develop the educational curricula for MOC. For example, the American College of Physicians develops the Medical Knowledge Self-Assessment Program® (MKSAP®) that is accepted by the ABIM for MOC. Some of the smaller boards, such as the American Board of Medical Genetics and Genomics, had to create their own educational programs out of necessity because the corresponding medical society, the American College of Medical Genetics and Genomics, lacked the resources to develop the programs.

Helping align the goals and work of the medical societies and ABMS member boards was the goal of a meeting convened in October 2014 by the ABMS and the Council of Medical Specialty Societies (CMSS). Representatives from these communities came together to discuss strategies for promoting the development of and access to meaningful and relevant activities to satisfy physician assessment and learning needs. More than 50 boards and societies were represented. The member boards and specialty societies share a commitment to professionalism and QI, and provide resources to support physician professional development, including assessment in a competency framework from the boards, and educational and measurement opportunities for identifying and resolving performance gaps by societies. They are working together to more efficiently and effectively help physicians assess their learning needs and participate in meaningful performance improvement.

Several activities suggested during the October Summit that may be helpful to physician professional development include:

- Developing an inventory of learning activities for all specialties that can be accessed by any physician regardless of specialty. The ABMS is seeking tools in support of the Program for MOC Lifelong Learning and Self-Assessment (Part II) and Improvement in Medical Practice (Part IV). These activities will be reviewed and housed in a common inventory where boards and Diplomates can access them electronically. The inventory will make it easier for physicians to find practice-relevant materials and activities.
- Encouraging the development of society-sponsored registries and the use of registries to satisfy practice assessment expectations of the member boards. Registries are increasingly used as a source of clinically rich data to evaluate practices and track patients longitudinally. In the era of value-based care, registries will become a key path for physicians to understand their own practices and identify areas of practice for education and improvement. As registries are costly to implement, societies and boards should collaborate in their development as well as measures, reporting, and performance feedback as meaningful ways to satisfy the demand for value-based care. (See Appendix B for more information about innovative approaches to the practice audits and the use of registries being piloted and/or implemented by ABMS member boards.)
- Encouraging specialty societies to become sponsors of the ABMS Multi-Specialty Portfolio Approval Program™ (Portfolio Program) to support physicians in their improvement efforts. The Portfolio Program is a single process for boards to approve quality improvement and learning activities that physicians undertake in their institutions or group practices. The Portfolio Program establishes criteria for quality improvement processes and meaningful physician participation. With the help of these criteria, programs provide support to physicians and enable physicians to count their practice-based learning and improvement towards satisfying board requirements. The American Academy of Pediatrics has led the way as a sponsor of improvement collaboratives that satisfy professional assessment requirements. Societies may become Portfolio Program sponsors and pass on to their members the benefit of having improvement and registry activity count for MOC credit.

- Aligning CME and QI activities. The boards can help to create a more coherent certification system that weaves assessment, education, and improvement into a single improvement process. This could be achieved by integrating educational components (Part II activities) into performance and quality improvement activity (Part IV) in order to satisfy multiple areas of the MOC standards.
- Increasing consistency in process, language, and requirements across the ABMS member boards, and increasing alignment for physicians with multiple certificates. Consistency is an important factor in presenting the MOC framework and for societies to collaborate across specialties. Boards are already working towards consistency and alignment.

The ABMS and CMSS plan to continue to promote effective partnerships between boards and societies. Information about the ABMS Call for MOC Activities is available at: [abms.org/news-events/abms-call-for-moc-activities/](http://abms.org/news-events/abms-call-for-moc-activities/). Resources from the Specialty Society Board Summit are available at: [abms.org/news-events/events/specialty-society-board-summit/](http://abms.org/news-events/events/specialty-society-board-summit/).

#### *Other Physician Educational and Quality Improvement Activities that Count for MOC*

The ABMS recently launched two “Calls for MOC Activities,” related to patient safety activities and system-based practice and interpersonal/communication activities, in an effort to provide Diplomates with as broad a set of practice-relevant options for fulfilling the requirements of MOC. The submitted activities will be housed in the ABMS MOC Implementation Center, a centralized Web-based platform, enabling access by both ABMS member boards and their Diplomates. The Center will provide information on the activities approved by each of the boards and CME credit associated with each activity as well as the cost of each activity, although most of the educational programs will be offered free of charge.

The goals of this initiative are to:

- Provide a mechanism for identifying CME and QI activities and resources that reduce the burden and improve relevance for Diplomates fulfilling their MOC requirements;
- Identify MOC activities that may be appropriate for multiple specialties and/or practice settings;
- Simplify the approval process by allowing the member boards to advance the adoption of MOC activities that meet the needs of their Diplomates (ten boards have agreed to a common submission form, which will allow review of activities submitted by the educational community by multiple boards on a common review portal); and
- Facilitate continuous QI and tracking real time approvals, system improvements, and additional feedback mechanisms to educational stakeholders.

To date, five member boards have actively engaged in the MOC Implementation Center, and all 24 member boards have been given access to the Center. In addition to the MOC activities that have been reviewed and approved through the Center, the National Patient Safety Foundation (NPSF) Curriculum has received approvals from 17 member boards and is currently being shared with the remaining member boards through the Center.

MOC activities also satisfy the requirements of other national, state, and private-sector quality improvement and reporting activities. Diplomates from 12 ABMS member boards participated in the MOC: PQRS Program through the MOC Matters Platform, which was closed on January 31, 2015. This final MOC Matters submission deadline allowed time for each of the participating member boards to verify Diplomat participation data for the 2014 reporting program and for the final transmission of Diplomat data to the Centers for Medicare & Medicaid Services (CMS) by March 31, 2015.

Over 1,660 Diplomates across the 12 member boards participated in the MOC: PQRS Program through the MOC Matters Platform in 2014. In addition to the member boards participating through the MOC Matters Platform, four additional member boards have been individually qualified by CMS to submit MOC: PQRS data on behalf of their Diplomates for the 2014 reporting program. It should be noted that 2014 was the final year for the MOC: PQRS payment incentive program.

*MOC Part IV: Practice Performance Assessment*

ABMS Standards do not specify how the member boards should structure the practice improvement component of MOC, due to the differences in clinical context across the specialties. The boards have generally taken four approaches to practice assessment: practice audits, registries, simulation, and organizational quality improvement (see Appendix B).

As noted above, the Portfolio Program has been developed to provide a streamlined approach for hospitals and health care organizations to support physician involvement in quality improvement (QI) initiatives and allows physicians from multiple specialties the opportunity to receive credit in their programs for MOC Part IV. For example, these QI projects focused on such areas as reducing adverse drug events (Nationwide Children's Hospital), ensuring continuous professional development (Mayo School of Continuous Professional Development and Mayo Clinic Quality Review Board), and documenting QI (University of Michigan Health System).

*MOC Requirements Modified for Internal Medicine*

On February 4, 2015, the ABIM issued a formal announcement titled, "We got it wrong. We're sorry." in which it apologized that the organization had "launched programs that weren't ready" and "didn't deliver an MOC program that physicians found meaningful." In addition to the changes already noted above regarding the secure, high-stakes examination and enrollment fees, the ABIM announced that it was suspending the Practice Assessment, Patient Voice, and Patient Safety requirement for at least two years to address concerns about MOC and its relevance to practice as well as better align the requirements of the MOC program with physician learning and practice improvement needs. This means that no internists will have their certification status changed for not having completed activities in these areas for at least the next two years. Furthermore, ABIM Diplomates who are currently not certified but who have satisfied all requirements for MOC, except for the Practice Assessment requirement, will be issued a new certificate this year.

The announcement also stated that the ABIM is changing the language used to publicly report a Diplomate's MOC status on the ABIM website within the next six months, from "meeting MOC requirements" to "participating in MOC." The ABIM also said it would assure new and flexible ways for internists to demonstrate self-assessment of medical knowledge by recognizing most forms of CME by the end of 2015. This change will affect internal medicine's more than 20 subspecialties.

**OSTEOPATHIC CONTINUOUS CERTIFICATION (OCC): AN UPDATE**

Each of the 18 specialty certifying member boards of the American Osteopathic Association's Bureau of Osteopathic Specialists (AOA-BOS) has implemented OCC, effective January 1, 2013. All osteopathic physicians who hold a time-limited certificate are required to participate in the following five components of the OCC process in order to maintain osteopathic board certification:

- **Component 1 - Unrestricted Licensure:** requires that physicians who are board certified by the AOA hold a valid, unrestricted license to practice medicine in one of the 50 states, and adhere to the AOA's Code of Ethics.
- **Component 2 - Life Long Learning/Continuing Medical Education (CME):** requires that all recertifying Diplomates fulfill a minimum of 120 hours of CME credit during each three-year CME cycle (some certifying boards have higher requirements). Of these 120 plus CME credit hours, a minimum of 50 credit hours must be in the specialty area of certification. Self-assessment activities will be designated by each of the 18 specialty certification boards. If an osteopathic physician holds subspecialty certification, a percentage of their specialty credit hours must be in their subspecialty certification area.
- **Component 3 - Cognitive Assessment:** requires provision of one (or more) psychometrically valid and proctored examinations that assess a physician's specialty medical knowledge as well as core competencies in the provision of health care.
- **Component 4 - Practice Performance Assessment and Improvement:** requires that physicians engage in continuous quality improvement through comparison of personal practice performance measured against

national standards for his or her medical specialty. The Standards Review Committee of the AOA-BOS has specific criteria for each Component 4 activity.

- Component 5 - Continuous AOA Membership.

Specific requirements for each specialty are available at [osteopathic.org/inside-aoa/development/aoa-board-certification/occ-requirements/Pages/default.aspx](http://osteopathic.org/inside-aoa/development/aoa-board-certification/occ-requirements/Pages/default.aspx)

Osteopathic physicians who hold non-time-limited (non-expiring) certificates are not required to participate in OCC. However, to maintain their certification, they must continue to meet licensure, membership, and CME requirements (120-150 credits every three-year CME cycle, 30 of which are in AOA CME Category 1A).

The AOA has developed policies for clinically inactive Diplomates as well as for Diplomates whose scope of practice is limited within their area of certification (limited scope physicians). For dually boarded (AOA/ABMS) Diplomates, the Standards Review Committee of the AOA-BOS is developing policies to potentially accept ABMS MOC Part IV activities for the AOA Component 4 requirements; an osteopathic activity will still be required as part of the Component 4 requirements.

The AOA-BOS is discussing the nature and goals of the Component 3 Cognitive Assessment and determining other possible methods for evaluating physicians' knowledge and currency in their respective specialty areas. The AOA-BOS is also discussing the single accreditation system for allopathic and osteopathic residency programs, under the aegis of the Accreditation Council for Graduate Medical Education (ACGME), as it relates to AOA board certification, including possible policy changes that may be necessitated by the new system.

#### AN UPDATE ON STUDY BY AN INDEPENDENT ENTITY ON MOC, OCC AND MOL

Policy D-275.960[6] directs the AMA to solicit an independent entity to commission and pay for a study to evaluate the impact of MOC, MOL and OCC on a number of issues, including health care workforce. Accordingly, in 2014, the AMA contacted the Cecil G. Sheps Center for Health Services Research (at the University of North Carolina at Chapel Hill) to explore the feasibility of such a study. The Sheps Center's Program on Health Workforce Research and Policy is one of four new national Health Workforce Centers focused on addressing the question of what health care workforce is needed to ensure access to high-quality, efficient health care for the US population. The impact of MOC/OCC/MOL on physician workforce was one of the areas the study was to address. The Center is supported through a cooperative agreement with the Health Resources and Services Administration and managed by the Bureau of Health Professions' National Center for Health Workforce Analysis. As such, the Center would be considered an independent entity.

In 2014, the AMA was advised by the Sheps Center that data are currently not available to study the effect of MOC and MOL on the retention of physicians in the workforce. Developing a study to answer the question of whether some physicians choose retirement over maintaining certification would require a fairly complex study design. Given the rapid pace of health system change, a multivariate analysis would be required to isolate the effects that MOC and MOL have relative to other factors that also affect physician retention in the workforce, including meaningful use requirements, electronic health records, accountable care organizations (ACOs), economic conditions, etc. A longitudinal study would be needed that also adjusted for physician age, specialty, certification cohort, gender, and years since graduation. Further, the study would need to adjust for geographic factors, including rural versus urban/suburban practices.

Currently, the Sheps Center is not assisting with or conducting research/studies to evaluate the impact that MOC requirements have on physicians' practices, including, but not limited to physician workforce, physicians' practice costs, patient outcomes, patient safety and patient access. Such studies would require a fairly complex research effort and have prohibitive costs and a lengthy timeframe.

The AMA also contacted the American Academy of Family Physicians (AAFP), which had looked at physician workforce from a different perspective. The study, conducted by the AAFP's Robert Graham Center, investigated the characteristics of differential participation in MOC by family physicians. The study reported that after completing the transition of all family physicians into MOC in 2010, participation appears to be higher than previously, and large numbers of family physicians are participating in MOC and meeting the requirements in a

timely fashion. The study also showed that family physicians who have not participated in MOC tend to be practicing in underserved areas or caring for underserved populations where health care providers and technological resources are generally limited.<sup>18,19,20</sup> This raised questions about the impact of MOC participation related to workforce, physician maldistribution, and the potential of health care disparities.

The Graham Center has not repeated this study. The Graham Center assisted the American Board of Family Medicine with developing a research team to look at issues related to MOC. Information about research in progress is available at: [theabfm.org/research/inprogress.aspx](http://theabfm.org/research/inprogress.aspx)

The authors of a study published in January 2015 examined whether participation in the ABIM MOC program varies according to physician and practice characteristics and MOC status.<sup>9</sup> The study showed that those who do not participate in MOC are more likely to be general internists, are older (between the ages of 65 and 75), and are in solo practice. The study also found that participation in MOC may be higher in the Midwest than in other parts of the country due to the high quality and lower cost of patient care in this region.<sup>9,21</sup>

## RECERTIFICATION IN OTHER COUNTRIES

Other developed countries are incorporating career-long learning and assessment programs into their systems of professional regulation, showing that the emphasis on ongoing professional development is not exclusive to the United States. Examples of countries that have implemented MOC programs include the following.

### *Canada*

Participation in the Royal College of Physicians and Surgeons of Canada MOC Program ([royalcollege.ca/portal/page/portal/rc/members/moc](http://royalcollege.ca/portal/page/portal/rc/members/moc)) is required to maintain membership and fellowship and is one of the recognized pathways approved by provincial medical regulatory authorities in Canada for renewal of medical licensure. The MOC program was developed on the concept of CPD to support learning across the CanMEDS competency framework ([royalcollege.ca/portal/page/portal/rc/canmeds](http://royalcollege.ca/portal/page/portal/rc/canmeds)) and to value learning activities against each dimension of professional practice: clinical, administration, education, and research. The Royal College's CPD program allows specialists to design, implement and document their accomplishment from multiple learning activities in order to build evidence-informed practices. An additional goal is to achieve competency-based residency education, which will define for each specialty a set of measurable milestones that practicing specialists can use to measure their progress from competence at the time of certification to mastery and expertise through their practice experiences.<sup>22</sup>

### *The United Kingdom*

Revalidation is the process by which all physicians are required to demonstrate to the General Medical Council (GMC) in the United Kingdom ([gmc-uk.org/doctors/revalidation.asp](http://gmc-uk.org/doctors/revalidation.asp)) that they are up to date and fit to practice. In general, licensed physicians have to revalidate every five years, through an annual appraisal based on the GMC's core guidance for doctors. The appraisal is conducted by a senior physician, usually within the same organization, but not necessarily in the same specialty. At each appraisal, a portfolio of supporting information is provided by the physician to demonstrate a high standard of practice in relation to four areas set out by the GMC: knowledge, skills, and performance; safety and quality; communication, partnership, and teamwork; and maintaining trust.

### *Australia*

Completion of CME credits is generally required for recertification/maintenance of competence of physicians in Australia. The Royal Australasian College of Physicians ([racp.edu.au/page/educational-and-professional-development/continuing-professional-development](http://racp.edu.au/page/educational-and-professional-development/continuing-professional-development)) has developed recertification criteria that include not only CME credits but also participation in quality improvement initiatives such as audits of practice. Physicians also participate in a unique assessment program in which they are rated by peers, coworkers, and patients on their clinical management and "holistic" and personal skills with patients.

## SUMMARY AND RECOMMENDATIONS

The AMA supports the need for an evidence-based certification process that is evaluated regularly to ensure physicians' needs are being met and activities are relevant to clinical practice. The AMA Council on Medical

Education is committed to monitoring the development of MOC and OCC and will continue to work with the ABMS, the AOA, and the member boards to identify and suggest improvements to the MOC and OCC programs and ensure that MOC and OCC support physicians' ongoing learning and practice improvement as well as assure the public that physicians are providing high-quality patient care in their practice settings (see Appendix B for a summary of ABMS initiatives). The AMA will continue to advocate for the most cost-effective and inclusive process to reduce duplication of work.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 920-I-14, and that the remainder of the report be filed.

1. That our American Medical Association (AMA) advocate that the American Board of Medical Specialties (ABMS) develop fiduciary standards for its member boards that are consistent with AMA Policy D-275.960 (4), An Update on Maintenance of Certification (MOC), Osteopathic Continuous Certification and Maintenance of Licensure, which states that our AMA encourages the ABMS to ensure that all ABMS specialty boards provide full transparency related to the costs of preparing, administering, scoring and reporting MOC and certifying/recertifying examinations and ensure that MOC and certifying/recertifying examinations do not result in significant financial gain to the ABMS specialty boards.
2. That our AMA reaffirm Policy H-275.924 (15), Maintenance of Certification (MOC), which states that actively practicing physicians should be well-represented on specialty boards developing MOC.
3. That our AMA encourage AMA members to be proactive in shaping Maintenance of Certification (MOC) and Osteopathic Continuous Certification by seeking leadership positions on the ABMS member boards, American Osteopathic Association specialty certifying boards and MOC Committees.
4. That our AMA continue to monitor the actions of professional societies regarding recommendations for modification to Maintenance of Certification.
5. That our AMA work with interested parties to ensure that Maintenance of Certification uses more than one pathway to assess accurately the competence of practicing physicians, to monitor for exam relevance and to ensure that MOC does not lead to unintended economic hardship such as hospital de-credentialing of practicing physicians.
6. That our AMA rescind Policy D-275.960 (6) (9), An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure, since that has been accomplished through this report.

#### APPENDIX A - AMA Policies Related to Maintenance of Certification and Osteopathic Continuous Certification

##### H-275.924 Maintenance of Certification

##### AMA Principles on Maintenance of Certification (MOC):

1. Changes in specialty-board certification requirements for MOC programs should be longitudinally stable in structure, although flexible in content.
2. Implementation of changes in MOC must be reasonable and take into consideration the time needed to develop the proper MOC structures as well as to educate physician diplomates about the requirements for participation.
3. Any changes to the MOC process for a given medical specialty board should occur no more frequently than the intervals used by each board for MOC.
4. Any changes in the MOC process should not result in significantly increased cost or burden to physician participants (such as systems that mandate continuous documentation or require annual milestones).
5. MOC requirements should not reduce the capacity of the overall physician workforce. It is important to retain a structure of MOC programs that permit physicians to complete modules with temporal flexibility, compatible with their practice responsibilities.
6. Patient satisfaction programs such as The Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient survey would not be appropriate nor effective survey tools to assess physician competence in many specialties.
7. Careful consideration should be given to the importance of retaining flexibility in pathways for MOC for physicians with careers that combine clinical patient care with significant leadership, administrative, research, and teaching responsibilities.
8. Legal ramifications must be examined, and conflicts resolved, prior to data collection and/or displaying any information collected in the process of MOC. Specifically, careful consideration must be given to the types and format of physician-specific data to be publicly released in conjunction with MOC participation.
9. The AMA affirms the current language regarding continuing medical education (CME): "By 2011, each Member Board will document that diplomates are meeting the CME and Self-Assessment requirements for MOC Part 2. The content of CME and self-assessment programs receiving credit for MOC will be relevant to advances within the diplomate's scope of practice, and free of commercial bias and direct support from pharmaceutical and device industries. Each diplomate will be required to complete CME credits (AMA Physician's Recognition Award (PRA) Category 1, American Academy of Family

Physicians Prescribed, American College of Obstetricians and Gynecologists, and or American Osteopathic Association Category 1A).” 10. MOC is an essential but not sufficient component to promote patient-care safety and quality. Health care is a team effort and changes to MOC should not create an unrealistic expectation that failures in patient safety are primarily failures of individual physicians. 11. MOC should be based on evidence and designed to identify performance gaps and unmet needs, providing direction and guidance for improvement in physician performance and delivery of care. 12. The MOC process should be evaluated periodically to measure physician satisfaction, knowledge uptake and intent to maintain or change practice. 13. MOC should be used as a tool for continuous improvement. 14. The MOC program should not be a mandated requirement for licensure, credentialing, reimbursement, network participation, or employment. 15. Actively practicing physicians should be well-represented on specialty boards developing MOC. 16. MOC activities and measurement should be relevant to clinical practice. 17. The MOC process should not be cost prohibitive or present barriers to patient care. (CME Rep. 16, A-09; Reaffirmed: CME Rep. 11, A-12; Reaffirmed: CME Rep. 10, A-12; Reaffirmed in lieu of Res. 313, A-12; Reaffirmed: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 919, I-13; Appended: Sub. Res. 920, I-14)

#### D-275.960 An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure

1. Our AMA will encourage the American Board of Medical Specialties (ABMS) and the specialty certification boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients as an alternative to high stakes closed book examinations. 2. Our AMA will continue to monitor the evolution of Maintenance of Certification (MOC), Osteopathic Continuous Certification (OCC), and Maintenance of Licensure (MOL), continue its active engagement in discussions regarding their implementation, and report back to the House of Delegates on these issues. 3. Our AMA will (a) work with the ABMS and ABMS specialty boards to continue to examine the evidence supporting the value of specialty board certification and MOC and to determine the continued need for the mandatory high-stakes examination; and (b) work with the ABMS to explore alternatives to the mandatory high-stakes examination. 4. Our AMA encourages the ABMS to ensure that all ABMS specialty boards provide full transparency related to the costs of preparing, administering, scoring, and reporting MOC and certifying/recertifying examinations and ensure that MOC and certifying/recertifying examinations do not result in significant financial gain to the ABMS specialty boards. 5. Our AMA will work with the ABMS to lessen the burden of MOC on physicians with multiple board certifications, in particular to ensure that MOC is specifically relevant to the physician’s current practice. 6. Our AMA will solicit an independent entity to commission and pay for a study to evaluate the impact that MOL and MOC requirements have on physicians’ practices, including but not limited to: physician workforce, physicians’ practice costs, patient outcomes, patient safety and patient access. Such study will look at the examination processes of the ABMS, the American Osteopathic Association, and the Federation of State Medical Boards. Such study is to be presented to the AMA HOD, for deliberation and consideration before any entity, agency, board or governmental body requires physicians to sit for MOL licensure examinations. Progress report is to be presented at Annual 2014; complete report by Annual 2015. 7. Our AMA: (a) supports ongoing ABMS specialty board efforts to allow other physician educational and quality improvement activities to count for MOC; (b) supports specialty board activities in facilitating the use of MOC quality improvement activities to count for other accountability requirements or programs such as pay for quality/performance or PQRS reimbursement; (c) encourages the ABMS specialty boards to enhance the consistency of such programs across all boards; and (d) will work with specialty societies and specialty boards to develop tools and services that facilitate the physician’s ability to meet MOC requirements. 8. Our AMA Council on Medical Education will continue to review published literature and emerging data as part of the Council’s ongoing efforts to critically review MOC, OCC, and MOL issues. 9. Our AMA will continue to explore with independent entities the feasibility of conducting a study to evaluate the impact that MOC requirements and the principles of MOL have on physicians’ practices, including, but not limited to physician workforce, physicians’ practice costs, patient outcomes, patient safety, and patient access. 10. Our AMA will work with the ABMS and the ABMS Member Boards to collect data on why physicians choose to maintain or discontinue their board certification. 11. Our AMA will work with the ABMS and the Federation of State Medical Boards to study whether MOC and the principles of MOL are important factors in a physician’s decision to retire and have a direct impact on the US physician workforce. 12. Our AMA: (a) encourages specialty boards to investigate and/or establish alternative approaches for MOC; (b) will prepare a yearly report regarding the maintenance of certification process; and (c) will work with the ABMS to eliminate practice performance assessment modules, as currently written, from the requirement of MOC. (CME Rep. 10, A-12; Modified: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 610, A-14; Appended: CME Rep. 6, A-14; Appended: Sub. Res. 920, I-14)

#### H-275.920 Impact of Maintenance of Certification, Osteopathic Continuous Certification, Maintenance of Licensure on the Physician Workforce

1. Our AMA encourages the Federation of State Medical Boards to continue to work with state licensing boards to accept physician participation in maintenance of certification (MOC) and osteopathic continuous certification (OCC) as meeting the requirements for MOL and to develop alternatives for physicians who are not certified/recertified, and that MOC or OCC not be the only pathway to MOL for physicians. 2. Our AMA encourages the American Board of Medical Specialties to use data from maintenance of certification to track whether physicians are maintaining certification and share this data with the AMA. (CME Rep. 11, A-12; Reaffirmed in lieu of Res. 313, A-14)

#### H-275.923 Maintenance of Certification / Maintenance of Licensure

Our AMA will: 1. Continue to work with the Federation of State Medical Boards (FSMB) to establish and assess maintenance of licensure (MOL) principles with the AMA to assess the impact of MOC and MOL on the practicing physician and the FSMB to study the impact on licensing boards. 2. Recommend that the American Board of Medical Specialties (ABMS) not introduce additional assessment modalities that have not been validated to show improvement in physician performance and/or patient



safety. 3. Encourage rigorous evaluation of the impact on physicians of future proposed changes to the MOC and MOL processes including cost, staffing, and time. 4. Review all AMA policies regarding medical licensure; determine if each policy should be reaffirmed, expanded, consolidated or is no longer relevant; and in collaboration with other stakeholders, update the policies with the view of developing AMA Principles of Maintenance of Licensure in a report to the HOD at the 2010 Annual Meeting. 5. Urge the National Alliance for Physician Competence (NAPC) to include a broader range of practicing physicians and additional stakeholders to participate in discussions of definitions and assessments of physician competence. 6. Continue to participate in the NAPC forums. 7. Encourage members of our House of Delegates to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups. 8. Continue to support and promote the AMA Physician's Recognition Award (PRA) Credit system as one of the three major CME credit systems that comprise the foundation for post graduate medical education in the US, including the Performance Improvement CME (PICME) format; and continue to develop relationships and agreements that may lead to standards, accepted by all US licensing boards, specialty boards, hospital credentialing bodies, and other entities requiring evidence of physician CME. 9. Collaborate with the American Osteopathic Association and its eighteen specialty boards in implementation of the recommendations in CME Report 16-A-09, Maintenance of Certification / Maintenance of Licensure. 10. Continue to support the AMA Principles of Maintenance of Certification (MOC). 11. Monitor MOL as being led by the Federation of State Medical Boards (FSMB), and work with FSMB and other stakeholders to develop a coherent set of principles for MOL. 12. Our AMA will 1) advocate that if state medical boards move forward with the more intense MOL program, each state medical board be required to accept evidence of successful ongoing participation in the American Board of Medical Specialties Maintenance of Certification and American Osteopathic Association-Bureau of Osteopathic Specialists Osteopathic Continuous Certification to have fulfilled all three components of the MOL if performed, and 2) also advocate to require state medical boards accept programs created by specialty societies as evidence that the physician is participating in continuous lifelong learning and allow physicians choices in what programs they participate to fulfill their MOL criteria. 13. Our AMA opposes any MOL initiative that creates barriers to practice, is administratively unfeasible, is inflexible with regard to how physicians practice (clinically or not), that does not protect physician privacy, and that is used to promote policy initiatives above physician competence. (CME Rep. 16, A-09; Appended: CME Rep. 3, A-10; Reaffirmed: CME Rep. 3, A-10; Appended: Res. 322, A-11; Reaffirmed: CME Rep. 10, A-12; Reaffirmed in lieu of Res. 313, A-12; Reaffirmed: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 919, I-13; Reaffirmed in lieu of Res. 610, A-14; Appended: Res. 319, A-14)

#### D-275.971 American Board of Medical Specialties - Standardization of Maintenance of Certification Requirements

1. Our AMA will work with the American Board of Medical Specialties to streamline Maintenance of Certification (MOC) to reduce the cost, inconvenience, and the disruption of practice due to MOC requirements for all of their member boards, including subspecialty requirements. 2. Our AMA will actively work to enforce existing policies to reduce current costs and effort required for the maintenance of certification and to work to control future charges and expenses. (Sub. Res. 313, A-06; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Appended: Res. 319, A-12; Reaffirmed in lieu of Res. 313, A-12; Reaffirmed in lieu of Res. 919, I-13)

#### D-275.969 Specialty Board Certification and Recertification

1. Our AMA will continue to monitor the progress by the ABMS and its member boards on implementation of Maintenance of Certification (MOC) and encourage ABMS to report its research findings on the issues surrounding certification, recertification and MOC on a periodic basis. 2. An update report will be prepared for the AMA House of Delegates no later than 2010. 3. Our AMA will encourage dialogue between the ABMS and its respective specialty societies to work on development, implementation, and monitoring of MOC that meets the needs of practicing physicians and improves patient care. 4. Our AMA will exercise its full influence to protect physicians from undue burden and expense in the Maintenance of Certification process. (CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Reaffirmed in lieu of Res. 919, I-13)

#### D-300.978 Continuing Medical Education Credit for Maintenance of Certification / Osteopathic Continuous Certification Activities

1. Our AMA will petition both the American Board of Medical Specialties (ABMS) and the American Osteopathic Association (AOA) to strongly encourage each of its specialty boards to offer certified Continuing Medical Education (CME) credit for required Maintenance of Certification (MOC) and Osteopathic Continuous Certification (OCC) activities dealing with practice performance assessment and life long learning. 2. Our AMA encourages all specialty societies to grant certified CME credit for activities that they offer to fulfill requirements of their respective specialty boards' MOC and associated processes. (Res. 329, A-11)

#### H-275.926 Maintaining Medical Specialty Board Certification Standard

1. Our AMA opposes any action, regardless of intent, that appears likely to confuse the public about the unique credentials of board certified physicians in any medical specialty, or take advantage of the prestige of any medical specialty for purposes contrary to the public good and safety. 2. Our AMA will communicate its concerns about the misleading use of the term "board certification" by the National Board of Public Health Examiners and others to the specialty and service societies in the federation, the Association of Schools of Public Health, the American Board of Medical Specialties, the Accreditation Council for Graduate Medical Education, the National Board of Medical Examiners, and the Institute of Medicine. 3. Our AMA will continue to work with other medical organizations to educate the profession and the public about the board certification process. It is AMA policy that when the equivalency of board certification must be determined, accepted standards, such as those adopted by state medical

boards or the Essentials for Approval of Examining Boards in Medical Specialties, be utilized for that determination. (Res. 318, A-07; Reaffirmation A-11)

#### D-275.987 Internal Medicine Board Certification Report - Interim Report

Our AMA shall: (1) support the ACP/ASIM in its efforts to work with the American Board of Internal Medicine (ABIM) to improve the Maintenance of Certification (MOC) program; (2) encourage specialty societies to work with their respective ABMS member board to develop, implement and evaluate the Maintenance of Certification (MOC) program; (3) continue to assist physicians in practice performance improvement; (4) continue to monitor the progress by the American Board of Internal Medicine and the other member boards of the American Board of Medical Specialties (ABMS) on implementing the Maintenance of Certification (MOC) program; (5) encourage the ABMS to include practicing physicians and physicians with time limited board certificates to assist in designing and evaluating the Maintenance of Certification (MOC) process for each of the ABMS member boards; and (6) shall study the ethical implications of the Maintenance of Certification (MOC) program including the patient assessment component vis-à-vis the doctor-patient relationship and the ethical implications of the peer review component vis-à-vis the practice environment. (CMS Rep. 7, A-02; Reaffirmed: CME Rep. 9, A-05; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09)

#### H-275.944 Board Certification and Discrimination

(1) Where board certification is one of the criteria considered for purposes of measuring quality of care, determining eligibility to contract with managed care entities, eligibility to receive hospital staff or other clinical privileges, ascertaining competence to practice medicine, or for other purposes, the AMA oppose discrimination that may occur against physicians involved in the board certification process including those who are in a clinical practice period for the specified minimum period of time that must be completed prior to taking the board certifying examination. (2) Our AMA reaffirms and communicates its policy of opposition to discrimination against member physicians based solely on lack of American Board of Medical Specialties or equivalent American Osteopathic Board certification. (3) Our AMA continues to advocate for nomenclature to better distinguish those physicians who are in the board certification pathway from those who are not. (Sub. Res. 701, I-95; Appended: Res. 314, I-98; Appended: Sub. Res. 301, I-99; Reaffirmed: Sub. Res. 722, A-00; Reaffirmed: CME Rep. 7, A-07)

#### H-405.975 Recertification Exam for the American Board of Medical Specialties

Our AMA actively encourages those specialty boards that issue time limited certificates to include young physicians with such certificates in the decision-making process for any design of plans for recertification. (Res. 303, A-92; Reaffirmed: CME Rep. 7, A-02; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09)

#### H-275.950 Board Certification

Our AMA (1) reaffirms its opposition to the use of board certification as a requirement for licensure or reimbursement; (2) seeks an amendment to the new Medicaid rules that would delete the use of board certification as a requirement for reimbursement and would address the exclusion of internal medicine, emergency medicine, and other specialties; and (3) opposes mandatory MOC as a condition of medical licensure, and encourage physicians to strive constantly to improve their care of patients by the means they find most effective. (Res. 143, A-92; ; Reaffirmed by Res. 108, A-98; Reaffirmation A-00; Reaffirmed: CME Rep. 16, A-09; Appended: CME Rep. 6, A-14)

#### H-405.973 Board Certification

It is the policy of the AMA (1) to continue to work with other medical organizations to educate the profession and the public about the board certification process; and (2) that, when the occasion arises that equivalency of board certification must be determined, the Essentials for Approval of Examining Boards in Medical Specialties be utilized for that determination. (CME Rep. D, A-92; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09)

#### D-275.977 Update on the American Board of Medical Specialties Program on Maintenance of Certification (MOC)

Our AMA will: (1) continue to monitor the progress of Maintenance of Certification (MOC) and its ultimate impact on the practice community; (2) encourage the Physician Consortium for Performance Improvement, the American Board of Medical Specialties (ABMS), and the Council of Medical Specialty Societies to work together toward utilizing Consortium performance measures in Part IV of MOC; (3) encourage the ABMS Maintenance of Certification Task Force to develop and adopt recommendations for re-entry into clinical practice and entry into Step IV of MOC for diplomates not involved in direct patient care; and (4) request that the ABMS restrain from dividing every aspect of their specialist physician practice into numerous added qualification exams and that, whenever possible, alternate methods be sought to ensure adequate qualifications and make the process less onerous for physicians. (CME Rep. 9, A-05; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Appended: Res. 314, A-11)

#### H-275.932 Internal Medicine Board Certification Report--Interim Report

Our AMA opposes the use of recertification or Maintenance of Certification (MOC) as a condition of employment, licensure or reimbursement. (CME Rep. 7, A-02; Reaffirmed: CME Rep. 2, A-12)

#### H-275.919 American Board of Medical Specialties Board Member Enrollment in Maintenance of Certification

Our AMA will recommend to the American Board of Medical Specialties that all physician members of those boards governing the Maintenance of Certification (MOC) process be required to participate in the MOC process. (Res. 310, A-12)

#### D-270.989 Improvements to the Maintenance of Certification Process

By September 15, 2008, our AMA Board of Trustees will write a letter to the American Board of Medical Specialties (ABMS) asking that it work with its 24 member boards to: a. coordinate with each other, the ABMS, specialty societies and the AMA to ensure that the demands of Maintenance of Certification (MOC) are reasonable; b. educate physicians and increase their understanding of the MOC process and its requirements; c. solicit physician input and feedback regarding MOC implementation; d. make transparent all recertification-related costs; e. work to minimize the disruption of physician practice due to MOC requirements; and f. ensure that the number of MOC-related testing dates and the locations of testing sites are ample enough to minimize the burden on physician practices and their time away from clinical care. (Res. 323, A-08; Reaffirmed: CME Rep. 16, A-09; Reaffirmed in lieu of Res. 313, A-12)

#### H-405.970 Specialty Board Certification Fee Requirements

The AMA strongly encourages member boards of the American Board of Medical Specialties to adopt measures aimed at mitigating the financial burden on residents related to specialty board fees and fee procedures, including shorter preregistration periods, lower fees and easier payment terms. (Res. 303, A-93; Reaffirmed: CME Rep. 2, A-03; Reaffirmed: CME Rep. 16, A-09)

#### H-405.974 Specialty Recertification Examinations

Our AMA (1) encourages the American Board of Medical Specialties and its member boards to continue efforts to improve the validity and reliability of procedures for the evaluation of candidates for certification; (2) believes that the holder of a certificate without time limits should not be required to seek recertification; and (3) believes that no qualifiers or restrictions should be placed on lifetime certifications recognized by the American Board of Medical Specialties. (CME Rep. E, A-92; Reaffirmed: CME Rep. 7, A-02; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Reaffirmed: CME Rep. 10, A-12; Reaffirmed in lieu of Res. 313, A-12; Appended: Res. 314, A-14)

#### D-275.999 Board Certification and Discrimination

Our AMA will collect information from members discriminated against solely because of lack of American Board of Medical Specialties or equivalent American Osteopathic Board certification. (Res. 314, I-98; Reaffirmed: CME Report 2, A-08)

#### H-275.933 Specialty Board Recertification Requirements for Employment

Our AMA opposes specialty board recertification as a sole condition of employment. (Res. 303, I-01; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09)

#### H-405.972 Recertification Alternatives

Our AMA continues to support the development and validation of alternatives to recertification by standardized testing. (Res. 317, I-92; Reaffirmed: Res. 306, I-97; Reaffirmed: CME Rep. 7, A-02; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09)

APPENDIX B - Letter from ABMS to Council on Medical Education



American Board of Medical Specialties  
 353 North Clark Street, Suite 1400  
 Chicago, IL 60654  
 T: (312) 436-2600  
 F: (312) 436-2700

[www.abms.org](http://www.abms.org)

April 1, 2015

William A. McDade, MD, PhD  
 Chair, Council on Medical Education  
 American Medical Association  
 330 N. Wabash Avenue  
 Chicago, IL 60611

Dear Dr. McDade:

Thank you for the recent opportunity to speak to the American Medical Association (AMA) Council on Medical Education about Maintenance of Certification (MOC) and efforts on the part of the American Board of Medical Specialties (ABMS) and its 24 Member Boards to respond to the issues that have been raised by members of the AMA. You suggested that an update on activities by ABMS and the Member Boards since the November AMA House of Delegates Interim meeting would be helpful.

The 2015 Standards for the ABMS Program for Maintenance of Certification, which became effective in January 2015, were intended to allow the Boards to innovate in the delivery and design of their programs for MOC and address physicians' concerns regarding relevance, burden, and cost in ways most suitable and relevant to their discipline and diplomate population. In addition to requirements addressing each component of the MOC program, the Standards include requirements addressing the broad structure of MOC, focusing on issues of continuous improvement within the Boards' programs themselves. It is this latter set of standards that responds specifically to issues raised by the Council. Under the General Standards, the Boards are expected to:

- Seek input from practicing clinicians
- Reduce burden, increase relevance, and deliver value to physicians
- Engage in a formal process of continuous improvement of their MOC programs
- Evaluate the elements of MOC to ascertain their impact on practice

ABMS is pursuing a variety of initiatives to introduce new approaches to each of the components; create a mechanism for evaluating and identifying effective Board practices that might be shared; and encourage the Boards to work together to make it easier for physicians to find practice-relevant activities to satisfy their Board's expectation and, more importantly, support their learning needs.

Member Boards of the American Board of Medical Specialties

American Board of Allergy and Immunology | American Board of Anesthesiology | American Board of Colon and Rectal Surgery | American Board of Dermatology  
 American Board of Emergency Medicine | American Board of Family Medicine | American Board of Internal Medicine | American Board of Medical Genetics and Genomics  
 American Board of Neurological Surgery | American Board of Nuclear Medicine | American Board of Obstetrics and Gynecology | American Board of Ophthalmology  
 American Board of Orthopaedic Surgery | American Board of Otolaryngology | American Board of Pathology | American Board of Pediatrics  
 American Board of Physical Medicine and Rehabilitation | American Board of Plastic Surgery | American Board of Preventive Medicine  
 American Board of Psychiatry and Neurology | American Board of Radiology | American Board of Surgery | American Board of Thoracic Surgery | American Board of Urology

Valerie M. Parisi, MD, MPH, MBA Chair	John C. Moorhead, MD Chair Elect	John G. Clarkson, MD Secretary-Treasurer	Thomas E. Norris, MD Immediate Past Chair	Lois Margaret Nora, MD, JD, MBA President and Chief Executive Officer
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### **LIFELONG LEARNING AND SELF-ASSESSMENT**

The 2015 Standards call for the incorporation of professionalism and patient safety learning and assessment, as well as incorporation of all of the core competencies into the Boards' programs for MOC. In order to facilitate the identification of relevant educational and self-assessment activities for both physicians and the Boards, the following initiatives are currently underway:

- ABMS issued two calls for activities to identify and catalog CME activities in safety science, professionalism, communication, improvement science, and system-based practice, team-based care, supervision, and transitions of care.
- In partnership with the Association of American Medical Colleges, ABMS is developing an on-line platform that will house an inventory of approved activities available to physicians in any specialty. This platform will launch in 2015 and will allow physicians to access educational and assessment activities developed by specialty societies, academic medical centers, and other educational providers that they might not have had access to previously.
- Ten Boards have agreed to simplify the Board approval process for new MOC Part II and IV activities by agreeing to a common submission form, which will allow review of activities submitted by the educational community by multiple Boards on a common review portal.

### **ASSESSMENT OF KNOWLEDGE, JUDGMENT, AND SKILLS**

ABMS and the Member Boards are engaged in several initiatives to make the MOC Part III Assessment of Knowledge, Judgment and Skills less costly, more convenient, more practice-relevant, and more formative in nature.

- ABMS has convened a Task Force on External Assessment to evaluate how innovations in assessment and adult learning can improve the design and delivery of MOC examinations. The task force is exploring a number of innovations that will address concerns raised about the examination: blueprinting and modularization techniques that facilitate customization of exam content to reflect focused practices; access to materials similar to those used at the point of care; remote testing; reduction of travel expense and inconvenience; and improved performance feedback to guide educational and development plans. The task force also is reviewing innovations in test development that simulate clinical scenarios and assess diagnostic acumen and clinical judgment, rather than recall. We anticipate a report in late summer 2015.
- Several Boards have modularized their examinations, offering diplomates the ability to tailor exam content by selecting modules that more closely reflect their areas of practice focus.
- Three Boards are piloting remote exam proctoring.
- Four Boards provide access to resource material about questions or content areas, or have initiated pilots to allow the use of outside resources, during the examination itself.

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- One Board is piloting a new approach to external assessment that would replace the high-stakes summative exam with more frequent, formative assessments linked to educational resources, while still being able to ensure that the content has been mastered successfully. This approach would provide physicians with more opportunities to be assessed on new developments in the field as they arise.

### IMPROVEMENT IN PRACTICE

The ABMS Standards do not specify how the Boards should structure the practice improvement component of MOC, recognizing that it is most sensitive to differences in clinical context across the specialties. The Boards have generally taken four approaches to practice assessment:

**Practice Audits** – Several Boards have developed on-line practice assessment protocols that allow physicians to assess their care to patients using evidence based quality indicators.

- One Board is working with a data vendor to populate its system with data extracted from electronic health records (EHRs) and is working with its specialty society to incorporate data from the society's registry.

**Registries** – This is the fastest growing approach to practice assessment since it provides practice-relevant data and ongoing performance feedback.

- Many Boards recognize participation in registries developed by their professional societies as satisfying their practice improvement requirements.
- One Board has piloted an innovative approach to collecting patient-reported outcome data using convenient data capture pre- and post-treatment to track patient functional outcomes.
- One Board has a grant from the Agency for Healthcare Research and Quality (AHRQ) to develop unobtrusive data extraction from EHRs for self-assessment, as well as population-based assessment using patient data to identify “hotspots” of illness or outcomes to allow physicians to understand how they affect their patients' health.

**Simulation** – Several Boards have made available high-fidelity clinical simulation to assess clinical judgment and improve practice skills.

**Organizational Quality Improvement** – This is the fastest growing approach to practice improvement, as the Boards seek to integrate MOC activity with other organizations' quality improvement (QI) programs to reduce redundancy and physician burden.

- The ABMS Multi-Specialty Portfolio Approval Program (Portfolio Program) enables physicians engaged in meaningful QI activities within their organizations to receive credit for those activities from their certifying boards. Currently, 21 of the 24 Member Boards offer MOC Part IV credit for participation in organizational QI projects approved through the Portfolio Program. Nearly 50 organizations have signed up as Portfolio

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Program sponsors, creating opportunities for thousands of physicians to receive MOC Part IV credit for organizational QI activities. Another 100 organizations have applied, including the AMA and some state medical societies.

- Several Boards accept TeamSTEPPS activities, a team-based QI program developed jointly by AHRQ and the Department of Defense, that optimize patient care quality by reducing errors and improving communication within medical teams.
- Five Boards accept physician activities related to hospital-based Ongoing and Focused Professional Practice Evaluation conducted under The Joint Commission standards.

### Other ABMS Initiatives

In addition to the MOC component-specific activities noted above, ABMS has:

- Constituted a Committee on Continuing Certification with membership from all 24 Boards to evaluate their programs for MOC and identify effective practices that could be shared across the Boards. In 2015 this committee is evaluating the practice assessment (Part IV) components of MOC programs.
- Launched a major initiative to evaluate the operations and practices of all 24 Boards, in order to identify areas where the Boards can work towards greater consistency.
- Organized a working group of the surgical Boards to examine solutions and core measures that might be suitable for multiple Boards.
- Convened a group of 10 Boards that have agreed to work together to share MOC practices and platforms.
- Convened working groups to examine the types of issues that physicians in unique practice environments encounter when engaging with their Boards' MOC programs and recommend ways to mitigate those issues. The specific cohorts being studied include physicians serving in the military, physician scientists, and physicians in administrative positions.

ABMS is committed to helping the Member Boards develop programs for MOC that are relevant and meaningful for diplomates, while helping support the social compact between the public and the profession. We look forward to continuing to work with the AMA Council on Medical Education to that end.

Sincerely,



Lois Margaret Nora, MD, JD, MBA  
 President and Chief Executive Officer

### REFERENCES

1. Report 6-A-14, Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. AMA Council on Medical Education. Available at: <https://download.ama-assn.org/resources/doc/council-on-med-ed/x-pub/cme-rpt6-a-14.pdf> (accessed 2-10-15)
2. Report 4-A-13, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-rpt4-a-13.pdf](https://ama-assn.org/resources/doc/council-on-med-ed/cme-rpt4-a-13.pdf) (accessed 2-10-15).
3. Report 10-A-12, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt10.pdf](https://ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt10.pdf) (accessed 2-10-15).
4. Report 11-A-12, Impact of Maintenance of Certification, Osteopathic Continuous Certification, Maintenance of Licensure on the Physician Workforce. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt11%20.pdf](https://ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt11%20.pdf) (accessed 2-10-15).

5. Report 3-A-10, Specialty Board Certification and Maintenance of Licensure AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-rep3-a10.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/cme-rep3-a10.pdf) (accessed 2-10-15).
6. Report 16-A-09, Maintenance of Certification/Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-report-16a-09.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/cme-report-16a-09.pdf) (accessed 2-10-15).
7. Cook DA, Holmboe ES, Sorensen KJ, et al. Getting Maintenance of Certification to Work; A Grounded Theory Study of Physicians' Perceptions. *JAMA Internal Medicine*. 2014.
8. Gallagher TH, Prouty CD, Brock DM, et al. Internists' Attitudes About Assessing and Maintaining Clinical Competence. *J Gen Intern Med*. 2013;29(4):608-614.
9. Lipner RS, Brossman BG. Characteristics of Internal Medicine Physicians and Their Practices That Have Differential Impacts on Their Maintenance of Certification. *Acad Med*. January 2015;90(1):81-87.
10. Hawkins RE, Lipner RS, Ham HP, et al. American Board of Medical Specialties Maintenance of Certification: Theory and Evidence Regarding the Current Framework. *Journal of Continuing Education in the Health Professions*. 2013;33(S1):S7-S19.
11. Hayes J, Jackson JL, McNutt GM, et al. Association Between Physician Time-Unlimited vs Time-Limited Internal Medicine Board Certification and Ambulatory Patient Care Quality. *JAMA*. 2014;312(22):2358-2363.
12. Gray BM, Vandergift JL, Johnston MM, et al. Association Between Imposition of Maintenance of Certification Requirement and Ambulatory Care-Sensitive Hospitalizations and Health Care Costs. *JAMA*. 2014;312(22):2348-2357.
13. Lee TH. Certifying the Good Physician-A work in Progress. *JAMA*. 2014;312(22):2340-2342.
14. Teirstein PS. Boarded to Death-Why Maintenance of Certification is Bad for Doctors and Patients. *N Engl J Med*. 2015;372(2):106-108.
15. Interview with Dr. Steven Weinberger on the pros and cons of the new Maintenance of Certification standards. Supplement to the *N Engl J Med*. 2015;372:106-108.
16. Wolfe S, Carol R, Mejicano G. Using the Evidence to Make the Case for ABMS Board Certification and Maintenance of Certification. *Journal of Continuing Education in the Health Professions*. 2014;34(S1):S47-S48.
17. Creation of Massachusetts Medical Society Principles for Physician Demonstration of Current Professional Expertise. Massachusetts Medical Society. TFMOC Report I-13 A-4 [I-12 A-106]
18. Xierali IM, Rinaldo JC, Green LA, et al. Family Physician Participation in Maintenance of Certification. *Annals of Family Medicine*. May-June 2011;9(3):203-210.
19. Puffer JC, Brazemore AW, Newton, et al. Engagement of Family Physicians Seven Years Into Maintenance of Certification. *J AM Board Fam Med*. 2011;24:483-484.
20. Puffer JC, Brazemore AW, Jaen CR, et al. Engagement of Family Physicians in Maintenance of Certification Remains High. *J AM Board Fam Med*. 2012;25:761-762.
21. McKinney M. For better or worse. Report: Where you live affects the type of healthcare you're going to get. *Modern Healthcare*. March 19, 2012;42:6-7.
22. Campbell CM, Parboosingh J. The Royal College Experience and Plans for the Maintenance of Certification Program. *Journal of Continuing Education in the Health Professions*. 2013;33(S1):S36-S47.

### 3. AN UPDATE ON MAINTENANCE OF LICENSURE (RESOLUTION 934-I-14)

*Reference committee hearing: see report of [Reference Committee C](#).*

**HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS  
IN LIEU OF RESOLUTION 934-I-14 AND  
REMAINDER OF REPORT FILED  
See Policies H-275.917 and D-275.957**

Policy D-275.960, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure, calls on our American Medical Association (AMA) to:

- Continue to monitor the evolution of maintenance of certification (MOC), osteopathic continuous certification (OCC), and maintenance of licensure (MOL), continue its active engagement in the discussions regarding their implementation, and report back to the House of Delegates (HOD) on these issues.

The Council on Medical Education has prepared single reports covering both MOC/OCC and the principles of MOL for the past six years.<sup>1,2,3,4,5,6</sup> However, MOC/OCC and MOL are distinctly different processes, designed by independent organizations with different purposes and mandates. While MOC and OCC describe programs that address continued specialty certification for allopathic and osteopathic physicians, MOL principles, once implemented by each licensing authority ("state medical board," or SMB), will define the process by which physicians are to meet requirements for renewing their medical license.<sup>5</sup> To provide greater clarity and avoid



confusion about the relationship between MOC/OCC and MOL, the Council will address these issues separately in its reports beginning with the 2015 Annual Meeting of the HOD.

Resolution 934-I-14, Creation of AMA Principles for Physician Demonstration of Current Professional Expertise, introduced by the Organized Medical Staff Section and referred by the HOD, asked that our AMA adopt the following Principles on Maintenance of Licensure (MOL) as a resource and make them available to state medical societies that seek guidance in determining MOL Principles for their states:

1. The AMA supports continuous lifelong learning by physicians and quality improvement in the practice of medicine and will only support implementation of MOL requirements when substantial and convincing evidence demonstrates that such requirements will improve clinical outcomes/patient care.
2. That in the event that substantial and convincing evidence exists that such MOL requirements will improve clinical outcomes/patient care, and implementation of these requirements moves forward, the AMA will support the following:
  - a. Any MOL activity should be able to be integrated into the existing infrastructure of the health care environment.
  - b. Any MOL educational activity under consideration should be developed in collaboration with physicians, should be evidence-based, and should be specialty specific. Accountability for physicians should be led by physicians.
  - c. Any proposed MOL activity should undergo an in-depth analysis of the direct and indirect costs, including physician's time and the impact on patient access to care, as well as a risk/benefit analysis with particular attention to unintended consequences.
  - d. Any MOL activity should be flexible and offer a variety of compliance options for all physicians, practicing or non-practicing, which may vary depending on their roles (e.g., clinical care, research, administration, education, etc.).
  - e. Any MOL activity should be designed for quality improvement and lifelong learning.
  - f. Participation in quality improvement activities, such as chart review, should be an option as an MOL activity.
3. The AMA shall work in collaboration with state and specialty medical societies and state agencies responsible for establishing criteria for MOL regarding any continuing medical education and lifelong learning. The physician community must be involved with the discussions and final deliberations before enactment.

At the 2014 Interim Meeting of the HOD, Reference Committee K reported that it heard mixed testimony on Resolution 934-I-14. There was concern with the first resolve setting unrealistic expectations. There also was confusion about MOC being a requirement for MOL. Due to the complexity of the issues raised in this Resolution and the need for additional study, the HOD referred this resolution for report back at the 2015 Annual Meeting.

## BACKGROUND

### *State-based Medical Licensure/Licensure Renewal*

With the passage of the Bill of Rights in 1791, states were given the right to regulate health, and formal licensing of physicians through state medical boards was implemented in the 1800s. To be licensed, physicians must demonstrate that they meet the requirements for each state in which they will practice; these requirements vary from state to state.

For many decades, the licensure process focused on reviewing standards for initial licensure. In 1967, a Presidential Commission on Medical Manpower recommended that "state governments explore the possibility of periodic relicensing of physicians and other health professionals." This included the recommendation that medical license

renewal be contingent upon participation in acceptable continuing medical education (CME) activities or assessment in the physician's specialty.

In 1971, the state of New York passed a regulation requiring physicians not serving on a hospital staff or holding specialty certification to match the CME requirements set by the American Academy of Family Physicians (AAFP). In that same year, New Mexico became the first state medical board (SMB) to implement a CME requirement for licensure renewal. Today, all but five states have CME requirements that physicians must meet to maintain their state licenses. Thus, while the process of MOL that is evolving may be new, physician demonstration of activities to maintain competence to practice has long been part of states' licensure renewal processes.

The AMA has consistently supported states' rights to determine the qualifications of physician candidates for medical licensure and has opposed efforts to set national requirements for state licensure. AMA Policy D-480.999, State Authority and Flexibility in Medical Licensure for Telemedicine, states that our AMA will continue its opposition to a single national federalized system of medical licensure. That said, with the advent of telemedicine and physicians seeking licensure in multiple states, movement toward compatibility of licensure/licensure renewal/MOL requirements across SMBs will become essential.

#### *Federation of State Medical Boards (FSMB)*

The FSMB is a national non-profit umbrella organization representing 70 medical and osteopathic boards in the United States and its territories. The FSMB assists SMBs in protecting the public's health, safety and welfare through promotion of high standards for physician licensure and regulation. FSMB services to SMBs include assessment tools and policy documents as well as credentialing and disciplinary alert services. It is important to note that while the FSMB represents the interests of all SMBs, each SMB operates in accordance with the laws of its respective state and is not bound by FSMB policies.

#### *AMA's Physician Recognition Award, AMA PRA Category 1 Credit™, other CME Credit Systems and Medical Ethics*

Since its founding in 1847, and moreover with the establishment in 1904 of the Council on Medical Education, the AMA has pursued a concerted campaign to encourage high quality educational requirements for physicians. The responsibility of self-regulation in medicine is the core of the profession. To retain the public trust, physicians must show good faith in how they certify and credential themselves and their colleagues.

As part of its role in ensuring the quality of medical education and practice, the Council on Medical Education reported to the HOD in 1955 that almost a third of the 5,000 physicians responding to a survey reported no participation in formal CME for at least five years and declared that CME "lacked direction and was suffering from a lack of clearly defined objectives." As a result of the report, the HOD took actions in the 1960s to support CME. For example, in 1968, the AMA began awarding the Physician Recognition Award (PRA)<sup>7</sup> to physicians who demonstrate a commitment to staying current with advances in medicine by providing documentation to the AMA of completion of a minimum of 50 CME credits per year. The credit system developed by the AMA to support the Award, *AMA PRA Category 1 Credit™* and *AMA PRA Category 2 Credit™*, has become a "common currency" for physicians across all specialties to meet requirements from multiple organizations that mandate participation in CME.

The *AMA PRA Category 1 Credit™* system, along with CME credit systems of the AAFP and the American Osteopathic Association (AOA), are recognized by SMBs as metrics to demonstrate that a physician has maintained a commitment to study, apply, and advance scientific knowledge.

Underlying this commitment to CME/continuing professional development (CPD) is the AMA Principle of Medical Ethics, which states: "A physician shall continue to study, apply, and advance scientific knowledge, maintain a commitment to medical education, make relevant information available to patients, colleagues, and the public..."

The AMA and many organizations agree that continuous learning and practice improvement should be core principles for lifelong practice. In the June 6, 2006 issue of *JAMA*, Duffy and Holmboe discussed lifelong learning:

“A self-regulating profession holds its members accountable to the public it serves for the continuous development of the competencies they profess to hold. A central component of physician competence is professionalism, which requires lifelong learning that leads to improved performance in practice. A medical profession accomplishes accountability by providing its members periodic measurement of performance using reliable and valid instruments and judging performance against evidence-based standards, providing graduate and CME programs that advance members’ knowledge and skills to meet these standards, and publicly certifying those who do so.”<sup>8</sup>

## EVOLUTION OF MOL

Since the early 1980s, the FSMB has been calling for physicians to continuously display characteristics that demonstrate that they are thoroughly educated, highly qualified, and staunchly ethical throughout their active careers. Increasing calls from outside the regulatory community for more proactive evaluation of physicians’ continued competence at the time of license renewal, including reports from the Pew Charitable Trust and the Institute of Medicine (IOM), were a significant impetus in the early 2000s for the FSMB to more closely evaluate the responsibility SMBs have to ensure physicians’ competence over the course of their careers.<sup>9</sup>

As a result of these efforts, in 2004 the FSMB’s HOD adopted the following policy statement: “State medical boards have a responsibility to the public to ensure the ongoing competence of physicians seeking licensure.” Following adoption of this policy, FSMB focused on developing strategies that SMBs could use in implementing programs to ensure physicians maintain an appropriate level of competence to practice medicine safely throughout their professional careers.

### *MOL Framework/Components*

A framework for MOL was formally adopted by the FSMB’s HOD in 2010, following seven years of study that included input and guidance from physicians and health care organizations across the house of medicine, including the AMA. The three components of MOL are:

1. **Component One (Reflective Self-assessment)**  
Physicians must participate in an ongoing process of reflective self-evaluation, self-assessment, and practice assessment, with subsequent successful completion of appropriate educational or improvement activities.
2. **Component Two (Assessment of Knowledge and Skills)**  
Physicians must demonstrate the knowledge, skills and abilities necessary to provide safe, effective patient care within the framework of the six general “core competencies” as they apply to their individual practice.
3. **Component Three (Performance in Practice)**  
Physicians must demonstrate accountability for performance in their practice using a variety of methods that incorporate reference data to assess their performance in practice and which guide improvement.

These components are aligned with Policy D-295.328, Promoting Physician Lifelong Learning, which encourages that physicians be trained to: 1) assess one’s own learning needs and to create an appropriate learning plan; 2) assess practice performance; and 3) engage in reflective practice.

A common misperception is that MOL Component Two calls for a secure examination, like that required for MOC, but the FSMB has made clear that a secure examination is not what is mandated. It is simply one option that is available for meeting Component Two requirements. The MOL Implementation Group report, discussed below, describes the expectations for how assessment of knowledge and skills may be accomplished.

### *FSMB MOL Implementation Group*

The AMA has been actively involved in providing input to the FSMB on implementation plans for MOL since the FSMB’s adoption of the MOL framework. Steven J. Stack, MD, served as chair of the FSMB MOL Implementation Group, which issued its report in February 2011.<sup>10</sup> The AMA provided comments on drafts of that report, and AMA issues were reflected in the final version.

The FSMB Implementation Group developed a series of recommendations to enable SMBs to implement MOL programs that are consistent with FSMB policy. These include:

1. **Phased Approach**—The entire MOL program should be implemented as expeditiously as possible with SMBs moving forward together. For practical reasons, some SMBs may institute MOL in a phased implementation. Regardless of the implementation approach, all SMBs should complete the implementation process within a 10-year period.
2. **Implementation of Component One—Reflective Self-assessment**: SMBs should require each licensee to complete certified and/or accredited CME, a majority of which is practice-relevant and supports performance improvement.
3. **Implementation of Component Two—Assessment of Knowledge and Skills**: SMBs should require licensees to undertake objective knowledge and skills assessments to identify learning opportunities and guide improvement activities. These activities should meet all of the following criteria: a) be developed by an objective third party with demonstrated expertise in these activities; b) be structured, validated, and consistently reproducible; c) be credible with the public and profession; d) provide meaningful assessment feedback to the licensee appropriate to the scope of the activity to guide subsequent education; and, e) provide formal documentation that describes both nature of the activity (i.e., content and areas assessed) and successful completion of the activity as designed.
4. **Implementation of Component Three - Performance in Practice**: SMBs should require licensees to use comparative data and, when available, evolving performance expectations to assess the quality of care they provide and then apply best evidence or consensus recommendations to improve and subsequently reassess their care.
5. **Periodicity of MOL Requirements**: SMBs should require each licensee to complete a minimum Component One activity on an annualized basis, a majority of which is devoted to practice-relevant CME that supports performance improvement, and to document completion of both one Component Two and one Component Three activity every five to six years.
6. **Board Certification in the Context of MOL**: SMBs should consider physicians who provide evidence of successful ongoing participation in American Board of Medical Specialties (ABMS) MOC or AOA OCC to have fulfilled all three components of MOL.
7. **Types and Nature of Physician Practices**: SMBs should regularly collect data from individual licensees about the extent of their engagement in direct patient care and the nature of their daily professional work.
8. **Consistency of MOL across Jurisdictions**: SMBs should strive for consistency in the creation and execution of MOL programs.

### *MOL Guiding Principles*

The FSMB has adopted principles that SMBs should consider in developing MOL processes:

1. Maintenance of licensure should support physicians' commitment to lifelong learning and facilitate improvement in physician practice.
2. Maintenance of licensure systems should be administratively feasible and should be developed in collaboration with other stakeholders. The authority for establishing MOL requirements should remain within the purview of the SMBs.
3. Maintenance of licensure should not compromise patient care or create barriers to physician practice.
4. The infrastructure to support physician compliance with MOL requirements must be flexible and offer a choice of options for meeting requirements.

5. Maintenance of licensure processes should balance transparency with privacy protections (e.g., should capture what most physicians are already doing, not be onerous, etc.).

These principles proactively address concerns physicians have expressed about potential burdens and costs resulting from the implementation of MOL. It will be critical for state medical societies to ensure that these principles are followed as SMBs develop processes for implementing MOL.

#### *Status of State Implementation of MOL*

No SMB has yet implemented the MOL framework; the Washington Medical Quality Assurance Commission has announced that it intends to begin implementing MOL requirements in 2016. While further study is under way to gather information on resources required, it is not anticipated that SMBs will need to make any significant additional investments in order to implement MOL. The FSMB has indicated that it is committed to supporting its member boards by providing information about appropriate activities and processes that ought to allow physicians to comply with the MOL framework. It would then follow that if there is not an additional cost to states for implementing MOL, there should not be an additional cost to physicians for licensure renewal. Again, state medical societies should monitor closely any increased costs to physicians for state implementation of MOL programs.

#### *MOL Pilot Projects*

While the FSMB's MOL policy provides a general framework for the implementation of MOL, questions remain about specific aspects of MOL programs at the state level. Several feasibility studies or "pilot projects" have been designed to answer these questions.

Shortly after the adoption of the MOL framework, several SMBs expressed an interest in becoming involved in the development of MOL through engagement in these projects. The first pilot project was the State Readiness Inventory, an electronic survey of the participating boards to identify issues SMBs need to consider and possibly resolve to ensure the successful implementation of MOL.

The second pilot project was a survey of practicing physicians to solicit opinions about their preferences for features of an MOL system as well as to determine what types of educational activities physicians are currently engaged in and what they find useful or beneficial about these activities.

Ongoing work includes studying the license renewal processes of SMBs, in particular how they verify CME compliance to determine how best to accommodate implementation of MOL with minimal impact on board resources.

In 2014, the FSMB MOL Task Force on CPD Activities<sup>11</sup> presented an informational report to the FSMB HOD that included recommendations regarding tools and activities that could meet a state's requirements for MOL. The report addressed issues such as models for compliance as well as standards and criteria for CPD activities, and included recommendations for SMBs, the FSMB, and other stakeholders.

#### IMPACT OF MOL ON WORKFORCE

There is no evidence to suggest that MOL will have an impact on the physician workforce, and it is impossible to study the effect of MOL on the physician workforce since no state MOL programs have yet been implemented. (See CME Report 2-A-15 for additional information.) Physicians routinely engage in CME activities, and should be participating in performance improvement and self-assessment as part of regular practice. If, as the FSMB has suggested, such activities will be counted for MOL, then conceivably there should not be a significant, if any, increase in time or costs beyond that which physicians already spend, or should spend, on CME/CPD, and documenting their participation in these activities. This is another issue that state medical societies will need to monitor closely as states consider how to implement MOL.

#### RESOLUTION 934-I-14: CREATION OF AMA PRINCIPLES FOR PHYSICIAN DEMONSTRATION OF CURRENT PROFESSIONAL EXPERTISE

The AMA should work with state medical societies to ensure that, as MOL programs are implemented in states, these programs reflect the MOL Guiding Principles that the FSMB has adopted, as outlined previously, and do not impose additional burdensome or costly requirements on physicians.

However, as the reference committee appropriately noted, the first proposed principle sets unrealistic expectations: “The AMA supports continuous lifelong learning by physicians and quality improvement in the practice of medicine and will only support implementation of MOL requirements when substantial and convincing evidence demonstrates that such requirements will improve clinical outcomes/patient care.” This principle calls for convincing evidence before the AMA would support MOL, but until MOL is implemented, there is no way to collect that evidence. Moreover, the components of MOL align with the tenets of CME/CPD, which the literature has already shown to be effective.<sup>12</sup>

The second proposed AMA principle asks that:

- a. Any MOL activity should be able to be integrated into the existing infrastructure of the health care environment.
- b. Any MOL educational activity under consideration should be developed in collaboration with physicians, should be evidence-based, and should be specialty specific. Accountability for physicians should be led by physicians.
- c. Any proposed MOL activity should undergo an in-depth analysis of the direct and indirect costs, including physician’s time and the impact on patient access to care, as well as a risk/benefit analysis with particular attention to unintended consequences.
- d. Any MOL activity should be flexible and offer a variety of compliance options for all physicians, practicing or non-practicing, which may vary depending on their roles (e.g., clinical care, research, administration, education).
- e. Any MOL activity should be designed for quality improvement and lifelong learning.
- f. Participation in quality improvement activities, such as chart review, should be an option as an MOL activity.

This language mirrors many of the recommendations the FSMB has already made around MOL (e.g., evidence-based, specialty/practice-specific, flexible, variety of options, designed for quality improvement, and lifelong learning) as noted in the FSMB MOL Implementation Group Report recommendations, referenced above, and the FSMB MOL Task Force on CPD Activities Report, as well as the report of the FSMB MOL Workgroup on Clinically Inactive Physicians.<sup>13</sup> Quality improvement and performance improvement activities and projects would be acceptable activities for MOL. The FSMB has stated that the intent behind MOL is not to force physicians to engage in extra activities, but to ensure that the activities physicians are engaging in to maintain their competence are practice-focused, objective, and aimed to practice improvement and lifelong learning. The AMA should consider adoption of this principle proposed in Resolution 934-A-14 as an AMA guideline for MOL.

The third proposed principle states: “The AMA shall work in collaboration with state and specialty medical societies and state agencies responsible for establishing criteria for MOL regarding any continuing medical education and lifelong learning. The physician community must be involved with the discussions and final deliberations before enactment.” This principle might also be adopted, though the emphasis should be on the state medical societies working with SMBs within their respective states. The FSMB reached out to the spectrum of organized medicine as the concepts for MOL were developed, and they were responsive to input they received as reflected in what was finally adopted. This model of collaboration needs to continue now between state medical and specialty societies and SMBs as state MOL programs are being developed.

#### RELATIONSHIP OF MOC AND OCC TO MOL

MOC, OCC and MOL are distinctly different processes, designed by independent organizations with different purposes and mandates. Board certification granted by one of the 24 ABMS Member Boards or 18 specialty

certifying member boards of the Bureau of Osteopathic Specialists provides assurance of a physician's expertise in a particular specialty and/or subspecialty of medical practice.

The ABMS MOC program is an ongoing program of education and assessment activities for certified physicians to improve practice performance. The ABMS and its member boards are developing MOC requirements that are supported by evidence-based guidelines, national clinical and quality standards, and specialty best practices. In addition, they periodically evaluate and update professional and educational standards to reflect the changes in medical specialty practice and health care delivery processes. In 2013, over 78 percent (659,756) of the approximately 840,000 active practicing physicians (not including resident physicians) were certified by one of the ABMS Member Boards.

The FSMB website defines MOL as "... a system of continuous professional development for physicians that supports, as a condition for license renewal, a physician's commitment to lifelong learning that is relevant to their area of practice and contributes to improved health care." MOC and OCC are not intended to become mandatory requirements for medical licensure but should be recognized as meeting some or all of a state's requirements for MOL, for physicians who are participating in MOC or OCC, to minimize the burden and avoid unnecessary duplication of work.

Components of MOL do offer a mechanism for physicians who are not certified, or not participating in MOC or OCC, to maintain their licenses to practice medicine. The AMA has advocated that SMBs accept programs created by specialty societies as evidence that the physician is participating in continuous lifelong learning and allow physicians choices in what programs they participate in to fulfill their MOL criteria

The AMA encourages rigorous evaluation of the impact on physicians of future proposed changes to the MOL process, including cost, staffing, and time. State medical societies working with SMBs on implementing MOL programs should also advocate that MOC fulfill the requirements for MOL, to minimize regulatory burdens for physicians who choose to maintain specialty board certification.

#### AMA CONTINUING SUPPORT FOR PHYSICIAN LICENSURE AND MOL

The AMA has been actively engaged in the discussions and development of reports related to establishing MOL. The Council on Medical Education and Medical Education staff meet several times each year with leadership of the FSMB; these meetings have provided opportunities for frank discussions of physician concerns related to the implementation of MOL. As previously noted, the AMA has provided feedback on the reports the FSMB has offered for comments, and AMA perspectives are reflected in final FSMB documents. The Council on Medical Education is committed to fostering this relationship with the FSMB to ensure that the actual implementation of MOL mirrors the MOL Guiding Principles adopted by the FSMB and adheres to relevant AMA policies.

As implementation of MOL moves into the state regulatory arena, the AMA Advocacy Resource Center can be an asset to state medical societies in discussions with SMBs about how MOL will be implemented, but the AMA cannot lead these efforts, as this is the rightful role of the state medical societies. State medical societies should be proactive in engaging SMBs early in the MOL development process to ensure that the resulting programs do not create an undue burden for the physicians in their states.

While the FSMB has stated that the components of MOL reflect what physicians already do in practice, a potential challenge for physicians may be how to maintain records of assessment, CME, and performance improvement activities for MOL. The HOD has previously asked that the AMA consider implementing a data collection/tracking system to assist physicians with documentation for credentialing purposes, but for a variety of reasons AMA has elected not to establish such programs.

The AMA PRA CME Credit system (*AMA PRA Category 1 Credit<sup>TM</sup>* and *AMA PRA Category 2 Credit<sup>TM</sup>*) and the AAFP and AOA credit systems were well positioned in the early 1970s, and were adopted by SMBs instead of creating new systems/requirements for physicians to renew their licenses. The movement toward MOL should be a stimulus for the AMA to explore the feasibility of developing, in collaboration with other stakeholders, physician-friendly documentation or other tools that would be recognized by SMBs as mechanisms for physicians to demonstrate how they meet MOL requirements. As with the AMA PRA and its associated CME credit system of the

1970s, a physician-developed solution to addressing MOL may be welcomed in shaping how states will implement MOL.

#### AMA POLICY

The AMA has robust policies related to medical licensure. AMA policy supports the underlying principles of MOL, which are consistent with the direction that the practice of medicine is evolving. AMA policy directs our AMA to monitor MOL as being led by the FSMB and work with the FSMB and other stakeholders to develop a coherent set of principles for MOL. (H-275.923[11]). AMA policy also encourages rigorous evaluation of the impact on physicians of future proposed changes to the MOL process, including cost, staffing and time, and opposes any MOL initiative that creates barriers to practice, is administratively unfeasible, is inflexible with regard to how physicians practice (clinically or not), that does not protect physician privacy, and that is used to promote policy initiatives above physician competence. (H-275.923[3, 13]). The complete text of policies cited in this report can be found in the Appendix.

#### SUMMARY AND RECOMMENDATIONS

MOC and MOL are distinct processes that impact physician credentialing. While CME Report 2-A-15 provides an update on MOC, this report has focused on issues related to the evolving process of MOL. The Components and Principles of MOL adopted by FSMB have been influenced by input from the AMA and align with AMA policies related to CME/CPD and AMA ethical principles. The AMA will continue its advocacy for physicians at the national level with the FSMB and other stakeholders related to licensure and MOL policy. But as implementation of MOL moves to local jurisdictions, the state medical societies will be at the frontline in influencing what SMBs will adopt. The AMA Advocacy Resource Center and AMA policy are assets that state medical societies may depend on in these discussions. Continued work is needed to explore the feasibility of developing products and services to support physicians as MOL becomes a reality.

The Council on Medical Education recommends that the following recommendations be adopted in lieu of Resolution 934-I-14 and that the remainder of this report be filed.

1. That our American Medical Association (AMA) establish the following guidelines for implementation of state MOL programs:
  - a. Any MOL activity should be able to be integrated into the existing infrastructure of the health care environment.
  - b. Any MOL educational activity under consideration should be developed in collaboration with physicians, should be evidence-based, and should be practice-specific. Accountability for physicians should be led by physicians.
  - c. Any proposed MOL activity should undergo an in-depth analysis of the direct and indirect costs, including physicians' time and the impact on patient access to care, as well as a risk/benefit analysis, with particular attention to unintended consequences.
  - d. Any MOL activity should be flexible and offer a variety of compliance options for all physicians, practicing or non-practicing, which may vary depending on their roles (e.g., clinical care, research, administration, education).
  - e. Any MOL activity should be designed for quality improvement and lifelong learning.
  - f. Participation in quality improvement activities, such as chart review, should be an option as an MOL activity.
  
2. That our AMA support the FSMB Guiding Principles for MOL, which state that:
  - a. Maintenance of licensure should support physicians' commitment to lifelong learning and facilitate improvement in physician practice.
  - b. Maintenance of licensure systems should be administratively feasible and should be developed in collaboration with other stakeholders. The authority for establishing MOL requirements should remain within the purview of state medical boards.
  - c. Maintenance of licensure should not compromise patient care or create barriers to physician practice.



- d. The infrastructure to support physician compliance with MOL requirements must be flexible and offer a choice of options for meeting requirements.
  - e. Maintenance of licensure processes should balance transparency with privacy protections (e.g., should capture what most physicians are already doing, not be onerous, etc.).
3. That our AMA work with interested state medical societies and support collaboration with state specialty medical societies and state medical boards on establishing criteria and regulations for the implementation of MOL that reflect AMA guidelines for implementation of state MOL programs and the FSMB's Guiding Principles for MOL.
  4. That our AMA explore the feasibility of developing, in collaboration with other stakeholders, AMA products and services that may be helpful tools to shape and support MOL for physicians.

#### APPENDIX - AMA Policies Related to Maintenance of Licensure

##### H-275.923, Maintenance of Certification / Maintenance of Licensure

Our AMA will: 1. Continue to work with the Federation of State Medical Boards (FSMB) to establish and assess maintenance of licensure (MOL) principles with the AMA to assess the impact of MOC and MOL on the practicing physician and the FSMB to study the impact on licensing boards. 2. Recommend that the American Board of Medical Specialties (ABMS) not introduce additional assessment modalities that have not been validated to show improvement in physician performance and/or patient safety. 3. Encourage rigorous evaluation of the impact on physicians of future proposed changes to the MOC and MOL processes including cost, staffing, and time. 4. Review all AMA policies regarding medical licensure; determine if each policy should be reaffirmed, expanded, consolidated or is no longer relevant; and in collaboration with other stakeholders, update the policies with the view of developing AMA Principles of Maintenance of Licensure in a report to the HOD at the 2010 Annual Meeting. 5. Urge the National Alliance for Physician Competence (NAPC) to include a broader range of practicing physicians and additional stakeholders to participate in discussions of definitions and assessments of physician competence. 6. Continue to participate in the NAPC forums. 7. Encourage members of our House of Delegates to increase their awareness of and participation in the proposed changes to physician self-regulation through their specialty organizations and other professional membership groups. 8. Continue to support and promote the AMA Physician's Recognition Award (PRA) Credit system as one of the three major CME credit systems that comprise the foundation for post graduate medical education in the US, including the Performance Improvement CME (PICME) format; and continue to develop relationships and agreements that may lead to standards, accepted by all US licensing boards, specialty boards, hospital credentialing bodies, and other entities requiring evidence of physician CME. 9. Collaborate with the American Osteopathic Association and its eighteen specialty boards in implementation of the recommendations in CME Report 16-A-09, Maintenance of Certification / Maintenance of Licensure. 10. Continue to support the AMA Principles of Maintenance of Certification (MOC). 11. Monitor MOL as being led by the Federation of State Medical Boards (FSMB), and work with FSMB and other stakeholders to develop a coherent set of principles for MOL. 12. Our AMA will 1) advocate that if state medical boards move forward with the more intense MOL program, each state medical board be required to accept evidence of successful ongoing participation in the American Board of Medical Specialties Maintenance of Certification and American Osteopathic Association-Bureau of Osteopathic Specialists Osteopathic Continuous Certification to have fulfilled all three components of the MOL if performed, and 2) also advocate to require state medical boards accept programs created by specialty societies as evidence that the physician is participating in continuous lifelong learning and allow physicians choices in what programs they participate to fulfill their MOL criteria. 13. Our AMA opposes any MOL initiative that creates barriers to practice, is administratively unfeasible, is inflexible with regard to how physicians practice (clinically or not), that does not protect physician privacy, and that is used to promote policy initiatives above physician competence. (CME Rep. 16, A-09; Appended: CME Rep. 3, A-10; Reaffirmed: CME Rep. 3, A-10; Appended: Res. 322, A-11; Reaffirmed: CME Rep. 10, A-12; Reaffirmed in lieu of Res. 313, A-12; Reaffirmed: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 919, I- 13; Reaffirmed in lieu of Res. 610, A-14; Appended: Res. 319, A-14)

##### D-275.960, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure

1. Our AMA will encourage the American Board of Medical Specialties (ABMS) and the specialty certification boards to continue to explore other ways to measure the ability of physicians to access and apply knowledge to care for patients as an alternative to high stakes closed book examinations. 2. Our AMA will continue to monitor the evolution of Maintenance of Certification (MOC), Osteopathic Continuous Certification (OCC), and Maintenance of Licensure (MOL), continue its active engagement in discussions regarding their implementation, and report back to the House of Delegates on these issues. 3. Our AMA will (a) work with the ABMS and ABMS specialty boards to continue to examine the evidence supporting the value of specialty board certification and MOC and to determine the continued need for the mandatory high-stakes examination; and (b) work with the ABMS to explore alternatives to the mandatory high-stakes examination. 4. Our AMA encourages the ABMS to ensure that all ABMS specialty boards provide full transparency related to the costs of preparing, administering, scoring, and reporting MOC and certifying/recertifying examinations and ensure that MOC and certifying/recertifying examinations do not result in significant financial gain to the ABMS specialty boards. 5. Our AMA will work with the ABMS to lessen the burden of MOC on physicians with multiple board certifications, in particular to ensure that MOC is specifically relevant to the physician's current practice. 6. Our AMA will solicit an independent entity to commission and pay for a study to evaluate the impact that MOL and MOC requirements have on physicians' practices, including but not limited to: physician workforce, physicians'

practice costs, patient outcomes, patient safety and patient access. Such study will look at the examination processes of the ABMS, the American Osteopathic Association, and the Federation of State Medical Boards. Such study is to be presented to the AMA HOD, for deliberation and consideration before any entity, agency, board or governmental body requires physicians to sit for MOL licensure examinations. Progress report is to be presented at Annual 2014; complete report by Annual 2015. 7. Our AMA: (a) supports ongoing ABMS specialty board efforts to allow other physician educational and quality improvement activities to count for MOC; (b) supports specialty board activities in facilitating the use of MOC quality improvement activities to count for other accountability requirements or programs such as pay for quality/performance or PQRS reimbursement; (c) encourages the ABMS specialty boards to enhance the consistency of such programs across all boards; and (d) will work with specialty societies and specialty boards to develop tools and services that facilitate the physician's ability to meet MOC requirements. 8. Our AMA Council on Medical Education will continue to review published literature and emerging data as part of the Council's ongoing efforts to critically review MOC, OCC, and MOL issues. 9. Our AMA will continue to explore with independent entities the feasibility of conducting a study to evaluate the impact that MOC requirements and the principles of MOL have on physicians' practices, including, but not limited to physician workforce, physicians' practice costs, patient outcomes, patient safety, and patient access. 10. Our AMA will work with the ABMS and the ABMS Member Boards to collect data on why physicians choose to maintain or discontinue their board certification. 11. Our AMA will work with the ABMS and the Federation of State Medical Boards to study whether MOC and the principles of MOL are important factors in a physician's decision to retire and have a direct impact on the US physician workforce. 12. Our AMA: (a) encourages specialty boards to investigate and/or establish alternative approaches for MOC; (b) will prepare a yearly report regarding the maintenance of certification process; and (c) will work with the ABMS to eliminate practice performance assessment modules, as currently written, from the requirement of MOC. (CME Rep. 10, A-12; Modified: CME Rep. 4, A-13; Reaffirmed in lieu of Res. 610, A-14; Appended: CME Rep. 6, A-14; Appended: Sub. Res. 920, I-14)

D-480.999, State Authority and Flexibility in Medical Licensure for Telemedicine

Our AMA will continue its opposition to a single national federalized system of medical licensure. (CME Rep. 7, A-99; Reaffirmed and Modified: CME Rep. 2, A-09; Reaffirmed in lieu of Res. 920, I-13; Reaffirmed: BOT Rep. 3, I-14)

## REFERENCES

1. Report 4-A-13, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-rpt4-a-13.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/cme-rpt4-a-13.pdf) (accessed 2-20-14).
2. Report 10-A-12, An Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt10.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt10.pdf) (accessed 2-20-14).
3. Report 11-A-12, Impact of Maintenance of Certification, Osteopathic Continuous Certification, Maintenance of Licensure on the Physician Workforce. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt11%20.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/a-12cmerpt11%20.pdf) (accessed 2-20-14).
4. Report 3-A-10, Specialty Board Certification and Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-rep3-a10.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/cme-rep3-a10.pdf) (accessed 2-20-14).
5. Report 16-A-09, Maintenance of Certification/Maintenance of Licensure. AMA Council on Medical Education. Available at: [ama-assn.org/resources/doc/council-on-med-ed/cme-report-16a-09.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/cme-report-16a-09.pdf) (accessed 2-20-14).
6. Report 6-A-14, Update on Maintenance of Certification, Osteopathic Continuous Certification, and Maintenance of Licensure. Available at: [ama-assn.org/resources/doc/council-on-med-ed/x-pub/cme-rpt6-a-14.pdf](http://ama-assn.org/resources/doc/council-on-med-ed/x-pub/cme-rpt6-a-14.pdf) (accessed 2-6-15).
7. AMA PRA Credit System Informational Booklet. American Medical Association. Available at [ama-assn.org/resources/doc/cme/x-pub/prabooklet.pdf](http://ama-assn.org/resources/doc/cme/x-pub/prabooklet.pdf). (accessed 2-6-15).
8. Duffy FD, Holmboe ES. Self-assessment in Lifelong Learning and Improving Performance in Practice: Physician Know Thyself. *JAMA*. 2006;296(9):1137-1139.
9. Chaudhry, HJ, Talmage, LA, et al. Maintenance of Licensure: Supporting a Physician's Commitment to Lifelong Learning. *Annals of Internal Medicine*. 2012;157(4):1-4. Available at: [nationalahaec.org/pdfs/MaintenanceofLicensureSupportingaPhysiciansCommitmenttoLifelong.pdf](http://nationalahaec.org/pdfs/MaintenanceofLicensureSupportingaPhysiciansCommitmenttoLifelong.pdf) (accessed 1-2-2014).
10. Report of the Maintenance of Licensure Implementation Group. Report of the Board of Directors, Federation of State Medical Boards. Available at: [fsmb.org/Media/Default/PDF/FSMB/Foundation/BD\\_RPT\\_1103\\_%20MOL.pdf](http://fsmb.org/Media/Default/PDF/FSMB/Foundation/BD_RPT_1103_%20MOL.pdf) (accessed 1-2-2014).
11. FSMB Maintenance of Licensure (MOL) Task Force on Continuous Professional Development (CPD) Activities. Federation of State Medical Boards. Available at: [fsmb.org/Media/Default/PDF/FSMB/Foundation/FSMB\\_MOL\\_Task\\_Force\\_on\\_CPD\\_Activities-FINAL\\_report.pdf](http://fsmb.org/Media/Default/PDF/FSMB/Foundation/FSMB_MOL_Task_Force_on_CPD_Activities-FINAL_report.pdf) (accessed 2-9-2015).
12. Marinopoulos SS, Dorman T, et al. Effectiveness of Continuing Medical Education. Evidence Report/Technology Assessment No. 149 (Prepared by the Johns Hopkins Evidence-based Practice Center, under Contract No. 290-02-0018.) AHRQ Publication No. 07-E006. Rockville, MD: Agency for Healthcare Research and Quality. January 2007.
13. Report of the Maintenance of Licensure Workgroup on Clinically Inactive Physicians. Federation of State Medical Boards. Available at: [fsmb.org/Media/Default/PDF/FSMB/Advocacy/mol\\_workgroup\\_clinically\\_Inactive.pdf](http://fsmb.org/Media/Default/PDF/FSMB/Advocacy/mol_workgroup_clinically_Inactive.pdf) (accessed 2-9-2015).
14. Chaudhry HJ, Cain FE, Staz ML, et al. The Evidence and Rationale for Maintenance of Licensure. *Journal of Medical Regulation*. 2013;99(1):19-26.

15. Research supporting Maintenance of Licensure (MOL). Federation of State Medical Boards. Available at: [fsmb.org/Media/Default/PDF/FSMB/Foundation/research-supporting-mol-10312012.pdf](http://fsmb.org/Media/Default/PDF/FSMB/Foundation/research-supporting-mol-10312012.pdf) (accessed 1-2-2015).
16. Chaudhry HJ. Maintenance of Licensure (MOL) Physician Accountability through Assurance of Continued Clinical Competence. Available at: [acoi.org/2011Convention/Chaudhry2.pdf](http://acoi.org/2011Convention/Chaudhry2.pdf) (accessed 1-2-2015).
17. Chaudhry HJ, Rhyne J, Cain FE, et al. Maintenance of Licensure: Protecting the Public, Promoting Quality Health Care. *Journal of Medical Regulation*. 2010;Commentary:1-8.
18. Epstein, R. Assessment in Medical Education. *New England Journal of Medicine*. 2007;356(4):387-396.
19. Dauhinee, WD. Revalidation of Doctors in Canada. *British Medical Journal*. 1999;319(7218):1188-1190. Available at: [ncbi.nlm.nih.gov/pmc/articles/PMC1116964/](http://ncbi.nlm.nih.gov/pmc/articles/PMC1116964/) (accessed 1-2-2015).
20. Havens, C, Mallin, J. Climate Change: It's Not About the Weather-Continuing Medical Education and Maintenance of Certification and Licensure. *The Permanente Journal*. Summer 2011;15(3):88-92.
21. Report of the National Advisory Commission on Health Manpower. 1967;Volume 1:1-93. Available at: [eric.ed.gov/?id=ED029108](http://eric.ed.gov/?id=ED029108) (accessed 1-2-2014).
22. Maintenance of Licensure: A Special Report. Federation of State Medical Boards. Available at: [fsmb.org/Media/Default/PDF/FSMB/Foundation/mol-new-vision.pdf](http://fsmb.org/Media/Default/PDF/FSMB/Foundation/mol-new-vision.pdf) (accessed 1-2-2014).

#### **4. GUIDELINES FOR STUDENTS SHADOWING PHYSICIANS (RESOLUTIONS 310-A-13 AND 913-I-13)**

*Reference committee hearing: see report of [Reference Committee C](#).*

**HOUSE ACTION: RECOMMENDATIONS ADOPTED  
IN LIEU OF RESOLUTIONS 310-A-13 AND 913-I-13 AND  
REMAINDER OF REPORT FILED**  
*See Policy H-295.859*

Resolution 310-A-13, “Medical Facility Regulations for Students Shadowing Physicians,” introduced by the Georgia Delegation and referred by the House of Delegates (HOD), asked that our American Medical Association (AMA) develop standard criteria for students to shadow physicians in medical facilities. The resolution noted that high school and premedical students are “strongly encouraged” by medical school admissions committees to have clinical shadowing experience. However, the Health Insurance Portability and Accountability Act (HIPAA) and other regulations (e.g., those dealing with patient rights, privacy and confidentiality) often serve as impediments to many physicians who might otherwise provide student shadowing experiences. In addition, individual hospitals may have standards for shadowing of physicians by students, but these vary widely from one institution to the next, with no recognized national standard in place.

Resolution 913-I-13, “Pre-Medical School Shadowing,” submitted by the Washington Delegation and referred by the HOD, asked that our AMA (1) promote the development of programs that assist physicians in providing premedical shadowing opportunities; and (2) communicate to the Association of American Medical Colleges that for medical schools which have the premedical shadowing requirement, aiding these underprivileged students in getting their shadowing is an obligation of the medical school. Testimony at the I-13 meeting on this resolution supported the need for appropriate guidelines for providing premedical school shadowing opportunities. In addition, increased opportunities for shadowing may help increase diversity in medicine by raising awareness among individuals from diverse backgrounds of the possibility of medicine as a career. It was suggested that such programs may contribute to improved motivation and experience, leading to increased matriculation and lower attrition rates. Questions were raised, however, as to the responsibility of medical schools to offer shadowing opportunities.

In response to these two resolutions, Council on Medical Education Report 8-A-14, “Guidelines for Students Shadowing Physicians,” asked that our AMA: (1) encourage wide dissemination of the Association of American Medical Colleges’ clinical shadowing guidelines to interested parties, including K-12 students, premedical students, health professions advisors, hospitals, medical schools and physicians and (2) encourage all physicians to provide shadowing opportunities to premedical students. The report also called for AMA Policy D-295.941, Facilitating Access to Health Care Facilities for Training, to be amended by addition to state that the AMA “work with the Association of American Medical Colleges and other national organizations to expedite, wherever possible, the standardization of requirements in regards to training on HIPAA, drug screening, and health requirements for premedical and medical students, and resident and fellow physicians who are being educated in hospitals and other health care settings.”

At the A-14 HOD meeting, mixed testimony was heard on CME Report 8 during the reference committee hearing. It was noted that the amount of paperwork required of physicians to offer a shadowing opportunity is onerous. Accordingly, this report was referred for a more thorough review of physician shadowing and the appropriate mechanisms to ensure that individuals from underprivileged and under-represented minority groups are afforded equal opportunity to participate in shadowing experiences.

## BACKGROUND

It is important to differentiate *shadowing* from *volunteering*. Volunteering offers an opportunity to help (without compensation) in a health care setting; duties might include filing paperwork, answering phones and similar functions. Shadowing, in contrast, is strictly observational but directly related to the provision of clinical care, with the student observing as the health professional provides care to patients. This may occur in varied clinical settings, including hospitals, outpatient clinics, long-term care facilities and/or office practices. Observation always occurs under the appropriate supervision of a licensed physician or other licensed health care professional. (Note: This report does not cover what are often referred to as observerships, which are often undertaken by international medical graduates [IMGs] as they seek to gain exposure to and understanding of the practical and sociocultural aspects of US medical education and health care. The AMA has previously developed guidelines for such programs; these are available via the AMA website at [ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/international-medical-graduates/observership-guidelines.page?](http://ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/international-medical-graduates/observership-guidelines.page?).)

The benefits of a shadowing experience for the student include exposure to the day-to-day realities of medical practice and tangible evidence (for admissions committees) of their commitment to becoming a physician. For example, a summertime medical program for high school students at the University of Oklahoma College of Medicine, which included a shadowing component, resulted in “increased understanding of the medical school application process, the medical curriculum and the medical field, and an increase in students’ likeliness to choose a medical career.”<sup>1</sup> Similarly, a study of premedical students in a shadowing program at Stanford University found “significant increases in familiarity with physician responsibilities and in understanding physician-patient interactions.”<sup>2</sup>

Such experiences, however, may raise ethical issues for patients in the clinical setting. The author of a June 2011 commentary in *JAMA*, for example, stated that any potential benefits of shadowing from the student perspective “are eclipsed by potential damage to the patient-physician relationship.”<sup>3</sup> Further, a review published in *Academic Medicine* in January 2013 called for further research and the creation of objective outcomes measures. The authors proposed “developing guidelines and introducing a code of conduct for pre-medical students, to enhance the consistency of shadowing experiences and address ethical and practical considerations.”<sup>4</sup>

In addition, these authors found scant medical literature on shadowing and its impacts on students, physicians and patients. Indeed, a recent PubMed search using the term “physician shadowing” returned 75 results (available at: [ncbi.nlm.nih.gov/pubmed/?term=physician+shadowing](http://ncbi.nlm.nih.gov/pubmed/?term=physician+shadowing)), the majority of which are not relevant to this report. One study that is relevant examined the impact of an academic summer research, shadowing and mentorship program on college students interested in medicine and surgery. The authors surveyed 48 participants in the program, with 44 respondents, and found that “proficiency in all categories assessed improved considerably, including medical terminology, abstract writing, statistical analysis, graph and table construction, article writing, and video production. During the last 5 years, participants coauthored 112 national presentations (29 video presentations), 46 published abstracts, and 57 peer-reviewed published articles. Ninety-two percent developed more favorable opinions of a career in medicine; 8 percent believed the experience deterred them from a career in medicine because of lifestyle and [study] demands. Seventy-seven percent believed the program promoted a career in surgery; 82 percent believed it elevated their goals to become leaders in American medicine.” They concluded that such programs for college and graduate students can lead to improved academic productivity and attainment of career goals, and that academic surgeons can play an influential role in this regard.<sup>5</sup>

Shadowing, and the concerns surrounding it, is a frequent subject of discussions on the email listserv of the National Association of Advisors for the Health Professions (NAAHP). Advisors note that, as regulations tighten in health care settings, developing and overseeing clinical educational and shadowing experiences has become more challenging than in the past. Some of the issues that may dissuade physician offices and hospitals from serving as sites for clinical shadowing include concerns over potential liability, HIPAA regulations, lack of time or staff for oversight, and ethical concerns, including informed consent and patient confidentiality.

In some areas, students are required to complete a training program prior to entering into a shadowing experience, to include HIPAA certification, criminal and child abuse background checks and drug testing. The authors of a 2011 letter to *JAMA* proposed three broad guidelines to ensure that medical ethics and legal requirements are not compromised during shadowing experiences: “First, the student must complete HIPAA regulations, the physician must judge if the appointment is appropriate for observing, and the physician should specify boundaries for educational dialogue and note taking. Second, on being introduced to the patient, the pre-medical student should clearly identify himself or herself as a college student observing to learn more about a medical career. It is deceptive to say he or she is a member of the team or working with the physician. Third, the patient should be told that there is no obligation to allow the observation and refusal is understandable. These criteria would prevent misrepresentation and create transparency—ethical principles that can never be introduced too early in an education.”<sup>6</sup>

In summary, shadowing should be clearly defined (as separate from volunteering, for example, or observerships). A limited number of studies on shadowing have been published in the peer-reviewed literature; more research may help quantify the benefits (and costs) of shadowing. Existing studies have shown that students who undertake a shadowing experience become more familiar with the practice of medicine and how physicians interact with patients in the clinical setting. This raises the question, however, of possible negative impacts on the patient-physician relationship and the need for ethical guidance in this arena. Additional concerns, for the physician, include potential liability and lack of time or staff for oversight of students.

#### THE PROFESSION’S RESPONSIBILITY FOR PROVIDING SHADOWING EXPERIENCES

In theory, physicians are willing to engage and train the next generation of practitioners and provide career guidance for college and university students aspiring to become physicians. In practice, however, this inclination often collides with the reality of modern medicine, in which physicians are under significant time and performance pressures. In addition, the regulatory, legal and ethical issues cited above may cause even the most altruistic physician to reconsider taking on this additional “unfunded mandate.” Often there are also first and second-year medical students who want to shadow; these students may have priority, given a physician’s busy schedule.

Most medical schools have admissions criteria that medical school applicants should have completed a certain number of hours in shadowing/observership (some recommend at least 40 hours). Accordingly, as proposed in Resolution 913-I-13, it may be appropriate to encourage medical schools to help premedical students meet this requirement by ensuring availability of shadowing programs.

Such programs are particularly needed with regard to students from underrepresented minority populations, who may lack the resources and connections to obtain the needed experience.<sup>7</sup> Not providing ready access to such experiences could mean that shadowing requirements have the unintended effect of further disenfranchising minority and economically disadvantaged students and reducing the number of medical school matriculants from these sectors of society. Furthermore, students enrolled in resource-poor K-12 schools and undergraduate education systems may face increased barriers to attaining medical shadowing experiences; special outreach to such students may be warranted to facilitate access to shadowing opportunities.

The AMA is helping address these concerns through its Doctors Back to School (DBTS) program ([ama-assn.org/go/dbts](http://ama-assn.org/go/dbts)), launched in 2002 by the AMA Minority Affairs Section and the Commission to End Healthcare Disparities. Through the program, minority physicians and medical students volunteer at local schools to introduce youth to professional role models. DBTS aims to show children and adolescents, especially those from underrepresented racial and ethnic groups, that medicine is an attainable career option for everyone.

Nationwide, a number of schools have taken up the challenge to increase the number of physicians from minority populations through providing shadowing experiences, similar to the University of Oklahoma program noted above. One such offering is the Summer Medical and Dental Education Program (SMDEP). This free, six-week summer academic enrichment program that offers freshman and sophomore college students intensive and personalized medical and dental school preparation (available at: [oregon.gov/oha/oei/Documents/Strategies\\_for\\_PipelineProgs.pdf](http://oregon.gov/oha/oei/Documents/Strategies_for_PipelineProgs.pdf)). Formerly known as the Minority Medical Education Program, SMDEP was established in 1988 by The Robert Wood Johnson Foundation to increase the number of highly qualified medical school applicants from minority groups underrepresented in medicine. Over the years, the program has broadened its initial focus on specific minority groups to include students from rural and economically disadvantaged backgrounds, regardless of race or ethnicity. Today, the program encompasses 11 sites nationwide:

- Case Western Reserve University School of Medicine
- Columbia University College of Physicians and Surgeons
- Duke University School of Medicine
- Howard University College of Medicine
- Rutgers New Jersey Medical School
- University of California, Los Angeles, David Geffen School of Medicine
- University of Louisville School of Medicine
- University of Texas Medical School at Houston
- University of Virginia School of Medicine
- University of Washington School of Medicine
- Yale University School of Medicine

In addition, the University of Washington School of Medicine website ([uwmedicine.org/education/md-program/admissions/applicants/shadowing](http://uwmedicine.org/education/md-program/admissions/applicants/shadowing)) offers information on shadowing to prospective students and lists helpful national, regional, and state resources.

#### DEVELOPMENT OF SHADOWING GUIDELINES

In response to the need for a more comprehensive approach, the Association of American Medical Colleges worked in close collaboration with the AMA and the NAAHP, among others, to develop shadowing guidelines for premedical students. The recommended guidelines ([aamc.org/download/356316/data/shadowingguidelines2013.pdf](http://aamc.org/download/356316/data/shadowingguidelines2013.pdf)), released in 2013, include student learning objectives and responsibilities, a model physician-student agreement, a student code of conduct, and a student agreement on confidentiality and privacy of patient information.

Another organization that provides information on shadowing is the American Association of Colleges of Osteopathic Medicine ([aacom.org/InfoFor/applicants/becoming/Pages/ShadowaDO.aspx](http://aacom.org/InfoFor/applicants/becoming/Pages/ShadowaDO.aspx)). Similar to allopathic medical schools, colleges of osteopathic medicine encourage applicants to learn more about the profession by identifying an osteopathic physician to shadow. Many DOs' offices will host a premedical student for one or two days.

#### EXISTING AMA POLICY

The AMA does not have existing policy on shadowing, but it does have significant policy related to increasing opportunities for underrepresented minorities to enter the field of medicine, including:

##### H-350.960, Underrepresented Student Access to US Medical Schools

Our AMA: (1) recommends that medical schools should consider in their planning: elements of diversity including but not limited to gender, racial, cultural and economic, reflective of the diversity of their patient population; and (2) supports the development of new and the enhancement of existing programs that will identify and prepare underrepresented students from the high-school level onward and to enroll, retain and graduate increased numbers of underrepresented students. (Res. 908, I-08)

##### D-350.995, Reducing Racial and Ethnic Disparities in Health Care

Our AMA's initiative on reducing racial and ethnic disparities in health care will include the following recommendations: ... (3) Promoting diversity within the profession by encouraging publication of successful outreach programs that increase minority applicants to medical schools, and take appropriate action to support such programs, for example, by expanding the "Doctors Back to School" program into secondary schools in minority communities. (BOT Rep. 4, A-03; Reaffirmation A-11)

##### E-9.121, Racial and Ethnic Health Care Disparities

(6) Increasing the diversity of the physician workforce may be an important step in reducing racial and ethnic health care disparities. Physicians should therefore participate in efforts to encourage diversity in the profession.

In addition to these policies addressing racial/ethnic diversity, AMA Policy D-295.941, Facilitating Access to Health Care Facilities for Training, calls on the AMA to "work with the Association of American Medical Colleges and other national organizations to expedite, wherever possible, the standardization of requirements in regards to training on HIPAA, drug screening, and health requirements for medical students, and resident and fellow

physicians who are being educated in hospitals and other health care settings.” This particular policy, however, specifies medical students and resident/fellow physicians, not premedical or K-12 students.

#### SUMMARY AND RECOMMENDATIONS

In many cases, shadowing for a given K-12 or premedical student is valuable and could make the difference between a successful career in health care or a missed opportunity. As part of its mission, the AMA could encourage physicians to “pay it forward” to the next generation by offering the opportunity for shadowing. A list of hospitals and physicians willing to allow students to shadow would be useful, but that would be a more substantive role than the AMA can assume, is outside the scope of the AMA’s strategic focus areas, and would entail a significant fiscal investment.

Other ways to further improve shadowing include: 1) an agreed-upon metric for all medical schools specifying the required quantity and quality of shadowing experiences for applicants; 2) similar standardization among medical schools, hospitals and physicians offering shadowing experiences as to the content and length of such programs; 3) development of HIPAA training modules for premedical students; and 4) a national “shadow for a day” event, to create more awareness of the need for shadowing, particularly as it relates to increasing physician diversity. Again, as noted above, such activities are outside the scope of the AMA’s work, but the AMA might encourage other appropriate organizations (including the AAMC and/or NAAHP) to undertake this work.

The development of clinical shadowing guidelines by the AAMC is timely and should help increase nationwide standardization of shadowing experiences for premedical students. The AMA should encourage awareness and use of these guidelines and call upon medical schools, physicians and others to help ensure availability of shadowing opportunities, particularly for students from underrepresented populations.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolutions 310-A-13 and 913-I-13 and that the remainder of this report be filed.

1. That our American Medical Association (AMA) encourage physicians in both private practice and academic settings to provide shadowing opportunities to students interested in a career in medicine—particularly those from underrepresented populations—as part of the physician’s commitment to the future of the profession.
2. That our AMA encourage physicians to adopt the most appropriate shadowing model to the needs of the practice/institution and the student(s).
3. That our AMA endorse the clinical shadowing guidelines for students from the Association of American Medical Colleges as one model for such students and help disseminate this document to K-12 students, premedical students, health professions advisors, hospitals, and physicians.

#### REFERENCES

1. Larson J et al. The University of Oklahoma College of Medicine summer medical program for high school students. *J Okla State Med Assoc.* 2011 Jun;104(6):255-9.
2. Wang JY, Hillary L, Lewis PY, Fetterman DM, Gesundheit NM. Is a Career in Medicine the Right Choice? The Impact of a Physician Shadowing Program on Undergraduate Premedical Students. *Acad Med.* 2015 Jan. 6. Available at: [journals.lww.com/academicmedicine/Abstract/publishahead/Is\\_a\\_Career\\_in\\_Medicine\\_the\\_Right\\_Choice\\_The.98881.aspx](http://journals.lww.com/academicmedicine/Abstract/publishahead/Is_a_Career_in_Medicine_the_Right_Choice_The.98881.aspx). Accessed February 16, 2015.
3. Kitsis EA. Shining a Light on Shadowing. *JAMA.* 2011;305(10):1029-1030.
4. Kitsis EA, Goldsammler M. Physician shadowing: a review of the literature and proposal for guidelines. *Acad Med.* 2013 Jan;88(1):102-10.
5. Hernandez J1, Al-Saadi S, Boyle R, Villadolid D, Ross S, Murr M, Rosemurgy A. Surgeons can favorably influence career choices and goals for students interested in careers in medicine. *J Am Coll Surg.* 2009 Jul;209(1):62-7. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/19651064>.
6. Wong KR, Gold JA. Shadowing Physicians. *JAMA.* 2011;305(23):2414-2416.
7. Diversity in Medical Education, Facts and Figures 2012. Association of American Medical Colleges. Available at: [members.aamc.org/eweb/upload/Diversity%20in%20Medical%20Education\\_Facts%20and%20Figures%202012.pdf](http://members.aamc.org/eweb/upload/Diversity%20in%20Medical%20Education_Facts%20and%20Figures%202012.pdf).

## 5. ASSURING SAFE AND EFFECTIVE CARE FOR PATIENTS BY SENIOR/LATE CAREER PHYSICIANS

*Reference committee hearing: see report of [Reference Committee C](#).*

### **HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS WITH CHANGE IN TITLE AND REMAINDER OF REPORT FILED**

*See Policy D-275.956*

Policy D-275.959, Competency and the Aging Physician, directs our American Medical Association (AMA) to: 1) study the issue of competency in aging physicians and develop guidelines, if the study supports such a need, for appropriate mechanisms of assessment to assure that America's physicians remain able to provide optimal care for their patients; and 2) report back to the House of Delegates.

### INTRODUCTION

The process of becoming a practicing physician in the United States requires a substantial commitment of time, money, energy, and emotion on behalf of each physician. Throughout their careers, physicians are recognized as professionals who practice a complex "craft" which requires them to maintain their skills and education, as well as make difficult, often quick and sometimes life-and-death decisions that demand high and complex levels of cognitive functioning.<sup>1,2</sup> The state medical boards grant physicians the authority to provide services that other health care professionals cannot provide.

As the demands of medical practice and the quantity of patients continue to grow, older physicians remain an essential part of the physician workforce.<sup>3</sup> The total number of physicians 65 years and older more than quadrupled from 50,993 in 1975 to 241,641 in 2013. Physicians 65 and older currently represent 23 percent of physicians in the United States. Within this group, two-fifths (39.3 percent) are actively engaged in patient care, while half (54 percent) are listed as inactive in the AMA Physician Masterfile.<sup>4</sup> The increasing numbers of older physicians, as well as the call for increased accountability by the public, have led regulators and policymakers to consider implementing some form of age-based competency screening.<sup>5</sup> All physicians must meet state licensing requirements to practice medicine in the United States. In addition, some hospitals and medical systems have initiated age-based screening, but there is no national standard, and older physicians are not required to pass a health assessment or an assessment of competency or quality performance in their area or scope of practice.<sup>6,7</sup>

Although some studies of physicians have shown decreasing practice performance with increasing years in medical practice, the effect of age on any individual physician's competence can be highly variable.<sup>8</sup> Many issues affecting late career physicians also affect those with a lapse in practice; assessment and remediation services for these physicians may be similar. However, there is a distinction between those seeking to reenter practice and the aging/late career physician. This report explores whether there is a need to establish guidelines for the testing for and judgment of an aging/late career physician's competence to care for patients.

### DETERMINING IF AN OLDER PHYSICIAN IS CLINICALLY COMPETENT

Assessment of practicing physicians is challenging because of the limited number of valid tools that may be applied to measuring competence and/or practice performance, the variable nature of physician practices, and cultural resistance to externally derived assessment approaches. Assessment of aging physicians poses unique challenges related to the uncertain and variable influence of aging on clinical competence and performance in practice. In addition, policy decisions regarding assessment of older physicians must balance the higher index of concern regarding potential competence deficits due to the effect of aging on physical health and cognitive function with a need to avoid implementation of discriminatory regulatory policies and procedures.

A large body of research demonstrates that cognitive dysfunction is more prevalent among older adults, although aging, per se, does not necessarily result in cognitive impairment.<sup>3</sup> Wide variations are seen in cognitive performance with aging,<sup>9,10</sup> and the ability to clearly demonstrate an association between specific cognitive deficits and physician occupational performance is challenging.<sup>5</sup> Furthermore, some attributes relevant to health care—such as wisdom, resilience, compassion, and tolerance of stress—may actually increase as a function of aging.<sup>5,11,12,13,14</sup>



In terms of specific research findings that may have a significant impact on patient care, there is a tendency for physicians to rely more on non-analytic processes (such as pattern recognition and “gist”-based processes), as opposed to more active and controlled processes, as they age.<sup>5,9</sup> With aging, fluid intelligence (“mental efficiency”) decreases while domain-specific, experientially-based knowledge remains stable.<sup>3</sup> Non-analytic processes may lead to more accurate diagnoses by experienced physicians, particularly when based primarily on contextual information, but may result in unrecognized diagnostic errors when analytic processes cannot intervene during evolving or complex clinical situations.<sup>9</sup> This may result in premature closure and diagnostic errors, and a compromise in the ability to care for more complex patients.<sup>5,9</sup> Eva described several factors associated with aging that may either negatively impact the accuracy of non-analytical approaches or limit the ability to engage in analytical processes. These factors include:

- Decreasing working memory and the ability to store and process information;
- Decreasing processing speed of mental operations limiting the ability to complete complex tasks;
- Increasing difficulty in inhibiting irrelevant information and inappropriate responses, including the tendency to be overly influenced by the order in which information is received (primacy effect) and to be biased by personal experience; and
- Declining hearing and visual acuity, which in and of themselves may significantly contribute to age-related intelligence decline.<sup>9,10</sup>

In addition to cognitive effects, relevant to maintenance of procedural competence, research shows that manual dexterity and visuospatial ability decrease with age.<sup>15,16,17</sup>

Related to the influence of aging on the actual assessment of physicians, published data demonstrate a negative impact of increasing age on physician assessment results. Physician performance on knowledge examinations declines as a function of aging regardless of whether the examination assesses general medical or surgical knowledge or more practice-specific knowledge, such as blood product transfusion or emergency contraception.<sup>18</sup> Important differences in performance may become more apparent after age 60.<sup>19</sup> Although most physicians over age 60 will score significantly lower than their younger colleagues, higher variability among older test-takers results in some physicians over 60 performing as well as those younger than 40.<sup>19</sup> Research suggests that the lower score obtained by older physicians represents failure to acquire new or changing knowledge rather than the loss of their more stable knowledge base.<sup>20</sup> Among physicians referred to an assessment center because of concerns regarding their clinical competence, older age and lack of board certification predicted a lower score on a computer-based clinical simulation designed to assess patient management skills.<sup>21</sup> Detection of competence deficits among referred physicians is associated with an increased risk of underlying cognitive dysfunction, which may be more pronounced in elderly physicians.<sup>22,23,24</sup>

When broader, multifaceted assessment approaches are deployed (including chart-stimulated recall, standardized patients, multiple-choice question tests, and oral examinations), physician age and time since graduation predict overall poorer performance.<sup>25,26</sup> Of note, performance deficits may be identified across multiple competence domains such as history taking, physical examination and communication skills, problem solving, patient management, and record keeping.<sup>26</sup> The negative impact of aging on performance was seen in both physicians referred for assessment because of concerns about their competence and in the physicians who served as a normative criterion (comparison) group.<sup>9</sup> Data from the Peer Assessment Program in Ontario show that detection of gross deficiencies increases with age, occurring in nine percent of physicians under age 49, 16 percent of those ages 50 to 74, and 22 percent over age 75.<sup>27</sup> In a sample of physicians referred from US licensing authorities, assessment outcomes of older physicians are significantly more likely to be interpreted as unsafe for clinical practice.<sup>28</sup> A neuropsychological analysis of physicians receiving adverse actions by a state medical board identified deficits in attention, sequential processing, logical analysis, eye-hand coordination, and verbal and non-verbal learning.<sup>5,29</sup>

The relationship between the results from competence assessment and the eventual quality of care provided and patient outcomes is complex and does not necessarily allow for predictions at the individual practitioner level. Consistent with the research cited above showing declining knowledge and failure to acquire new knowledge over time, research shows that older primary care physicians are less likely to prescribe appropriate medications or incorporate new treatment strategies into their practices.<sup>17,30,31</sup> A review of 62 studies found that increasing years in practice is associated with decreasing knowledge; lower adherence to evidence-based standards of care for diagnosis, prevention and treatment; and worse patient outcomes.<sup>18</sup> A large majority (73 percent) of the studies showed an age-related decline in all or some of the parameters assessed, while only four percent showed an age-

related improvement in all or some of the parameters assessed. Another study demonstrated that inpatients cared for by physicians who were practicing longer had longer stays and higher mortality rates.<sup>32</sup> The peer review program in Ontario found age to be an independent predictor of poor quality of care and record keeping.<sup>27,33</sup> In the United Kingdom, physician practices that are consistently classified as poorly performing relative to their quality and outcomes are more likely to be staffed by elderly general practitioners.<sup>34</sup> However, not all research finds a negative association between age and quality. A large study of physician performance in Massachusetts, using publicly available claims data, did not find a relationship between quality and years of experience.<sup>35</sup>

Research on actions taken by state medical boards suggests that advancing age is a risk factor for adverse licensing actions, although malpractice incidents and claims may occur less frequently among older physicians.<sup>36,37,38</sup> Following a thorough practice review by Quebec licensing authorities, including medical record audit and assessment of prescribing habits and practice outcomes, physicians over age 70 were three times more likely to have their license cancelled than those under 70 years old, and were half as likely to successfully remediate. Physicians ages 65 to 97 were three times more likely to have inadequate continuing professional development (CPD) activity compared to their younger colleagues.<sup>39</sup>

Studies have shown that aging in surgeons is associated with increased morbidity and/or mortality in patients undergoing thyroidectomy,<sup>40</sup> carotid endarterectomy,<sup>41</sup> knee replacement surgery,<sup>42</sup> and coronary artery bypass grafting.<sup>43</sup> A study based on Medicare data found that older surgeons, particularly those with low procedural volumes, have higher mortality rates for selected procedures, such as segmental colon resection, pancreatotomy, and CABG,<sup>17</sup> but not for other complex procedures such as lung resection or abdominal aortic aneurysm repair. Older surgeons are less likely to integrate new modalities and recommendations for care into their practices; for example, they are less likely to perform breast reconstruction when indicated in breast cancer patients<sup>44</sup> and are more likely to have delayed adoption of and higher complications with laparoscopic techniques.<sup>45,46,47</sup>

#### OTHER FACTORS THAT AFFECT CLINICAL PERFORMANCE

Although age is a factor in predicting the prevalence of dyscompetence, there are other individual and practice factors that may influence performance. Physicians in solo practice (who have less contact with physician colleagues) and those who are in administrative positions (who have less patient contact) tend to score lower on knowledge-based examinations.<sup>19</sup> Physicians in solo practice score lower on knowledge examinations related to both the loss of stable knowledge and failure to acquire new and changing knowledge, suggesting that an isolated environment impacts one's abilities to maintain and acquire knowledge.<sup>20</sup> Broad, multifaceted assessment approaches identify solo practice, international training, lack of board certification, general practice and incongruence between training and scope of practice as additional risk factors predicting poor performance outcomes.<sup>25,26,28</sup> Board certification, female gender, and graduation from a domestic medical school, but not time in practice, were associated with better quality of care as identified by review of claims data in Massachusetts.<sup>35</sup> Similarly, the peer assessment program in Canada found that, in addition to increasing age, lack of board certification, male gender, and a rural practice location were associated with worse quality of care and documentation in the medical record.<sup>27,33</sup> Furthermore, multivariate analysis revealed a related and potentially additive impact of age, practice location, and lack of certification.<sup>27</sup> In addition, male gender, lack of board certification or hospital privileges, graduation from a foreign medical school, high clinical volume, physical and mental health issues, and certain specialty practices are also risk factors for adverse licensure action.<sup>36,37</sup> Of note, self-reported continuing medical education (CME) hours may be directly correlated with incompetence.<sup>26</sup> Fatigue, stress, burnout, and health issues unrelated to aging are also risk factors that can affect clinical performance.<sup>5</sup>

#### HEALTH SCREENINGS FOR PHYSICIANS

Moutier suggests that aging is but one of several risk factors for competence and performance problems and that a mandatory retirement age for physicians is not justified.<sup>5</sup> However, Moutier gives credit to hospitals and medical systems that have initiated age-based screening processes, and a broad professional initiative in developing age-based screening policy and procedures is recommended.<sup>5</sup> The majority of individuals surveyed during a conference of the Coalition for Physician Enhancement favored implementation of age-based screening of physicians' competence.<sup>5</sup> Among the respondents, which included staff from physician assessment centers, attorneys and state medical board members, 72 percent recommended that screening begin at age 65 or 70. Conference participants suggested the process should include peer review, practice evaluation, and assessments of physical and mental health, including a cognitive screening process.

### *Physicians' Professional Responsibilities*

It is part of all physicians' professional duty to continually assess their own physical and mental health.<sup>1,9,48</sup> Currently, there is no national standard for screening physicians who have reached a certain age. In addition, the standards of professional behavior authorized and adopted by medical societies state that physicians' professional responsibilities should include reporting all instances of significantly impaired or incompetent colleagues to hospital, clinic or other relevant authorities.<sup>48</sup>

### *Peer Review and Practice Evaluation*

Although individual peers reporting on each other is the prime mechanism for identifying physicians whose knowledge, skills, or attitudes are compromised, and most physicians agree that impaired or incompetent physicians should be reported to the appropriate authorities, this method is not always reliable.<sup>1,48,49</sup> A study by Campbell et al. showed that 45 percent of those with direct personal knowledge of a physician in their hospital group or practice who was impaired or incompetent did not always report that physician.<sup>48</sup> Contemporary methods of self-regulation (e.g., clinical performance measurement; CPD requirements, including novel performance improvement CME programs; and new and evolving maintenance of certification programs) have been created by the profession in part due to increasing recognition that sole reliance on individual physicians to report colleagues' performance, even if it were 100 percent reliable, still would not be enough to meet shared obligations for quality assurance and patient safety.

From a public protection perspective, the objective assessment option seems like an important intervention, given the strong impact of aging on performance, the extreme variability of cognitive function among older physicians, and the well-documented inability of physicians to self-assess, in particular those who are less competent.<sup>50</sup> Eva advised caution regarding the above interventions, with significant resource and administrative implications; they should not be universally mandated but implemented through a case-by-case, assessment-driven process, given the extreme variability of cognitive findings among older physicians.<sup>9</sup> External, objective assessment also seems essential given that non-analytic processes may be even less accessible to critical self-appraisal than the more conscious analytical processes.

### *The Joint Commission's Requirements*

The Joint Commission's standard MS.11.01.01 is specifically written to encourage medical staffs to identify and manage matters of individual health for licensed independent practitioners that are separate from actions taken for disciplinary purposes. The standard focuses on the education of physicians to recognize issues in others and also encourages self-referral in an effort to facilitate confidential diagnosis, treatment and rehabilitation by assisting a practitioner to retain and regain optimal professional functioning consistent with the protection of patients. If it is determined, however, that a physician is unable to exercise safely the privileges that he or she has been granted, The Joint Commission's standard calls for the matter to be reported to the medical staff leadership for appropriate corrective action.<sup>51</sup>

### *Hospital/Health System Screening Programs*

A growing number of hospitals and health care systems have adopted official policies that require physicians to undergo health assessments upon reaching a certain age in order to examine practice patterns and physician abilities to practice safely.<sup>52</sup> Examples of hospitals and groups that have such policies in place include the University of Virginia Health System, Driscoll Children's Hospital in Texas, and Stanford Lucille Packard Children's Hospital in California. The University of Virginia screens physicians at age 70 and every year after age 75 and assesses physical and mental capacity. Driscoll screens physicians at age 70 and at reappointment thereafter, conducts physical and mental examinations and, if deemed appropriate, proctors clinical performance. Stanford screens physicians at age 75 and every two years thereafter, and screening includes peer assessment of clinical performance, history and physical assessments, and cognitive screening.<sup>52,53</sup>

### *US and Canadian Local Screening Programs*

LifeGuard, conceptualized and supported by the Pennsylvania Medical Society, evaluates and assesses the neurocognitive status, physical status, and medical knowledge of referred physicians and provides an objective

report describing assessment results and recommendations for remediation (if applicable).<sup>54</sup> LifeGuard is a resource for state medical boards, hospitals and health systems, medical staff, peer review boards, credentialing committees, physician group practices and physicians in Pennsylvania. The program includes the Aging Physician pathway for entities and organizations that need “ability to perform” assessments for senior physicians. This pathway measures clinical skills and health status; core components of the assessment can include an objective measurement of cognitive and physical functioning as well as fine motor skills. Additional assessment options are available based on the concerns identified by the requesting entity.<sup>54</sup>

The Colorado Physician Health Program (CPHP), governed by the Colorado Peer Assistance Act, is independent of other medical organizations and the state government. The Denver Medical Society, the Colorado Medical Society and Copic Insurance Company were instrumental in establishing CPHP and continue their support of the program. CPHP provides confidential services in all areas required by law or regulation, including comprehensive clinical evaluation; treatment planning and referral; treatment monitoring and support; assessment of ability to practice safely; consultation to hospital administrators, medical executive committees and medical staff offices; education presentations on physician health and related issues; documentation of health status necessary for hospital credentialing; and neutrality, objectivity and confidentiality in the context of working with hospitals, partnerships, the Colorado Board of Medical Examiners, organizations, families and other systems with which the physician is involved.<sup>55</sup>

The California Medical Association, California Hospital Association’s Center for Healthcare Medical Executives, and California Public Protection and Physician Health drafted guidelines and principles for medical staffs, medical groups, and other entities in California that have responsibility for decisions related to evaluating a practitioner’s health and well-being as they impact the practitioner’s ability to practice medicine safely. The draft guidelines include options for assessing physicians who choose to work late into their careers. The draft guidelines, available at <https://cppphdotorg.files.wordpress.com/2011/02/assessing-late-career-practitioners-draft-26-wo-cma-1-14-15.pdf>, are subject to periodic review and revision to incorporate new developments.

The College of Physicians and Surgeons of Ontario (CPSO) has established a formal system for assessing all physicians in Ontario. Duties of the College include issuing certificates of registration to doctors for the practice of medicine, monitoring and maintaining standards of practice through peer assessment and remediation, investigating complaints about doctors on behalf of the public, and conducting discipline hearings when doctors may have committed an act of professional misconduct or may be incompetent. Ontario physicians who reach age 70 are required to participate in the College-appointed peer assessment program (if the physician has not been randomly selected in the previous five years). These physicians are then assessed every five years thereafter. When a physician is selected to undergo assessment, a number of pre-assessment activities take place. Reviewing a physician’s medical record-keeping system is perhaps most often associated with peer assessment. A records review enables an assessor to develop a picture of the physician’s practice and an understanding of his or her approach to patient care. Through the records review and discussion with the physician, assessors try to put together the “story of the patient.” An assessor evaluates the physician’s ability to take adequate histories, conduct appropriate examinations, order the necessary diagnostic tests, identify the appropriate course of action, conduct the necessary interventions and monitor patients, as necessary.<sup>56</sup>

#### FACTORS THAT MAY HAMPER ASSESSMENT OF OLDER PHYSICIANS’ COMPETENCE

Factors that may make assessment of older physicians more challenging include the variability of cognitive dysfunction in older adults, uncertainty regarding how to interpret tests of cognitive or motor function in physicians, the confounding effects of other variables on physician competence and performance, and the uncertain predictive value of specific competence assessments on the actual quality of care and patient outcomes.

With regard to measurement of cognitive dysfunction, it is uncertain whether and how physician results should be compared to the general population and whether their results should be age-matched for interpretation purposes.<sup>22</sup> The nature of physician decisions, in terms of their difficulty, acuity and gravity, suggests that even minor changes in cognitive function may be impactful in patient care situations.<sup>2,57</sup> Results for cognitive testing that are interpreted as normal based on comparison to an age-matched, non-physician population could potentially represent a significant decline in highly intelligent individuals.<sup>58,59</sup> Turnbull and colleagues found that using an age-independent standard for neuropsychological performance was more sensitive in detecting cognitive problems among referred physicians, and it was more accurate in predicting assessment and remediation outcomes.<sup>23</sup>

Although there are currently no accepted criteria or guidelines for making judgments regarding acceptable cognitive or neuropsychological thresholds, there is a sentiment that public protection goals dictate the need for a high standard in judgments about cognitive ability in physicians.<sup>58</sup> Should “corrections” be made in expectations for cognitive performance when they are not made for performance on other assessment modalities, such as the multiple-choice question examinations?<sup>22,23</sup> Regardless of whether correction should be made for age-matching on physicians, the ultimate relationship between tests of cognitive function on clinical performance and outcomes is not well established.<sup>60</sup> Caulford notes that the failure to assimilate new knowledge identified in the American Board of Internal Medicine (ABIM) studies is not clearly related to physician performance problems.<sup>26</sup> Waljee points out that there is no evidence directly linking age-related decline in motor and visuospatial skills to worsening outcomes for patients.<sup>17</sup> In fact, commonly used diagnostic assessments that focus primarily on analytic approaches to clinical care may yield somewhat spurious findings in physicians who rely more on non-analytical approaches.<sup>9</sup> Yet, the identified relationship between cognitive performance level and prediction of assessment and remediation outcomes cannot be ignored.<sup>23</sup>

An increasingly prevalent perspective emerging from the CME community is the need to recognize the important influence of the system and practice environment on physicians in terms of their ability to learn and apply their learning in improving patient care and outcomes.<sup>61</sup> Physician performance in practice represents a complex interaction between personal characteristics of the physician (age, gender and certification status) and practice context (practice structure, location, workload and patient acuity). This suggests that competence or performance assessment models should take into consideration the broader environmental context in which a physician practices.<sup>28,62</sup> In fact, regression modeling suggests that incorporation of organizational and system factors substantially reduces the independent impact of age and other individual physician characteristics on practice-based assessments of physicians.<sup>62</sup> Durning and colleagues applied situated cognition theory as a framework for understanding how a physician’s thoughts and actions cannot be separated from the social context in which they practice.<sup>3</sup> In addition to physician factors such as age and cognitive function, patient factors (acuity and complexity) and practice factors (appointment lengths, setting, staffing and support systems) affect a physician’s practice and influence patient care and outcomes. This phenomenon limits the ability of measures of cognitive function and knowledge, and perhaps measurement of other domains in an assessment center context, to explain or predict performance in the physician’s actual practice setting.<sup>3</sup>

Interpretations and decisions based on diagnostic assessment of clinical competence are also challenged by the lack of clear standards for physician performance and an overall lack of normative assessment data on practicing physicians.<sup>21</sup> Even though physicians may be at increased risk for competence deficits as they age, the majority of older physicians most likely provide safe and effective patient care. While age is a risk factor for cognitive dysfunction among referred physicians, age in the absence of identified cognitive deficits does not necessarily have a negative impact on assessment or remediation outcomes.<sup>23</sup> The challenge is to devise a process that will be cost effective in identifying physicians who require remediation, or perhaps should retire from practice. Norman and colleagues suggest a process analogous to an epidemiologic approach to screening for a low prevalence disease in which a single testing method may not be cost effective.<sup>25</sup> A multifaceted approach would begin with an economical screening test with high sensitivity, followed by a more comprehensive diagnostic approach for those who are identified as a high risk for dyscompetence.<sup>25</sup> The diagnostic approach would need to include assessment methods that cover the range of competencies relevant to safe and effective patient care, as physicians who are diagnosed as “incompetent” may have deficiencies that span more than one competency domain.<sup>26</sup>

There remains some uncertainty about the value of results based on assessment of physician knowledge and skills in vitro for predicting their clinical performance and quality of care in vivo. It is difficult, in an assessment center setting, to account completely for practice and patient-related contextual factors that have a strong influence on physician performance. Work by Rethans and Kopelow suggests that physician behaviors in an assessment context may not accurately represent their actual clinical performance.<sup>63,64</sup> On the other hand, there are consistencies noted between assessment outcomes and practice performance results. For example, assessment of aging physicians demonstrates their failure to acquire new or changing knowledge over time, and clinical studies show they fail to integrate new clinical information or methods in their practices.<sup>20,30,31</sup> In response to potential concerns regarding relevance and predictability of competence assessments for actual performance in practice, the Physician Review Program (PREP) of the CPSO included medical records from physicians’ actual practice and standardized patient-simulated cases typical of those seen in physicians’ specific practice context.<sup>25</sup> It would seem appropriate, pending resolution of such questions by targeted research, to integrate methods focusing on assessment of knowledge and skills with those assessing actual clinical performance in a way that is sensitive to practice context.

## IMPAIRED PHYSICIANS AND UNIFORM WAYS TO DEAL WITH THEIR COMPETENCE TO PRACTICE

The profession of medicine holds itself to the high ideals of caring and competency; the first tenet is *primum non nocere* or “first do no harm.” Ethical guidelines state, “When health or wellness is compromised, so is the safety or effectiveness of the medical care provided. When failing physical or mental health reaches the point of interfering with a physician’s ability to engage safely in professional activities, the physician is said to be impaired.”<sup>65</sup>

Concern regarding the continuing competence of physicians has grown in recent years from the Institute of Medicine reports on patient safety as well as public concern with medical errors and inadequate practice oversight. Unlike commercial airline pilots who must undergo regular health screenings starting at age 40 and must retire at age 65, or FBI agents whose mandatory retirement age is 57, physicians are subject to no such rules.<sup>66,67</sup> However, physicians are regulated by state medical boards, professional organizations, hospitals, organized systems, and specialty certification boards.

The issue of who holds physicians accountable to a high standard of practice throughout their careers is one that has troubled licensing authorities, hospitals and clinical directors, as well as third party payers. The primary purpose of state medical boards is to protect the public by ensuring that those who practice medicine are able to do so safely. In most states, relicensure, the process by which physicians renew their licenses to practice, consists primarily of reporting CME activities and maintaining a record free of violation of legislative and professional statutes and guidelines.<sup>67</sup>

Hospitals have an obligation to retain only competent physicians on their staff. Some hospitals now require physicians over a certain age, usually starting between ages 70 to 75, to undergo periodic physical and cognitive exams as a condition of renewing their privileges. Other hospitals oppose setting a hard-and-fast-number for mandatory testing.<sup>5,68</sup> The Joint Commission has established guidelines for ongoing evaluation of the professional practice quality of physicians. These evaluations must be conducted on a regular basis and measure a practitioner’s clinical and behavioral competence in six areas: patient care, medical/clinical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice.<sup>51</sup>

Maintenance of certification (MOC) programs sponsored by the American Board of Medical Specialties (ABMS) and its 24 member boards promote CPD. The Member Boards require most medical specialists to seek recertification on a periodic basis, typically every 10 years, by successfully completing assessments designed to test medical knowledge, clinical competence and skills in communicating with patients. MOC’s impact is limited, however, in that many older physicians are “grandfathered” or have time-unlimited board certifications. Furthermore, the process does not address those physicians who are not board certified.<sup>67,69</sup> Choudhry suggests that older physicians may need the quality interventions that are appropriate for all physicians and raises concerns that much of existing CME may not help them maintain their quality of care.<sup>18</sup> Many older physicians are exempt from MOC requirements that might provide a venue for helping to maintain their competence.<sup>18</sup>

When competency to practice safely is in question, the approach is individualized because there is a continuum of competency. If the physician is an immediate threat to the public welfare, or has an irreversible cognitive impairment or an untreatable condition, the state medical board can revoke the medical license. If the condition is potentially reversible, state medical boards and hospitals may refer physicians to specialized programs for competency to practice assessments and remediation. These programs evaluate a physician’s clinical knowledge, reasoning, judgment, documentation and patient care as well as neuropsychological status. Organizations such as the Coalition for Physician Enhancement have a mission to support, develop and certify those with expertise in assessment and education enhancement for physicians and other health-care providers. There are approximately 10 remediation programs in the United States.<sup>5</sup>

## RETRAINING MAY BE NEEDED TO ALLOW PHYSICIANS TO CONTINUE TO PRACTICE

It is the opinion of the Council on Medical Education that remediation should be a supportive, ongoing and proactive process and that physicians should be allowed to remain in practice as long as patient safety is not endangered.<sup>70</sup> Remediation programs offer many educational approaches including formal CME. Traditional CME courses developed for the average physician are often used as a resource for physicians needing remediation. Lobprabhu, et al. suggest that the remediation program should include remedial CME for the identified area of

dyscompetence, as well as pre- and post-testing to determine whether the physician learned the material presented.<sup>68</sup> The type of testing and the criteria for successful remediation may differ according to specialty.

Norman comments that “physicians undergoing remedial education are at high risk for failure and conventional education may be unsuccessful.”<sup>25</sup> In particular, cognitive dysfunction may negatively impact a physician’s ability to remediate successfully.<sup>2,22</sup> Thus, assessment of neuropsychological function may be of value in supporting decisions about the potential utility (vs. futility) of further remediation and assessment, particularly if cognitive problems are identified in older physicians with significant competence deficits.<sup>22,71</sup> Kohatsu commented that their research findings had potential policy implications for use of board certification in credentialing, and they support the efforts of the ABMS to enhance the development and assessment of physician life-long learning and continuing competence.<sup>37</sup>

Barriers associated with remediation programs include the high cost of programs; the dispersed location of programs; the lack of a comprehensive database to inform physicians about assessment and remediation programs, such as structure, requirements, costs and outcomes; the lack of standardized curricula; and the lack of a sufficient monitoring process to assess program outcomes. Further, due to the relatively small number of assessment programs that address cognitive and other impairments, physicians are unlikely to be assessed within the context of their own practice.<sup>68,70</sup>

#### APPROPRIATENESS OF GUIDELINES FOR TESTING FOR AND JUDGMENT OF A PHYSICIAN’S COMPETENCE TO CARE FOR PATIENTS

Deciding when to give up practice is an important decision for any physician, and it is critically difficult for some. Normal aging is associated with cognitive changes; some are positive (e.g., accumulated wisdom), but most are usually associated with some decline. However, increased intelligence and greater educational achievement appear to be protective to some extent. Nonetheless, physicians, similar to non-physicians, are at risk of mild cognitive impairment and dementia, and physicians with either condition, often lack insight into their deficiencies. These physicians may be resistant to suggestions that it is time to retire from practice.<sup>58</sup>

Many wise physicians have asked trusted younger colleagues to tell them when it is time to stop. Self-regulation is an important aspect of medical professionalism, and helping colleagues recognize their declining skills is an important part of self-regulation. Therefore, physicians must develop guidelines/standards for monitoring and assessing both their own and their colleagues’ competency. Clinical performance measurement and patient safety event reporting are used now for medical staff assessment of professional competency.<sup>5</sup>

In years past, local medical societies would perform this function for their members. More recently, medical staffs and department chiefs have dealt with the issue on an ad hoc basis, and with medical staff peer review processes on a more formal basis. With the recent shift away from hospital practice and the current competitive and litigious environment, formal guidelines on the timing and content of testing of competence may be appropriate. How often this testing should occur is not well defined. Unfortunate outcomes may trigger an evaluation at any age, but perhaps periodic reevaluation after a certain age such as 70, when incidence of declines is known to increase, may be appropriate. This testing should include evaluation of physical and mental health, neurocognitive testing, and review of actual clinical care, either by direct observation or chart review. Physicians must generate and agree on the appropriate guidelines themselves. Following formal guidelines may head off a call for mandatory retirement ages, as pilots experience, or imposition of guidelines by others.<sup>1</sup>

#### SUPPORT FOR AGING PHYSICIANS

Some physicians are glad to move into a different phase of their lives when they reach age 70. For others, however, this transition is not easy, and it may require the guidance and support of peers. For this reason, it is important for medical staff leaders to understand how to support and respect long serving colleagues. Physicians with decades of experience and contribution deserve the same sensitivity and respect afforded their patients as they experience health changes that may or may not allow continued clinical practice.<sup>72</sup>

Shifting away from procedural work, allocating more time with individual patients, using memory aids and seeking input from professional colleagues might help physicians successfully adjust to the cognitive changes that accompany aging.<sup>5,58</sup> Eva suggests that findings from the literature may also identify ways that to alter the practice

environment or tailor approaches to CPD to help mitigate the effects of age-associated cognitive changes.<sup>9,10</sup> These findings include:

- Increased environment supports, such as simplified documentation forms for recording data and thus decreasing the need for working memory, freeing cognitive resources for other activities;
- Decreased case load/decreased time demands;
- Narrowing or limiting scope of practice;
- Enhancing the clarity of various stimuli provided to older physicians, such as increasing the contrast and resolution of radiographic images; and
- Focus on analytic components of medical diagnosis in CPD.

The AMA also provides support for aging physicians through a special membership section that is the largest such group in the United States. The AMA Senior Physicians Section (SPS), which comprises all AMA member physicians age 65 and older, sponsors educational activities on topics of interest to the senior physician community. Recent programs included:

- “The Aging Physician: Opportunities and Challenges,” held in June 2013, focused on understanding impairment in older physicians as well as facilitating the planning of prevention strategies. The session examined what role the AMA should play in determining competency measurements in an aging workforce. ([www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/education-programs.page](http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/education-programs.page))
- “Grow Healthier as You Grow Older,” held in June 2014, focused on the challenges and opportunities physicians face in maintaining health and well-being and provided insights into how to improve health outcomes in the senior population. ([www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/meetings.page?](http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/meetings.page?))

## AMA POLICIES

The AMA has policy in which it urges members of the profession to discover and rehabilitate if possible, or exclude if necessary, the physicians whose practices are incompetent, and to fulfill their responsibility to the public and to their profession by reporting to the appropriate authority those physicians who, by being impaired, need help, or whose practices are incompetent (H-275.998). AMA policy urges licensing boards, specialty boards, hospitals and their medical staffs, and other organizations that evaluate physician competence to inquire only into conditions that impair a physician’s current ability to practice medicine (H-275.978[6]). AMA policy also reaffirms that it is the professional responsibility of every physician to participate in voluntary quality assurance, peer review, and CME activities (H-300.973 and H-275.996). These and other related policies are attached (see Appendix).

## SUMMARY AND RECOMMENDATIONS

Regulators and policymakers are considering some form of age-based competency screening due to the increasing number of older physicians, the call for increased accountability by the public and concerns for patient safety.<sup>5</sup> Although some studies among physicians have shown decreasing practice performance with increasing years in medical practice, the effect of age on any individual physician’s competence can be highly variable.<sup>8</sup> Furthermore, assessment of competence among aging physicians poses unique challenges related to the uncertain and variable influence of aging on clinical competence and performance in practice.

It is part of a physician’s professional duty to continually assess his or her own physical and mental health, as well as to report all instances of significantly impaired or incompetent colleagues to hospital, clinic or other relevant authorities. However, this method is not always reliable. Contemporary methods of self-regulation (e.g., clinical performance measurement; CPD requirements, including novel performance improvement CME programs; and new and evolving MOC programs) have been created by the profession to meet shared obligations for quality assurance and patient safety. Some hospitals and medical systems have initiated age-based screening, but there is no national standard, and older physicians are not required to pass a health assessment or an assessment of competency or quality performance in their area or scope of practice.

It is the opinion of the Council on Medical Education that physicians should be allowed to remain in practice as long as patient safety is not endangered and that, if needed, remediation should be a supportive, ongoing and proactive



process. Self-regulation is an important aspect of medical professionalism, and helping colleagues recognize their declining skills is an important part of self-regulation. Therefore, physicians must develop guidelines/standards for monitoring and assessing both their own and their colleagues' competency. Formal guidelines on the timing and content of testing of competence may be appropriate and may head off a call for mandatory retirement ages or imposition of guidelines by others.

It should be noted that the development of guidelines/standards for appropriate mechanisms to assess aging/late career physicians will require significant resources to convene meetings (live and virtual) of experts and stakeholders—especially in view of the limited and conflicting data available on this topic. Furthermore, if a uniform set of guidelines was to be identified, it would have to be consistent with state regulations at a number of levels.

The Council on Medical Education recommends that the following recommendations be adopted, and that the remainder of the report be filed.

1. That our American Medical Association (AMA) identify organizations that should participate in the development of guidelines and methods of screening and assessment to assure that senior/late career physicians remain able to provide safe and effective care for patients.
2. That our AMA convene organizations identified by the AMA to work together to develop preliminary guidelines for assessment of the senior/late career physician and develop a research agenda that could guide those interested in this field and serve as the basis for guidelines more grounded in research findings.
3. That our AMA rescind Policy D-275.959, Competency and the Aging Physician, since this directive has been accomplished through this report.

#### APPENDIX – AMA Policies

##### D-275.959, Competency and the Aging Physician

Our AMA will study the issue of competency in aging physicians and develop guidelines, if the study supports such a need, for appropriate mechanisms of assessment to assure that America's physicians remain able to provide optimal care for their patients and report back to the House of Delegates. (Res. 308, A-14)

##### H-275.998, Physician Competence

Our AMA urges: (1) The members of the profession of medicine to discover and rehabilitate if possible, or to exclude if necessary, the physicians whose practices are incompetent. (2) All physicians to fulfill their responsibility to the public and to their profession by reporting to the appropriate authority those physicians who, by being impaired, need help, or whose practices are incompetent. (3) The appropriate committees or boards of the medical staffs of hospitals which have the responsibility to do so, to restrict or remove the privileges of physicians whose practices are known to be incompetent, or whose capabilities are impaired, and to restore such physicians to limited or full privileges as appropriate when corrective or rehabilitative measures have been successful. (4) State governments to provide to their state medical licensing boards resources adequate to the proper discharge of their responsibilities and duties in the recognition and maintenance of competent practitioners of medicine. (5) State medical licensing boards to discipline physicians whose practices have been found to be incompetent. (6) State medical licensing boards to report all disciplinary actions promptly to the Federation of State Medical Boards and to the AMA Physician Masterfile. (Failure to do so simply allows the incompetent or impaired physician to migrate to another state, even after disciplinary action has been taken against him, and to continue to practice in a different jurisdiction but with the same hazards to the public.) (CME Rep. G, A-79; Reaffirmed: CLRPD Rep. B, I-89; Reaffirmed: Sunset Report, A-00; Reaffirmation I-03; Reaffirmed: CME Rep. 2, A-13)

##### H-275.978, Medical Licensure

The AMA: (1) urges directors of accredited residency training programs to certify the clinical competence of graduates of foreign medical schools after completion of the first year of residency training; however, program directors must not provide certification until they are satisfied that the resident is clinically competent; (2) encourages licensing boards to require a certificate of competence for full and unrestricted licensure; (3) urges licensing boards to review the details of application for initial licensure to assure that procedures are not unnecessarily cumbersome and that inappropriate information is not required. Accurate identification of documents and applicants is critical. It is recommended that boards continue to work cooperatively with the Federation of State Medical Boards to these ends; (4) will continue to provide information to licensing boards and other health organizations in an effort to prevent the use of fraudulent credentials for entry to medical practice; (5) urges those licensing boards that have not done so to develop regulations permitting the issuance of special purpose licenses. It is recommended that these regulations permit special purpose licensure with the minimum of educational requirements consistent with protecting the health, safety and welfare of the public; (6) urges licensing boards, specialty boards, hospitals and their medical staffs, and other

organizations that evaluate physician competence to inquire only into conditions which impair a physician's current ability to practice medicine. (BOT Rep. I-93-13; CME Rep. 10 - I-94); (7) urges licensing boards to maintain strict confidentiality of reported information; (8) urges that the evaluation of information collected by licensing boards be undertaken only by persons experienced in medical licensure and competent to make judgments about physician competence. It is recommended that decisions concerning medical competence and discipline be made with the participation of physician members of the board; (9) recommends that if confidential information is improperly released by a licensing board about a physician, the board take appropriate and immediate steps to correct any adverse consequences to the physician; (10) urges all physicians to participate in continuing medical education as a professional obligation; (11) urges licensing boards not to require mandatory reporting of continuing medical education as part of the process of reregistering the license to practice medicine; (12) opposes the use of written cognitive examinations of medical knowledge at the time of reregistration except when there is reason to believe that a physician's knowledge of medicine is deficient; (13) supports working with the Federation of State Medical Boards to develop mechanisms to evaluate the competence of physicians who do not have hospital privileges and who are not subject to peer review; (14) believes that licensing laws should relate only to requirements for admission to the practice of medicine and to assuring the continuing competence of physicians, and opposes efforts to achieve a variety of socioeconomic objectives through medical licensure regulation; (15) urges licensing jurisdictions to pass laws and adopt regulations facilitating the movement of licensed physicians between licensing jurisdictions; licensing jurisdictions should limit physician movement only for reasons related to protecting the health, safety and welfare of the public; (16) encourages the Federation of State Medical Boards and the individual medical licensing boards to continue to pursue the development of uniformity in the acceptance of examination scores on the Federation Licensing Examination and in other requirements for endorsement of medical licenses; (17) urges licensing boards not to place time limits on the acceptability of National Board certification or on scores on the United State Medical Licensing Examination for endorsement of licenses; (18) urges licensing boards to base endorsement on an assessment of physician competence and not on passing a written examination of cognitive ability, except in those instances when information collected by a licensing board indicates need for such an examination; (19) urges licensing boards to accept an initial license provided by another board to a graduate of a US medical school as proof of completion of acceptable medical education; (20) urges that documentation of graduation from a foreign medical school be maintained by boards providing an initial license, and that the documentation be provided on request to other licensing boards for review in connection with an application for licensure by endorsement; (21) urges licensing boards to consider the completion of specialty training and evidence of competent and honorable practice of medicine in reviewing applications for licensure by endorsement; and (22) encourages national specialty boards to reconsider their practice of decertifying physicians who are capable of competently practicing medicine with a limited license. (CME Rep. A, A-87; Modified: Sunset Report, I-97; Reaffirmation A-04; Reaffirmed: CME Rep. 3, A-10; Reaffirmation I-10; Reaffirmed: CME Rep. 6, A-12; Appended: Res. 305, A-13)

#### H-300.973, Promoting Quality Assurance, Peer Review, and Continuing Medical Education

Our AMA: (1) reaffirms that it is the professional responsibility of every physician to participate in voluntary quality assurance, peer review, and continuing medical education activities; (2) to encourage hospitals and other organizations in which quality assurance, peer review, and continuing medical education activities are conducted to provide recognition to physicians who participate voluntarily; (3) to increase its efforts to make physicians aware that participation in the voluntary quality assurance and peer review functions of their hospital medical staffs and other organizations provides credit toward the AMA's Physicians' Recognition Award; and (4) to continue to study additional incentives for physicians to participate in voluntary quality assurance, peer review, and continuing medical education activities. (BOT Rep. SS, I-91; Reaffirmed: Sunset Report, I-01; Reaffirmed: CME Rep. 2, A-11)

#### H-275.996, Physician Competence

Our AMA: (1) urges the American Board of Medical Specialties and its constituent boards to reconsider their positions regarding recertification as a mandatory requirement rather than as a voluntarily sought and achieved validation of excellence; (2) urges the Federation of State Medical Boards and its constituent state boards to reconsider and reverse their position urging and accepting specialty board certification as evidence of continuing competence for the purpose of re-registration of licensure; and (3) favors continued efforts to improve voluntary continuing medical education programs, to maintain the peer review process within the profession, and to develop better techniques for establishing the necessary patient care data base. (CME Rep. J, A-80; Reaffirmed: CLRPD Rep. B, I-90; Reaffirmed: Sunset Report, I-00; Reaffirmed: CME Rep. 7, A-02; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Reaffirmed in lieu of Res. 302, A-10; Reaffirmed in lieu of Res. 320, A-14)

#### D-295.325, Remediation Programs for Physicians

1. Our AMA supports the efforts of the Federation of State Medical Boards (FSMB) to maintain an accessible national repository on remediation programs that provides information to interested stakeholders and allows the medical profession to study the issue on a national level. 2. Our AMA will collaborate with other appropriate organizations, such as the FSMB and the Association of American Medical Colleges, to study and develop effective methods and tools to assess the effectiveness of physician remediation programs, especially the relationship between program outcomes and the quality of patient care. 3. Our AMA supports efforts to remove barriers to assessment programs including cost and accessibility to physicians. 4. Our AMA will partner with the FSMB and state medical licensing boards, hospitals, professional societies and other stakeholders in efforts to support the development of consistent standards and programs for remediating deficits in physician knowledge and skills. 5. Our AMA will ask the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education to develop standards that would encourage medical education programs to engage in early identification and remediation of

conditions, such as learning disabilities, that could lead to later knowledge and skill deficits in practicing physicians. (CME Rep. 3, A-09)

#### H-275.936, Mechanisms to Measure Physician Competency

Our AMA (1) reviews and proposes improvements for assuring continued physician competence, including but not limited to performance indicators, board certification and recertification, professional experience, continuing medical education, and teaching experience; and (2) opposes the development and/or use of “Medical Competency Examination” and establishment of oversight boards for current state medical boards as proposed in the fall 1998 Report on Professional Licensure of the Pew Health Professions Commission, as an additional measure of physician competency. (Res. 320, I-98; Amended: Res. 817, A-99; Reaffirmed: CME Rep. 7, A-02; Reaffirmed: CME Rep. 7, A-07; Reaffirmed: CME Rep. 16, A-09; Reaffirmed in lieu of Res. 313, A-12)

#### REFERENCES

1. Wynia MK. The Role of Professionalism and Self-regulation in Detecting Impaired or Incompetent Physicians. *JAMA*. 2010;304(2):210-211.
2. Korinek LL1, Thompson LL, McRae C, Korinek E. Do physicians referred for competency evaluations have underlying cognitive problems? *Acad Med*. 2009 Aug;84(8):1015-21.
3. Durning SJ, Artino AR, Holmboe E, Beckman TJ, van der Vleuten C, Schuwirth L. Aging and cognitive performance: challenges and implications for physicians practicing in the 21st century. *J Contin Educ Health Prof*. 2010 Summer;30(3):153-60.
4. Smart DR. Physician Characteristics and Distribution in the US. American Medical Association. 2015 Ed.
5. Moutier CY, Bazzo DEJ, Norcross WA. Approaching the Issue of the Aging Physician Population (Data from the Coalition for Physician Enhancement Conference). *Journal of Medical Regulation*. 2013;99(1):10-18.
6. Bazzo DEJ. Senior Physicians Section Educational Program. June 7, 2014. Available at: [www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/meetings.page](http://www.ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/senior-physicians-section/meetings.page)? (accessed 1-28-15).
7. Miller SH. Coalition for Physician Enhancement Meeting. November 10-11, 2011.
8. Lee L, Weston W. The Aging Physician. *Canadian Family Physician*. January 2012;58:17-18.
9. Eva KW. The Aging Physician: Changes in Cognitive Processing and Their Impact on Medical Practice. *Acad Med*. October 2002;77(10):S1-S6.
10. Eva KW. Stemming the tide: Cognitive aging theories and their implications for continuing education of the health professions. *J Contin Educ Health Prof*. 2003;23:133-140.
11. Meeks TW, Jeste DV. Neurobiology of wisdom: A literature overview. *Arch Gen Psychiatry*. 2009;66:355-365.
12. Grossman I, Na J, et al. Reasoning about social conflicts improves into old age. *PNAS*. 2010;107:7246-7250.
13. Peisah C, et al. Secrets to psychological success: Why older doctors might have lower psychological stress. *Aging and Mental Health*. 2009;13:300-307.
14. Benbow SM, Jolly DJ. Burnout and stress amongst old age psychiatrists. *Int J Geriatr Psychiatry*. 2002;17:710-714.
15. Jackson GR, Owsley C. Visual dysfunction, neurodegenerative diseases, and aging. *Neurol Clin*. 2003;21:709-728.
16. Jackson GR, Owsley C, Cordle EP, et al. Aging and scotopic sensitivity. *Vision Res*. 1998;38:3655-3662.
17. Waljee JF, Greenfield LJ, Dimick JB, Birkmeyer JD. Surgeon age and operative mortality. *Ann Surg*. 2006;244:353-362.
18. Choudhry NK, Fletcher RH, Soumerai SB. Systematic review: The relationship between clinical experience and quality of healthcare. *Ann Intern Med*. 2005;142:260-273.
19. Norcini JJ, Lipner RS, Benson JA, Webster GD. An analysis of the knowledge base of practicing internists as measured by the 1980 recertification examination. *Ann Intern Med*. 1985;102:385-389.
20. Day SC, Norcini JJ, Webster GD, Viner ED, Chirico AM. The effect of changes in medical knowledge on examination performance at the time of recertification. *Res Med Educ*. 1988;27:138-144.
21. Sample L, LaDuca T, Leung C, et al. Comparing patient-management skills of referred physicians and non-referred physicians on a computer-based case-simulation examination. *Acad Med*. 2001;76(10 suppl):S24-S26.
22. Turnbull J, Carbotte R, Hanna E, et al. Cognitive difficulty in physicians. *Acad Med*. 2000;75:177-181.
23. Turnbull J, Cunningham J, Unsal A, et al. Competence and cognitive difficulty in physicians: a follow-up study. *Acad Med*. 2006;81:915-918.
24. Korinek LL, Thompson LL, McRae C, Korinek E. Do physicians referred for competency evaluations have underlying cognitive problems? *Acad Med*. 2009;84:1015-1021.
25. Norman GR, Davis DA, Lamb S, Hanna E, Caulford P, Kaigas T. Competency assessment of primary care physicians as part of a peer review program. *JAMA*. 1993;270:1046-1051.
26. Caulford PD, Lamb SB, Kaigas TB, Hanna E, Norman GR, Davis DA. Physician incompetence: Specific problems and predictors. *Acad Med*. 1994;69(10 supplement):S16-S18.
27. McAuley RG, Paul WM, Morrison GH, Beckett RF, Goldsmith CH. Five-year results of the peer assessment program of the College of Physicians and Surgeons of Ontario. *CMAJ*. 1990;143:1193-1199.
28. Grace ES, Wenghofer EF, Korinek EJ. Predictors of physician performance on competence assessment: Findings from CPEP, the Center for Personalized Education for Physicians. *Acad Med*. June 2014;89(6):912-919.
29. Perry W, Crean RD. A retrospective review of the neuropsychological test performance of physicians referred for medical infractions. *Arch Clin Neuropsychol*. 2005;20:161-170.

30. Stolley PD, Becker MH, Lasagna L, et al. The relationship between physician characteristics and prescribing appropriateness. *Med Care.* 1972;10:17-28.
31. Rhee So. Factors determining the quality of physician performance in patient care. *Med Care.* 1976;14:733-750.
32. Southern WN, Bllin EY, Arnsten JH. Longer lengths of stay and higher risk of mortality among inpatients of physicians with more years in practice. *Am J Med.* 2011;124:868-874.
33. Norton PG, Dunn EV, Soberman L. What factors affect quality of care? Using the Peer Assessment Program in Ontario family practices. *Can Fam Physician.* 1997;43:1739-1744.
34. Ashworth M, Schofield P, Seed P, Durbaba S, Kordowicz M, Jones R. Identifying poorly performing general practices in England: A longitudinal study using data from the quality and outcomes framework. *J Health Serv Res Policy.* 2011;16:21-27.
35. Reid RO, Friedberg MW, Adams JL, McGlynn EA, Mehrotra A. Association between physician characteristics and quality of care. *Arch Intern Med.* 2010;170:1442-1449.
36. Morrison J, Wickerhsam JS, MAppStat. Physicians disciplined by a state medical board. *JAMA.* 1998;279:1889-1893.
37. Kohatsu ND, Gould D, Ross LK, Fox PJ. Characteristics Associated with Physician Discipline. *Arch Int Med.* 2004;164:653-658.
38. Weycker DA, Jensen GA. Medical malpractice among physicians: Who will be sued and who will pay? *Health Care Manage Sci.* 2000;3:269-277.
39. Goulet F, Jacques A, Gagnon R, et al. Performance assessment: Family physicians in Montreal meet the mark! *Can Fam Physician.* 2002;48:1337-1344.
40. Duclois A, Peix JL, Colin C, et al. Influence of experience on performance of individual surgeons in thyroid surgery: Prospective cross sectional multicenter study. *BMJ.* 2012;344:d8041.
41. O'Neill L, Lanska DJ, Hartz A. Surgeon characteristics associated with mortality and morbidity following carotid endarterectomy. *Neurology.* 2000;55:773-381.
42. Heck DA, Robinson RL, Partridge CM, Lubitz RM, Freund DA. Patient outcomes after knee replacement. *Clin Orthop Relat Res.* 1998;356:93-100.
43. Hartz AJ, Kuhn EM, Pulido J. Prestige of training programs and experience of bypass surgeons as factors in adjusted patient mortality rates. *Med Care.* 1999;37:93-103.
44. Callaghan CJ, Couto E, Kerin MJ, Rainsbury RM, George WD, Puroshotham AD. Breast reconstruction in the United Kingdom and Ireland. *Br J Surg.* 2002;89:335-340.
45. Ahmad S, Lettsome L, Schuricht A. The role of laparoscopy in the management of groin hernia. *JLS.* 1998;2:169-173.
46. Neumayer LA, Gawande AA, Wang J, et al. Proficiency of surgeons in inguinal hernia repair: effect of experience and age. *Ann Surg.* 2005;242:344-348.
47. Wang DS, Winfield HN. Survey of urological laparoscopic practice patterns in the Midwest. *J Urol.* 2004;172:2282-2286.
48. Campbell EG, Regan S, Gruen RL, et al. Professionalism in Medicine: Results of a National Survey of Physicians. *Annals of Internal Medicine.* 2007;147:795-802.
49. DesRoches CM, Rao SR, Fromson JA, et al. Physicians' perceptions, preparedness for reporting, and experiences related to impaired and incompetent colleagues. *JAMA.* 2010;304(2):187-193.
50. Kruger J, Dunning D. Unskilled and unaware of it: How difficulty in recognizing one's own incompetence lead to inflated self-assessments. *J Pers Soc Psychol.* 1999;77:1121-1134.
51. The Joint Commission. 2015 Comprehensive Accreditation Manual for Hospitals: The Patient Safety Systems. Chapter MS.09.01.01.
52. Krisberg K. Policies Targeted Toward Aging Physicians May Keep Doctors Working Longer, Smarter. *AAMC Reporter.* April 2013. Available at: [www.aamc.org/newsroom/reporter/april2013/334334/aging-physicians.html](http://www.aamc.org/newsroom/reporter/april2013/334334/aging-physicians.html) (accessed 8-28-14)
53. Washington Post: [www.washingtonpost.com/national/health-science/as-doctors-grow-older-hospitals-begin-requiring-them-to-prove-theyre-still-fit/2012/12/10/42bb4d90-2d0e-11e2-a99d-5c4203af7b7a\\_story.html](http://www.washingtonpost.com/national/health-science/as-doctors-grow-older-hospitals-begin-requiring-them-to-prove-theyre-still-fit/2012/12/10/42bb4d90-2d0e-11e2-a99d-5c4203af7b7a_story.html) (accessed 1-30-15).
54. Lifeguard. Pennsylvania Medical Society. Available at: [www.lifeguardprogram.com/pathways/aging-physician-assessment](http://www.lifeguardprogram.com/pathways/aging-physician-assessment) (accessed 9-12-14).
55. Colorado Physician Health Program. Available at: [www.cphp.org/](http://www.cphp.org/) (accessed 10-10-14).
56. College of Physicians and Surgeons of Ontario. Available at: <http://www.cpso.on.ca/CPSO-Members/Membership-Info-Fees/Changing-Scope-of-Practice> and [www.cpso.on.ca/CPSO-Members/Peer-Assessment](http://www.cpso.on.ca/CPSO-Members/Peer-Assessment) (accessed 1-30-15).
57. Thompson LL. Neuropsychological assessment of physicians whose competency to practice medicine is being questioned. In: Prigatano GP, Pliskin MH, eds. *Clinical Neuropsychology and Cost Outcome Research: A Beginning.* New York, NY: Psychology Press; 2003:373-392.
58. Adler RG1, Constantinou C. Knowing - or not knowing - when to stop: cognitive decline in ageing doctors. *Med J Aust.* 2008 Dec 1-15;189(11-12):622-4.
59. Rentz Dm Huh TJ, Faust RR, et al. Use of IQ-adjusted norms to predict progressive cognitive decline in highly intelligent older individuals. *Neuropsychology.* 2004;18:38-49.
60. Blasier RB. The problem of the aging surgeon: When surgeon age becomes a surgical risk factor. *Clin Orthop Relat Res.* 2009;467:402-411.
61. Cervero RM. Place matters in physician practice and learning. *J Contin Educ Health Prof.* 2003;23:S10-S18.
62. Wenghofer EF, Williams AP, Klass DJ. Factors affecting physician performance: Implications for performance improvement and governance. *Health Policy.* 2009;42:141-160.

63. Rethans JJ, Norcini J, Baron-Maldonado M, Blackmore DE, Jolley DM, LaDuce A, Lew SR, Page GG, Southgate L. The relationship between competence and performance: Implications for assessing practice performance. *Med Edu*. 2002;36:901-909.
64. Kopelow M, Schnabel GK, Hassard TH, Klass DJ, Beazley F, Hechter F, Grott M. Assessing practicing physicians in two settings using standardized patients. *Acad Med*. 1992;67:S19-S21.
65. AMA Code of Medical Ethics, Opinion 9.0305, Physician Health and Wellness. American Medical Association. Available at: [www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion90305.page](http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion90305.page) (accessed 1-31-15).
66. Tarkan L. As Doctors Age, Worries About Their Ability Grow. *The New York Times*. January 24, 2011.
67. Gardner LB. Who Holds Physicians Accountable? *Transactions of American Clinical and Climatological Assn*. 2007; 118: 57-68.
68. Loboprabhu SM, Molinari VA, Hamilton JD, Lomax JW. The aging physician with cognitive impairment: approaches to oversight, prevention, and remediation. *Am J Geriatr Psychiatry*. 2009 Jun;17(6):445-54.
69. Iglehart JK 1, Baron R.B. Insuring Physicians' Competence—Is Maintenance of Certification the Answer? *N Engl J Med*. 2012, 367: 2543-2549.
70. CME Report 3-A-09, Remediation Programs for Physicians, Council on Medical Education. American Medical Association. Available at: <https://download.ama-assn.org/resources/doc/council-on-med-ed/x-pub/cme-report-3a-09.pdf> (accessed 1-30-15).
71. Hanna E, Premi J, Turnbull. Results of remedial continuing medical education in dyscompetent physicians. *Acad Med*. 2000;75:174-176.
72. Burroughs J. The aging physician: Balancing safety, respect, and dignity. Medical Staff Leader Insider, September 23, 2009. Available at: [www.hcpro.com/MSL-239454-871/The-aging-physician-Balancing-safety-respect-and-dignity.html](http://www.hcpro.com/MSL-239454-871/The-aging-physician-Balancing-safety-respect-and-dignity.html) (accessed 1-30-15).

## 6. AMERICAN BOARD OF MEDICAL SPECIALTIES SHOULD ADHERE TO ITS MISSION (RESOLUTION 5-A-14)

*Reference committee hearing: see report of [Reference Committee C](#).*

**HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS  
IN LIEU OF RESOLUTION 5-A-14 AND  
REMAINDER OF REPORT FILED  
*See Policy H-275.944***

At its 2014 Annual Meeting, the American Medical Association (AMA) House of Delegates (HOD) referred Resolution 5, American Board of Medical Specialties Should Adhere to its Mission. This resolution, introduced by the New York Delegation, asked that the AMA “make clear to the American Board of Medical Specialties (ABMS) our AMA’s opposition to the establishment of scope of practice limitations through the use of board certifications by the ABMS and its member organizations.”

The essence of testimony proffered at the reference committee hearing was that, although scope of practice limitations through board certification are not appropriate, this is not a general practice beyond the one specific case that served as catalyst for this resolution. In addition, the organizations involved in the original case also testified that this was a limited circumstance and had been already addressed appropriately between the parties affected. In any event, to ensure that the AMA is on record with policy on this issue, should similar concerns arise in the future, the item was extracted on the House floor and the HOD voted for referral for a report back to the HOD.

### BACKGROUND

On September 12, 2013, the American Board of Obstetrics & Gynecology (ABOG) posted on its website a new definition of an ABOG-certified obstetrician-gynecologist. Included in this definition was a limitation on the amount of time for performing non-gynecologic procedures, along with a statement that ABOG-certified physicians, with few exceptions, should treat female patients only. Physicians who treated male patients, the statement continued, could lose their ABOG certification. The notice specifically barred ob-gyns from performing an examination called anoscopy on men, a procedure for diagnosis of abnormal, potentially cancerous growths in the anal canal.<sup>1</sup>

The impetus for the new definition, as described in an article in *The New York Times*, was to “protect patients and the integrity of the specialty because some gynecologists were practicing other types of medicine, like treating men for low testosterone or performing liposuction and other cosmetic procedures on women and men.” Further, the

article noted the ABOG's concern that some ABOG-certified physicians "ran ads offering those services and describing themselves as board certified, without specifying that their certification was in obstetrics and gynecology, an omission that could mislead patients into thinking they were certified in plastic surgery or some other specialty."<sup>2</sup>

Regardless of the ABOG's intent, the release of its statement provoked protests from obstetrician-gynecologists and patients nationwide and coverage in national media outlets. A November 22, 2013 article in *The New York Times*, for example, highlighted the potential fallout for patients as well as physicians: "About two months ago, Dr. Elizabeth Stier was shocked to learn that she would lose a vital credential, board certification as a gynecologist, unless she gave up an important part of her medical practice and her research: taking care of men at high risk for anal cancer.... Doctors cannot ignore such directives from a specialty board, because most need certification to keep their jobs. Now Dr. Stier's studies are in limbo, her research colleagues are irate, and her male patients are distraught. Other gynecologists who had translated their skills to help male patients are in similar straits."<sup>3</sup>

A second article in *The New York Times*, published on December 10, 2013, profiled the tribulations of a male patient with chronic pelvic pain so severe that he could not work. After waiting five months for an appointment, he was notified less than one week before the appointment date that it had been canceled, due to the treating physician's concerns that his ABOG certification could be at risk if he were to see the patient. The patient then "went home, close to despair. His condition has left him largely bedridden. The pain makes it unbearable for him to sit, and he can stand for only limited periods before he needs to lie down. 'These characters at the board jerked the rug out from underneath me,' he said."<sup>4</sup>

In response to such concerns raised by patient advocates and board-certified obstetrician-gynecologists alike, the ABOG revised its policy partially in both November and December 2013. The first revision allowed for continued screening of men for anal cancer; the second permitted treatment of male patients with pelvic pain, although it prohibited ABOG-certified physicians from accepting new patients with the condition.<sup>5</sup>

After continued protests by obstetrician-gynecologists who treat male patients, the statement was fully rescinded one month later. In a January 30, 2014 statement on its website to announce the final revocation of the policy, the ABOG conceded that the issue had become a "distraction from our mission to ensure that women receive high quality and safe health care from certified obstetricians and gynecologists." In addition, the statement noted, "This change recognizes that in a few rare instances board certified diplomates were being called upon to treat men for certain conditions and to participate in research." At the same time, the ABOG cautioned that the change was not "an endorsement for board-certified diplomates to practice in areas outside of their specialty," and that the ABOG "does not and cannot attest to the knowledge, judgment, skills, and qualifications of Diplomates related to practice outside of the scope of the specialty of Obstetrics and Gynecology."<sup>6</sup>

## DISCUSSION

As stated earlier, the ABOG has retracted its policy. This case, however, offers a number of lessons related to physician scope of practice, the authority of physician certification bodies to regulate physician practice, and impact on physician workforce and patient access to care of such decisions by physician certification entities and other medical regulatory bodies.

First, regulation of physician practice is not the domain of certification boards, but rather within the purview of the state medical licensing boards, which protect the public through licensure of physicians to practice medicine in a given state or jurisdiction (and discipline of those physicians, as needed). The mission of the ABMS (and by extension, its 24 member boards) is encapsulated on its website: "to develop and utilize professional and educational standards for the certification of physician specialists" and "to provide assurance to the public that a physician ... has successfully completed an approved educational program and evaluation process ... required to provide quality patient care in that specialty." The actions of the ABOG were seen by many as going beyond this mission.

The stated rationale for its decision was to preserve the integrity of the specialty of gynecology and to protect patients from those ABOG-certified physicians who might have been practicing fields of medicine for which they were neither appropriately trained nor certified. In particular, the board contended that too many gynecologists had extended their practice to areas outside the scope of obstetrics-gynecology. In so doing, these physicians may have been presenting themselves as "board-certified" without revealing that their certification was in obstetrics-gynecology (thereby potentially misleading patients, and perhaps placing patients in harm's way by not being fully

versed in the intricacies of a given subspecialty field). The board also argued that obstetrician-gynecologists should focus on women's health issues due to the workforce shortage of physicians providing care to women.

The needs of patients are never static, and advances in medicine are continual; accordingly, the borders between given specialties and fields of medicine are fluid. Where this fluidity benefits patients, it is to be applauded, and advanced. A given subspecialty practice may be relevant for only a small group of patients, but that does not detract from these patients' needs (as illustrated by the article quoted above on the male patient with chronic pelvic pain). In addition, the practice of physicians with multiple board certifications should not be discouraged through unilateral actions by a given board. One article on the ABOG case, for example, noted the impact on the 33 physicians with dual certification from the ABOG and the American Board of Addiction Medicine: "[T]his change meant risking the loss of their ABOG certification if their practice of addiction medicine comprised more than 25% of their medical practice or included male patients."<sup>7</sup> In short, just as physicians practice patient-centered medicine, changes in medical practice should be centered around, and responsive to, patient need—regardless of the number of patients impacted.

#### AMA POLICY

A search of AMA records found no AMA policy specific to this issue, although the following policy may be relevant.

#### H-275.944, Board Certification and Discrimination

(1) Where board certification is one of the criteria considered for purposes of measuring quality of care, determining eligibility to contract with managed care entities, eligibility to receive hospital staff or other clinical privileges, ascertaining competence to practice medicine, or for other purposes, the AMA oppose discrimination that may occur against physicians involved in the board certification process including those who are in a clinical practice period for the specified minimum period of time that must be completed prior to taking the board certifying examination. (2) Our AMA reaffirms and communicates its policy of opposition to discrimination against member physicians based solely on lack of American Board of Medical Specialties or equivalent American Osteopathic Board certification. (3) Our AMA continues to advocate for nomenclature to better distinguish those physicians who are in the board certification pathway from those who are not. (Sub. Res. 701, I-95; Appended: Res. 314, I-98; Appended: Sub. Res. 301, I-99; Reaffirmed: Sub. Res. 722, A-00; Reaffirmed: CME Rep. 7, A-07)

#### SUMMARY AND RECOMMENDATION

The AMA is opposed to scope of practice limitations put into place by physician certification bodies. Such actions can have an adverse impact on the availability of physician workforce to ensure patient access to care, especially in cases where subspecialty physicians provide care to specific patient populations. Although in this particular case the ABOG rescinded its decision, it would be advisable for the AMA to express its opposition to any potential future actions by the ABOG or other ABMS member boards that would inappropriately limit physicians' scope of practice.

The Council on Medical Education therefore recommends that the following recommendations be adopted in lieu of Resolution 5-A-14 and that the remainder of the report be filed.

1. That our American Medical Association (AMA) work with the American Board of Medical Specialties (ABMS) to ensure that ABMS member boards avoid attempts at restricting the legitimate scope of practice of board-certified physicians. This is not meant to restrict the ability of ABMS member boards from deliberating on and issuing guidelines on the legitimate scope of practice within that board's specialty.
2. That our AMA work with the American Board of Medical Specialties (ABMS) to ensure that ABMS member boards avoid attempts at restricting the legitimate scope of practice of board-certified physicians.

#### REFERENCES

1. Should gynecologists treat men? The Daily Briefing/The Advisory Board Company. December 12, 2013. Available at: [advisory.com/Daily-Briefing/2013/12/02/Should-gynecologists-treat-men](http://advisory.com/Daily-Briefing/2013/12/02/Should-gynecologists-treat-men).
2. Grady D. Responding to Critics, Gynecology Board Reverses Ban on Treating Male Patients. *The New York Times*. January 30, 2014. Available at: [nytimes.com/2014/01/31/health/responding-to-critics-gynecology-board-reverses-ban-on-treating-male-patients.html](http://nytimes.com/2014/01/31/health/responding-to-critics-gynecology-board-reverses-ban-on-treating-male-patients.html)

3. Grady D. Gynecologists Run Afoul of Panel When Patient Is Male. *The New York Times*. November 22, 2013. Available at: [nytimes.com/2013/11/23/health/gynecologists-run-afoul-of-panel-when-patient-is-male.html](http://nytimes.com/2013/11/23/health/gynecologists-run-afoul-of-panel-when-patient-is-male.html).
4. Grady D. Men With Pelvic Pain Find a Path to Treatment Blocked by a Gynecology Board. *The New York Times*. December 10, 2013. Available at: [nytimes.com/2013/12/11/us/men-with-pelvic-pain-find-a-path-to-treatment-blocked-by-a-gynecology-board.html](http://nytimes.com/2013/12/11/us/men-with-pelvic-pain-find-a-path-to-treatment-blocked-by-a-gynecology-board.html).
5. OB-GYN board reverses ban on treating male patients. The Daily Briefing/The Advisory Board Company. February 3, 2014. Available at: [advisory.com/daily-briefing/2014/02/04/ob-gyn-board-reverses-ban-on-treating-male-patients](http://advisory.com/daily-briefing/2014/02/04/ob-gyn-board-reverses-ban-on-treating-male-patients).
6. The American Board of Obstetrics and Gynecology (ABOG) Revises Definition of an Obstetrician and Gynecologist and Clarifies Information about Certification. ABOS website. Available at: [abog.org/news.asp?news=01302014](http://abog.org/news.asp?news=01302014).
7. Starer J. A Crisis Averted for OB-GYNs. *ASAMagazine*. February 17, 2014. Available at: [asam.org/magazine/read/article/2014/02/17/a-crisis-averted-for-ob-gyns](http://asam.org/magazine/read/article/2014/02/17/a-crisis-averted-for-ob-gyns).

## 7. ENHANCING THE AMA'S ROLE IN PREMEDICAL EDUCATION

*Reference committee hearing: see report of [Reference Committee C](#).*

### HOUSE ACTION: RECOMMENDATIONS ADOPTED AND REMAINDER OF REPORT FILED

*See Policy D-295.315*

#### BACKGROUND

Our American Medical Association (AMA) has recognized and stated support for the developmental pipeline for future physicians and other health care team members at the earliest appropriate time in premedical and pre-health care student training.<sup>1</sup> The profession and the public are well-served by physicians and health care providers who have been educated and nurtured in the foundations of the profession – altruism, professionalism, and leadership skills among these. The Association of American Medical Colleges' (AAMC) landmark report published in 1984 noted the need for a baccalaureate education broadened beyond premedical science and premedical preparatory courses.<sup>2</sup> The report noted that aspiring physicians “should not only acquire and sustain clinical expertise, skills, and knowledge, but also retain, hone, and apply humanistic values and attitudes nurtured and expanded in college and inherent to a profession dedicated to caring and healing.” Premedical and pre-health care students who understand and commit to the tenets of the profession, as foundations of their own education and professional aspirations, may be more likely to remain ensconced in these attributes throughout their education and subsequent professional careers.<sup>3,4</sup>

Few would dispute that a profession is well-served by members and aspiring learners who have depth of knowledge of, and commitment to, the historical ethical and altruistic base on which the profession was founded. As noted by De Vries and Gross,<sup>5</sup> “Premedical education has an important, but mostly unrecognized influence on the attitudes, character, and moral lives of medical students.”

Despite the findings and opinions noted above, the education and pre-professional development of premedical and pre-health care students still tends to focus largely on acquiring knowledge in foundational sciences—biology, chemistry, mathematics, psychology, sociology, etc., and achievement of high scores on institutional and national examinations. As noted by Albright, Webster et al., “Students come to college with varying degrees of commitment and understanding of their chosen careers and majors; students may decide on a medical career without much thought to what that means.”<sup>6</sup> Once accepted into medical or health care training, the educational experiences focus largely on acquiring the scientific knowledge and technical skills necessary to provide competent care. Duffy, in his eloquent assessment of the impact of the Flexner Report, noted “the poverty of professional ideals now current in medicine” that has been the unintended result of the profession’s emphasis on science and research.<sup>7</sup> While the importance of demonstrating academic abilities and foundational knowledge in the sciences to admissions committees is generally not disputed, at present there is little emphasis in most premedical educational environments for the pre-professional and early professional student to gain an understanding of the “greater calling” of the chosen profession. As noted by Rockey and Winship,<sup>8</sup> “We must make changes throughout the continuum of medical education and training that foster the development of medical leaders who can think and act—with our patients’ best interests in the pre-eminent—in the service of the profession and our health care system.” Inui’s report to the AAMC on professionalism development<sup>9</sup> notes the current status of medical student education: “The ‘formative trajectory’



of medical students is one that prepares them poorly for the kind of life commitment that we as faculty, given our ideals about professionalism in medicine, hope they make in their careers.”

#### CURRENT AMA ACTIVITIES/INVOLVEMENT IN THE PREMEDICAL EDUCATION DOMAIN

Our AMA’s current outreach and products addressing the needs of premedical and pre-health care students are limited. Student membership in the AMA requires enrollment in a Liaison Committee on Medical Education (LCME)- or American Osteopathic Association (AOA)-accredited medical education program. According to our AMA, more than 50 percent of medical students in LCME-accredited school programs hold active AMA student memberships. Premedical students begin forging a bond and commitment to the organization through their interaction with the AMA “Becoming a Physician” website. This is one of the most-visited sections of the AMA website. Indeed, AMA data show that the site garnered more than 275,000 page views in 2014 and is averaging over 30,000 page views/month in 2015. At the same time, however, the premedical information provided on that site focuses primarily on the technical aspects of admission to medical education programs, with links to other organizations’ websites and an overview of the steps to independent practice. An updated, enhanced website, with more attention to the professional development aspect of the field of medicine, may better serve the needs of the many premedical students who use this popular resource and increase their understanding of the ethical foundation that underpins the profession.

#### OTHER ORGANIZATIONS’ ACTIVITIES/INVOLVEMENT IN THE PREMEDICAL EDUCATION DOMAIN

The “Becoming a Physician” site provides a direct link to the National Association of Advisors for the Health Professions (NAAHP) and the AAMC’s “Aspiring Docs.” Accessing educational material from the NAAHP site requires membership and a \$125 annual fee. The Aspiring Docs website focuses almost exclusively on the application process, career options, services available, financial aid, and an overview of the medical education continuum. Publicly accessible websites maintained by the American Medical Student Association and the Student National Medical Association contain similar information related to the process of applying to medical school.

#### POTENTIAL STRATEGIES FOR ENHANCING OUR AMA’S ROLE IN THE PREMEDICAL EDUCATION ARENA

The opportunity exists to expand current premedical education and mentoring of aspiring physicians and those considering medicine as a profession. Capitalizing on these opportunities could fill gaps that have been identified for decades (and for the most part incompletely addressed), such as early development of professionalism and altruism characteristics for future physicians.

A potential opportunity would be for the AMA, alone or in collaboration with other medical education interests, to investigate enhancing its existing “Becoming a Physician” website with additional educational resources targeted to premedical and pre-health care students. These resources, in the form of online modules, could serve to provide an understanding of the foundations of the profession. Possible topics could include, but are not limited to:

- The origin and evolution of the profession
- Basic concepts of medical professionalism
- An introduction to medical ethics and discussion of their relevance to contemporary issues
- The role of the physician in society and public health
- Basic medical economics
- The impact of sentinel and recent legislation on medical practice
- Physician leadership development
- Interprofessional teamwork in health care, and the physician’s role on the team
- The role and influence of organized medicine
- Milestones, stages of training, and the roles of regulatory bodies involved in the oversight of physician education and the practice of medicine

A further step could be a simple assessment at the end of each module to assure successful completion of that module. Successful completion could result in a downloadable “certificate of completion.” This certificate could in turn be provided in medical school application materials to demonstrate to admissions committees that an applicant has an understanding of the basis of the profession and commitment to the principles. To complement this resource,

the AMA could consider offering low-cost opportunities for engagement activities to premedical students or pre-health professions students, to include access to the modules. Such activities might lead to development of an early relationship between aspiring physicians and our AMA, which could potentially provide additional downstream benefits to the organization in terms of membership and expanded involvement with the AMA. It could also provide an additional measure for medical school admissions personnel as they consider the merits of a given applicant. Prior to development, input from medical schools would be needed to fully explore feasibility and potential value to schools of this program.

#### RESOURCE NEEDS/BARRIERS

Implementing the strategies noted above would require resource allocation within the AMA. The expertise for content development is currently present among staff and active members. Staff time for content development would need to be allocated and prioritized. Within the appropriate AMA unit(s), infrastructure would need to be developed to support the proposed activities, along with new staff time. A marketing plan would need to be developed and implemented. Allocation of these resources and coordination of efforts presents challenges within the organization.

#### EXISTING AMA POLICY

Current AMA policy relevant to this report includes the following:

H-295.871, Initiative to Transform Medical Education: Strategies for Medical Education Reform.

Our AMA continues to recognize the need for transformation of medical education across the continuum from premedical preparation through continuing physician professional development and the need to involve multiple stakeholders in the transformation process, while taking an appropriate leadership and coordinating role.

H-295.995, Recommendations for Future Directions for Medical Education

Our AMA supports the following recommendations relating to the future directions for medical education: (1) The medical profession and those responsible for medical education should strengthen the general or broad components of both undergraduate and graduate medical education. All medical students and resident physicians should have general knowledge of the whole field of medicine regardless of their projected choice of specialty. (2) Schools of medicine should accept the principle and should state in their requirements for admission that a broad cultural education in the arts, humanities, and social sciences, as well as in the biological and physical sciences, is desirable.... (5) Medical schools should require their admissions committees to make every effort to determine that the students admitted possess integrity as well as the ability to acquire the knowledge and skills required of a physician. (6) Although the results of standardized admission testing may be an important predictor of the ability of students to complete courses in the preclinical sciences successfully, medical schools should utilize such tests as only one of several criteria for the selection of students. Continuing review of admission tests is encouraged because the subject content of such examinations has an influence on premedical education and counseling. (7) Medical schools should improve their liaison with college counselors so that potential medical students can be given early and effective advice. The resources of regional and national organizations can be useful in developing this communication....

#### SUMMARY AND RECOMMENDATIONS

Society and leaders in medical education have been calling for an increased emphasis on professionalism development in medical education. Meanwhile, premedical education and most established organizational resources focusing on these learners emphasize educational requirements and achievement scores in the foundational sciences. Our AMA could address the needs of the profession and society by providing enhanced resources for pre-professional development and mentoring, prior to matriculation into medical school, for a broad group of learners who will become tomorrow's health professionals. As a first step, revising and updating the "Becoming a Physician" website would enhance the value of this resource and help premedical student better understand the practice of medicine and the role of physicians in society. A second step, pending a thorough review of feasibility and available resources, would be to develop additional AMA engagement activities to 1) aid premedical students as they seek entry to medical school, 2) assist advisors and mentors to these students, 3) help medical schools make better, more informed decisions on admissions, and 4) help future medical students, and physicians, understand the relevance of our AMA and the long-term value of engagement and membership in the association.

The Council on Medical Education therefore recommends that the following recommendations be adopted and that the remainder of the report be filed.

1. That our American Medical Association (AMA) update its “Becoming a Physician” website with most relevant information to enhance usage and usability, and support the concept and explore the feasibility of enhancing current AMA online resources for premedical students.
2. That our AMA explore the feasibility of developing innovative online “premedical” engagement activities that are affordable to students and cost-effective for our AMA and have value to medical school admissions personnel.
3. That our AMA explore the feasibility of developing resources to enhance premedical student advising and mentoring by physicians and others.

#### REFERENCES

1. H-295.871, Initiative to Transform Medical Education: Strategies for Medical Education Reform.
2. GPEP Report 1984. Published by the Association of American Medical Colleges.
3. Gross JP, Mommaerts CD, Earl D, De Vries RG. After a Century of Criticizing Premedical Education, Are We Missing the Point? *Academic Medicine*, 2008; 83 (5) 516-20.
4. Lin KL, et al. The undergraduate premedical experience in the United States: a critical review. *International Journal of Medical Education*, 2013; 4: 26-37.
5. De Vries RG, Gross J. The winnowing fork of Premedical Education: Are We Really Separating the Wheat from the Chaff? *Virtual Mentor*, 2009; 11 (11): 859-63.
6. Albright, Janis, Karen Martel & Brenda Webster. (2012) No more missed opportunities: using the foreclosure model to advise nursing and pre-nursing students. *Academic Advising Today*, 2012; 35(4). Retrieved from: [www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/No-More-Missed-Opportunities-Using-the-Foreclosure-Model-to-Advise-Pre-Nursing-and-Nursing-Students.aspx](http://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/No-More-Missed-Opportunities-Using-the-Foreclosure-Model-to-Advise-Pre-Nursing-and-Nursing-Students.aspx).
7. Duffy TP. The Flexner Report- 100 Years Later. *Yale Journal of Biology and Medicine*, 2011; 84 (3): 269-76.
8. Rocky P, Winship D. Nurturing Leaders for an Environment of Change. *Virtual Mentor*, 2009; 11 (11) 886-90.
9. Inui T. A Flag in the Wind: Educating Professionalism in Medicine. AAMC, 2003.

### **8. MEANINGFUL ACCESS TO ELECTRONIC HEALTH RECORDS (EHR) FOR UNDERGRADUATE MEDICAL EDUCATION STUDENTS (RESOLUTIONS 907-I-14 AND 914-I-14)**

*Reference committee hearing: see report of [Reference Committee C](#).*

#### **HOUSE ACTION: RECOMMENDATIONS ADOPTED AS FOLLOWS IN LIEU OF RESOLUTIONS 907-I-14 AND 914-I-14 AND REMAINDER OF REPORT FILED**

*See Policy H-315.969*

Resolution 907-I-14, Promoting Education of Electronic Health Records in Undergraduate Medical Education, introduced by the Medical Student Section and referred by the House of Delegates (HOD), asked that our American Medical Association (AMA) support efforts to incorporate electronic health records (EHR) training into undergraduate medical education (UME).

Resolution 914-I-14, Excessive Computer Time for Medical Students, Residents and Fellows, introduced by the Wisconsin Delegation and referred by the HOD, asked that our AMA work with the Liaison Committee on Medical Education (LCME) and Accreditation Council for Graduate Medical Education (ACGME) to encourage the nation’s medical schools and residency and fellowship training programs to teach trainees in those programs effective methods of utilizing electronic devices in the exam room and at the bedside, so that they enhance rather than impede the physician-patient relationship so as to have a positive impact on said relationship and health care for the patient.

In 2011, the AMA Council on Medical Education began to assess medical student access to EHRs. With the transition from paper records to EHRs, students in many institutions are no longer able to write notes and orders (under supervision) in the actual patient chart. This change is a step backwards in the education of medical students.

Council on Medical Education Report 1-I-11, Medical Student Access to Electronic Health Records, described the barriers and limitations that, in many cases, have resulted in students assuming a mainly passive role as observers of the record. The report also analyzed the concerns that had been expressed about the effects of EHR use on student learning. This report provides an update on the current level of student involvement with EHRs in UME and explores best practices and opportunities to assure that students have ample opportunities to have access to and meaningful experiential clinical learning with EHRs. This report will also address Resolutions 907-I-14 and 914-I-14.

## STUDENT ACCESS TO THE EHR

EHRs have become important tools in patient care; many medical schools have incorporated the use of EHRs into their curricula. A survey by the LCME during the 2013-2014 academic year showed that almost all (98 percent) of LCME-accredited medical schools allowed student access to EHRs, although access to the EHR varied across institutions and hospital types (school- or university-owned hospitals, affiliated hospitals, non-hospital ambulatory training sites, and VA hospitals).<sup>1</sup>

A 2012 survey of clerkship directors showed that permitted levels of use varied. The survey indicated that 32 percent allowed students to only view the record; 41 percent allowed them to view and write notes; and 27 percent allowed them to view the record, write notes, and enter orders to be cosigned.<sup>2</sup>

## BARRIERS AND LIMITATIONS

### *Legal and Regulatory Requirements*

Students are denied full access to EHRs or have significantly restricted access due to hospital and/or medical staff requirements, the structure of the EHR system (e.g., no place for student notes), liability concerns, legal requirements, and payer requirements/regulations.<sup>1</sup> Guidelines issued by the Centers for Medicare & Medicaid Services (CMS) for documenting evaluation and management services under Medicare explicitly state that “students may document services in the medical record in certain circumstances.” Services provided by medical students are not reimbursable, and CMS has strict rules about which student documentation can be used to support billable service.<sup>3</sup>

In a 2014 Compliance Advisory, the Association of American Medical Colleges (AAMC) recommended that “the EHR should allow for real-time identification of the author of a note (medical student, resident, non-physician provider or teaching physician) so that the author/history of authorship and review is readily apparent to all users in the final note.”<sup>4</sup> Although CMS does not address documentation in the EHR, the AAMC also notes that meeting this requirement will mean that teaching physicians cannot copy and paste or refer to students’ documentation of physical examination findings or medical decision making in their personal notes.<sup>4</sup> Inappropriate use of medical student documentation to support a bill to Medicare may be considered fraudulent by the federal government and may lead to allegations of violating the False Claims Act.<sup>4</sup>

Other factors impeding medical students’ use of EHRs are concerns about security, patient privacy, and confidentiality. Access to health information, including data in the EHR systems at hospitals, ambulatory care centers, and other health care institutions, is highly regulated by laws, including the Health Insurance Portability and Accountability Act (HIPAA). These laws carry civil and, for some forms of violation, criminal penalties for individuals who break them, as well as sanctions and penalties for institutions that fail to protect health and personal information.<sup>5</sup>

Institutions also tend to restrict medical student access to EHRs because of issues related to potential legal liability. The risk of medical errors due to the ability to copy and paste notes, input incorrect information, and misuse clinical decision support systems can present wide-ranging consequences for medical student education.<sup>6</sup>

### *Educational Issues*

Some medical educators have expressed concern that students’ overreliance on clinical decision support systems, which allow for easy access to relevant and up-to-date medical literature for developing diagnosis and management plans, may lead to complacency in evaluating their own decisions. For example, if trainees rely on the EHR system

to alert them of potential serious side effects or drug interactions, they may be less likely to research these possibilities before ordering a medication.<sup>7</sup> EHRs may also affect the development of oral presentation and communication skills and impair the ability to translate and synthesize clinical information before and during rounds.<sup>7,8</sup>

Further, some have argued that the EHR can hinder patient-physician communication<sup>9,10,11</sup> and might be a barrier for relationship building tasks (talking to, looking at, and building rapport with patients) during clinical encounters.<sup>12</sup> A study by Margalit et al. showed that physicians spent an average of 24 percent to 55 percent of the patient visit time gazing at the screen, and this time was inversely related to the physician's direct engagement with the patient through asking questions and listening to the patient.<sup>13</sup> It can be challenging for the clinician to effectively communicate while accessing the EHR with the patient present; minimize diversion of attention from a patient, which can alter the patient's narrative; and avoid the diminishment of dialogue, particularly in the psychosocial and emotion realm.<sup>14</sup>

Training and experience with the EHR system are important components for getting faculty adjusted to teaching health IT. However, the steep learning curve for faculty may be a barrier.<sup>2</sup>

#### *Copying and Editing Student Notes for Educational Purposes*

EHRs have the potential either to enhance or impair the development of effective written communication skills, which medical students are expected to begin exhibiting during UME.<sup>7</sup> Medical students have reported that their documentation was better or more complete with the EHR.<sup>12,15</sup> In a national survey of clerkship directors, however, more than half of respondents (57 percent) stated that they use the student note to help document a resident or attending note, and some (24 percent) indicated that there have been issues with an individual copying a provider's note and using it as their own without the proper attribution.<sup>2</sup> The survey respondents also felt that the "copy and paste" ability stifled a student's thinking, especially in obtaining and synthesizing information, because students could and did "document" information that they didn't obtain themselves.<sup>2</sup> Although a limited educational framework exists for teaching students proper EHR documentation, the Alliance for Clinical Education has recommended that medical schools develop competencies in EHR documentation for all students and that medical education leaders must ensure that their students become skillful and ethical users of EHRs.<sup>15,16</sup>

#### *Logistical and Structural Issues*

In a recent study of medical student use of EHRs, more than 80 different EHR systems were reported as used by various institutions.<sup>2</sup> Thus, it is likely that medical students will not be using the same EHR software systems at each of their assigned hospitals or practices. Furthermore, although the use of clinical simulation EHR curricula are increasing,<sup>17</sup> not all training sites have teaching EHR systems in place. It can also be costly and time consuming for institutions to establish licenses/permissions and log-in IDs as well as provide appropriate training for students rotating through clinical clerkships.<sup>18</sup>

### EHR CHARACTERISTICS THAT WOULD MITIGATE COMPLIANCE AND OTHER CONCERNS

#### *The Advantages and Disadvantages of Scribing Notes for Educational Purposes*

Scribing by medical students is an activity that is distinct from allowing medical students to write notes as part of their educational experience. If possible, the EHR should allow for clear and automatic identification regarding whether a note is scribed as verbally instructed by the provider or written by a student as part of the educational experience. If this is not possible, then students should be required to clearly indicate when they are acting as scribes rather than students.<sup>4</sup>

Scribing allows students to obtain a firsthand view of a broad spectrum of clinical medicine. It also strengthens the student's medical knowledge, clinical decision making, and patient interaction and bedside manner. The process of capturing medical information with an EHR system also puts them ahead of their peers. Physicians and nurses who have scribes enter and retrieve EHR data for them are able to attend to patients more efficiently, especially in the emergency department.<sup>19</sup> The Joint Commission does not endorse or prohibit the use of scribes.<sup>20</sup>

The University of Toledo established a successful scribe program in which it recruits first- and second-year medical students on a volunteer basis to assist in the medical center's emergency department by transcribing patient information for their records. Working six-hour shifts, the scribes document the patient's chief complaint and medical history and take notes on pertinent findings in the physical exam. The scribes review written information with physicians after the exam, and then transcribe the data into the patient's EHR. They also alert physicians when lab results and imaging studies are available and document all procedures performed, consultations ordered, and changes in a patient's course of care or response to treatment.<sup>19</sup>

### *Clinical Decision Support Systems*

While concerns have been raised, as noted above, clinical decision support systems available within EHRs have the potential to enhance medical students' knowledge and guide learning.<sup>7</sup> Examples of decision support systems include reference materials, diagnostic assistance, clinical alert systems, drug dosing assistance, and preventive care or chronic disease management reminders. In a survey of clerkship directors, respondents cited clinical alert systems that inform users of drug allergies or drug-drug interactions as being most frequently used and valued.<sup>2</sup> A well-planned EHR can facilitate education and allow physicians to apply evidence-based medicine in the clinical context and provide opportunities to teach best practices.<sup>7,21</sup>

### *Learning to Use the EHR in a Way to Enhance Patient Interviewing*

Many health care experts have emphasized the promising capabilities of the EHR to involve patients in their own health care management and have reported that patients feel more in control of their care after viewing their visit notes.<sup>1,22,23,24</sup>

Medical schools are recognizing the need to teach students how to maximize the EHR in patient interactions. Students at the University of Arizona College of Medicine-Phoenix began receiving a 20-minute training session on how to use the EHR in a "relationship-enhancing way" after the college's observational studies showed that today's computer-savvy students make the same missteps as older generations when using an EHR in an exam room.<sup>25</sup> The college developed a training intervention that teaches students to begin an office visit by explaining to patients why the computer is important to the visit, reassuring patients about confidentiality, and positioning the computer screen so the patient can see the screen to review information such as medication lists, laboratory values, and x-rays. Students are also taught to recognize cues to close their laptops and focus solely on the patient.<sup>25</sup>

## ACADEMIC EHR (AEHR) SYSTEMS AND VENDORS

### *Resources to Identify AEHR Systems Available for Educational Settings*

An academic EHR (AEHR) is an adapted version of a clinical information system used in acute care and ambulatory facilities with modifications that customize the product for the needs of academic institutions. Since most AEHR systems are custom built, information on AEHR selection and resources to identify EHR systems for educational settings are not readily available. Integrating an AEHR into the curriculum can be complex; many faculty lack the expertise to identify technical specifications and components of an EHR, including vendor selection, implementation, training, and support.<sup>26</sup> Other factors that need to be considered in the selection of an AEHR system include clinical requirements, the financial resources of the medical center and high cost of technology, the geographic setting, the need for outreach into the community, and an analysis of the existing and predicted flow of information and work within the clinical systems.<sup>27</sup>

There are several different options for academic institutions to consider. Products range from fully functional AEHR systems similar to those used in the hospital setting to textbooks with accompanying activities on a software disc. Educational publishing houses are also developing simulated charting programs that allow students to document in a computerized format. Fully functional programs that allow for a large degree of customization vary by vendor and are more expensive than textbooks with accompanying software.<sup>28</sup> To support the use of EHR products used by medical students and residents, some vendors offer customized templates that track author or source information and the date and time of origin as well as information being moved through the patient record.<sup>29</sup>

## INNOVATIVE TRAINING MODELS

The AMA's Accelerating Change in Medical Education (ACE) Consortium, comprising 11 medical schools nationwide, is developing innovative models that can be adapted at other US medical schools ([www.changemed.org](http://www.changemed.org)). The Consortium's recent work includes investigating the tools necessary to create a robust virtual health care learning system, including teaching EHRs. Currently, each of the Consortium schools has an EHR system in place at the students' primary clinical sites with some ability for students to write notes.

At Vanderbilt University School of Medicine, for example, students are allowed to write notes about their patients that are displayed in the patients' medical records. The entire patient note gets copied automatically to a different secure server that houses the student's personal electronic portfolio. Students can also write orders that are saved as draft. Notes are evaluated to assess students' documentation and reasoning skills.

The technology-enabled curriculum at New York University School of Medicine includes a virtual patient panel with de-identified patient data. Third-year students are allowed to write notes and have mobile access to the EHR system; fourth-year students can write notes, write orders to be co-signed, and have mobile access.

At Indiana University School of Medicine, a virtual health care system (vHS) and a teaching electronic medical record (tEMR) have been developed to teach clinical decision making and ensure competencies in system, team, and population-based health care skills. The tEMR provides a safe computer program for learners to become familiar with EHRs. Students are able to see de-identified patient data to practice making entries and creating a plan of care using the EHR resources. The program also includes resources to help students learn the costs of different tests, the effectiveness of those tests in discriminating between two diseases, and the advantages of using one test over another. Faculty are also being trained as quality and systems coaches in current health systems practice to be prepared to expertly use the tEMR. The vHS learning experiences will incorporate interprofessional team care and be taught by faculty from various health professions. The project runs sequentially over each year of medical school across all phases of the curriculum for all students across nine statewide campuses.<sup>30</sup> This model is focused on a web application; users need only Internet access, the correct permissions, and a web browser to access the system.

Meanwhile, third-year students at Oregon Health & Science University interact with virtual patients created in a simulated EHR (sim-EHR) in two manners. Simple EHRs and standardized patients are combined to teach the art of maintaining patient rapport while using an EHR. Students also use a sim-EHR case to demonstrate their skills in medication reconciliation, order entry, chart maintenance, and evidence-based chronic disease management.<sup>30</sup>

Warren Alpert Medical School of Brown University developed a longitudinal UME EHR curriculum within a series of its clinical "Doctoring" courses. The six-course, non-specialty-specific program was designed to teach knowledge, skills, attitudes, and behaviors of the competent, ethical and humane physician, and combined instruction and assessment in medical interviewing, physical examination, cultural competency, medical ethics, and professional development. This program uses an educational paradigm that models interdisciplinary teaching and collaboration. An initial training session in EHR use during the third-year clinical skills clerkship was also implemented to formally introduce the computer into the physician-patient relationship. The program uses mock data with which students can practice. A second advanced EHR training module occurs late within the final Doctoring course.<sup>14</sup> The school also constructed user-friendly, behavior-focused frameworks or "behavior grids," drawn from existing literature, to facilitate and assess interviewing skills during EHR use and provide multisource feedback.<sup>14</sup>

## AMA POLICY

Policy H-315.969, Medical Student Access to Electronic Health Records, states that our AMA (1) recognizes the educational benefits of medical student access to electronic health record (EHR) systems as part of their clinical training; (2) encourages medical schools, teaching hospitals, and physicians practices used for clinical education to utilize clinical information systems that permit students to both read and enter information into the EHR, as an important part of the patient care team contributing clinically relevant information; and (3) encourages research on and the dissemination of available information about ways to overcome barriers and facilitate appropriate medical student access to EHRs and advocate to the Electronic Health Record Vendors Association that all Electronic Health Record vendors incorporate appropriate medical student access to EHRs.

## SUMMARY AND RECOMMENDATIONS

The movement to EHRs provides opportunities to improve patient care as well as increase the accuracy of communications. With the transition from paper records to EHRs, students in many institutions are no longer able to write notes and orders (under supervision) in the actual patient chart. This change is a step backward in the education of medical students. The implementation of EHRs also presents significant challenges regarding patient communication, safety and privacy, controls for authorship and authentication, and compliance and liability. As a first step toward residency and beyond, medical students need to acquire the necessary hands-on experience, without compromising patient care or safety, to enter and discuss orders and prescriptions and document a clinical encounter in the medical record without direct supervision.<sup>4</sup> Learning to use the EHR in a way to enhance patient interviewing is also critical. Some academic institutions are developing innovative teaching EHR systems, but software innovation and standardization is limited. Integrating an AEHR into the curriculum can be complex, expensive, and time consuming.

The Council on Medical Education recommends that the following recommendations be adopted in lieu of Resolutions 907-I-14 and 914-I-14, and that the remainder of the report be filed.

1. That our American Medical Association (AMA) reaffirm Policy H-315.969, Medical Student Access to Electronic Health Records, which recognizes the benefits of medical students' access to electronic health record systems as part of their clinical training.
2. That our AMA support medical student acquisition of hands-on experience in documenting patient encounters and entering clinical orders into patients' electronic health records (EHRs), with appropriate supervision, as was the case with paper charting.
3. That our AMA: (1) research the key elements recommended for an educational Electronic Health Record (EHR) platform; and (2) based on the research—including the outcomes from the Accelerating Change in Medical Education initiatives to integrate EHR-based instruction and assessment into undergraduate medical education—determine the characteristics of an ideal software system that should be incorporated for use in clinical settings at medical schools and teaching hospitals that offer EHR educational programs.
4. That our AMA encourage efforts to incorporate EHR training into undergraduate medical education, including the technical and ethical aspects of their use, under the appropriate level of supervision.
5. That our AMA work with the Liaison Committee for Medical Education (LCME), AOA Commission on Osteopathic College Accreditation (COCA) and the Accreditation Council for Graduate Medical Education (ACGME) to encourage the nation's medical schools and residency and fellowship training programs to teach students and trainees effective methods of utilizing electronic devices in the exam room and at the bedside to enhance rather than impede the physician-patient relationship and improve patient care.

## REFERENCES

1. Liaison Committee on Medical Education Annual Medical School Questionnaire Part II for Academic Year 2013-2014.
2. Hammoud MH. Opportunities and challenges in Integrating Electronic Health Records into Undergraduate Medical Education: A National Survey of Clerkship Directors. *Teaching and Learning in Medicine*. 2012;24(3):219-224.
3. Guidelines for Teaching Physicians, Interns, and Residents. July 2008. Medicare Learning Network, Center for Medicare and Medicaid Services. Department of Health and Human Services.
4. AAMC Compliance Advisory: Electronic Health Records (EHRs) in Academic Health Centers. Available at: [https://www.aamc.org/em/aamc/compliance\\_advisory.pdf](https://www.aamc.org/em/aamc/compliance_advisory.pdf) (accessed 1-20-15).
5. Health Information Privacy. Health Information Technology. US Department of Health & Human Services. Available at: [www.hhs.gov/ocr/privacy/hipaa/understanding/special/healthit/index.html](http://www.hhs.gov/ocr/privacy/hipaa/understanding/special/healthit/index.html) (accessed 1-20-15).
6. Gliatto P, Masters P, Karani R. Medical student documentation in the medical record: is it a liability? *Mt Sinai J Med*. 2009 Aug;76(4):357-64
7. Tierney MJ, Pageler NM, Kahana M, et al. Medical Education in the Electronic Medical Record (EMR) Era: Benefits, Challenges, and Future Directions. *Acad Med*. 2013;88:748-752.
8. Chi J, Verghese A. Clinical Education and the Electronic Health Records; The Flipped Patient. *JAMA*. December 20, 2014;312(22):2331-2332.



9. Lown BA, Rodriguez D. Commentary: lost in translation? How electronic health records structure communication, relationships, and meaning. *Acad Med.* 2012;87(4):392-394.
10. Yang DX, Kim YA. Patient-Physician Interactions and Electronic Health Records. *JAMA.* November 6, 2013;310(17):1857.
11. Duke P, Frankel RM, Reis S. How to Integrate the Electronic Health Record and Patient-Centered Communication Into the Medical Visit: A Skills-Based Approach. *Teaching and Learning in Medicine.* 2013;25(4):358-365.
12. Rouf E, Chumley HS, Doobie AE. Electronic health records in outpatient clinics: Perspectives of third-year medical students. *BMC Med Ed.* March 31, 2008;8:13.
13. Margalit RS, Roter D, Dunevant MA, et al. Electronic medical record use and physician-patient communication: An observational study of Israeli primary care encounters. *Patient Education and Counseling.* 2006;61:134-41.
14. Wald HS, George P, Reis SP, Taylor JS. Electronic Health Record Training in Undergraduate Medical Education: Bridging Theory to Practice With Curricula for Empowering Patient- and Relationship-Centered Care in the Computerized Setting. *Acad Med.* March 2014;89(3):380-386.
15. Hammoud MM1, Dalymple JL, Christner JG, et al. Medical student documentation in electronic health records: a collaborative statement from the Alliance for Clinical Education. *Teach Learn Med.* 2012;24(3):257-66.
16. Heiman HL, Rasminsky S, Bierman JA, et al. Medical Students' Observations, Practices, and Attitudes Regarding Electronic Health Record Documentation. *Teaching and Learning in Medicine.* 2014;26(1):49-55.
17. Milano CE, Hardman JA, Plesiu A, et al. Simulated Electronic Health Record (Sim-EHR) Curriculum: Teaching EHR Skills and Use of the EHR for Disease Management and Prevention. *Acad Med.* March 2014;89(3):399-403.
18. Mintz M, Navarte HJ, O'Brien KE et al. Use of electronic medical records by physicians and students in academic internal medicine settings. *Acad Med.* 2009;84(12):1698-1704.
19. Cunningham M. Medical student scribes gain early clinical experience, assist physicians. The University of Toledo News. March 10, 2011.
20. Gellert GA, Ramirea R, Webster SL. The Rise of the Medical Scribe Industry – Implications for the Advancement of Electronic Health Records. *JAMA.* December 15, 2014.
21. Peled JU, Sagher O, Morrow JB Dobbie AE. Do Electronic Health Records Help or Hinder Medical Education? *PLoS Medicine.* May 2009;6(5).
22. Greene J, Hibbard JH. Why does patient activation matter? An examination of the relationships between patient activation and health-related outcomes. *J Gen Intern Med.* 2012;27(5):520-526.
23. Delbanco in T, Walker J, Bell SK, et al. Inviting patients to read their doctors' notes: a quasi-experimental study and a look ahead. *Ann Intern Med.* 2012;157(7):461-470.
24. White A, Danis M. Enhancing patient-centered communication and collaboration by using the electronic health record in the examination room. *JAMA.* 2013;309(22)2327-2328.
25. Peck AD. Making the EHR your partner in patient care. *Medical Economics.* September 25, 2013.
26. Gloe D. Selecting an Academic Electronic Health Record. *Nurse Educator.* July/August 2010;35(4):156-161
27. McDowell SW, Wahl R, Michelson J. Herding Cats: The Challenges of EMR Vendor Selection. *J Healthc Inf Manag.* 2003 Summer;17(3):63-71.
28. Gardner CL, Jones SJ. Utilization of Academic Electronic Medical Records in Undergraduate Nursing Education. *Online Journal of Nursing Informatics.* June 2012;16(2):
29. Weis JM, Levy PC. Copy, Paste and Cloned Notes in Electronic Health Records; Prevalence, Benefits, Risks and Best Practice Recommendations. *Chest.* 2014;145(3):632-638.
30. Accelerating Change in Medical Education. American Medical Association. Available at: [www.changemeded.org](http://www.changemeded.org) (accessed 1-20-15)

## 9. THE VALUE OF GRADUATE MEDICAL EDUCATION

*Reference committee hearing: see report of [Reference Committee C](#).*

### **HOUSE ACTION: RECOMMENDATIONS ADOPTED AND REMAINDER OF REPORT FILED**

*See Policy D-305.967*

Over the past century, the graduate medical education (GME) system in the United States has contributed significantly to the health of the public by training generations of physicians who have provided care and greatly improved the health and longevity of our population.<sup>1</sup> GME efforts are aligned with the “Triple Aim” of our current health care agenda, to achieve better care and better health, at lower cost. Today, the US GME system serves as the model for the globe and attracts applicants from all over the world. GME is singularly important in affecting physicians’ practices and the care of their patients for the remainder of their careers.

The system of funding GME in the United States is complex and largely falls to the public in the form of funding from Medicare and, in many states, Medicaid. The Institute of Medicine (IOM) has recently affirmed the value of

this funding, while documenting concern about the lack of transparency and accountability in the way these funds are currently distributed.<sup>2</sup>

The general public is likely to be uninformed as to the overall value of GME training, beyond that of training individual physicians to provide for their care in the future. This report focuses on the diverse activities of physicians while they are training in GME programs and how these contribute to the health and benefit of the public, both in this country and around the world. This report briefly summarizes the educational process and GME funding, and describes the added value GME provides in the areas of service (in the United States and globally), education, research, improved quality of care and community benefits. This will assist in supporting the policies of the American Medical Association (AMA) for expansion of GME positions and funding sources.

## GRADUATE MEDICAL EDUCATION – PROCESS, FUNDING, AND VALUE

### *Process*

GME provides the formal training for physicians required by state licensure bodies. Upon graduation from medical school, physicians enter GME at an accredited training program (typically in a teaching hospital) in a particular specialty of medicine. There are two recognized accrediting organizations. The Accreditation Council for Graduate Medical Education (ACGME) has historically accredited allopathic medical programs (training for physicians with an MD degree), and the American Osteopathic Association (AOA) accredits osteopathic medical programs for physicians with a DO degree. Although several states may license a physician with just 1 year of accredited training (graduates of international medical schools, or IMGs, typically must complete 2 to 3 years of accredited training to qualify for state licensure), physicians who wish to become certified by an American Board of Medical Specialties (ABMS) member board in a particular specialty must graduate from a training program in that specialty. Required training length, depending upon the specialty, can be 3 to 5 years; therefore, all practicing physicians in the US will have at least 1 year of GME, and the vast majority will have 3 to 5 years of GME. Additional years of fellowship training are required for subspecialists.<sup>3</sup>

### *Funding*

Prior to the end of World War II, hospitals covered GME costs via direct patient billing. The initial federal foray into funding GME began after World War II in the form of support via the GI Bill. The GI Bill provided a federally funded living allowance and subsidized costs when hospitals provided GME positions to servicemen. From 1940 to 1960 the number of residency positions offered in the US increased six-fold.<sup>4</sup> With the establishment of Medicare in 1965, GME costs were explicitly included as part of reasonable costs for teaching hospitals, without a cap on the number of residency positions reimbursed. Currently, Medicare supports GME through two payment streams, direct medical education (DME) and indirect medical education (IME),<sup>5</sup> the majority of which is in the form of IME payments to hospitals.<sup>6</sup>

In addition to DME and IME support from Medicare, the federal government also reimburses GME partially through the Veterans Administration (VA), the Department of Defense, the National Institutes of Health, and other federal agencies.<sup>5,6</sup> The VA supports 9,000 full-time residents, in addition to hosting more than 30,000 residents that rotate through VA facilities yearly. The Department of Defense trains approximately 3,000 residents for the uniformed services. State Medicaid programs contribute an estimated \$3 billion annually to GME funding nationwide.<sup>7</sup>

Most health policy experts, including our AMA, believe there is a looming shortage of qualified physicians to take care of an aging population. In its 2014 report on GME, the IOM found the evidence of an overall shortage wanting and highlighted the need for increased transparency in the allocation of federal money for GME, specifically money that would encourage the production of physicians in shortage specialties.<sup>2</sup> The IOM did not propose increased GME funding but instead proposed combining DME and IME dollars into a single payment stream, and taking a percentage of the overall GME funding to create a GME policy council within the Department of Health and Human Services and a GME Center within the Centers for Medicare and Medicaid Services. This council would guide the development of innovative models of training and payment systems for GME.

### *Current Value*

**Service Value.** In providing direct patient care, residents and fellows often perform the initial evaluation of patients, provide first responder care in clinical emergencies, and perform necessary interventions/surgery under the supervision of an attending physician. Trainees provide a major component of care for underserved, uninsured, Medicaid, and Medicare populations. In particular, trainees provide a higher percentage of acute/complex care than might be expected from the relatively low percentage of US hospitals (roughly 6%) offering formal GME training. In this setting, trainees provide care for more than 20% of all hospital inpatients in the country, 28% of Medicaid hospital admissions, 40% of all hospital-based charity care (amounting to roughly \$9.9 billion annually), 40% of high-acuity patient transfers, 62% of pediatric ICU care and 80% of level I trauma care. In addition, more teaching hospitals than nonteaching hospitals (89% vs. 16%) offer community outreach ambulatory services, which significantly impact population health in the setting of limited access to preventive services.<sup>8</sup> Moreover, free community clinics staffed by residents offer an opportunity for continuity in care for community health and an appreciation of health care disparities.<sup>9</sup>

In 2003 and 2011, the ACGME implemented restrictions to limit the consecutive and total number of hours resident physicians could work in order to promote rest and reduce fatigue among residents. Evidence has been mixed regarding resulting quality of care,<sup>10,11,12</sup> however, increased resident productivity and efficiency allows for the continuation of high levels of care provided by residents.

As the largest provider of medical training at all levels, the VA system is host to 30% of US medical residents. These trainees contribute substantially to the delivery of cost-effective and high quality patient care in the VA system. While roughly 33% of residents may consider VA employment before their rotation, over 77% consider it afterward. This is of significant value to the pipeline of providers of VA care.<sup>13</sup> Given recent innovations in medical school curricula, VA trainees may be uniquely positioned to promote the VA system's goals of improving service delivery, with a focus on outcomes and setting a course for long-term excellence and reform.<sup>14</sup>

Global health rotations add perspective to the trainee's view of health care. Such experiences foster idealism, enhancement of physical exam skills without reliance on technology, and knowledge of diseases that are uncommon in the United States. Trainees pursuing such experience are likely to develop an increased interest in primary care and are more likely to care for underserved populations.<sup>15</sup>

In summary, GME positively impacts trainees, their sponsoring institutions, the community, affiliated academic health centers/university sponsors and the global community as well as our own nation's population health.

**Teaching.** Medical residents serve a vital role in undergraduate medical education, specifically during clinical training.<sup>16,17,18</sup> They play a similar role in resident-to-resident training, both in an interdisciplinary manner and as senior residents training junior residents.<sup>17</sup> In the apprenticeship style of medical education, residents fill a vital gap between classroom and textbook learning and problem-based application on the wards. They also model skills that attending physicians may not readily demonstrate, such as finding work-life balance, handling criticism, and navigating the complex social structure of the hospital.<sup>19</sup>

Based on surveys, residents enjoy teaching.<sup>20</sup> Many take time outside of work hours to prepare for teaching topics,<sup>21</sup> and there are estimates that up to a quarter of a resident's time is spent supervising, evaluating, and teaching.<sup>17</sup> Often, students rate the teaching of residents higher than that of attending physicians.<sup>22</sup> In looking at models of experiential learning, participation in patient care stands out as the best learning tool.<sup>23</sup> Residents facilitate this learning by being open to medical student participation. Studies suggest that residents are more likely to let students learn by trial and error.<sup>19</sup>

**Research.** ACGME-accredited programs are required to advance residents' understanding of research and engagement in scholarly activities; specialties differ in the level of research activity required. Over 44% of training programs require research, averaging 30 weeks in duration, and another 41% have an optional research rotation (American Medical Association, Graduate Medical Education Database, 2015). Despite the compression of residents' time resulting from duty hours restrictions, residents have been able to continue publishing research, and, in some cases, the publication rate has increased,<sup>24</sup> although there can be associated costs in terms of decreased clinical activities.<sup>25</sup> Promoting and encouraging research by residents has been found to increase faculty involvement in research, thus contributing to the overall scholarly mission of the institution and value to society.<sup>26</sup>

International Medical Graduates. Physicians educated in other countries who seek GME in the United States, known as international medical graduates (IMGs), provide much-needed patient care, since many of them train in and enter primary care specialties and serve in underserved and shortage areas, including inner-city and rural areas.<sup>27</sup> IMGs who are on an Exchange Visitor Visa (J-1) during their GME training may apply for a J-1 Visa waiver that allows them to stay in the United States after training, if they agree to work in an underserved area or shortage area. Since 1994, when the J-1 Visa waiver program was initiated, over 9,000 IMGs have been granted waivers.<sup>28</sup> Without these IMGs, thousands of patients would be without a physician in their communities. IMGs play a critical role in caring for the country's neediest patients. In 2012, federal legislation was signed into law to extend to September 2015 the Conrad State 30 J-1 Visa Waiver Program, a vital program for placing IMGs in communities that face health care access challenges.<sup>29</sup> The AMA supports the permanent reauthorization and expansion of the Conrad State 30 J-1 Visa Waiver Program.

Outcomes of Care. Teaching hospitals have been compared to non-teaching hospitals and non-teaching services on a wide variety of parameters, including quality of care, health care outcomes, time spent on procedures, costs, and health care disparities.<sup>30,31,32,33,34,35,36,37,38,39</sup> Kupersmith<sup>40</sup> reviewed 23 such studies published between 1985 and 2004. The majority of these studies showed improved quality and outcomes in teaching hospitals, and several additional studies demonstrate no difference between teaching and non-teaching hospitals. The outcomes measured were generally risk-adjusted in these studies due to the increased likelihood of sicker patients to be cared for in teaching hospitals.

Operative procedures performed by residents supervised by faculty have been shown to take more time, but without significant differences in morbidity from non-teaching cases.<sup>37</sup> One study showed a decrease in racial disparities in emergency department visit duration in teaching versus non-teaching emergency departments.<sup>36</sup> In a study of cost efficiency comparing internal medicine inpatient teaching teams to internists and hospitalists, the teaching teams had reduced length of stay and overall costs, without a difference in mortality.<sup>33</sup>

Thus in virtually all important health outcome measures, including patient safety and quality of care, teaching hospitals perform the same as, or better than, non-teaching hospitals.

Community Value. The economic and health care value of GME to local communities has been well established. GME creates a physician workforce that not only provides care locally while physicians are training, but additionally as physicians tend to locate near the community in which they have completed their training. This local workforce reduces recruitment costs for hospitals and practices, helps retain providers and mitigates shortages, positively affecting local health care practices in terms of increased community capacity and enhanced relationships between local hospitals and communities.<sup>41</sup> This in turn is self-perpetuating, as a community with an active physician workforce tends to be attractive to medical students when considering options for their own residency training.<sup>42,43</sup> The economic value of a practicing physician to a community includes supporting 14 jobs and over \$1 million in wages and benefits, as well as over \$90,000 in local and state tax revenues.<sup>44</sup>

Similarly, physicians may find a community with GME as an attractive place for relocation, as the health care resources and educational opportunities provided by the teaching hospital create a setting that enriches practice, and thus enhances health care.<sup>45</sup> Many residents who train in safety net settings return to practice in these settings.<sup>46</sup> A review of the direct, indirect, and intangible benefits of GME programs suggests that benefits extend beyond the walls of the teaching hospital and into the community at large. Through service, these programs contribute positively in ways that cannot be easily assessed in hospital revenue and expense reports. More study that can demonstrate the magnitude of the contributions of GME to the institutions and the communities they serve is warranted, to help improve planning, resource allocation, innovation, and quality for the local community.<sup>39</sup>

In summary, the local community gains from GME, specifically by attracting physician talent, preventing physician attrition, and improving the economic and health care-providing benefits of local teaching institutions.

## AMA POLICY

Policy D-305.967 (9), The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education, asks our AMA to work, in collaboration with other stakeholders, to improve the awareness of the general public that GME is a public good that provides essential services as part of the training process and serves as a necessary component of physician preparation to provide patient care that is safe, effective and of high quality.

## SUMMARY AND RECOMMENDATIONS

While difficult to fully and accurately measure, the many tangible (and intangible) contributions of resident/fellow physicians to not just the US health-care system but also to the nation as a whole are no doubt significant. Those benefiting from GME include sponsoring and affiliated training institutions, community health clinics, local physician practices, underserved areas, the community-at-large, and the global community. The patient care services, teaching, research, altruistic efforts, and global outreach are unique and represent a large and nearly irreplaceable public health and economic benefit to society. Studies show that, despite concerns about the potential quality impacts of trainees, patient safety is not compromised during GME, and in virtually all important health outcome measures teaching hospitals perform the same as, or better than, non-teaching hospitals. Further, the presence of GME in a community extends beyond the institution's doors to enhance the economic and health well-being of the community. It also creates opportunities to attract physician talent while preventing physician attrition, thus ensuring continued access to care and providing inestimable public contributions. Surveys show that Americans have a high level of respect for physicians as bastions of the community and as a bulwark for ensuring the health of the individual, in all its aspects, as well as the community. In summary, the value of GME to the nation is indisputable.

The Council on Medical Education therefore recommends that the following recommendations be adopted and that the remainder of the report be filed.

1. That our American Medical Association (AMA) utilize its resources to share its content expertise with policymakers and the public to ensure greater awareness of the significant societal value of graduate medical education (GME) in terms of patient care, particularly for underserved and at-risk populations, as well as global health, research and education.
2. That our AMA revise Policy D-305.967, "The Preservation, Stability and Expansion of Full Funding for Graduate Medical Education," to read as follows: "8. Our AMA will vigorously advocate for the continued and expanded contribution by all payers for health care, (including the federal government, the states, and local and private sources payers), to funding both the direct and indirect costs of GME."
3. That our AMA advocate for the appropriation of Congressional funding in support of the National Healthcare Workforce Commission, established under section 5101 of the Affordable Care Act, to provide data and healthcare workforce policy and advice to the nation and provide data that support the value of GME to the nation.
4. That our AMA support recommendations to increase the accountability for and transparency of GME funding and continue to monitor data and peer-reviewed studies that contribute to further assess the value of GME.

## REFERENCES

1. Ludmerer KM. *Let Me Heal: The Opportunity to Preserve Excellence in American Medicine*. New York, NY: Oxford University Press; 2015.
2. *Graduate Medical Education That Meets the Nation's Health Needs*. Washington, DC: Institute of Medicine; 2014. <http://www.iom.edu/Reports/2014/graduate-medical-education-that-meets-the-nations-health-needs.aspx>. Accessed July 29, 2014.
3. Donini-Lenhoff F (Ed). State Medical Licensure Requirements and Statistics 2014. Chicago, IL: American Medical Association; 2014.
4. Rich EC, Liebow M, Srinivasan M, et al. Medicare Financing of Graduate Medical Education: Intractable Problems, Elusive Solutions. *J Gen Intern Med*. Apr 2002;17(4): 283–292.
5. Ben-Ari R, Robbins RJ, Pindiprolu S, et al. The costs of training internal medicine residents in the United States. *Am J Med*. 2014;127(10):1017-1023.
6. Rye B, Barry M, editors. Bloomberg Government Study: Assessing the impact of potential cuts in Medicare doctor-training subsidies. February 28, 2012. <http://about.bgov.com/bgov/files/2012/03/ryestudy.pdf>. Accessed November 13, 2014.
7. Maher K. Reforming Medicare-financed graduate medical education, 30 *J Contemp Health Law Policy*. 2014;30(2): 336-362. <http://scholarship.law.edu/jchlp/vol30/iss2/9>. Accessed November 13, 2014.
8. What roles do teaching hospitals fulfill? Association of American Medical Colleges. <https://www.aamc.org/download/54360/data/whatrolesdothfulfill.pdf> Teachhospfacts1.pdf. Accessed January 26, 2015.
9. Pincavage AT, Razi RR, Arora VM, et al. Resident education in free clinics: an internal medicine continuity clinic experience. *J Grad Med Educ*. 2013;5(2):327-331.

10. Patel MS, Volpp KG, Small DS, et al. Association of the 2011 ACGME resident duty hour reforms with mortality and readmissions among hospitalized Medicare patients. *JAMA*. 2014;312(22):2364-2373.
11. Rajaram R, Chung JW, Jones AT, et al. Association of the 2011 ACGME resident duty hour reform with general surgery patient outcomes and with resident examination performance. *JAMA*. 2014;312(22):2374-2384.
12. Choma NN, Vasilevskis EE, Sponsler KC, et al. Effect of the ACGME 16-hour rule on efficiency and quality of care: duty hours 2.0. *JAMA Intern Med*. 2013;173(9): 819–821.
13. Kashner TM, Chang BK. VA residents improve access and financial value. Paper presented at the Association of American Medical Colleges annual meeting, Denver, Colorado. November 2011.
14. McDonald RA. Remarks by Veterans Affairs Secretary Robert A. McDonald, Institute of Medicine Annual Meeting October 20, 2014. <http://www.va.gov/opa/bios/secretary.asp>. Accessed November 18, 2014.
15. Liaw W, Bazemore A, Xierali I, et al. The association between global health training and underserved care: early findings from two longstanding tracks. *Fam Med*. 2013;45(4):263-267.
16. Barrow MV. Medical student opinions of the house officer as a medical educator. *J Med Educ*. 1966;41(8):807-10.
17. Brown RS. House staff attitudes toward teaching. *J Med Educ*. 1970;45(3):156-159.
18. Bing-you RG, Sproul MS. Medical students' perceptions of themselves and residents as teachers. *Med Teach*. 1992;14(2-3):133-138.
19. Karani R, Fromme HB, Cayea D, et al. How medical students learn from residents in the workplace: a qualitative study. *Acad Med*. 2014;89(3):490-496.
20. Busari JO, Prince KJ, Scherpbier AJ, et al. How residents perceive their teaching role in the clinical setting: a qualitative study. *Med Teach*. 2002;24(1):57-61.
21. Apter A, Metzger R, Glassroth J. Residents' perceptions of their role as teachers. *J Med Educ*. 1988;63(12):900-905.
22. Whittaker LD, Estes NC, Ash J, Meyer LE. The value of resident teaching to improve student perceptions of surgery clerkships and surgical career choices. *Am J Surg*. 2006;191(3):320-324.
23. Dornan T, Boshuizen H, King N, Scherpbier A. Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Med Educ*. 2007;41(1):84-91.
24. Namdari S, Baldwin KD, Weinraub B, Mehta S. Changes in the number of resident publications after inception of the 80-hour work week. *Clin Orthop Relat Res*. 2010;468(8):2278-2283.
25. Schott NJ, Emerick TD, Metro DG, Sakai T. The cost of resident scholarly activity and its effect on resident clinical experience. *Anesth Analg*. 2013;117:1211-1216.
26. Panchal AR, Stolz U, Denninghoff KR, et al. Scholar Quest: a residency research program aligned with faculty goals. *West J Emerg Med*. 2014;15(3):299-305.
27. Mick S. The safety-net role of international medical graduates. *Health Affairs*. 1999;16:141-150.
28. <https://www.aamc.org/download/272830/data/aamcendorsesconradstate30improvementacts1979.pdf>. Accessed January 22, 2015.
29. <http://www.whitehouse.gov/the-press-office/2012/09/28/statement-press-secretary-hj-res-117-s-3245-and-s-3552>. Accessed January 22, 2015.
30. raat LJ, Bosma E, Roukema JA, Heisterkamp J. Appendectomy by residents is safe and not associated with a higher incidence of complications: a retrospective cohort study. *Ann Surg*. 2012;255(4):715-719.
31. Advani V, Ahad S, Gonczy C, Markwell S, Hassan I. Does resident involvement effect surgical times and complication rates during laparoscopic appendectomy for uncomplicated appendicitis? An analysis of 16,849 cases from the ACS-NSQIP. *Am J Surg*. 2012;203(3):347-351.
32. Volpp KG, Small DS, Romano PS, et al. Teaching hospital five-year mortality trends in the wake of duty hour reforms. *J Gen Intern Med*. 2013;28(8):1048–1055.
33. Au AG, Padwal RS, Majumdar SR, McAlister FA. Patient outcomes in teaching versus nonteaching general internal medicine services: a systematic review and meta-analysis. *Acad Med*. 2014;89(3):517-523.
34. Everett G, Uddin N, Rudloff B. Comparison of hospital costs and length of stay for community internists, hospitalists, and academicians. *JGIM*. 2007;22:662–667.
35. Ricciardi R, Nelson J, Roberts PL, et al. Is the presence of medical trainees associated with increased mortality with weekend admission? *BMC Medical Education*. 2014;14(4): <http://www.biomedcentral.com/1472-6920/14/4>
36. Karaca Z, Wong HS. Racial disparity in duration of patient visits to the emergency department: teaching versus non-teaching hospitals. *West J Emerg Med*. 2013;14(5):529–541.
37. Davis SS Jr, Husain FA, Lin E, et al. Resident participation in index laparoscopic general surgical cases: impact of the learning environment on surgical outcomes. *J Am Coll Surg*. 2013; 216(1):96-104.
38. Hayanga AJ, Mukherjee D, Chang D, et al. Teaching hospital status and operative mortality in the United States. Tipping point in the volume-outcome relationship following colon resections? *Arch Surg*. 2010;145(4):346-350.
39. Pugno PA, Gillanders WR, Kozakowski SM. The direct, indirect, and intangible benefits of graduate medical education programs to their sponsoring institutions and communities. *J Grad Med Educ*. 2010; 2(2):154-159.
40. Kupersmith J. Quality of care in teaching hospitals: a literature review. *Acad Med*. 2005;80(5):458-466
41. Fletcher S, Mullett J, Beerman S. Value of a regional family practice residency training program site: perceptions of residents, nurses, and physicians. *Can Fam Physician*. 2014; 60:e447-54. <http://www.cfp.ca/content/60/9/e447.full.pdf>. Accessed November 17, 2014.

42. Fagan EB, Finnegan SC, Bazemore AW, et al. Migration after family medicine residency: 56% of graduates practice within 100 miles of training. *Am Fam Physician*. 2013;88(10):704. <http://www.aafp.org/afp/2013/1115/p704.html>. Accessed January 26, 2015.
43. Welling R. GME added value: community hospital prospective. Paper presented at the Association of American Medical Colleges annual meeting, Denver, Colorado. November 2011.
44. IMS Health. *The National Economic Impact of Physicians*. March 2014. <http://www.ama-assn.org/ama/pub/advocacy/state-advocacy-arc/economic-impact-study.page>. Accessed February 11, 2015.
45. Brady D, Howley L, Kuhn CM, Runge E. Returns on the GME investment: perspectives on the costs and benefits of resident education. Paper presented at the Association of American Medical Colleges annual meeting, Chicago, IL. November 2014.
46. Phillips RL, Petterson S, Bazemore A. Do residents who train in safety net settings return for practice? *Acad Med*. 2013; 88(12):1934-1940.

## 10. ALIGNING THE EVALUATION OF PHYSICIANS ACROSS THE MEDICAL EDUCATION CONTINUUM

*Reference committee hearing: see report of [Reference Committee C](#).*

### HOUSE ACTION: RECOMMENDATIONS ADOPTED AND REMAINDER OF REPORT FILED

*See Policy H-295.862*

#### THE IDEAL CONTINUUM

In order to provide a framework, this report begins with a description of an ideal continuum that would allow determination of whether a medical student, resident or practicing physician has acquired and can demonstrate the competencies that characterize a physician. As the individual moves through medical school, residency training, and into practice, he or she should be able to demonstrate the knowledge, skills, attitudes and behaviors related to these competencies at levels of accomplishment that are appropriate to his or her stage of the medical education continuum. This requires that, for each of the competencies, there will be assessment methods, tools and metrics to test an individual's achievement of expected outcomes. In the ideal continuum, the methods and tools used for assessment are able to determine, and in some cases predict, the individual's level of accomplishment.

The ideal continuum for evaluation depends on the availability of the following:

- Agreed-upon outcome-based competencies;
- Performance benchmarks for each level of the continuum and for entry into and maintenance of practice; and
- A process and measurement tools to assess whether the learner can demonstrate achievement of the relevant competencies at an appropriate level.

#### PURPOSE AND SCOPE OF THIS REPORT

American Medical Association (AMA) Policy H-295.862, Alignment of Accreditation Across the Medical Education Continuum, adopted at the 2014 Annual Meeting of the House of Delegates (HOD), supports the concept that assessment of physicians across the continuum should be based on the six competency domains of the Accreditation Council for Graduate Medical Education (ACGME): patient care, medical knowledge, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice.<sup>1</sup> The current report uses this competency framework in the discussion of assessment methods.

This report is the second in a series. Council on Medical Education Report 4-A-14, Alignment of Accreditation Across the Medical Education Continuum, discussed how accreditation could be aligned from medical school through residency. It concluded that there should be collaboration among interested stakeholder groups to identify guidelines for the general level of learners' competencies as they move from one stage of the continuum to the next. The current report summarizes approaches to evaluating physicians across the continuum from entry to medical school into practice and describes the following:

- The methods and tools currently used to assess knowledge, skills, attitudes and behaviors relevant to competency domains during the stages of the medical education continuum.
- The status of efforts to use assessment to predict individuals' success during training and in practice.
- The status of and potential approaches to using a competency framework for aligning assessment across the continuum.

## THE DEFINITION OF ASSESSMENT AND RELATED CONCEPTS

The evaluation of physician learners across the continuum should include a variety of assessment methods to allow a judgment about an individual's attainment of specific knowledge, skills, and behavioral and attitudinal outcomes. As described by Boulet and McKinley, assessments:

must be practical, yield sufficiently precise measures of ability, and allow one to make justifiable inferences concerning the qualities or abilities of those being evaluated.<sup>2</sup>

Through the use of relevant assessment methods, it can be accurately and consistently determined whether and at what level the expected competencies have been acquired by a given learner.

### *Validity and Reliability*

The validity of an assessment tool (e.g., a multiple-choice test, a clinical skills examination) relates to whether it actually measures the "construct" (the characteristic) that it intends to measure (e.g., professionalism).<sup>3</sup> The assessment tool needs to be tested (validated) to ensure that it is accurately measuring all the relevant components of the construct (e.g., medical knowledge). The reliability of an assessment tool relates to the consistency of scores when the tool is administered repeatedly within a short timeframe to the same learner.<sup>3</sup> Both reliability and validity must be considered in determining if a given assessment tool is appropriate for the desired purpose.

### *Formative and Summative Assessment*

*Formative* assessment is designed to provide feedback to individuals for purposes of their learning and improvement. In formative assessment, the results are used by the learner for his or her own purposes and the results do not contribute to an external decision about the learner, such as progress to the next level of training or grading. *Summative* assessment, in contrast, contributes to final judgments, such as pass-fail decisions. The same types of assessment methods or tools may be used for both formative and summative assessment, though the level of feedback to the learner will differ. In formative assessment, the learner receives detailed information about his or her performance, such as content areas where performance was strong or weak. In summative assessment, the learner likely will receive only a score/set of subscores or a decision, such as pass or fail.

## OVERVIEW OF THE ASSESSMENT METHODS USED IN VARIOUS PHASES OF THE EDUCATIONAL CONTINUUM

### *Assessment of Knowledge and Cognitive Skills*

Assessment of knowledge is often done through tests using multiple-choice questions (MCQs).<sup>4</sup> The MCQ format came into prominence in the 1950s. For example, the National Board of Medical Examiners engaged in statistical studies related to the validity and reliability of tests using MCQs and found reliability and validity of the format appropriate for licensure examinations and superior to methods that had been used, such as essay questions.<sup>5</sup> Today, tests using MCQs are used across the continuum from preadmission testing (the Medical College Admission Test) through the medical specialty board certification and re-certification examinations in the various specialties. The MCQ format allows a wide variety of objectives to be tested and the test to be easily scored.<sup>4</sup> However, care must be taken that questions match the expected competency that the learner should demonstrate. For example, questions that simply expect the recall of previously learned information are not appropriate when the goal is to assess higher-level skills, such as medical reasoning or problem-solving.

Cognitive skills, such as problem-solving, also can be assessed through observation of the learner in a classroom or workplace setting. During medical school, formats such as problem-based learning allow an assessment of how well learners identify and utilize information related to clinical problems. As the medical student gains more experience,



he/she applies this skill in the context of real patients during clerkships, where the skill is assessed through supervisor observation. In medical school and residency training, cognitive skills such as clinical judgment also can be assessed through more structured observational techniques, such as case-based discussion/chart stimulated recall.<sup>6</sup> In these situations, the individual is observed demonstrating his/her thought processes related to the care of real patients. Observational assessment methods, even under controlled conditions, require appropriate training of evaluators.<sup>6</sup>

### *Assessment of Clinical and Communication Skills*

Assessment of procedural skills may occur in isolation (i.e., the performance of a specific task, such as examining the abdomen or suturing) or along with assessment of cognitive skills (i.e., the performance of a physical examination with the results used by the examinee to develop a problem list or management plan). Similarly, communication skills may be assessed alone (e.g., the ability to ask open-ended questions or to put the patient at ease) or in the context of eliciting information that allows a specific diagnosis to be made.

There are a variety of assessment methods and tools that are used for the evaluation of clinical and communication skills within the clinical setting. All are based on observation of performance with real patients during a single clinical encounter or cumulative over time. For example, the mini-clinical evaluation exercise (mini-CEX), developed in the 1990s, is a workplace-based single encounter assessment that evaluates patient encounters in the clinical setting. It is useful for the assessment of a variety of competencies, including professionalism, interviewing/communication and physical examination and allows for immediate post-encounter feedback.<sup>8,9</sup> The mini-CEX is used during medical school and residency training.<sup>10</sup> In summary, many tools, such as checklists and rating scales, are used during medical school and residency training to assess students, residents and fellows in the clinical setting.<sup>10</sup> Often the tools are developed and used within one medical school or residency program. According to a systematic review of the literature, few tools have been “thoroughly evaluated and tested” for their reliability and validity, the mini-CEX being one exception.<sup>10</sup>

Assessment of clinical skills also can occur in a simulated setting. The Objective Structured Clinical Examination (OSCE) first was described in 1975 as a way to enhance the reliability and validity of clinical skills assessment and to ensure that learners (medical students and residents) are systematically observed performing core clinical skills.<sup>11,12</sup> OSCEs consist of a series of cases that require the individual to elicit information through history and/or physical examination and/or to use clinical information in follow-up, such as creating a differential diagnosis or management plan. OSCEs are widely used within individual medical schools for formative or summative purposes.<sup>13</sup> The United States Medical Licensing Examination Step 2-Clinical Skills is an OSCE-based examination. In the 2013-2014 academic year, 96 percent of MD-granting medical schools required students to take the examination and 67 percent required a passing score for advancement or graduation.<sup>13</sup>

High-fidelity simulation has been noted to be useful in assessing both technical and non-technical skills. While there is evidence for the face validity of these measures, the evidence for their reliability and predictive validity is not as clear.<sup>6</sup>

Methods that allow assessment of written communication skills include review of clinical documentation (e.g., chart review, patient write-ups). For example, there is widespread use of clinical documentation review during required clinical clerkships.<sup>7</sup> Review of clinical records as an assessment methodology extends into residency training and, in some cases, into clinical practice. For example, in practice there could be assessment of the accuracy and adequacy of the clinical record and of whether information has been shared with appropriate parties, such as patients and referring physicians. There is little information in the literature about the extent to which the review of physician records occurs in a systematic manner.

### *Assessment of Professionalism*

Professionalism may be characterized in a variety of ways and each has implications for assessment. For purposes of this report, professionalism is considered to be a “characteristic or attribute that is identifiable within individuals”<sup>14</sup> and is assessed through the observation of behavior in actual or simulated settings. The complexity of assessing professionalism arises from the different characteristics included in the definition (e.g., altruism, integrity) by different groups and the need to operationalize these characteristics into observable behaviors.<sup>14</sup> For purposes of

assessment, professionalism has been considered as a “global construct” (that is, a composite characteristic) or as a set of individual, though perhaps related, characteristics.<sup>15</sup>

Regardless of the complexities, professionalism is widely evaluated during medical school and residency training and also is considered during the admission process.<sup>14</sup> For example, medical schools use a variety of methods to assess professionalism (Table 1).

Table 1: Methods Used by Medical Schools in the Assessment of Professionalism (2012)<sup>16</sup>

Method	Number	% of Schools
Observation by clinical faculty during clerkships	134	100%
Observation during small group sessions in the preclinical years	129	96%
Observation by residents	126	94%
Observation during laboratory sessions	118	88%
OSCE with one or more professionalism stations	99	74%
Comments from other health professionals	79	59%
Comments from patients	55	41%

Assessment of professionalism can occur as a single point-in-time evaluation, such as the mini-CEX; composite performance over time, such as in an end-of-clerkship evaluation; or a critical incident, such as the reporting of an incident of unprofessional behavior.<sup>17</sup> In residency training, the ACGME milestones for all specialties include an assessment of various aspects of professionalism over time.<sup>1</sup> While the milestones for each specialty include an evaluation of professionalism, each organizes the components of professionalism (and consequently the specific behaviors evaluated) differently.

Other tools are being used to support formative and summative evaluation of professionalism. Portfolios are being used in medical school and residency as a means to store information from a variety of assessment methods, to allow the creation of a comprehensive view of the individual over time.<sup>6</sup> The move to electronic portfolios has increased their flexibility and utility, though security of information remains an issue.<sup>18</sup>

### *Systems to Assess Multiple Competencies*

While the previous discussion focused on the tools and methods typically used to assess single competency domains, there are systems and processes in place to address the physician’s accomplishments across the six competency domains, including systems-based practice and practice-based learning and improvement. The ACGME milestones project includes the ongoing assessment of each of the six competency domains in each specialty.<sup>1</sup> This system is designed to monitor a resident’s ongoing progress in more than 30 areas per specialty so that the graduate’s readiness for unsupervised practice can be documented.<sup>1</sup> Similarly, the American Board of Medical Specialties Maintenance of Certification (MOC) program addresses the six competency domains using multiple methods for learning and assessment.<sup>19</sup> Such comprehensive assessment systems can provide information for physicians and others to use for tracking progress along the continuum.

This report has described many tools and methods that are available to assess medical knowledge, patient care, interpersonal and communication skills, and professionalism. A variety of processes exist, such as those used by the individual medical specialty boards for Part IV of the MOC program, to assess systems-based practice and practice-based learning and improvement.<sup>34</sup> In general, however, less research has been conducted to determine their reliability and validity for summative purposes. They are able to provide useful formative feedback to individual physicians and their practices.

### THE BENEFITS AND LIMITATIONS OF SELF-ASSESSMENT

Physicians need to understand their knowledge and skill gaps, so that they can be remedied through targeted education and practice. Self-assessment allows physicians to take responsibility for their learning and to build an ongoing educational program based on perceived needs. However, reviews of the literature have cast doubts on physicians’ ability to independently assess their own knowledge, skills, or performance in a global content domain as compared with an appropriate external assessment measure.<sup>20,21</sup> In summary, self-assessment is important but insufficient in itself to allow physicians to identify areas in which they need to improve. To address this, researchers

have pointed to the importance of external assessments. In addition, the creation of objective measurements or benchmarks of performance and the use of an external appraiser to facilitate self-assessment could be useful.<sup>20</sup>

## METHODS AND TOOLS TO PREDICT PERFORMANCE

There has been a great deal of research on what tools/measures are useful to predict the performance of a physician-in-training or a physician in a future phase of the continuum, including in practice.<sup>22</sup> Some of these measures, for example, the Medical College Admission Test (MCAT) and the United States Medical Licensing Examination (USMLE), are widely used in admission decisions to medical school and residency programs, respectively. In summary, though, reviews of the literature indicate that clinical competence is complex and that no one measure is sufficient to predict overall performance after medical school graduation.<sup>22</sup> This section summarizes research linking tools or measures with specific outcomes, such as future examination or clinical performance. In summary, while performance on tests of knowledge tends to predict performance on tests of knowledge, there is far less evidence for valid measures to predict performance at later stages of the continuum in other competence domains.

### *Predicting Success in Medical School*

In their selection processes, medical schools typically rely to varying degrees on the MCAT, the college grade point average (GPA) and interviews. There has been much research done on how well the MCAT predicts performance during medical school. Statistical analyses reveal that the MCAT score has a significant relationship to USMLE Step 1 performance (predicts about 43 percent of the variance) and a much smaller relationship to Step 2 performance (predicts about 18 percent of the variance).<sup>23</sup> In general, the total MCAT score has a medium predictive validity for basic science course performance (19 percent of the variance) and clinical (clerkship) performance (15 percent of the variance), and medical school grades were best predicted by a combination of MCAT scores and undergraduate GPA, though the percent of the variance explained was not high.<sup>23,24</sup> These results indicate that there are other factors that influence performance in medical school.

Some form of interview is used as part of the admission process to, in part, assess nonacademic personal qualities and to predict nonacademic success.<sup>25</sup> Concerns have been raised, however, about lack of consistency and objectivity in an unstructured interview.<sup>26</sup> To address this issue, new formats have been created that exhibit more standardization. The multiple mini-interview (MMI) uses a number of brief encounters modeled after the OSCE. As utilized by the McMaster University MD program, candidates have a short period of time to respond to questions or situations alone or with other applicants. All applicants experience the same scenarios. In an early study, the MMI was independently predictive of performance on the Medical Council of Canada Qualifying Examination (MCCQE).<sup>27</sup> The MCCQE is similar to the USMLE. The MMI is a type of situational judgment test. This type of assessment has been shown to be useful to select for a variety of nonacademic or professional attributes.<sup>28</sup>

### *Predicting Success in Residency Training*

USMLE Step 1 scores are commonly used by residency program directors to select applicants for interviews.<sup>29</sup> However, USMLE performance can be influenced by a variety of factors, such as the curriculum of the medical school, the assessment methods used by the school, and the clinical experience of the student at the time the exam is taken.

A review of the literature did not show a statistically significant correlation between USMLE Step 1 and 2 scores and reliable measures of procedural and clinical skill acquisition among residents and fellows. There is, however, correlation between USMLE scores and the scores on MCQ-based medical specialty board examinations.<sup>29</sup> There also was a significant correlation between USMLE Step 2 scores and the scores on the in-training examination in one specialty.<sup>30</sup>

### *Predicting Success in Practice*

A systematic review of the literature<sup>22</sup> found few studies of the relationship between performance in the early stage of the continuum (i.e., medical school) and performance in practice. One substantive area of inquiry is related to the identification of individuals who would experience future adverse actions. Studies have linked behaviors in medical school and residency training related to professionalism with the risk of disciplinary actions by state medical licensing boards. Behaviors in medical school that were statistically related to licensing board actions were defined

by the authors as “severe irresponsibility” and “severely diminished capacity for self-improvement.”<sup>31</sup> A national study of internal medicine residents found that low professionalism ratings on the Residents’ Annual Evaluation Summary predicted increased risk for disciplinary action by state medical licensing boards. The study also found that progressively increasing professionalism ratings and higher scores on the American Board of Internal Medicine certification examination were associated with less risk for subsequent disciplinary action.<sup>32</sup>

Clinical performance at all levels of the continuum is complex, and little is known about the relationship between performance measures early in the continuum and longer-term practice outcomes.<sup>22</sup> There is a need, therefore, for a more systematic approach to study of the predictive value of assessment methods and tools.

## APPROACHES TO ALIGNING ASSESSMENT ACROSS THE CONTINUUM

What type of assessment system would allow the performance of an individual to be determined through valid and reliable means at various stages of the continuum? Based on research to date, external assessment of clinical knowledge using “written” tests can be both predictive from one stage of the continuum to the next and can have appropriate levels of reliability and validity. There would be a need, however, to ensure that the test blueprint (the number of questions per content area) samples appropriately from the discipline domain being tested<sup>2</sup> and that the questions are at an appropriate level for the stage of the continuum. There are methods, such as the OSCEs and mini-CEX, to assess distinct cognitive and procedural skills. These also, when properly developed and administered, have appropriate statistical properties. Performance benchmarks (e.g., passing scores) for all these could be set based on the stage of the continuum. There are many other domains of clinical competence that are assessed in various ways, but these assessments tend to occur in isolation and do not allow a composite picture of knowledge and skills at a given phase of an individual’s professional development.

### *Workplace-based Assessment as an Organizing Framework*

There is a need to create an organizing framework that would allow assessment along the medical education continuum related to the six competency domains. Workplace-based assessment is defined as:

the assessment of working practices based on what doctors actually do in the clinical setting and predominantly carried out in the workplace itself.<sup>33</sup>

Workplace-based assessment can be a format for collecting and aggregating performance data from quantitative and qualitative sources about a breadth of clinical skills. As such, it can be used to provide feedback about physicians’ development of these skills as they progress along the continuum.<sup>33</sup> The tools that typically are used for workplace-based assessment can be categorized as:

- Documentation of work experience, such as patient encounter logs.
- Observation of individual clinical encounters, such as the mini-CEX.
- Discussion of individual clinical cases, such as chart stimulated recall.
- Feedback from peers and others on routine performance.<sup>6</sup>

These techniques have been described in an earlier section of this report. Workplace-based assessment allows the results to be aggregated so that a picture of composite performance can be developed.

### *Setting Benchmarks of Performance*

The results of workplace-based assessment would allow a cumulative judgment about the performance of an individual at a given stage of the medical education continuum and allow a determination of readiness for progression to the next year of the program or phase of the continuum. How then do we know if the level of performance that is achieved is appropriate? Benchmarks for individual measures, such as the passing score on a written test and an OSCE, are common. However, benchmarks for the aggregate performance of an individual are not. One example that has been implemented is the milestones component of the ACGME Next Accreditation System.<sup>1</sup> Residency programs will evaluate residents in each of the competency domains at intervals and submit composite milestone data on residents to the ACGME every six months. The results of the milestone evaluations will place each resident along a performance continuum for each competency domain.<sup>1</sup> While this information will

be used as part of the accreditation process, it is not clear how it will be used in decisions within a residency program about progression for individual residents.

The issue of benchmarks for progression decisions is an important one, since competency-based curricula permit the advancement/promotion of an individual within medical school and from medical school to residency that is not time-based. That is, a medical student or a resident could complete the educational program in less than the standard time if he or she meets the requirements of the program's competencies. While theoretically attractive, there is a need to set appropriate performance benchmarks to determine if the requirements have been met. This is not just a theoretical need. In the 2013-2014 academic year, 17 medical schools (12%) reported having a time flexible/competency-based curriculum for all students.<sup>7</sup>

## SUMMARY AND RECOMMENDATIONS

The goal of ensuring that physicians are knowledgeable and skilled depends on an assessment system that allows both formative feedback to improve performance and summative decisions based on valid and reliable measures. The system should be coordinated so that progression in knowledge and skill development can be monitored across the stages of the medical education continuum. While there has been progress in achieving this outcome, more work is needed in two areas. One is assessment of the competency areas of systems-based practice and practice-based learning and improvement. Another area is to move beyond the individual competency areas to ensure that physicians are prepared for the complexities of medical practice.

The Council on Medical Education recommends that the following recommendations be adopted and that the remainder of this report be filed.

1. That our American Medical Association (AMA) support the concept that evaluation of physicians as they progress along the medical education continuum should include the following:
  - a. Assessments of each of the six competency domains of patient care, medical knowledge, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based practice; and
  - b. Use of assessment instruments and tools that are valid and reliable and appropriate for each competency domain and stage of the medical education continuum.
2. That our AMA encourage study of competency-based progression within and between medical school and residency.
  - a. Through its Accelerating Change in Medical Education initiative, our AMA should study models of competency-based progression within the medical school.
  - b. Our AMA should work with the Accreditation Council for Graduate Medical Education (ACGME) to study how the Milestones of the Next Accreditation System support competency-based progression in residency.
3. That our AMA encourage research on innovative methods of assessment related to the six competency domains of the ACGME/American Board of Medical Specialties that would allow monitoring of performance across the stages of the educational continuum.
4. That our AMA encourage ongoing research to identify best practices for workplace-based assessment that allow performance data related to each of the six competency domains to be aggregated and to serve as feedback to physicians in training and in practice.

## REFERENCES

1. Nasca TJ, Philibert I, Brigham T et al. The next accreditation system - Rationale and Benefits. *NEJM* 2012;366(March):1051-1056.
2. Boulet J, McKinlet DW, Criteria for Good Assessment. In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp19-43.
3. Schuwirth L, Colliver j, Gruppen L et al. Research on Assessment Practices. In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp 59-75.

4. Juul D. Evaluation of Knowledge Acquisition, In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London.pp127-128
5. Cowles JT, Hubbard JP. Validity and reliability of the new objective test. *Journal of Med Educ*. 1954;29(6):30-34.
6. Boursicot K, Etheridge L, Setna Z et al. In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp 97-125.
7. 2013-2014 LCME Part II Annual Medical School Questionnaire. Sent to the deans of the 140 MD-granting medical schools, with a 100% response rate.
8. Pelgrim EAM, Kramer AWM, Mookink HFA et al. In training assessment using direct observation of single-patient encounters: A literature review. *Adv in Health Sci Educ* 2011;16:131-142.
9. Norcini JJ, Blank LL, Duffy FD et al. The mini-CEX: A method for assessing clinical skills. *Annals of Internal Medicine* 2003;138(6):476-481.
10. Kogan JR, Holmboe ES, Hauer KE. Tools for direct observation and assessment of clinical skills of medical trainees. *JAMA* 2009;302(12):1316-1326.
11. Khan KZ, Ramachandran S, Gaunt K et al. The Objective Structures Clinical Examination (OSCE): AMEE Guide No. 81. Part I: An historical and theoretical perspective. *Medical Teacher* 2013;35(9):1437-46(e)
12. Fromme HB, Karani R, Downing SM. Direct observation in medical education: A review of the literature and evidence for validity. *Mt Sinai J Med* 2009;76(4):365-371.
13. Barzansky B, Etzel SI. Medical schools in the United States, 2013-2014. *JAMA* 2014;312(22):2421.
14. Hodges BD, Ginsburg S. Assessment of Professionalism. In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp 136-167.
15. Veloski J, Hojat M. Measuring Specific Elements of Professionalism: Empathy, Teamwork, and Lifelong Learning. In Stern JT (editor), *Measuring Medical Professionalism*, 2006.Oxford University Press. Oxford. pp 117-145.
16. Barzansky B, Etzel SI. Medical schools in the United States, 2011-2012. *JAMA* 2012;308(21):2262.
17. Norcini JJ. Faculty Observation of Student Professional Behavior. In Stern JT (editor), *Measuring Medical Professionalism*, 2006.Oxford University Press. Oxford. pp147-157.
18. Tochel C, Haig A, Hesketh A et al. The effectiveness of portfolios for post-graduate assessment and education: BEME Guide No 12. *Medical Teacher* 2009;31(4):299-318.
19. Hawkins RE, Weiss KB. Building the evidence base in support of the American Board of Medical Specialties Maintenance of Certification program. *Academic Medicine* 2011;86(1):6-7.
20. Davis DA, Mazmanian PE, Fordis M et al. Accuracy of physician self-assessment compared with observed measures of competence: A systematic review. *JAMA* 2006;296(9):1094-1102.
21. Ward M, Gruppen L, Regehr G. Measuring self-assessment: Current state of the art. *Adv Health Sci Educ Theory Pract*. 2002;7(1):63-80.
22. Hamdy H, Orasas K, Anderson MB et al. BEME systematic review: Predictive values of measurements obtained in medical schools and future performance in medical practice. *Medical teacher* 2006;28(2):103-116.
23. Donnon T, Paolucci EO, Violato C. The predictive validity of the MCAT for medical school performance and medical licensing examinations: A meta-analysis of the published research. *Academic Medicine* 2007;82(1):100-106.
24. Julian ER. Validity of the Medical College Admission test for predicting medical school performance. *Academic Medicine* 2005;80(10):910-917.
25. Prideau D, Roberts c, Eva K et al. Assessment for Selection of the Health Care Profession and Specialty Training. ). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp77-96.
26. Quintero AJ, Segal LS, King TS et al. The personal interview: Assessing the potential for personality similarity to bias the selection of orthopaedic residents. *Academic Medicine* 2009;84(10):1364-1372.
27. Eva KW, Reiter HI, Rosenfeld J et al. Association between a medical school admission process using the multiple mini-interview and national licensing examination scores. *JAMA* 2012;308(21):2233-2240.
28. Patterson F, Ashworth V, Zibarras L et al. Evaluations of situational judgment tests to assess non-academic attributes in selection. *Medical Education* 2012;46:850-868.
29. McGaghie WC, Cohen ER, Wayne DB. Are United States Medical Licensing Exam Step 1 and 2 scores valid measures for postgraduate medical residency selection decisions? *Academic Medicine* 2011;86(1):48-52.
30. Black KP, Abzug JM, Chinchilli VM. Orthopaedic in-training examination scores: A correlation with USMLE results. *J Bone Joint Surg Am*. 2006;88(3):671-676.
31. Papadakis MA, Teherani A, Banach MA et al. Disciplinary actions by medical boards and prior behavior in medical school. *N Engl J Med* 2005;353(25):2673-2682.
32. Papadakis MA, Arnold GK, Blank LL et al. performance during internal medicine residency training and subsequent disciplinary action by state licensing boards. *Ann Int Med* 2008;148(11):869-876.
33. Singh T, Norcini JJ. Workplace-based Assessment. In McGaghie WC (editor). *International Best Practices for Evaluation in the Health Professions*. 2013.Radcliffe Publishers. London. pp 257-279.
34. American Board of Medical Specialties. Maintenance of Certification Part IV Practice Performance Assessment. Accessed at [www.abms.org](http://www.abms.org).