REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 13-A-10

Subject: Expectations for Lifelong Learning

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Council on Medical Education Report 3-A-08, "Physician Lifelong Learning," included two related recommendations. Recommendation 2 asked that our American Medical Association (AMA) conduct a study on how medical schools and residency program could promote the skills of lifelong learning and how practicing physicians were using various continuing medical education modalities to support their continued learning. The results of this study were included in CME Report 10-A-09, "Promoting Physician Lifelong Learning," which was presented at the 2009 Annual Meeting of the AMA House of Delegates (HOD).

This informational report summarizes the expectations of accrediting, certifying, and licensing bodies related to physician lifelong learning across the medical education continuum.

EXPECTATIONS FOR PHYSICIANS-IN-TRAINING

Medical students and resident physicians are starting on the road to lifelong learning. Accreditation standards related to these groups focus on learners' acquiring the skills that will allow them to become mature lifelong learners as they enter practice.

Accreditation Expectations for Undergraduate Medical Education

The Liaison Committee on Medical Education, the accrediting body for medical education programs leading to the MD degree, has explicit standards related to preparing students to engage in lifelong learning.

> ED-5A. The educational program must include instructional opportunities for active learning and independent study to foster the skills necessary for lifelong learning.[1]

The explanatory annotation[1] to this standard, which is meant to assist schools and reviewers to understand the expectations for compliance, reads as follows:

> It is expected that the methods of instruction and evaluation used in courses and clerkships will provide students with the skills to support lifelong learning. These skills include self-assessment on learning needs and independent identification, analysis, and synthesis of relevant information, as well as the assessment of whether information sources are credible. Students should receive explicit experiences in using these skills, and evaluation of and feedback on their performance.

Medical schools undergoing a regular accreditation review are expected to provide examples of the opportunities that students have to: 1) evaluate their own learning needs; 2) identify, analyze, and synthesize information relevant to their learning needs; and 3) assess the credibility of information

sources. Medical schools also must describe how students' demonstration of the skills needed for lifelong learning contribute to their evaluations in courses and clerkships.[2]

The accreditation process also may use data from other sources when determining compliance with the standard requiring lifelong learning. For example, the Association of American Medical Colleges (AAMC) Annual Medical School Graduation Questionnaire (GQ) collects annual information from fourth-year medical students. The data are provided to individuals schools with their own students' responses and with national norms. In the questionnaire, there are several items related to activities that can be linked to lifelong learning. For example, national data from the 2009 GQ showed that 42% of responding students had completed an independent study project for credit, 65% had participated in a research project with a faculty member, and 38% had been sole or co-author of a research paper submitted for publication.[3]

Accreditation Expectations for Graduate Medical Education

The Accreditation Council for Graduate Medical Education (ACGME) Competencies, as contained in the ACGME Common Program Requirements, include the following expectations associated with the competency termed practice-based learning and improvement:

> "…Residents are expected to develop skills and habits to be able to meet the following goals: (1) identify strengths, deficiencies, and limits in one's knowledge and expertise; (2) set learning and improvement goals; (3) identify and perform appropriate learning activities…"[4, p .8]

ACGME is exploring the development of a learning portfolio system that would allow residents and their supervisors to track the individual resident's learning over time. As described on the ACGME web site, the portfolio could

> "prepare residents for managing their continued learning and professional development as they transition into practicing physicians."[5]

EXPECTATIONS FOR PHYSICIANS IN PRACTICE

As physicians leave training and move into practice or other activities, there is an expectation that they have acquired the skills of lifelong learning and will continue their education throughout their professional careers. The AMA Principles of Medical Ethics state:

> V. 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, obtain consultation, and use the talents of other health processionals, where indicated.[6]

For the physician in his or her professional life, lifelong learning can be equated with continuing medical education (CME), defined by our AMA as consisting of:

> "educational activities which serve to maintain, develop, or increase the knowledge, skills, and professional performance and relationships that a physician uses to provide services for patients, the public, or the profession. The content of CME is the body of knowledge and skills generally recognized and accepted by the profession as within the basic medical sciences, the disciplines of clinical medicine, and the provision of health care to the public" (Policy H-300.988, AMA Policy Database).

Accreditation of continuing medical education providers is conferred by the Accreditation Council for Continuing Medical Education (ACCME) or by an ACCME-recognized state medical society. Educational activities are certified for AMA PRA Category 1 Credit™ by an accredited provider establishing that the activity meets AMA PRA standards.[7] There also are credit systems from the American Academy of Family Physicians, which accredits individual continuing medical education activities rather than providers, and the American Osteopathic Association.[7]

Physicians may gain AMA PRA Category 1 CME Credits™ by participation in a variety of learning formats, such as:

- Live activities where a physician attends an educational session in person or virtually (for example, over the Internet).
- Use of enduring materials, including printed, recorded, audio, video and/or online activities that may be used over time and at various locations and that, in themselves, constitute a structured CME activity.
- Journal-based CME where the physician selects and reads a designated article in the peer-reviewed medical literature and engages in reflection or interaction based on the article's content (for example, through an evaluation or examination).
- Test item writing where the physician contributes to the development of a designated high-stakes examination or specific self-assessment module by researching, drafting, and defending a test item.
- Manuscript review where the physician critically reviews assigned journal manuscripts under the direction of a journal editor and an accredited CME provider.
- Performance improvement where a physician or group of physicians can, using a structured, long-term process, learn about selected performance measures, apply such measures to respectively or prospectively assess their practices, and re-evaluate their performance after an interval.
- Internet point of care learning where physicians engage in structured, self-directed online learning on topics relevant to their practices.[7]

Licensure

Sixty-two state medical licensing boards require CME for license re-registration. Many states require that a certain percentage of the CME be AMA PRA Category 1 Credit™ or equivalent credits. In 34 states, completion of a graduate medical education residency/fellowship program can be used (once) as a surrogate for a defined number of CME credits. The number of recognized credits required per year ranges from 12 to 50.[8]

There are some states that mandate that a certain number of CME credits be in specific content areas. For example, licensure renewal in California requires all general internists and family physicians with 25% of greater of their patient population aged 65 or older to complete at least 20 hours of all mandatory CME in geriatric medicine or the care of older patients. Kentucky physicians must complete a one-time course covering domestic violence and obtain 2 credits every 10 years in HIV-AIDS.[8]

The Federation of State Medical Boards (FSMB) Advisory Group on Continued Competence of Licensed Physicians developed a draft report titled "Report on FSMB Maintenance of Licensure Initiative" concluded that:

> There is current data that supports continued lifelong medical education as an effective means of physician learning and change if it is part of a system of continuous professional development that includes self-assessment, remediation and reassessment.[9, p.13]

The maintenance of licensure framework described in the draft report included the expectation that, for license renewal, physicians should provide evidence that they are participating in a program of professional development and lifelong learning that is based on the general competencies model:

- medical knowledge;
- patient care;
- interpersonal and communication skills;
- practice based learning;
- professionalism; and
- systems based practice.[9]

Specialty Board Certification

In 2000, the 24 Member Boards of the American Board of Medical Specialties (ABMS) agreed to a process of continuous professional development for their recertification programs. The ABMS Maintenance of Certification® (MOC) process is meant to assure that physicians are committed to lifelong learning in a specialty or subspecialty by requiring ongoing measurement of six core competencies that had been adopted by the ABMS and ACGME in 1999.[10] These six core competencies are the competencies listed above.

The four-part MOC process includes the following elements:

> Part I - Professional Standing. Physicians must hold a valid, unrestricted medical license.
>
> Part II - Lifelong Learning and Self-Assessment. Physicians must participate in educational and self-assessment programs that meet specialty-specific standards.
>
> Part III - Cognitive Expertise. Physicians must demonstrate through formalized examination that they have the fundamental, practice-related, and practice-environment related knowledge to provide quality care in their specialty.
>
> Part IV - Practice Performance Assessment. Physicians are asked to demonstrate that they can assess the quality of care they provide compared to peers and national benchmarks and can apply evidence or consensus recommendations to improve quality.[9]

Each of the four parts of MOC relates directly or indirectly to elements of lifelong learning.

On March 16, 2009, the ABMS adopted new standards related to the MOC process and provided timelines for their implementation.[11] These standards included:

> Documentation that physicians are meeting CME and self-assessment requirements. By 2011, the 24 ABMS Member Boards will be expected to document that physician diplomats are meeting CME and self-assessment requirements for MOC. The content of CME and self-assessment programs utilized for MOC are expected to be relevant to medical advances within the medical specialty for which physicians are certified.

There already are medical specialty boards that meet the self-assessment requirement.

Evidence of participation in practice-based assessment and quality improvement. By 2010, ABMS Member Boards will require physician diplomats to provide evidence of participation in practice assessment and quality improvement every two to five years.

Membership and Privileges

Membership in state and medical specialty societies as well as maintenance of hospital privileges can require evidence of continued learning, through CME requirements and/or specialty board certification. For example, many state medical societies and specialty organizations require evidence of participation in CME, such as AMA PRA Category 1 Credit™ or equivalent credits.

SUMMARY

There are expectations related to physician lifelong learning across the medical education continuum. These are set by different groups, including accrediting, licensing, and certifying bodies, with little historical expectation of coordination. Events such as the creation of the six ACGME-ABMS competencies are serving as a focus for synergy between some groups, but do not yet permeate the entire continuum. The absence of a coordinated set of expectations makes it difficult to assure that all physicians have the skills to engage in meaningful lifelong learning, including the ability to self-assess and act on their learning needs.[12,13] There is evidence from systematic reviews of the literature that at least some physicians have "limited" ability to self-assess and that those whose knowledge and skills are most limited are also least able to accurately self-assess their level of performance.[12,13] Efforts to assure that physicians possess the skills to engage in appropriate and effective lifelong learning should be collaborative across the continuum, to avoid duplication and to support an appropriate level of skill as physicians proceed through training.

REFERENCES

1. LCME. Functions and Structure of a Medical School, June 2008 edition. Obtained from www.lcme.org.
2. LCME. 2010-2011 Medical Education Database. Obtained from www.lcme.org.
3. AAMC Academic Affairs. 2009 GQ Medical School Graduation Questionnaire, All Schools Summary Report. Obtained from www.aamc.org.
4. ACGME. Common Program Requirements, Effective July 1, 2007. Obtained from www.acgme.org.
5. ACGME Learning Portfolio. Frequently Asked Questions and Answers. Obtained from www.acgme.org.
6. AMA Principles of Medical Ethics. AMA Policy Database, E-1.001
7. AMA. The Physician's Recognition Award and credit system. Information for accredited providers and physicians. 2006 revision.
8. AMA. State Medical Licensure Requirements and Statistics, 2010 (p.53-56)
9. Federation of State Medical Boards Advisory Group on Continued Competence of Licensed Physicians. Report on FSMB Maintenance of Licensure Initiative. Amended for dissemination by the FSMB Board of Directors. December 13, 2009.
10. ABMS. Maintenance of Certification®. Accessed at www.abms.org/Maintenance_of_Certification/ABMS_MOC.aspx
11. ABMS. News release: New standards adopted to elevate physician lifelong learning assessment for the ABMS Maintenance of Certification (MOC) program. March 16, 2009. Obtained from www.abms.org.
12. Duffy FD, Holmboe ES. Self-assessment in lifelong learning and improving performance in practice: Physician know thyself. JAMA 2006;296(9):1137-1139.
13. 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.