HOD ACTION: CME Report 4 adopted as amended with the addition of a fifth recommendation and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-1-09

Subject: Factors Affecting the Availability of Clinical Training Sites for Medical Student Education

Presented by: Susan Rudd Bailey, MD, Chair

Referred to: Reference Committee K
(Peter C. Amadio, MD, Chair)

Recommendation 1 of Council on Medical Education Report 2 (I-08), asked that our American Medical Association work with organizations such as the Association of American Medical Colleges and the American Association of Colleges of Osteopathic Medicine to study and report the current and projected availability of and need for clinical clerkship placements for US medical students. (D-295.931 [1], AMA Policy Database)

This report will: 1) summarize the challenges facing medical schools in gaining access to sufficient clinical teaching capacity and the possible strategies to address these challenges; 2) illustrate the recent expansion in medical education programs and in programs training other health professionals that also require clinical training sites; and 3) provide data on the factors reported to be affecting the availability of clinical training sites.

BACKGROUND - CHALLENGES AND STRATEGIES

Council on Medical Education Report 2 (I-08), “Competition for Clinical Training Sites,” summarized the factors affecting the adequacy of clinical training sites for medical students, both in the inpatient and community-based outpatient settings. It concluded that the availability of sites for clinical training of US medical students was being and, in the future, could increasingly be, affected by:

- increases in enrollment at existing US medical schools;
- creation of new MD- and DO-granting medical schools in the US; and
- competition for training sites from offshore medical schools.

The report also described potential strategies to consider in order to maintain a quality clinical education program.

Expand Teaching Capacity at Existing Teaching Sites

Additional learners could be added to existing clinical teaching sites. This likely would require adding teaching faculty and/or freeing the time of existing teachers to allow additional participation in the educational program. Since participation in teaching reduces the time available for patient care, sources of funding to offset lost revenue may be needed.
Identify New Sites for Training

New clinical teaching sites could be identified in the region of the medical school and/or at a distance (for example, through the formation of a branch campus). Such expansion has the same requirements as expansion in the region of the medical school, including identifying and preparing teaching faculty and providing release time for them to participate in teaching. This challenge is exacerbated by the current caps on the creation of new residency positions. It is much more difficult to develop a quality teaching site for medical students where there will be no residents present.

Regulations Limiting Access to Clinical Teaching Sites

The standards of the Liaison Committee on Medical Education (LCME), which accredits the educational programs leading to the MD degree, require that “institutional resources to accommodate the requirements of any visiting...students must not significantly diminish the resources available to existing enrolled students” (standard MS-12, Functions and Structure of a Medical School, June 2008 edition). In general, this standard is interpreted to mean that there must be adequate resources (faculty, patients, and teaching space) for the medical school’s own students.

Council on Medical Education Report 2 (I-08) also noted that state regulations might limit the access of students from offshore medical schools to US clinical teaching sites. The report recommended various strategies that would require that visiting students from offshore medical schools only come from medical schools whose educational programs have met standards for quality.

CURRENT STATUS OF EDUCATIONAL PROGRAM EXPANSION

There has been significant expansion in medical education programs, as well as in programs to train other health professionals that would utilize inpatient and outpatient clinical sites for training.

MD-Granting Educational Programs

The number of first-year students enrolled in US MD-granting medical schools grew from 16,856 in 2000 to 18,508 in 2008, a 9.8% increase. According to the Association of American Medical Colleges (AAMC) Center for Health Workforce Studies, first-year enrollment is anticipated to continue to increase to about 21,000 by about 2015. The enrollment increases are a result of the formation of new medical schools and the expansion of existing schools, through the creation of distributed campuses and/or enrollment increases at the “home” campus.

The number of US MD-granting medical schools accredited by the LCME increased from 125 in 2000 to 131 in 2009. Of the newly-accredited medical schools, 4 admitted their first class in 2009 and 1 will admit its charter class in 2010. Therefore, the impact of these schools on the number of enrolled students has yet to be felt. There are an additional 5 medical schools that have formally applied for accreditation but have not yet undergone a review by the LCME.

In addition to creating new medical schools, enrollment increases are being facilitated by the formation of distributed campuses. A distributed campus is defined as a site at a distance from the medical school that offers at least one full year of instruction (basic science and/or clinical) to medical students. In the 2008-2009 academic year, 17 medical schools with enrolled students...
(13% of the total) reported that they were planning to create a new distributed campus and 9 schools (7%) reported that they were planning to expand an existing distributed campus to offer more years in the curriculum within the next 2-3 years.3

DO-Granting Medical Schools

Between 2005 and 2007, the number of accredited DO-granting schools increased from 20 to 25, and the current 25 colleges offer instruction in 31 locations.4 Data from the American Association of Colleges of Osteopathic Medicine indicates that first-year enrollment in DO-granting medical schools increased from 2,927 in 1999-2000 to 4,528 in 2007-2008 and is projected to increase to 5,227 in 2012-2013.4,5

International Medical Schools

US citizens who study medicine outside the US, especially in the Caribbean region in medical schools whose language of instruction is English, are likely to pursue their clerkship training in the US. As of 2008, there were a total of 35 international medical schools located throughout the Caribbean that offered the MD degree and delivered the instructional program in English.6 There are no summary data available on enrollment of US citizens in international medical schools. However, an estimate can be made based on the number of US citizens pursuing certification by the Educational Commission for Foreign Medical Graduates (ECFMG). US citizens accounted for about 23% of the medical students/graduates seeking ECFMG certification in 2008. The largest number of students/graduates registering for certification were from medical schools located in the Caribbean (Dominica, Netherlands Antilles, Grenada, and the Cayman Islands).7 These totaled 4,560 individuals.7

Other Health Professions Programs

Physician assistant (PA) programs will be used for purposes of this analysis, since it is likely that PA clinical training most closely overlaps with medical student training, especially in terms of training sites. The number of PA programs has been increasing (from 126 in 2000 to 145 in 2009).8 In 2008, about 12,000 students were enrolled in PA programs, which are about 2-2½ years in length.9 There are, in addition, many other types of learners who require access to the clinical setting, including those from nurse practitioner/doctor of nursing practice programs and various allied health programs. Educational programs for other health professions are, in general, increasing both in enrollment and in number.

In summary, the number of learners who require access to clinical education sites is significant and increasing.

FACTORS AFFECTING THE AVAILABILITY OF CLINICAL TRAINING SITES

Of the 126 MD-granting medical schools that responded to the 2008-2009 LCME Annual Medical School Questionnaire3, 80 (63%) reported that it had become more difficult to recruit and retain a sufficient number of community-based (volunteer) faculty to meet the school’s needs. In addition, 59 schools (47%) reported that it had become more difficult to find inpatient clinical placements for students in the core clerkships. Schools also were asked to identify the reasons causing the increased difficulty.
Difficulty in Recruiting and Retaining Volunteer Clinical Faculty

The schools with difficulty in recruiting and retaining volunteer faculty reported experiencing this problem for a number of reasons.

- The inability to compensate/sufficiently compensate volunteer faculty (65 schools/81% of those with difficulty).
- Increased enrollment at the medical school (37 schools/46%).
- Increased competition for volunteer faculty due to expansion in other medical education programs, including MD, DO, international (37 schools/46%).
- Creation of new medical education programs (MD or DO) in the region (19 schools/24%).

It was often the case that medical schools were having problems based on several of these circumstances.

In summary, while inability to provide payment was the most-frequently cited reason, it was often coupled with expansion in enrollment at the medical school or the presence of additional learners from other educational programs in the region.

Difficulty in Finding Inpatient Clinical Placements

Many of the same factors affecting access to volunteer faculty also are important reasons for increased difficulty in finding inpatient placements for clinical clerkships:

- Increased medical school class size (43 schools/73% of schools experiencing increased difficulty).
- Competition for placement sites from other US medical schools (31 schools/53%).
- New or increased requirements to provide financial compensation to clinical sites and/or their physicians (28 schools/47%).
- Competition for placement sites from off-shore medical schools (14 schools/24%). [This difficulty is localized in 8 states: California (2 schools), Georgia (1 school), Illinois (3 schools), Michigan (1 school), New Jersey (1 school), New York (4 schools), Ohio (1 school), and Pennsylvania (1 school).]

In summary, the expansion in medical education in the US, and, in some cases internationally, and the inability to provide financial compensation to clinical teaching sites are seriously affecting access to resources for clinical education.
DISCUSSION

Our AMA supports increasing the number of medical students, provided that such expansion does not jeopardize the quality of medical education (Policy D-295.938). In order to assure that lack of access to clinical placements does not have a negative effect on educational program quality, two major changes will be needed.

Expand Capacity for Clinical Teaching

As the number of learners from all sources increases, medical schools will need to identify additional sites for clinical training and additional faculty to teach. AMA policy supports such planning.

That each medical school and residency program identify the specific resources needed to support the clinical education of trainees and 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. (Policy H-305.942, [1])

New clinical sites and their physicians will need to be prepared to assume a teaching role. For hospitals and other clinical facilities, this may include infrastructure upgrades, such as the addition of conference rooms and study space, a library, and information resources, as well as formal changes to their missions and associated medical staff policies and procedures. Physicians assuming the role of faculty for the first time will require faculty development and orientation to the teaching role. Our AMA is working with appropriate collaborators to study how to build additional institutional and faculty capacity in the US for delivering clinical education (Policy D-295.931, [2])

Identify Financing Mechanisms to Support Expansion

The changes needed to expand both educational infrastructure and the number of full-time and volunteer (community) faculty have financial implications. It is unlikely that most medical schools have the current financial resources to meet the increased costs required to, for example, compensate volunteer clinical faculty. There is a long history of providing other benefits to volunteer clinical faculty. For example, in the 2005-2006 LCME Annual Medical School Questionnaire, the 125 medical schools provided information on how volunteer clinical faculty were being rewarded:

- Access to the library (118 schools)
- Recognition dinners/certificates (111 schools)
- Access to faculty development programs (106 schools)
- Access to free/discounted continuing medical education (80 schools)
- Computers/software supplied or discounted (41 schools)
- Access to athletic facilities/sports events (36 schools)
- Ability to participate in the medical school practice organization (20 schools)

The data from the current survey cast doubt that these benefits, without added compensation, will remain sufficient in all cases.
Even if individual medical schools can financially support their own expansion, care must be taken that the sum total of resources in a region are adequate. Competition among medical schools for resources is counterproductive to a quality system of medical education in a city, state, or region. For example, while the creation of a distributed campus may solve the resource problem for a given medical school, the new campus may compete for clinical teaching sites and/or faculty with an existing medical school in the area. Therefore, both new funding and regional planning related to resources are necessary.

RECOMMENDATIONS

As medical schools continue to expand, there will be increasing pressures on resources for clinical education. Unless these resources are increased, it is likely that the quality of medical education will suffer. Therefore, the Council on Medical Education recommends that the following be adopted and that the remainder of this report be filed:

1. That our American Medical Association work with the Association of American Medical Colleges and the American Association of Colleges of Osteopathic Medical Education to encourage local and state governments and the federal government, as well as private sector philanthropies, to provide additional funding to support infrastructure and faculty development for medical school expansion. (Directive to Take Action)

2. That our AMA encourage medical schools and the rest of the medical community within states or geographic regions to engage in collaborative planning to create additional clinical education resources for their students. (Directive to Take Action)

3. That our AMA support the expansion of medical education programs only when educational program quality, including access to appropriate clinical teaching resources, can be assured. (New HOD policy)

4. That our AMA rescind D-295.931 [1], because the work called for in the directive has been completed. (Rescind HOD Policy D-295.931 [1])

5. That our AMA advocate for regulations (e.g. via JCAHO, LCME and COCA) that would ensure clinical clerkship slots be given first to students of U.S. medical schools that are LCME or COCA approved.

Fiscal Note: $2000 for advocacy activities
REFERENCES

1. Medical Education Issue of *JAMA*, selected issues
   a. 2000; Volume 284(9):1116
   b. 2008; Volume 300(10): 1225


3. LCME Annual Medical School Questionnaire, 2008-2009. The questionnaire was sent to the deans of the 126 LCME-accredited medical schools with enrolled students and had a 100% response.


