Resolution 308 (A-06), which was referred to the Board of Trustees, was submitted by the American College of Surgeons, the American Academy of Facial Plastic and Reconstructive Surgery, the American Society of Anesthesiologists, the American Society of Plastic Surgeons, and the Society for Vascular Surgery. The resolution asked that our American Medical Association support the evolution of a medical school curriculum and graduate medical education programs to develop educational paradigms that emphasize an in-depth, multidisciplinary education in medical science and research; support residency programs, as they struggle with new educational constraints, such as the eighty-hour work week and reduced patient contact, to fashion clerkships of the highest quality; encourage and support efforts by medical schools, residency programs and all graduate medical education departments to incorporate into the curriculum a knowledge and understanding of the importance of medical knowledge/skills, practice-based learning and improvement, systems based practice, and the importance of achieving and maintaining certification; support transition from medical student to resident by restructuring the fourth year of medical school and develop a directed prerequisite curriculum which permits students to prepare more effectively for residency and ultimately a disease-based, multidisciplinary style of medical practice.

The resolution appears to call for change in medical education to address the following issues: (1) the need to create an educational continuum from medical school through residency training which permits the learner to acquire certain defined competencies, (2) the need to assure that the fourth year of medical school provides an appropriate transition to graduate medical education; and (3) the need to re-structure the environment in which training occurs, in the context of stresses in the clinical environment such as duty hours limits and increased pressures for clinical productivity.

A Competency-Based Medical Education Continuum

In 1999, the Accreditation Council for Graduate Medical Education (ACGME) endorsed six general or core competency areas for residents: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and
The six core competencies have been introduced into residency training in phases. As of July 2006, residency programs were expected to have fully integrated the core competencies into their teaching and evaluation, so that competency attainment can be assessed as part of ACGME residency program review. To assist residency programs in incorporating the competencies, various instructional and assessment tools have been created and other resource guides have been produced.

The six core competencies have been instrumental in focusing discussion about what residents should learn. The influence of the competencies has reached beyond graduate medical education to earlier and later stages of the continuum. The Liaison Committee on Medical Education (LCME), which accredits educational programs leading to the MD degree, has a standard which states:

> The objectives [of the educational program] and their associated outcomes must address the extent to which students have progressed in developing the competencies that the profession and the public expect of a physician.

(Standard ED-1A, *Functions and Structure of a Medical School*)

The LCME includes the ACGME competencies among those “widely recognized definitions of the characteristics appropriate for a competent physician.”

At the other end of the continuum, the six core competencies have become an integral part of the maintenance of certification process adopted by the American Board of Medical Specialties (ABMS) and its Member Boards.

For the six ACGME/ABMS competencies to become the basis of a true continuum, there is a need to develop a consensus about what elements of each competency should be best taught during medical school, in residency training, and during the physician’s continuing professional development. The AMA Initiative to Transform Medical Education (ITME) aims to work with collaborators to address this need, at least for some of the competencies.

The Fourth Year of Medical School as a Transition to Graduate Medical Education

The structure of the fourth year has changed considerably over the past 50 years. In the mid-twentieth century, the fourth year consisted of a number of required clinical experiences, with little free time for students to pursue areas of interest or relevance for their future specialties. By the end of the 1970s, this pattern had changed so that an average of almost 70% of time in the fourth year was devoted to electives. About one-third of medical schools had an all-elective fourth year.

Since the 1970s, more structure has been added to the fourth year. The number of schools with required fourth-year clerkships in one or more of the following has increased significantly: advanced surgery/surgical subspecialties, advanced medicine/medical subspecialties, subinternships, neurology, ambulatory/primary care, critical care. In 2000, an average of 56% of time in the fourth year was devoted to electives and less than 5% of schools had an all-elective fourth year.
One major concern about the remaining flexibility in the fourth year is that students will not choose their electives wisely. However, LCME accreditation standards require that students receive support in making this important decision.

There must be a system to...guide students in choosing elective courses.

(Standard MS-19, Functions and Structure of a Medical School)²

AMA policy already addresses the need to make the fourth year a useful educational experience. Policy H-295.895, Progress in Medical Education: Structuring the Fourth Year of Medical School (AMA Policy Database) states, in part:

- The third and fourth years as a continuum should provide students with a broad clinical education that prepares them for entry into residency training.
- The ability of students to choose electives based on interest or perceived academic need should not be compromised by the residency selection process. The AMA should work with the Association of American Medical Colleges, medical schools, and residency program directors to discourage the practice of excessive audition electives.
- Our AMA should continue to work with relevant groups to study the transition from the third and fourth years of medical school to residency training, with the goal of ensuring that a continuum exists in the acquisition of clinical knowledge and skills.

As described previously, the continuum should address all of the six core competencies, not only the acquisition of knowledge and skills.

The Clinical Teaching Environment

A number of factors are affecting the clinical training environment, including duty hour restrictions for residents⁶ and medical students² and increased pressures on full-time and volunteer faculty for clinical productivity.⁷⁻⁸ The need for faculty members to concentrate on clinical and research productivity has been linked to high levels of anxiety and job dissatisfaction, especially in more junior faculty.⁹ These and other pressures in the environment may negatively affect the ability of faculty to serve as teachers, as well as role models and mentors, of physicians-in-training.

Various activities are under way directed at enhancing the clinical learning environment.

Accrediting Body Initiatives: The ACGME Committee on Innovation in the Learning Environment was formed in 2005 to look beyond duty hours to other factors that affect the learning environment of residents, including work flow and innovations in curriculum and teaching methods.¹⁰ The LCME has adopted a new accreditation standard that asks medical schools to ensure that the learning environment for medical students promotes the development of explicit and appropriate professional attributes (attitudes, behaviors, and identity). To accomplish this, medical schools will be expected to define the professional attributes they wish students to acquire, promulgate these among faculty and staff, and evaluate the outcomes.

AMA Initiative to Transform Medical Education. ITME is committed to bringing about change across the continuum of medical education, from premedical preparation through continuing physician professional development. Strategies for bringing about educational change include: (1) changes in the financing of medical education to support education and innovation, (2) changing the organizational reward system of the medical school and clinical teaching site to place heightened emphasis on teaching, and (3) faculty development to assist faculty to become teachers and role models.
Summary and Recommendations

While there are a number of activities under way that address the intent of Resolution 308 (A-06), the resolution encompasses a number of important areas that warrant ongoing and enhanced attention. The Council on Medical Education, therefore, recommends that the following be adopted in lieu of Resolution 308 (A-06) and that the remainder of this report be filed.

1. That our American Medical Association reaffirm Policy H-295.895, Progress in Medical Education: Structuring the Fourth Year of Medical School. (Reaffirm HOD Policy)

2. That our AMA, through its Initiative to Transform Medical Education and in collaboration with relevant groups, study ways to apportion relevant content related to the six Accreditation Council for Graduate Medical Education core competencies across the medical education continuum. (Directive to Take Action)

3. That our AMA: (a) collaborate with other groups to define changes to the clinical education environment that would support medical student and resident physician acquisition of appropriate core competencies and (b) continue to advocate for appropriate funding for education to support these changes. (Directive to Take Action)

4. That a report be prepared for the 2009 Annual Meeting of the House of Delegates summarizing actions taken and successes achieved in bringing about educational program and clinical learning environment change. (Directive to Take Action)

Fiscal Note: $5000 for staff time for data gathering and for advocacy related to educational program financing.

Complete references for this report are available from the Medical Education Group.