A Proposal to Address the Curriculum for the M-4 Medical Student

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The unstructured and elective nature of the fourth-year medical student (M4) medical school curriculum has been recognized by medical educators as an area of concern. Few accepted guidelines exist for the M4 curriculum, and students exercise significant discretion over their experience. The Family Medicine Curriculum Resource Project post-clerkship resource was developed by the Society of Teachers of Family Medicine under contract from the Health Resources and Service Agency to support medical educators in the development of curricula and assessment of student needs for the M4 year of medical school. The post-clerkship resource defines competencies for graduation and contains educational resources as well as recommendations for faculty development and student evaluation in the M4 year.

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For many years, the purpose and curricular content of the fourth year of medical school has been an area of concern for medical educators. At most schools, students exercise significant discretion over the content and experience they choose during their last year of training. Given this flexibility, there are various approaches taken by students, including the “pre-residency syndrome,” in which students select courses relating to their future field in residency and may also choose “audition” electives to increase their likelihood of matching at a particular residency program. Educators from surgery, obstetrics-gynecology, and family medicine have proposed that a fourth-year curriculum that balances broad-based experience with some specialty-specific experience best prepares students for graduate medical education.

Most policy makers agree that it is the purview of individual medical schools to set their curricular requirements, and most schools have a mixture of required courses and electives. With the increasing calls by educational, governmental, and private institutions for curricular reforms and increased competition for curricular time, it is appropriate to identify those competencies critical for all graduating medical students to accomplish prior to residency. An opportunity exists for the largely elective fourth year of medical school to be used to assure that these competencies are achieved.

Post-clerkship Resource, FMCRP

A complete description of the Family Medicine Curriculum Resource Project (FMCRP) can be found in the lead article in this issue of Family Medicine. In addition to developing curricular resources for the pre-clerkship and clerkship years, the FMCRP was charged to analyze post-clerkship medical student training (those courses designed to be taken after the third-year clerkships). The purpose of this examination was to evaluate current competencies to be achieved by medical students and to propose a new framework to develop competencies and curricular resources for all graduating medical students.

Currently, the Liaison Committee for Medical Education (LCME), which accredits US and some foreign medical schools, has standards for medical school curricula, including experiences in internal medicine, pediatrics, psychiatry, surgery, obstetrics-gynecology, and family medicine, but it is not prescriptive in terms of timing or specific content. The National Board of Medical Examiners (NBME) tests students twice over the 4 years of medical school, largely assessing the
requisite knowledge base with traditional standardized testing. Recently a clinical skills component has been added that more specifically assesses patient care competencies attained by the student learner.9

The Accreditation Council for Graduate Medical Education (ACGME), which certifies residency and fellowship education in the United States, has recently implemented a general competencies requirement for all residents essential to the completion of graduate education but does not speak to competencies to be achieved prior to entering residency training.10 The Association of American Medical Colleges (AAMC) has also made recommendations regarding knowledge, skills, and attitudes to be achieved by medical students during their 4 years of school but has not been prescriptive about specifics.11

The goal of the FMCRP was to address the curricular needs of medical students over all 4 years of medical school. The decision to use the ACGME competency framework on which to construct curricula allowed the project to link medical student and residency education with a common language and structure. In the article by Matson et al, essential competencies for all students entering the clerkships of the third year were identified.12 These recommendations were made by a panel of educators from internal medicine, pediatrics, and family medicine and informed by a survey of third-year clerkship directors addressing competencies needed for successful learning on these clerkships.

The challenge for the group addressing the post-clerkship period was how to deal with the final, relatively unstructured, fourth year of medical school. The post-clerkship development group included members of the FMCRP advisory and executive committees. The group reviewed the literature addressing the fourth-year curricula and sought input from student and resident educators. FMCRP leaders met with small groups (15–25 per group) of family medicine residency educators four times at the annual family medicine residency program directors workshops in 2002 and 2003. Project leadership also met with a group of 30 medical student and resident educators at the annual AAMC meeting in 2003. Attendees of all of the sessions self-selected to participate and were not solicited specifically by FMCRP leadership. The group at the AAMC was not limited to family medicine educators and included educators from a variety of specialties as well as representatives from deans’ offices. All of these groups were asked to identify essential competencies that residency faculty would expect of matriculating first-year residents.

Not surprisingly, this method of inquiry resulted in a wide spectrum of suggestions, including using the fourth year to build skills either in the anticipated specialty area or more broadly. In addition, some educators proposed using the fourth year as a “re-medial” year, creating personal learning plans for students that would identify and fill gaps in their core clerkship experiences. Although there remained some disagreement with regard to the specific structure of the fourth year, there was general agreement that there were general competencies that would be expected of all graduating students regardless of specialty choice. When these proposed competencies were compared to the competency recommendations from the interdisciplinary pre-clerkship group, significant congruency was observed. As a result, the decision was made to use the pre-clerkship competencies as a framework but to elevate the level of attainment on the competency continuum expected at the completion of medical school. Given the broad nature of these competencies, it is reasonable to expect that all medical school graduates, not just those entering family medicine, should achieve these competencies before entering residency training. Although the initial focus of the project was on the family medicine curriculum in the fourth year, the focus shifted to all medical school graduates as the project progressed.

The specific recommendations of the post-clerkship group are included in the final draft of the post-clerkship resources document. The resource is a Web-based document and is available on the Family Medicine Digital Resources Library Web site (www.fmdrl.org); search under “Family Medicine Curriculum Resource Project.”

This document lists the knowledge and behavior competencies to be attained by the end of the (fourth-year medical student (M4) year and provides educational goals and objectives and educational resources for the design of curricula to support the achievement of these competencies. Specific resources are identified as well as information about faculty development, teaching settings, resources and budget allocation, and student evaluation techniques. Rather than prescribing a specific curriculum for the fourth year, this document provides resources that allow educators the flexibility to design curricular experiences based on the needs of an individual student, to develop courses appropriate for fourth-year students, or to design an entire fourth-year curriculum. In addition, students can use these resources to assist in making informed choices about the design of their fourth-year experience.

Conclusions

The environment surrounding preparation of physicians to practice in the 21st century calls for significant changes in how medical education is designed. The adoption of competency-based training for graduate medical education exemplifies the recognition that a new approach to education is essential in preparing physicians to address the needs of the public. The segment of the FMCRP addressing curricula for the
fourth year in medical school suggests that the same competencies required prior to entering the third-year clerkships be revisited prior to graduation to assure that all graduating physicians have achieved an appropriate level of education. It also affords the opportunity for residency directors to assess the level of competency of incoming residents, so that potential learning challenges can be addressed early in this phase of training, and subsequent learning is not impeded.

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References