Despite decades of discussion about the merits of a system of medical education based on achieving competence and specific outcomes, as yet no fully competency-based medical education system has been developed. Hodges1 recently discussed the concepts of tea-steeping (time in training) and i-Doc (attainment of defined outcomes) models as critical elements of a more comprehensive system of medical education. Quoting Hodges, “As we have seen, it is the kind of outcomes-based model that matters.”

Superimposing a competency-based model onto a process-based system has led to significant challenges, the greatest of which is assessment. The most common solution to the difficulties of assessing competence is to reduce the competencies into smaller and smaller subunits (subcompetencies and subsubcompetencies), so that they can be measured in ways that we in U.S. medical education currently favor. The end result is measuring isolated skills that do little to assess whether one is a “good doctor.”

However, building a system of learning and assessment based on Entrustable Professional Activities (EPAs) proposed by ten Cate and Scheele2, which places competencies back into the context of clinical care, holds great promise for meaningful assessment and provides the foundation for our pilot education program.

For the past two years representatives from pediatrics, including the American Board of Pediatrics, the American Council for Graduate Medical Education (ACGME), the Association of American Medical Colleges, and others in the medical education community have been working on a project involving five medical schools to redesign the education of pediatricians. This educational pilot bridges the medical education continuum from medical school through residency training and is based on the individual attainment of competence defined by the EPAs for general pediatrics. This pilot program, known to its members as the Pediatric Redesign Project, offers much beyond simply devising training differently for pediatricians. A small number of students in each school will enter the pilot program in the second year of medical school and will finish residency when they have completed all requirements for Board certification in Pediatrics. Students will pursue the standard basic science curriculum of each school, but will be offered some introductory experiences in pediatrics in the first year to aid the participant selection process for both faculty mentors and students. Key aspects of the project include a multiyear continuity clinic, through which each student will assume responsibility for increasing numbers of patients throughout the years of the program, and an integrated longitudinal clinical experience, which will be built around pediatrics but offer exposure to the other disciplines of medicine from the perspective of child health. Importantly, from early in their education, participating students will be exposed to working in different environments of the health care system and working with a variety of health professionals involved in the care of children for their normal growth and development as well as for illness. This concept of interprofessional team care and training is an important element of the project, and encourages acknowledging the child’s family as members of the team.

The goal of the program is to achieve a required level of independence in the EPAs and milestones for pediatrics established by the ACGME’s Pediatrics Residency Review Committee. The rate of progression will probably differ for each trainee in the program. Thus, the program would address a key recommendation by the recent Carnegie Report: standardization of outcomes with flexibility in how one achieves them.3 In addition, opportunities for longitudinal follow-up of patients over a number of years of training in concert with a designated senior faculty advisor and with the data management of an electronic portfolio system will enable students to understand from early in their medical educational training the need for improvement in the outcomes of care in the population of patients for which they are responsible. Thus care based on outcomes and continuous improvement of the quality of care is an integral part of this project.

Those involved in this redesign project for pediatric education do not envision that the model would replace the current system of medical education. Many medical students come to medical school uncertain of their ultimate career choice and need much more “tea-steeping” in the different disciplines to ascertain their specialty of choice. However, it is our belief that this model may be applicable for other disciplines in medicine and for a subset of medical students. Moreover it may offer some exciting educational opportunities that may be more broadly applicable and transportable to medical education at both the undergraduate and graduate medical education level.

References

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