A New Era for Residency Training in Internal Medicine

“Disruptive change” is a buzzword for many industries, and health care is no exception. Changes in practice payment methodologies and locations of service affect the learning environment and settings for medical education, as well as the knowledge and skills that residents in internal medicine should acquire during their training. At the same time, graduate medical education (GME) is undergoing an internal evolution to make programs more based on the development of competencies and centered on the educational needs of individual trainees.

Health Care System Reform and Practice Redesign

More health care is delivered outside the hospital and more emphasis is placed on primary care. Redesigning resident practices around team-based, patient-centered care that focuses on quality and value for the individual patient as well as the population of patients offers opportunities to enhance residents’ experience in ambulatory care, better serve the needs of patients, and improve the health of communities.1 Practice redesign should include direct resident involvement in chronic disease and population management, reducing disparities in care, use of data to improve individual performance measures, approaching quality improvement and patient safety from a systems perspective, and interprofessional collaboration. Indeed, such change has already started in many internal medicine residency programs. Many have adopted schedules with 1- to 2-week clinic blocks every 3 to 6 weeks with an objective of better incorporating residents into the day-to-day operations of the outpatient clinic. Similarly, many institutions are pursuing patient-centered medical home status for their academic practices, incorporating trainees into team-based care and required quality improvement activities. The joint high-value care curriculum of the American College of Physicians and the Alliance for Academic Internal Medicine (AAIM) has been integrated into many residency programs.2 Trainees’ understanding of these concepts is assessed on the annual Internal Medicine In-Training Examination.3

One motive for improving the outpatient experience for trainees is to encourage careers in primary care. In a 2012 survey linked to the Internal Medicine In-Training Examination, only 19.9% of categorical residents and 39.6% of primary care residents reported general internal medicine as their ultimate career plan.4 Although systemwide payment reform and practice redesign are critical to the rejuvenation of primary care, enhanced preparation for practice and a better ambulatory experience in residency are important adjutants for attracting residents to the field.

Quality measures, patient satisfaction and value-based care are particularly important areas of transformation in both the inpatient and outpatient settings. Given the central role that residents play in patient care, their active involvement in quality and process improvement efforts benefits the institution and also serves the trainees’ educational needs. GME leaders should harness the forces of change to make training programs integral to the success of their institutions as medical centers struggle to adapt to new models of health care delivery.

Educational Redesign

In 1901, the Flexner report created a single model of medical education, and set the standard for the methods used for much of the 20th century. By the end of the 20th century, however, it became clear that the changes in medical practice and the progression of educational theory made this an outdated approach. In 2010, the Carnegie report called for a better integration of basic science and clinical experience, better exposure to illness over time, a focus on habits of inquiry and cultivating professional identity, as well as a standardization of learning outcomes while allowing for individualized experiences.5 Several years before, the Accreditation Council for Graduate Medical Education (ACGME) had instituted an Outcomes Project to shift the evaluation of residents to a standard set of 6 domains of medical competence (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice), as well as to place a greater focus on educational outcomes, not process. The focus would now be on developmental milestones, defined by the achievement of competence rather than simple exposure to a patient population or disease over a prespecified period. This restructured approach to GME has become known as the Next Accreditation System, which began phased implementation in July 2013.6

The American Board of Internal Medicine (ABIM) and the ACGME jointly developed a set of 22 reporting milestones. They form the basis for a biannual report on key performance measures required of each internal medicine residency program. Although implementation has at times been difficult, the process has created a standard means of evaluation with common language across all training programs. Moreover, the competencies to be assessed are in keeping with the skills that are needed to practice as a physician in the evolving health care environment. In addition to the expected milestones related to medical knowledge and skill in patient care, there is an expectation of demonstrated ability in the areas of quality, patient safety, and cost-effective care. There are assessments of professionalism and self-reflection, as well as the ability to work in interprofessional teams. To assess these domains, a curricular infrastructure has been built to teach the required elements, leading to innovations in curricular design.
The reporting milestones offer meaningful assessment data on a criterion-based framework of resident development, and are anchored to behaviors on a 5-point spectrum from “critical deficiencies” to “ready for unsupervised practice” to “aspirational.” There is evidence that both faculty and trainees feel that the milestones promote a common understanding of what a resident should have achieved at a given stage of training, allow for more meaningful feedback, and enable more equitable assessments of resident promotion.7 Redesigned assessment strategies include the use of chart-stimulated recall exercises and more direct observation, as well as the restructuring of clinical competency committees. In April 2015, the educational redesign taskforce of the AAIM published a work-based assessment framework consisting of 16 “entrustable professional activities.” An entrustable professional activity is a readily observable task or responsibility (eg, manage transitions of care) that may be entrusted to a resident to be performed without supervision once the individual has attained a certain level of competence. Caverzagie et al8 proposed that because competence is both synthetic and contextually entrustable professional activities have become a reasonable starting point for programs to develop both curricula and assessment instruments. More data are needed to know how effective this approach will be, and whether it can effectively standardize the point at which it can be comfortably said that a trainee is ready to practice independently. When this does occur, the standard 3-year internal medicine training program may give way to a period of training for which the duration is determined by the time it takes to attain such competence.

Physician Wellness

With news media reports of suicides and other serious mental health issues, attention is also focused on the emotional well-being of residents. Wellness is not simply dependent on the number of hours of work each week; it also relates to the complexities of the training environment and the personal trials of becoming a practicing physician. It is important to establish processes and eventually to determine best practices for monitoring stress and intervening when necessary. From an accreditation standpoint, the ACGME’s Clinical Learning Environment Review Program sets an expectation for institutions to educate residents about burnout, assess burnout periodically, and have mechanisms in place to address it, though no specific strategies are recommended.9 Strategies might include workload reduction with an increased role for physician assistants and other physician extenders, mentoring and wellness programs, education of trainees and program leadership, regular screening for depression and substance abuse, and ensuring access to mental health treatment.10

Conclusions

At present, internal medicine training is quite different from even 10 years ago. As Lucey1 has written, we need to produce doctors who “can be successful in the 21st century health care environment rather than further refining our ability to produce the 20th century physician.” Internal medicine residents should learn to deliver high-quality, cost-effective, equitable care that is patient-centered as well as to function as part of an interprofessional team. Residents should accomplish these goals while being responsible for an ever-expanding evidence base in the setting of universal and immediate access to medical information by their patients. Although the challenges are formidable, the current educational reform efforts should create the opportunities for this learning to occur. A competency-based assessment system should assure faculty as well as the public that residency programs in internal medicine are producing the best doctors for the 21st century.

ARTICLE INFORMATION


Conflict of Interest Disclosures: Dr Fazio reports being the chair of Alliance for Academic Internal Medicine (AAIM) Board of Directors. Dr Steinman reports being the vice-chair of the AAIM Board of Directors.

REFERENCES