“The most important thing is not how much time your doctors spend in medical school but whether or not they’ve learned what they need to know before they move on to residency,” said Bonnie Miller, M.D., senior associate dean for Health Sciences Education at Vanderbilt University School of Medicine. Vanderbilt created a curriculum allowing students to graduate when they have achieved a level of competency assuring patient safety, a practice that requires a clear definition of expected competencies, descriptions of how students should be developing along the way, and valid, reliable ways of measuring growth in knowledge, skills, and attitudes.

The American Medical Association (AMA)’s Susan Skochelak, M.D., M.P.H., group vice president for medical education, said each of the 11 medical schools receiving one of the $1 million grants will help move medical education into the 21st century. The program is part of an AMA initiative—Accelerating Change in Medical Education.

Oregon Health Sciences University School of Medicine—also one of the 11 recipients of the five-year grant—is testing a new learner-centered, competency-based curriculum, enabling students to advance through medical school in fewer than four years. It also helps students become lifelong learners. As such, they can self-assess, adapt, and be better prepared to become physicians of the future who successfully manage the needs of patients and populations.

Among the other medical schools receiving AMA grants to accelerate change in medical education are: Indiana University School of Medicine, Mayo Medical School, NYU School of Medicine (flexible three-year individualized technology-enabled curriculum), Penn State College of Medicine, Brody School of Medicine at East Carolina University, The Warren Alpert Medical School of Brown University, University of California-Davis School of Medicine (three-year, competency-based medical school curriculum), University of California-San Francisco School of Medicine (accelerated, competency-based curriculum), and the University of Michigan Medical School.

Studies Needed to Find Best Practices in Preparing Successful Faculty Members

The purpose of faculty development is not just to increase competency in patient care. It is also a means for faculty members to improve their ability to model, teach, assess, and remediate the competencies of their residents so that they too will be able to improve the health of patients and the community.

In accomplishing this, clinician-educators must be supported both locally and nationally in developing skills not only as clinicians but also as educators. Clinical faculty members need training in the emerging competency domains (e.g., patient-centered communication) to become effective teachers. While competencies have been developed for most specialties, few faculty members have had meaningful training in assessing trainees in the attainment of such competencies.

Preparing trainees for practice in new systems of health care delivery means medical educators must invest in clinician-educator faculty so that residents are ready for unsupervised practice. There is a need for medical educators to invest in new national infrastructures for faculty development. Emerging clinical and teaching skills believed to improve health and health care are not discipline specific. There is a need for studies using rigorous research methods that measure changes in the behavior of individuals and organizations.


Institute of Medicine Disputes Oncoming Physician Shortage

In its report entitled “Graduate Medical Education That Meets the Nation’s Health Needs,” the Institute of Medicine (IOM) said physician shortages are created by poor geographic distribution and lopsided ratios of primary care and specialty physicians. The IOM said recent research suggests the answers lie in new technology and innovations in health care technology.

The demand for physicians, despite the aging of the population, can be addressed by an expanding role for physician assistants and advanced practice registered nurses and other innovations such as telehealth and electronic communication. Darrell Kirsch, M.D., president and chief executive officer of the Association of American Medical Colleges, said the IOM recommendation would threaten the training programs of health professionals and jeopardize patients. In addition, it would cut funds for level 1 trauma centers, pediatric intensive care units, and burn centers. The IOM response said while Medicare-funded residencies have been capped since 1967, a 17.5 percent increase in training sites in the last 10 years financed by other sources has not eased geographic shortages or specialty mix.

The fact that graduate medical education has grown has not resulted in an increase in the proportion of primary care physicians, those in underserved communities, or those in rural practices. By 2020, 45,000 primary care physicians and 46,000 specialists will be needed. The American Medical Association and Medicare should fund more positions to meet the need and produce an appropriately sized and geographically distributed physician workforce.


Geriatric Surgery Curriculum Considered Very Important for General Surgery Residents

Faculty members from the Department of Surgery at Duke University Medical Center introduced an initiative leading to a formalized curriculum in geriatric surgery within its general surgery residency. The curriculum includes a comprehensive series of didactic sessions moderated by faculty members who are experts in a variety of geriatric surgery topics designated as relevant to clinical practice by the residents.

Surgical residencies have been relatively slow to implement formal geriatric training in their curricula, even in view of the projection that geriatric surgery will make up a significant proportion of surgical practice in the future. A pre-curriculum survey was completed by 46 general surgery residents from all levels of the residency (PGY1-PGY8). Residents were asked to rate the importance of a series of geriatric surgery topics on a three-point scale. The five topics most frequently designated as “Very Important/Essential” were:

- Preoperative evaluation of cardiac disease
- Management of anticoagulation
- Management of postoperative delirium
- Preoperative evaluation of pulmonary disease
- Intensive care unit management of the elderly surgical patient

These surveys led to a surgery curriculum of 16 didactic hour-long sessions that included conventional lectures and role-playing scenarios. Upon completion of the curriculum over a two-year period, 47 residents were surveyed again to determine if there was a change in their attitudes toward the elderly and the importance of the various geriatric surgery topics.

It appeared the 40.4 percent of the residents who completed the program rated the geriatric education curriculum as good or excellent compared to only 8.7 percent prior to the curriculum. While the program initially began as classroom interactions, they now extend into the clinical arena. The interactions between surgical residents and other disciplines including geriatric medicine, palliative medicine, and anesthesiology have been invaluable. In conclusion, the development of formalized geriatric education in surgical training will be important in view of the aging of society.

Study Addresses Usage of EHR and Marginalization of Future Physicians

A study conducted by the Alliance for Clinical Education found that only 64 percent of medical school programs allow students to use electronic health records (EHR). Only two-thirds of those programs allow students to write notes within the EHR. Most schools realize it is important to give students a solid base in EHRs, but dealing with a different way of doing things is difficult—both practically and philosophically.

Physicians want students to write notes but do not want them to be part of the chart. How do we get faculty members to adjust to the EHR, and how do we integrate it with students? Students feel marginalized when they see an EHR and are not permitted to enter a note even if there is a place for such an entry.

The recent American Medical Association initiative that awarded $11 million to 11 medical schools entitled “Accelerating Change in Medical Education” hopes to change this. One of the selected schools, the Indiana University School of Medicine, plans to use its award to develop a teaching EHR to ensure students are well versed in system, team, and population-based care. The university said the initiative will be a clone of an actual clinical EHR designed to use informatics to look at population health issues and use data to help physicians and students make decisions about patients and populations of patients they take care of so that they think not only about individual care but the care of the whole community. Students will not get introduced to EHRs in their third year but will get to use it right after matriculation.

“We’ve seen a significant increase in efforts to integrate learning using the electronic health record in the last couple of years,” said Carol Aschenbrener, M.D., chief medical education officer at the Association of American Medical Colleges. “The medical educator should advocate with the companies that make EHRs about the importance of accessibility to the learner to facilitate the education and training of young physicians.” The practice will make physicians of tomorrow highly skilled in the use of EHRs.

(Mliard M. Are med schools failing future docs? Healthcare IT News; October 7, 2013).

Reinventing Classroom Teaching at the University of California, Davis

Two classes, each consisting of several hundred students, are simultaneously attending a class in chemistry at the University of California, Davis. One class is quiet except for a lecturer’s voice. The lecturer speaks for up to 80 minutes. This traditional form of teaching is known as passive learning.

In the other room, students are being challenged to answer questions asked by the instructor. These students often gather in small groups. They virtually never come to class without completing assigned readings.

Studies show that the students do better using the active approach to learning. A study of several thousand students over several years at the University of Colorado found that students who learned using the active approach improved their test scores by about 50 percent more than students who were exposed to the traditional approach. There is an assumption by many in higher education that if you know your subject you can teach. Catherine Uvarov, Ph.D., chemistry instructor at the University of Colorado, emphasizes that is not true. The practices at the University of Colorado were founded by Carl E. Wieman, Ph.D., a Noble Prize-winning physicist from Stanford University.


Survey Points Out Prevalence of Rude and Disruptive Physician Behavior

At his address to the 125th Annual Meeting of the Association of American Medical Colleges (AAMC), Louis Betz, M.D., Ph.D., chair, board of directors, described situations of demeaning, disrespectful, and disruptive behavior at teaching institutions, citing examples that occurred at his own organization.

Concerned that these were not isolated and infrequent incidents, Dr. Betz cited a recent survey of the American College of Physician Executives that quantified such physician behavior. The survey included 840 physicians, 70 percent of whom said they observed disruptive physician behavior every month, and 11 percent who said that they see their colleagues behave disruptively every single day. The survey also determined that 25 percent of those who completed the survey admitted that they exhibited disruptive behavior sometime in their career.

Another study found that nearly 60 percent of medical trainees had experienced at least one form of harassment or discrimination during training. Dr. Betz said disrespect is more systemic than isolated. He reminded the audience that such disrespect can be as self-centered as scheduling patients to show up at the same time and making them wait, or as subtle as referring to patients by their disease (e.g., the herniated disc in room 214).

In June 2014, the AAMC Board of Directors endorsed the following statement: “We affirm our commitment to shaping a culture of teaching and learning that is rooted in respect for all. Fostering resilience, excellence, compassion, and integrity allows us to create patient care, research, and learning environments that are built upon collaboration, mutual respect, and human dignity.”

In spite of an institution’s best efforts, however, bad behavior persists. A graduation questionnaire given between 2000 and 2012 found essentially no difference in the number of students reporting incidents of personal mistreatments. Only one-third of students who experienced mistreatment reported the incident. Dr. Betz, who headed the University of Utah Health Sciences for 12 years, concludes that this age-old culture needs to change since it is a good business decision as well as a good people decision. He remarks that it is what people deserve and expect. It’s what learners expect and deserve.

(Discussions focusing on developments in interprofessional education (IPE) have begun with several health professions forming the Health Professions Accreditors Collaborative (HPAC). The initial members of HPAC include the accrediting bodies for medicine, osteopathic medicine, pharmacy, dentistry, nursing, and public health. HPAC members will discuss important developments in IPE. As the collaborative evolves, other health care accreditation organizations will join. A purpose of HPAC includes a better preparation of students for interprofessional collaboration. HPAC will respect the independence of accreditation standards, procedures, and decision making of each participant. The collaborative was announced on December 14, 2014.

A recent letter to Ron Klain, White House Ebola response coordinator from the Association of American Medical Colleges (AAMC), expressed support for a robust and sustained federal investment in preparing for and caring for Ebola patients in the United States. Scientists at 120 medical schools are involved in Ebola-related projects ranging from basic studies to the better understanding of how the virus works to clinical trials to test candidate vaccines. The AAMC said the federal and state governments must be committed to and be part of a partnership that helps medical centers secure adequate reimbursement from public and private payers for potentially costly and lengthy hospitalizations. These investments must be steady, reliable, and long-term financial commitments, even when threats appear to diminish. Readiness training alone may cost more than $25,000 per day—higher in those institutions without existing infrastructure. Sample expenses for domestic preparedness alone to prepare and respond may include:

- training health professionals, transportation teams, and others
- training to identify, isolate, and arrange transportation for infected patients
- training in proper use and donning/doffing personal protective equipment
- identifying, assessing, and readying treatment facilities to handle cases transported from the community/other facilities
- research to accelerate diagnostics, treatments, and vaccines

The AAMC said budget caps hinder the ability to invest in National Institutes of Health and public health and hospital preparedness programs critically needed for the Ebola epidemic and future emergencies.