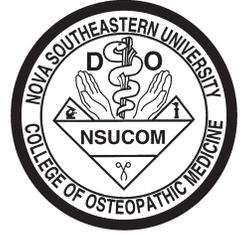


Medical Education Digest



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Focusing on Patients Living with Disabilities



Among the most vulnerable populations are those with disabilities. Little training is provided to medical students in the care of such patients, contributing to the health disparities this population experiences. While not typically included in discussions about cultural competencies, people with disabilities face stigmatization, isolation, questioned self-determination, and the belief that disability is the same as being in poor health. With 20 percent of the U.S. population having a disability according to the 2000 census, and the prevalence rising as the nation ages, those adults with disabilities are being underserved.

Secondary conditions they have may be medical, psychological, social isolation, and financial concerns. Those with disabilities have health care needs that are not being served not only because

of the growing physician shortage, but because there is limited training provided to medical students and residents, leading to their lack of competence in providing such care. In addition, they not only lack knowledge about people with disabilities, they also have misperceptions about them such as believing they are medically and socially complex, time consuming, difficult to relate to, and inadequately insured. This is in spite of information that indicates that when physicians are trained and they increase their experience with disabled individuals, the disabled have favorable outcomes of greater confidence and comfort, and the physician is willing to provide care.

The University of South Florida Morsani College of Medicine created a third-year student Primary Care and Special Populations module that includes an emphasis on patients with disabilities. On one or two half-days per week, the students are assigned to a rotation focusing on disabilities engaged in community-based activities that includes a home visit. They also attend three half-day classroom sessions oriented towards people with disabilities participating in health care using a wellness-oriented functional approach.

Volunteers with disabilities serve as model patients who tell their stories and guide students in appropriate communication and examination techniques. For about 20 minutes, students take a history and perform a brief examination on a patient. Four patients are seen by each student monitored by faculty members via real-time audio and video. A lecture is provided offering a biopsychosocial perspective.

In addition, a sensitivity training session is provided using such devices as wheelchairs and blindfolds. This is to sensitize students to the reality of living with atypical functionality. The module provides a comprehensive approach to patients with disabilities. The authors provide an example of how such a program can be developed, implemented, and evaluated.

(Woodard LJ, Havercamp SM, Zwygart KK. An innovative clerkship module focused on patients with disabilities. Academic Medicine. 87:537-542; 2012.)

Results of the 2012 National Resident Matching Program



In 2012, 38,377 applicants to the National Resident Matching Program (NRMP) applied for 26,772 positions. U.S. allopathic medical school fourth-year students included 15,712 of 22,934 applicants who were matched to a first-year residency position. Osteopathic medical graduates numbered 2,360 or 180 more than 2011. U.S. citizens from international medical schools were 4,279 or 510 more than last year, and 6,828 were non-U.S. citizens who graduated from international medical schools, amounting to 169 more than 2011.

This year, the NMRP conducted the Supplemental Offer and Acceptance Program (SOAP), which is a program that partners with the Association of American Medical Colleges (AAMC) and consults with student affairs deans, residency program directors, resident physicians, and medical students. The program makes available locations of unfilled positions, allowing students who did not match to have their applications submitted electronically to these positions through the AAMC's Electronic Residency Application Service (ERAS).

As a result of the SOAP 1,131 of the unfilled positions were offered, and only 152 remained available after three offer rounds. The most competitive areas were dermatology, orthopedic surgery, otolaryngology, plastic surgery, radiation oncology, thoracic surgery, and vascular surgery. Emergency medicine, with 1,668 positions, had 61 more positions than last year and filled all of its positions. Anesthesiology had 78 more positions than 2011 and filled 725 of its 919 positions.

(Highest match rate for U.S. medical school seniors in 30 years. Association of American Medical Colleges. Tomorrow's Doctors, Tomorrow's Cures. March 16, 2012.)

Don't Eat Your Heart Out: Get Continuing Medical Education

A course on cooking conducted by a Harvard Medical School and Harvard School of Public Health physician, David M. Eisenberg, M.D., is literally catering to sellout crowds of health professionals, including endocrinologists, pediatricians, and dietitians. He is attempting to break down the firewall between *healthy* and *crave-able* cuisine with his course "Healthy Kitchens/Healthy Lives."

Among the students are those from Baylor College of Medicine in Houston, where a chef has been hired to teach cooking skills, as well as a physician who installed a kitchen in his office. Among the areas of instruction in the course are "Healthy Cooking with Nuts and Legumes" and "Mastering Healthy Marinades" as well as "Grilling Techniques" and a knife-skills class. One sold-out session is on wine, while the \$1,000 course granting continuing medical education also has a section on chocolate-dipped apricots. The course was started by Dr. Eisenberg in partnership with the Culinary Institute and the Harvard School of Public Health.

Reports show that physicians who are obese are less likely to discuss diet and exercise with their patients. Those who practice healthful behaviors, on the other hand, like exercise, using sunscreens, and not smoking, are more likely to do the same with their patients. Dr. Eisenberg indicated that he would like to see teaching kitchens in medical schools, hospitals, universities, public schools, and military bases with such facilities being as prevalent as computer labs.

A 24-year-old Baylor College of Medicine student, Jasdeep Mangat, who founded Choosing Healthy, Eating Fresh (CHEF), has a local chef teach classes to groups of 20 medical students using five portable gas burners in the student lounge. "We need to walk the talk," Mangat remarked.

(Brown PL. To heal, first eat. N.Y. Times. D1 and D7; Wednesday, April 11, 2012.)

Making a Diagnosis

Diagnostic error is the leading type of medical error resulting in malpractice claims and also sits high on the list for patient-reported failed health care. Most physicians are unaware of their own diagnostic error rates. They believe they are able to be guided by textbooks, review articles, and their training to determine what needs to be done for patients.

While by no means perfect, algorithms ensure that physicians do not overlook essential components of the patient evaluation. If adequate resources were provided, valid and usable comprehensive diagnostic algorithms could be developed. Until this becomes practical, specialty societies

working with primary care and emergency physicians could develop simple rules. This would be in the form of checklists for each of the top 20 or 30 critical symptoms. If developed in standardized, consensus-based, and evidenced-based fashion, the checklist would be widely accepted.

As medical records become automated, checklists could be easily tracked, producing outcomes that are evidence-based and permitting continuous improvement of the checklists. Checklist elements that are recommended include **essential data elements** with reliably obtained history, physical examination, and testing data. Also included should be don't-miss diagnoses, which are critical diagnoses that may present with particular symptoms that must be considered in every patient and are fatal or have serious consequences if not recognized. A third item on the list is **red-flag symptoms** or specific associated symptoms or findings that may be due to serious conditions.

Potential drug causes also need to be considered concerning medications that cause symptoms, especially when not explained since a significant amount of patient symptoms are drug side-effect induced. **Required referral** is another item for the checklist when a specialist or special technology is indicated, especially for rare conditions requiring such expertise. Finally, there are the **patient follow-up instructions and plan**, which warn patients when to return or call due to specific symptoms they may experience. It is suggested that by including these in workflow, education, clinical culture, and electronic support would result in a more-reliable diagnosis.

(Schiff GD, Leape LL. How can we make diagnosis safer? Academic Medicine. 87:135-138; 2012.)

Evolution and Relevance of the New MCAT

The newly revised Medical College Admission Test (MCAT) rolls out in 2015—the sixth revision of the required examination—which initially began as the Scholastic Aptitude Test for Medical Students in 1928. Recent studies show that Step 1 of the U.S. Medical Licensing Examination (USMLE) correlates with science scores on the MCAT. However, MCAT scores are considerably less predictive for USMLE Step 2 and 3. On the other hand, MCAT scores in verbal reasoning have been shown to predict success in clinical clerkships.

Jules L. Dienstag, M.D., dean of Harvard Medical School, points out in the *New England Journal of Medicine* that the designers of the MCAT recognized the need for a revision of the examination. This was because the changes and progress in science are rapid, human behavior has a profound influence on health, and future physicians will be caring for a more diverse population. The two current sections on natural sciences will be changed to focus on relevance to living systems, and there will be an emphasis on critical analysis and reasoning in the verbal section.

One of the ineffective sections, the writing sample, will be removed. It will be expected, as a result of recommendations

of the Association of American Medical Colleges (AAMC), that medical students be ready to learn about behavioral, social, and cultural determinants of health. The AAMC recommended competencies in psychological, social, and cultural factors that influence perceptions and reactions to the world which, according to Dr. Dienstag, should be accomplished without specific courses.

He indicates that what is learned from literature about human nature has endured for millennia and is as necessary to becoming a good physician as a grounding in science. A concern he has is the expanded length of the MCAT from 4 hours and 20 minutes to 6 hours and 15 minutes. This, he remarked, adds to endurance but does not increase the value of the test. He concludes with a caveat that the MCAT should not be the single predictor of success in medical school and medicine, but should be only one component for assessing a candidate's suitability.

(Dienstag JL. The Medical College Admission Test-toward a new balance. The New England Journal of Medicine. 365:1955-1957; November 24, 2011.)

Osteopathic Medical Schools: Most Rural Primary Care Graduates in Appalachia

West Virginia School of Osteopathic Medicine led the nation in producing 50.5 percent of its graduates between 2001 and 2005 who practiced primary care in rural Appalachia. Appalachia includes all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia.

The region has physician shortages as well as a number of counties lacking adequate medical care. This shortage is expected to continue with 42 percent of the people in the area living in rural areas and being disproportionately affected. The overwhelming majority of primary care physicians practicing in rural Appalachia came from 10 medical schools, 4 of which were osteopathic, including West Virginia School of Osteopathic Medicine and the University of Pikeville Kentucky College of Osteopathic Medicine, which ranked number one and two respectively.

Similarly, two schools of osteopathic medicine, including Lake Erie College of Osteopathic Medicine and West Virginia School of Osteopathic Medicine, ranked number two and five respectively for the number of their graduates in primary care practice in urban Appalachia. An interesting finding of the study, which focused on graduates of U.S. medical schools, was that 22.5 percent, or 10,110 physicians practicing in Appalachia, were international medical school graduates.

(Baker H, Pathman DE, Nemitz JW, Bolsvert CS, Schwartz RJ, Ridpath LC. Which U.S. medical schools are providing the most physicians for the Appalachian region of the United States? Academic Medicine. 87:498-505; 2012.)

New Accreditation System by American Council on Graduate Medical Education



as being able to employ it to improve care for individuals and the population, and practice with sensitivity as well as being cost effective. It also includes the ability to involve patients in their own care. In the first year of the new system, 7 of the 26 ACGME specialties will be implementing NAS, including emergency medicine, internal medicine, neurologic surgery, orthopedic surgery, pediatrics, diagnostic radiology, and

urology. One year later, the other ACGME specialties will be implementing the NAS. The measurement and reporting of outcomes through educational milestones will be key elements of the NAS. Among these milestones are professionalism, interpersonal and communication skills, practice-based learning and improvement, and service-based practice. For each milestone, there are five levels defined such as milestone one for professionalism, which is to be aware of basic bioethical principles and be able to identify ethical

issues in clinical situations. The aim of the milestones is to create logical professional development in residents in essential elements of competency so as to meet criteria for effective assessment. This includes feasibility, demonstration of beneficial effect on learning, and community acceptability. NAS programs submit composite milestone evaluation data every six months that are synchronized with semiannual resident evaluation. The benefits of the new system include a national framework for assessment encompassing comparison data, reducing the burden associated with the current accreditation system that is process-based, the enhancement of program innovation, and improvement of quality in resident education as well as improved patient safety in addition to new competencies. As a result, programs will be better able to focus more attention on program success rather than have greater emphasis on identifying problems.

The American Council on Graduate Medical Education (ACGME) is phasing in a new accreditation system (NAS) beginning in July 2013. It will be based on educational outcomes with opportunities for innovation rather than being prescriptive. In addition to clinical and professional attributes, the ACGME will expect physicians to be leaders and function as a member of a team.

It is reminded by the ACGME that patients, the public, and payers demand literacy in information technology as well

(Nasca TJ, Philbert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. The New England Journal of Medicine; February 22, 2012.)



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