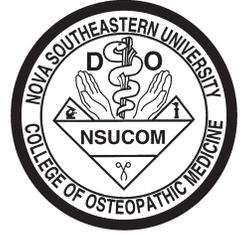


# Medical Education Digest



Volume 13, Number 2

Published six times per year by NSU College of Osteopathic Medicine

March/April 2011

## Changing Medical Student Attitudes Toward Patient Safety



The majority of medication errors involve recent graduates from medical school. As a result, Robert Dudas, M.D., a Johns Hopkins University School of Medicine pediatrician, recommends that patient safety tenets be instilled early in medical school even before medical students receive hospital training.

An assessment was made of the effect on medical student attitudes on patient safety by a patient-safety curriculum within a pediatrics clerkship. Using an online video, medical students were introduced to a systems-based analysis of medical errors, where a Learning from Defects tool was used to analyze the error and its causes. Components of a Safety Attitudes Questionnaire were used to measure attitudinal changes in 108 students regarding patient safety. These students completed a curricular experience between July 2008 and July 2009. Students in groups of 25 identified and then analyzed medication errors, presenting patient safety concerns.

Students reported that the curriculum was relevant to their clinical rotation and that it should remain part of the clerkship. It was concluded that an active learning curriculum that was integrated into a clinical clerkship can change learners' attitudes toward patient safety.

*(Dudas RA, Bundy DG, Miller MR, Barone M. Can teaching medical students to investigate medical errors change their attitudes towards patient safety? Online BMJ Journals Quality & Safety; January 12, 2011.)*

## Noncompliance with Surgical Residency Work-Hour Regulation



The major reasons behind the changes in the number of hours a resident was permitted to work were patient safety, resident well-being, and resident education. In 2003, the Accreditation Council for Graduate Medical Education approved requirements providing the guidelines for resident work hours.

Residents were permitted to have a limit of 80 hours of work weekly over 4 weeks. They are to have at least 10 hours between duty periods as well as a limit of 24 hours of continuous care in addition to 6 additional hours of education and continuous care. They also were to have one day in seven free from patient care and education in a four-week period, and there can be no more than one in-house call every three nights over four weeks.

Violations, however, have been documented and are in evidence in many publications. In a questionnaire returned by 141 surgical residents, they reported working an average of 86.6 hours per week, but 21 percent reported working more than 90 hours weekly. Noncompliance was highest in PGY-5 residents at 71 percent. It was found that 35.2 percent of the surgical faculty felt the decreased work hours would be detrimental to the education of residents.

Surgical residents support the concept of work-hour restrictions (72.1 percent), but noncompliance is high due to concerns about reduced exposure to clinical problems and operative cases in addition to a sense of responsibility to patients. It was concluded that the effect of future duty-hour restrictions among surgical residents is still a dilemma.

*(Tabrizian P, Rajhbeharrysingh U, Khaitov S, Divino CM. Persistent noncompliance with work-hour regulation. Archives of Surgery. 146(2):175-178;2011.)*

# Ensuring an Accountable Graduate Medical Education System



Reports from the Health Resources and Services Administration, Association of American Medical Colleges, Accreditation Council on Graduate Medical Education, and other organizations have projected shortages of new physicians. Recently, the Association of Academic Health Centers called for substantial changes in training of the health care

workforce to meet the needs of patients and society. In addition, the Institute of Medicine, as well as several foundations, has expressed concerns about residency programs, indicating they are not adequately covering issues relating to how the country's health care system functions.

A health care system that is patient-centered, efficient, effective, and adaptable to the changing needs of a diverse population is not possible without an adequate health care workforce. The graduate medical education (GME) system should be responsive to both patient care and trainee needs in the nation's environment of changing demography and health care delivery. There is an impending shortage of physicians, but this is particularly so in the adult primary care specialties and is in need of immediate attention.

An Association of Academic Health Centers (AAHC) conference sponsored by the Josiah Macy Foundation recommended that Medicare at least partially fund some new GME positions by reallocation of some of the current Medicare GME funds positions targeting specialty training in such specialties as primary care, general surgery, and geriatrics and decreasing funds for the transitional year or preliminary year programs. This is consistent with the 30-year-old decision to discontinue internships.

Finally, the AAHC recommended that the responsibility for reshaping GME and to develop a physician workforce that can meet the health care challenges of this century needs to be shared by government, accrediting bodies, certifying bodies, training institutions, educators, and trainees themselves.

*(Ensuring an effective physician workforce for America: recommendations for an accountable graduate medical education system. Association of Academic Health Centers. Conference Summary. Josiah Macy Foundation; October 2010.)*

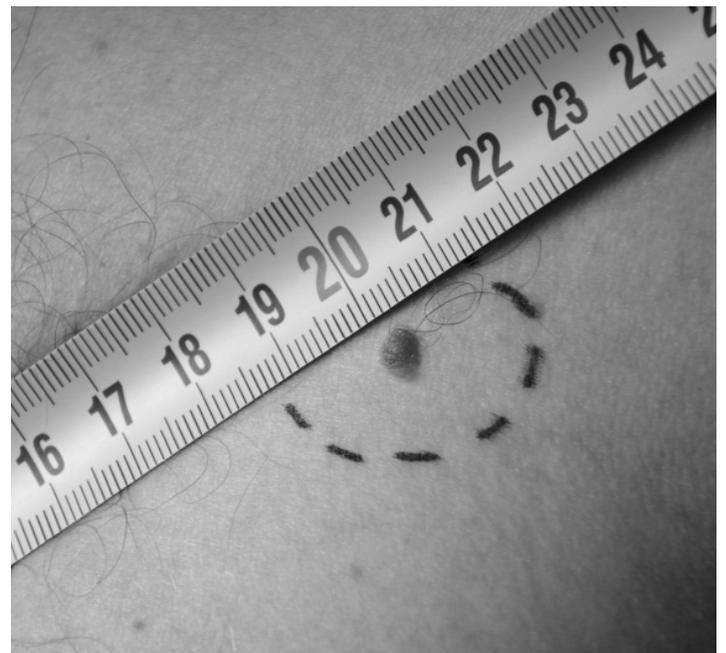
# Lack of Proficiency by Fourth-Year Medical Students in Detecting Melanoma

Fourth-year medical students from the University of Illinois at Chicago were confronted with a trained simulated patient they were examining for carpal tunnel syndrome. Also on the "patient's" hand was a medical moulage-created skin lesion measuring 3-4 mm in diameter placed on the second digit of the same hand.

The simulated patient had been trained by a dermatologist prior to the examination by students to educate the "patient" about the history and symptoms of melanoma. Of 190 participating students who saw the patient, 56 noticed the lesion, but 13 failed to comment on it either in their notes or to the patient. Of the 43 who saw the lesion and recommended follow-up or a biopsy, only one student felt to see if there were any swollen lymph glands, while one other examined other parts of the patient's body to see if there were other unusual spots.

Those who recommended follow-up did ask if there were any changes in the lesion that occurred and if there were any symptoms. In that skin cancers can be dangerous and melanoma is especially deadly, it was discouraging that medical students were not getting this message. Simply providing lectures to students about melanoma does not ensure they have the practical skills needed to be comfortable doing examinations of the skin or to diagnose skin cancers.

*(Hernandez C. Will young doctors recognize melanoma? 69th Annual Meeting of the American Academy of Dermatology. New Orleans; February 2011.)*



# Analyzing the Performance of Caribbean Medical School Students and Graduates

The number of Caribbean-educated medical students/graduates that registered for the Educational Commission for Foreign Medical Graduates (ECFMG) examination has increased from 1,510 in 2000 to 4,900 in 2009. Currently, there are 56 medical schools in the Caribbean and 10 more under development.

Between 2000 and 2009, first-time performance of Caribbean-educated students/graduates on the United States Medical Licensing Examination (USMLE) has increased, although there is variation by country. Currently, 25 percent of physicians in residency and practice in the United States are international graduates, and they play an important role in the health care system

of the nation since they are more likely to practice in underserved areas.

In addition, both demographics and health reform are expected to increase physician demand. Of the 10,406 certified by ECFMG in 2009, 2,639 (or 25.4 percent) graduated from medical schools in the Caribbean. However, there are concerns regarding the quality of education provided at these schools because of a lack of a uniform system of quality assurance.

There is a wide variance in resources, curricula, selection processes, and student performance in the 56 Caribbean medical schools now in operation. Two Caribbean medical schools with the highest first-time passing rates on the USMLE in 2009 were in Grenada with Step 1, 2, and 3 scores

of 90.6, 87.0, and 90.0, respectively, followed by Dominica with scores of 88.2, 81.1, and 90.0. Data shows, however, that three-quarters of students/graduates who took at least one USMLE exam eventually received ECFMG certification.

Since 2004, there has been an overall increase in Step 1 and Step 2 CK pass rates. Effective in 2013, the ECFMG will require that applicants applying for ECFMG certification must graduate from a school accredited by a formal process. This requires using criteria established for U.S. M.D.-granting medical schools by the Liaison Committee on Medical Education or other globally accepted criteria such as those set forth by the World Federation for Medical Education.

*(Van Zanten M, Boulet JR. Medical education in the Caribbean: a longitudinal study of United States Medical Licensing Examination performance, 2000-2009. Academic Medicine. 86:231-238; 2011.)*

## Think Tank Formed by Johns Hopkins and University of Baltimore

With a first-year budget of \$1 million, the Johns Hopkins University School of Medicine and the University of Baltimore School of Law will open an academic center and think tank to foster more understanding between law and medicine in July 2010. The center is headed by an emergency physician, Frederick Levy, M.D., J.D., who also is a lawyer from the medical school faculty and a former George Washington University School of Law faculty member who also is a physician and lawyer.

Aimed at influencing health policy and located at the medical school and the law school, the center will offer classroom instruction, publish a peer-reviewed journal, develop health law policy position papers, and conduct symposiums. Among the topics it will address are access to health care, patient safety, medical malpractice and tort reform, health insurance, and disaster medicine. The center will include involvement by directors, fellows, students, and professors from both schools.

It is hoped that misunderstanding and distrust between doctors and lawyers may be addressed with current students as well as practicing professionals through continuing education.

*(Cohn M. Johns Hopkins, University of Baltimore form medical-law center. Baltimore Sun; February 15, 2011.)*

## Investigation of Animal Use by Johns Hopkins



An investigation of alleged illegal use of animals to provide training in surgery at Johns Hopkins University School of Medicine is being called for by a former state health secretary and a physicians group. An alumnus of Johns Hopkins and the Physicians Committee for Responsible Medicine is claiming that the use of the animals for this training is in violation of the animal cruelty law of the state. It is being alleged to the Maryland attorney general that the university is regularly violating state law by causing students to inflict unnecessary suffering or pain on an animal. This is part of a five-year effort by the group.

Hopkins, one of seven U.S. medical schools using live animals, has responded by indicating it reviews its mission, vision, and values regularly and strives to ensure the curriculum and training meet the highest standards. Students in their third- and fourth-year surgery rotation at Hopkins practice suture and knot-tying skills on pigs as well as performing surgical procedures on the animals.

*(Cohn M. Johns Hopkins under fire for using animals in doctor training. The Baltimore Sun. February 23, 2011.)*

# Health Policy Education Advocated in U.S. Medical Schools

A survey of 93 M.D. and D.O. schools was performed to determine the extent of education the schools provided on health policy education. While the average amount of instruction was 14 hours, the lowest quartile provided from 0 to 6 hours over the course of the curriculum. Most of the schools felt there needs to be an expansion in health policy curriculum, with 58 percent reporting that their school currently has too little of such education.

Medical school deans reported that the most important topic was quality improvement, followed by health costs, Medicare and Medicaid, health care reform, and least important, physician reimbursement. The survey found that 52 percent of the medical schools are currently in the process of increasing health policy education. Curricular flexibility and faculty interest appeared to be the two most important constraints to integrating health policy into medical education.

Among the conclusions of the investigators was that to provide comprehensive care for patients and participate in health care reform, the medical community must be literate in health policy. They believe this should be a core competency of the 21<sup>st</sup> century physician.

*(Mou D, Sarma A, Sethi R, Merryman R. The state of health policy education in U.S. medical schools. The New England Journal of Medicine; February 23, 2011.)*



Health Professions Division  
College of Osteopathic Medicine  
3200 South University Drive  
4th Floor, Room 1495  
(954) 262-1469  
Fort Lauderdale, FL 33328-2018  
<http://medicine.nova.edu>

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4097; telephone number: 404-679-4501) to award associate's bachelor's, master's, educational specialist, and doctoral degrees.

Nova Southeastern University admits students of any race, color, sex, age, nondisqualifying disability, religion or creed, sexual orientation, or national or ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school, and does not discriminate in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

## **M**edical Education Digest

The *Medical Education Digest* is published bimonthly through the NSU-COM Office of Education, Planning, and Research

### Editor

Leonard Levy, D.P.M., M.P.H.  
Associate Dean

### Associate Editor/Graphic Designer

Scott Colton, B.A.  
Director of Medical Communications