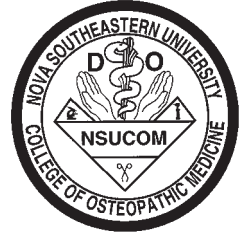


# Medical Education Digest



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## An Overview of Medical Education and Geriatric Precepting in Family Medicine



A University of Virginia study in its family medicine clinic attempted to gain an understanding of how geriatric content was incorporated into resident/attendings precepting encounters in its family medicine residency program. All residents and physician attendings were involved in the four-week study. The family medicine clinic averaged 1,900 outpatient visits monthly.

Observation of the encounters was by a trained medical student

observer whose focus was on comparing encounters between older adults and those who were middle-aged. Residents and attendings were not asked questions or interrupted during the perceiving encounter, and the observer did not leave the perceiving room to follow the preceptor if there was interaction outside the room. The observer did ask the attending to identify the issues discussed with the resident outside of the precepting room when the attending returned

Encounters were videotaped by a camera mounted in the preceptor room for the purpose of faculty development. The student observer completed an observation form for each adult encounter. Data collected included identifying information and visit type, including acute, chronic, and health maintenance. Discussions included such domains as history, exam, functional status, diagnosis, therapy options,

and social talk. There were 26 family medicine residents and 12 physician faculty members in the study, including one with a Certificate of Added Qualification in Geriatrics.

Of 259 patients, 33 involved people over 64 years of age. The percent of older patients seen by these residents was less than the 20 percent typically seen in family practice. The data collected indicated that additional sites may be needed to supplement the exposure to older patients that residents receive in a continuity clinic. Such sites include a combination of nursing homes, home care, and ambulatory care precepted by a geriatrician. Family physicians, it was concluded, also need to possess competence and strategies in addressing geriatric issues.

While geriatric issues can be addressed in busy family medicine training programs by preceptors without geriatric certification, there should be training programs to ensure they are able to teach residents about common geriatric issues encountered in outpatient settings.

*(Rollins LK, Martirosian T, Gazewood JD. The glass is half full: geriatric precepting encounters in family medicine. Gerontology & Geriatrics Education. 30:341-350;2009.)*



*“Medical Education Highlights for Primary Health Care”*

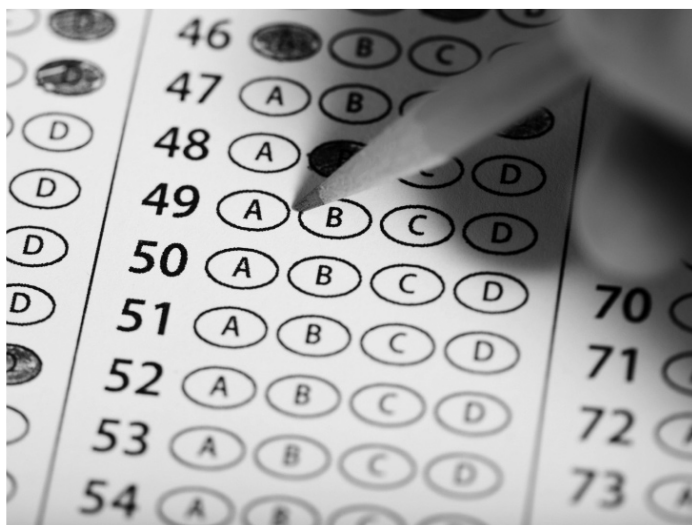
## Converting COMLEX-USA Scores to those of USMLE

In the residency application process, discussions often take place regarding the standardized tests taken by osteopathic medical students (COMLEX-USA) and how they compare to the allopathic USMLE. Many graduates of osteopathic medical programs take both of these examinations. One reason for this attention is because many osteopathic medical students seek residency programs approved by the Accreditation Council for Graduate Medical Education (ACGME) that require successful completion of Step 1 and Step 2 of the USMLE to be granted an interview. The other reason is to provide residency program directors the ability to compare a D.O. graduate with those who are from M.D. schools.

However, Philip C. Slocum, D.O., and Janet S. Louder reported in 2006 (*JAOA*, September 2006) formulas they developed for the comparison of COMLEX-USA Level 1 and 2 scores with USMLE-USA Step 1 and 2. These were: USMLE Step 1 =  $67.97 + 0.24 \times \text{COMLEX-USA Level 1}$  ( $r^2 = 0.68$ ) and USMLE Step 2 =  $102.2 + 0.18 \times \text{COMLEX-USA Level 2}$  ( $r^2 = 0.46$ ). But it is pointed out by the authors that Slocum and Louder's formulas do not provide ACGME residency program directors with an accurate view of the qualifications of osteopathic medical students.

Furthermore, the authors conclude that unless there is an effective way to convert the COMLEX to an USMLE score, it is likely that ACGME programs will withhold interviews of D.O. students unless they also have satisfactorily completed the USMLE. They advocate that efforts be continued by osteopathic medicine to develop a formula that more accurately reflects the qualifications of an osteopathic medical student.

*(Parikh SP, Shiembob CA. New COMLEX-USA-to-USMLE conversion formula needed. JAOA. 110:7. pp. 400-401; July 2010.)*



## Benefits of an Osteopathic Summer Research Project

Students from Kirksville College of Osteopathic Medicine-A.T. Still University engaged in a practice-based research network (PBRN) summer NIH-funded research project investigating the use of various techniques of osteopathic manipulative treatment for different diagnoses and the extent of patient satisfaction. Supported by a grant from the National Center for Complementary and Alternative Medicine, they were impressed with the importance of current research within the osteopathic medicine paradigm.

Students indicated they learned how well-planned research projects could improve clinical practice and how osteopathic physicians are able to integrate clinical research and clinical practice without conflict, each complementing the other. Such research, they concluded, is the summit of evidence-based patient care. They realized more fully how basic science studies and clinical decision making are connected. It also stimulated their interest in pursuing additional patient-oriented research training and influenced their consideration of future specialty options.

The students recommended that osteopathic medical students pursue similar research projects early in their education and integrate research into their careers. They also felt they were better prepared as future osteopathic physicians to adopt a more scholarly and scientific approach to solving medical problems, guiding them in clinical decision-making processes.

*(Prast AM, Willingham KJ, Wagner MJ, Laird SD. Importance of early exposure to clinical research for osteopathic medical students. JAOA. 110:8. pp. 422-423; 2010.)*

## Servicing the Underserved

A July 2010 Association of American Medical Colleges survey indicated that 25.8 percent of medical school graduates between 2005 and 2009 intend to practice in underserved areas. However, African American graduates are 11 times more likely than white graduates to do so. While 56.2 percent of African Americans between 2005 and 2009 indicated in the survey that they intend to practice in underserved areas, 41.6 percent of Hispanic/Latinos and only 20.5 percent of Asians intended to practice in these areas. Compared with Asian and white graduates, the intent to serve the underserved was greater in African American and Hispanic/Latino graduates who also were more likely to have acquired an intention to serve between matriculation and graduation.

*(Grbic D, Slapar F. Changes in medical students' intentions to serve the underserved: matriculation to graduation. Analysis in Brief. Association of American Medical Colleges. 9:8; July 2010.)*

# Survey of Geriatric Medicine House Calls and Student Perceptions

An open-ended anonymous survey of 123 second-year medical students from the Virginia Commonwealth University (VCU) School of Medicine focused on the university's observation of a preceptor during house calls to elderly homebound patients. VCU students are required to have a half-day house call experience to private homes, adult homes, or assisted living facilities. At the end of their experience, they were asked

to respond to the following questions:

- What impressed you most during the house call today?
- How is the provision of medical care in the home most different from office-based medicine?
- Do you see house calls occurring in your future?

Half of those responding were female, and the majority was white and ranging in age from 21 to 26. Overall, the responses reflected an appreciation by the students of the experience and the complex social context of the patient and caregiver. One student commented, "I will always remember today's experience when I consider the opportunities to provide house visits to my patient."

*(Abbey L, Willett R, Penczak RS. Social learning: medical students' perceptions of geriatric house calls. Gerontology & Geriatrics Education.)*

## iPad Program for First-Year Medical Students



The University of California Irvine School of Medicine (UCI) provides Apple iPads to its first-year medical students. Four key electronic textbooks will be provided by Elsevier—a scientific, technical, medical information publisher. Access will be provided to the *Atlas of Human Anatomy* by Frank Netter, the *Color Textbook of Histology* by Leslie Gartner and James Hiatt, *Physiology* by Linda Costanzo, and *Thompson and Thompson Genetics in Medicine* by Robert Nussbaum, Roderick McInnes, and Huntington Willard in the form of e-textbooks accessible through the iPad.

Elsevier intends to work with UCI to monitor the use of the content and the iPads. As the school year progresses, Elsevier will be adding more texts, anticipates UCI. Students also will be able to access Student Consult, an online portal of Elsevier that will allow them to access full textbooks as well as interactive content.

At Stanford University, the 91 entering medical students also will be receiving iPads. Medical school administrators hope that not only will this improve the learning experience, but it also will reduce the use of paper by the school. The senior associate dean for medical education, Charles Prober, M.D., believes that the iPad will be useful in future physicians explaining to patients what medical conditions or surgeries look like by using diagrams or pictures. Faculty members also will receive training so they can use the devices in their courses.

Pediatrician and senior associate dean for information resources and technology at Stanford, Henry Lowe, M.D., remarks that physicians are a mobile group and move from patient to patient, which should lead to the iPad becoming popular with more doctors. A Stanford second-year medical student indicated that he probably will no longer be using his laptop in class.

*(Dolan PM. Med students open to learning via new media. Amednews.com. American Medical News; August 30, 2010.)*



# New Media and Video Games for Medical Students



Medical students of today, having evolved in an era of computer and computer-related technology, are comfortable using new media and virtual reality during their education, concludes a recent survey conducted with

medical students from the University of Wisconsin School of Medicine and Public Health and the University of Michigan Medical School.

However, in *BioMed Central*, researchers report there were gender differences in game-play attitudes so the developers of the educational gaming platforms need to design games that appeal to both genders. It was found that games that emphasized competition were preferred by men, while women preferred games emphasizing personal challenge. The assistant dean for academic affairs at Boston University School of Medicine and director of medical student education in the Department of Family Medicine, John Weicha, M.D., M.P.H., focused on Second Life—a virtual world where users communicate with one another as an avatar or animated version of themselves.

He found that virtual worlds offer the potential of enhancing learning outcomes. He is starting a pilot program using virtual reality to teach patient-physician communication. A barrier he identified is the investment in time and money to train educators how to use these environments. *BioMed Central* reported that men are 4.4 times more likely than women to play video games, while women are 5.2 times more likely than men to play puzzle games. Women also are about 23 percent as likely as men to play sports games and 15 percent as likely as men to play strategy games. Efforts also are underway to create a gaming curriculum at the University of Wisconsin.

*(Dolan PM. Med students open to learning via new media. Amednews.com. American Medical News; August 30, 2010.)*

# Changing Times: Putting a Face on Disease

Since the *Flexner Report* of 1910, the model of medical education has not appreciably changed, with two years of basic science followed by two years of clinical studies. However, over the last few years, several medical schools have questioned whether this lock-step curriculum is creating future physicians who lack humanity. The new physicians see patients as diseases rather than whole people, resulting in ethical erosion or the loss of idealism, empathy, and morality.

At New York University School of Medicine, students got to meet patients on the first day of their medical school curriculum. The curriculum makes changes between the relatively abstract science taught in classrooms to a hands-on approach to education. Advancing some of the clinical component into the first two years of study provides students more time to study popular public health issues. This includes nutrition and how diseases may affect people differently due to race, ethnicity, and socioeconomic status. As a result, students are able to earn the medical degree and master's of public health in four years rather than five.

Atul Grover, M.D., Ph.D., chief advocacy officer of the Association of American Medical Colleges, indicates that we periodically go through a phase where people do not go into primary care, which continues to worsen. Georgetown University professor of public health and pediatrics, Fitzhugh Mullan, M.D., remarked that NYU and other universities are responding to the lack of social mission among their graduates, with NYU being the fifth worst in the nation.

At NYU, new students were introduced to the “four pillars” of its new curriculum, which included diabetes, colon cancer, tuberculosis, and heart disease. A patient in a locked-ward setup for tuberculosis patients at Bellevue Hospital Center who forgot to take his medications remarked to students that when he was hospitalized, the doctors saved his life, but the nurses saved his sanity.

*(Hartocollis A. In medical school, seeing patients on day 1 to put a face on disease. New York Times. Friday, September 3, 2010.)*



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