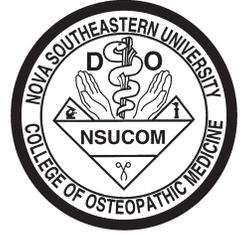


Medical Education Digest

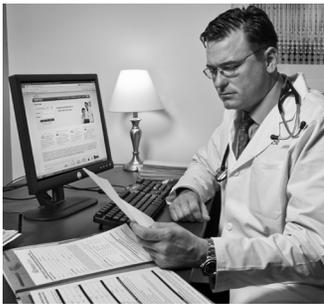


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Study Analyzes Students' Views on Internal Medicine Careers



A study headed by a New York University internist indicated the importance of rebuilding and sustaining the U.S. generalist physician workforce. A crisis is pending because there is a growing demand for primary care physicians fueled by the aging of America, chronically ill baby boomers, an obesity epidemic, and a growing decrease in the supply of those in primary care.

However, improving the experience students receive in internal medicine while in medical school is not adequate enough. There also needs to be payment and practice reform to reduce the remuneration gap between the primary care physician and the subspecialist. Scholarships and loan repayment opportunities are needed and should be advocated for those who enter primary care training and practice. Also suggested is a shift from fee-for-service and a system that emphasizes value incentives.

While the current generation of medical students values excellence, it seems less likely to sacrifice quality of life for career growth. This is believed to be due to the fact that more women are entering medical practice and tending to work fewer hours than men, although both sexes are more geared to prioritize work/home balance. This appears to be associated with a significant growth of applicants in such specialties as anesthesiology, dermatology, plastic surgery, and radiology. Students also were pushed from internal medicine careers because of their debt, with 1-in-5 graduates owing \$299,000 and an income gap between the generalist and subspecialist being nearly threefold. As a result, the percent of students who planned a career in general internal medicine declined from 9 in 1990 to 2 in 2007.

(Schwartz MD, Durning S, Linzer M, Huer KE. Changes in medical students' views of internal medicine careers from 1990 to 2007. Archives of Internal Medicine. 171 (8);744-749;2011.)

Impact of Reduced GME Hours in the United Kingdom



A *British Medical Journal* study supports the view that training is patient safety for the future. The investigators indicate that the reduction of working hours in graduate medical education from over 80 hours per week has had little impact on graduate medical education and minimal effect on patient

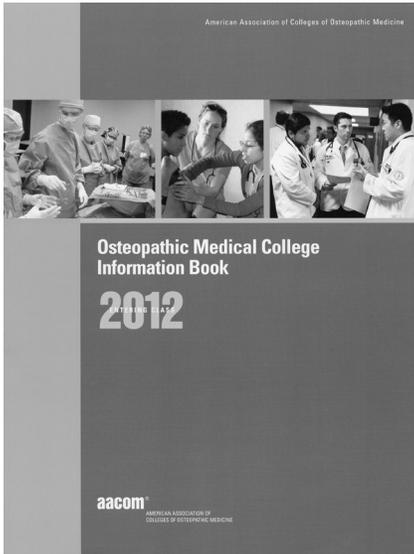
outcomes. However, they indicate there is not enough evidence in the United Kingdom to conclude the effects of reducing working hours to less than 56 or 48 hours a week as an objective measure of graduate training or clinical outcomes.

The investigators searched through studies conducted in the United States amounting to well over 130 regarding both training outcomes and outcomes in patients and found that the reduction of work hours from greater than 80 hours did not seem to have an adverse effect on patient safety and only a limited effect on graduate training. They indicated that over the past 20 years in Europe and the United States, there has been a progressive reduction in the work hours of doctors in training.

In the United Kingdom, reduced work hours for physicians-in-training resulted from the NEW Deal, which was negotiated by the British Medical Association and the European Working Time Directive. It was concluded, however, that further high-quality studies are needed, especially in the European Union using large multicenter evaluations of the impact of duty hours' legislation on objective educational and clinical outcomes.

(Moonsinghe SR, Lowery J, Shahi N, Millen A, Beard JD. British Medical Journal Impact of Reduction in Working Hour; medscape.com/viewarticle/740708_print Posted 4/19/2011 BMJ.)

Review of Information Sources Used by Prospective Medical School Applicants



While Web sites were the most-used source by prospective medical students in determining the schools to which they apply, these sources were not the most highly rated. A study released in April 2011 by the Association of American Colleges indicated that the most highly rated information sources for students considering

the submission of an application to medical school were MSAR-Medical School Admissions Requirements, a physician, a medical student or recent graduate, and the AACOM *Osteopathic Medical College Information Book*.

U.S. News & World Report, while one of the sources, was not very highly rated, nor was the *Kaplan* or *Princeton Review*. While the MSAR and *Osteopathic Medical College Information Book* received the highest ratings (i.e., +3), 34 and 32 percent of the time respectively, they were used only about 37 percent of the time, suggesting that they may be underused.

More frequently used but considerably lower rated were medical school Web sites, which 59 percent of aspirants employed, followed by friends, peers, and word-of-mouth with 55 percent usage. It was noted that one in five users gave a rating of zero to the *U.S. News & World Report*, *Kaplan* or *Princeton Review*, and *studentdoctor.net*. There was no significant difference linked to gender or college status. However, prospective applicants from lower socioeconomic groups valued physicians somewhat more as an information source.

Since there was such wide use of the Web sites by applicants to get information they wanted to make decisions about regarding where to send their applications, the investigators recommended there is a need to identify what details are needed that medical school applicants value the most.

(Matthew D, Grbic D. Use and evaluation of medical school information sources by aspiring medical students. *Analysis in Brief. Association of American Medical colleges. 11 (2);April 2011.*)

Reasons Why Medical School Applicants Enroll in Osteopathic Medical Schools

Faculty members from the New York College of Osteopathic Medicine of New York Institute of Technology analyzed a recent survey performed by the American Association of Colleges of Osteopathic Medicine about the characteristics of applicants to the class of 2014 for osteopathic medical schools.

It was noted that 69.8 percent of medical school applicants applied to both M.D. and D.O. programs. While 54.8 percent were accepted to at least one D.O. program, 37.6 percent were accepted by schools offering an M.D. It was revealed that applicants accepted to both types of medical schools overwhelmingly enrolled in M.D. schools. Students admitted to both M.D. and D.O. schools indicated they enrolled in allopathic medical schools mainly because of location, cost, and a preference for an M.D degree.

An inherent bias exists in the perceived value between M.D. and D.O. degrees, the study suggests. Also relevant is the small role osteopathic philosophy plays in the decisions of applicants, the authors conclude. They believe this is related to the growing number of D.O. graduates who enter into Accreditation Council for Graduate Medical Education-accredited internships and residencies.

The authors also stated that many osteopathic medical students are primarily motivated to pursue a career in medicine rather than osteopathic medicine in particular. The authors also concluded that osteopathic medical schools' focus on primary care is considered to be a negative attribute by applicants, perhaps limiting their future professional opportunities.

(Ramos RL, Zhou C, Hasan M, Herrera SJ, Bono NA, Hallas BH. Understanding osteopathic medical school applicants and the class of 2014. *The Journal of the American Osteopathic Association. 111(3):174-175; 2011.*)



Analyzing the Attributes and Responsibilities of Effective Medical Educators

Faculty cannot *not* teach and, therefore, they must be able to demonstrate basic competence as educators, is the conclusion of a recent conference. Over the years, it was assumed that if one was a medical clinician or researcher, he or she had the ability to teach. This has changed in the recent past with the need for many faculty members in medical schools to have major teaching responsibilities, and whose effectiveness is measured by the assessment of meaningful outcomes.

The conference, which was entitled 2020 Vision of Faculty Development Across the Medical Education Continuum, included medical education leaders from North America and was held at Baylor College of Medicine in February 2010. One of the working groups identified desirable attitudes, knowledge, and skills of effective medical educators at all levels of the educational continuum (undergraduate, graduate, and continuing medical education). This group began by identifying that effective teaching is not defined by technique but by whether learning and understanding has been achieved. The recommended attitudes, knowledge, and skills of competent teachers are indicated in the list below:

Attitudes and Attributes

- acknowledges that the goal of effective teaching is directed at effective learning and understanding
- advocates for education
- believes in teacher's code of ethics for teaching medicine
- demonstrates passion as a teacher
- demonstrates kindness in all kinds of interactions
- is not afraid to say "I don't know" and demonstrates awareness of own limitations
- is accessible to learners
- manifests and stimulates curiosity

- seeks and obtains knowledge of learners
- values and establishes a safe learning environment

Knowledgeable

- demonstrates an awareness of and tacitly and explicitly employs basic pedagogic principles
- displays awareness of and uses teaching techniques in line with current neuroscience and cognitive psychological findings
- is knowledgeable and up-to-date in one's discipline
- promotes scholarship

Skills

- communicates knowledge effectively and makes it relevant to the learner
- demonstrates leadership in educational settings
- demonstrates the basic skills for effective lecturing and facilitating small- and large-group discussions

- questions, listens, and responds in an effective manner
- establishes a learning community that values education and the process of continual learning
- establishes educational contract with learners, identifying learners' needs/clarifying the teacher's expectations
- gives praise as well as critical feedback in a manner acceptable to the learner
- is a reflective, mindful teacher
- is able to capture/maintain attention
- is adaptable and flexible
- promotes critical thinking
- promotes self-directed learning
- provides timely summative evaluation
- uses information technology effectively

(Haterm CJ, et al. The educational attributes and responsibilities of effective medical educators. Academic Medicine. 86:474-480; 2011.)



Trends in Allopathic Medical School Demographics

The number of applicants to allopathic medical schools increased from 18,703 in 1965 to 42,269 in 2009. In 1965, the total medical school first-year enrollment was 8,759, increasing to 18,853 in 2009. However, the percent of women matriculated in the first year increased from 8.3 to 48.3 between the same two years.

The residency program with the highest percent of women in 2009 was pediatrics, with a 69.5 participation figure in 2009. In obstetrics and gynecology, the percentage was 61.6 in 2009 and 50.8

in 1999. Orthopedic surgery, neurosurgery, and thoracic surgery had the lowest percent of women with 13.4, 13.5, and 14.8 participation, respectively. Of 129,929 U.S. allopathic medical school faculty members in 2010, 35 percent were women and 65 percent were men. The percent of faculty members who were men that held the rank of full professor was 30, compared to 13 for women.

The percent of full-time faculty members who were women was highest in the specialty of obstetrics and gynecol-

ogy at 52 percent, followed by public health and preventive medicine at 50 percent, and pediatrics at 49 percent. In 2010, 2.2 percent of medical school faculty members were black or African American compared to 4.1 percent for Hispanics and 12.8 percent for those of Asian descent. In 2009, 13 (or 11 percent) of the deans of allopathic medical schools were women.

(Association of American Medical Schools; 2011.)

More Women Selecting General Surgery Careers

In a study conducted by the American College of Surgeons between 2000 and 2006, the percentage of women selecting training in general surgery increased, as it did in obstetrics and gynecology, ophthalmology, orthopedics, otolaryngology, urology, and plastic surgery.

Among graduates entering surgical specialties, women made up 82 percent of those pursuing training in obstetrics and gynecology, with 40 percent of those

taking residencies in general surgery.

Between 2000 and 2005, there was a 25 percent increase in U.S. medical school female graduates who entered general surgical residencies (i.e., from 32 percent to 40 percent). Only neurosurgery had a decline in the percent of women training for that specialty (i.e., from 14 percent in 2000 to 11 percent in 2005).

It was suggested by the study authors that research be done to identify the fac-

tors associated with the decisions of women to enter surgery. Some studies show that among these factors is the number of women on surgical faculty, onsite childcare availability, policies regarding maternity leave, and sex discrimination.

(Davis EC. Women in surgery residency programs: evolving trends from a national perspective. Journal of the American College of Surgeons. 212:320-326; 2011.)



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