Medical School Debt of M.D. Graduates Shows No Correlation to Specialty Choice

In February 2013, the Association of American Medical Colleges (AAMC) released a survey of the debt incurred by graduates of M.D. medical schools in the United States that said the median indebtedness was $170,000. Costs of attending medical schools and the debt of graduates have increased faster than inflation over the last 20 years. Graduate debt increased 6.3 percent yearly since 1992, compared to 2.5 percent for the Consumer Price Index (CPI).

The median debt for students at public medical schools was $160,000 compared to $190,000 for those at private medical schools. The 1992 median debt for medical education in 2012 dollars was $81,729 compared to $170,000 in 2012. While the annual increase in medical school debt has slowed the last few years, the compound annual growth rate between 1992 and 2012 was 6.3 percent.

The AAMC survey did not show a difference in debt by gender, nor did it show premedical and non-education debt to be major factors. Little evidence supports the assertion that few physicians choose primary care because of prohibitive debt levels. More important factors appear to be the student’s interest in a specialty’s content and/or level of patient care, desire for a controllable lifestyle, and the influence of a role model.

The survey concluded that while the future is uncertain, and medical school cost and debt continue to increase, physicians are able to repay current debt levels. The AAMC indicates physician compensation could be affected positively or negatively, however, by the projected physician shortage, the Affordable Care Act, and potential changes in health care delivery. These factors may require reexamining the state of medical education debt in the future.

(Physician education debt and the cost to attend medical school: 2012 update. Association of American Medical Colleges; February 2013.)

Medical Students Exhibit High Use of Stimulants

A survey of third-year medical students found there was a prevalence of 15 percent who used stimulants while in school compared to 6.9 percent among college students. Medical students are reported to be significantly more likely to use prescription stimulant medications to improve their academic performance compared to other students.

A Yale School of Medicine study headed by Jadon R. Webb, M.D., Ph.D., of the Yale Child Study Center concluded that three-fourths of medical students believed stimulants could enhance their cognitive performance and that one in five used them. The study also suggested that since medical students eventually become prescribing physicians who dispense these medications, their personal experience with stimulants may affect future prescribing trends, especially in children with attention deficit hyperactivity disorders and in students experiencing academic difficulties.

The study was conducted with a cohort of 148 third-year medical students prior to orientation lectures at a single medical school. Caffeine was excluded as a stimulant. There was a 98 percent response rate (145 replies). White students used stimulants nine times more than Asian students. Since there were too few Hispanic and black students in the sample, the investigators were not able to compare reliably the prevalence of stimulant use in these groups. It was found that 25 percent of the sample had been offered stimulants without a prescription. The investigators concluded there is a need to balance the teaching of high volumes of material while safeguarding student health and well-being.

(Cassels C. Stimulant use exceptionally high among medical students. www.medscape.com; February 6, 2013.)
Accreditation Council for Graduate Medical Education
Reports Increase in D.O.s

The Accreditation Council for Graduate Medical Education (ACGME) released its report on Graduate Medical Education (GME) programs for 2011-12. Of a total of 113,427 residents in 911 programs, 8,615, or 7.6 percent, were D.O.s. This compares to 6,629 D.O.s, or 6.3 percent in 2006-07. International medical graduates amounted to 30,300, or 26.7 percent, in 2011-12 compared to 26.9 percent in 2006-07. Specialties that had 10 or more percent of the ACGME residency positions filled by D.O.s in 2011-12 are shown below:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number of D.O. Residencies</th>
<th>Percent of D.O.s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Medicine/Rehabilitation</td>
<td>342</td>
<td>27.6</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>1,639</td>
<td>16.8</td>
</tr>
<tr>
<td>Pain Medicine</td>
<td>35</td>
<td>13.0</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>656</td>
<td>12.3</td>
</tr>
<tr>
<td>Hospice and Palliative Medicine</td>
<td>13</td>
<td>11.1</td>
</tr>
<tr>
<td>Preventive Medicine</td>
<td>29</td>
<td>10.9</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>507</td>
<td>10.3</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>486</td>
<td>10.0</td>
</tr>
</tbody>
</table>


Holistic Review and Competency-Based Admissions Seek to Improve Processes for Medical Schools

Academic readiness will remain important in the medical school admissions process. Along with admissions interviews, a new dimension will be added to make the process more holistic. The interpersonal characteristics required of a physician to practice patient-centered care will become a focus. Other emerging methods include assessment of competencies such as oral communication or resilience and adaptability.

New techniques that may be used include assessment centers to evaluate medical school candidates’ personal and interpersonal attributes, situation-based judgment tests, and combinations of these. This approach recognizes that high grades and test scores are only part of what predicts a good physician. Other evaluation methods to be included are the use of a standardized set of guidelines for those who write letters of recommendation as well as the development of a centralized simulation-based judgment test to provide applicants with the opportunity to demonstrate personal competencies.

An additional goal of holistic admission will be ensuring diverse student bodies, since people with varied backgrounds and ways of viewing the world outperform groups of people with similar backgrounds. These changes, which are now on the way, may result in a transformation or even a revolution in medical education.

(Kirch DG. Transforming admissions: the gateway to medicine. The Journal of the American Medical Association. 308(21): 2250-2251; 2012.)

Study Examines Effects of Reduced Shift Length for Residencies

Since 1989, there have been several activities that led to the reduction in the number of hours residents were required to complete in a shift. The Accreditation Council for Graduate Medical Education (ACGME) issued restrictions in the duration of a resident’s shift in 2003 and then further restrictions resulted after an Institute of Medicine report in 2008.

These reports indicated that extended shifts adversely affect the well-being of residents and resulted in increased medical errors. Since the implementation of these initiatives, no significant impact has been shown on standardized test scores, procedural volume, or didactic participation. More time was available for reading and no difference in number of patients admitted or mean census occurred.

In 2011, the ACGME restricted intern shift length to 16 hours or less. A study of internal medicine interns by Vanderbilt University Medical Center in Nashville, Tennessee, reported no decrease in clinical exposure, caring for more unique patients, performing more initial workups, longer and more detailed notes, and higher attendance at a weekly educational conference. It was also found that interns wrote more in-depth notes to ensure patient safety. The study included 47 interns in 2010 and 50 interns when the restrictions were implemented in 2011.

(Theobold CN et al. The effect of reducing maximum shift lengths to 16 hours on internal medicine interns’ educational opportunities. Academic Medicine. 88:512-5118; 2013.)
Dual Degree in Medicine and Population Health Planned at Brown University's Alpert Medical School

A new program planned for Alpert Medical School of Brown University in Providence, Rhode Island, would lead to the dual degree of M.D. and Sc.M., integrating population health into the medical student's four years of training. Students would not only acquire medical knowledge but also be exposed to public health policy, leadership skills, and how to work in a team with other health professionals.

The new program will emphasize active learning rather than passive lecture-style teaching. Instead of the typical group of separate clinical rotations, students will complete nine-month physician practice-based clerkships, following a cohort of patients through their interactions with the health care system. Students will be mentored by local primary care physicians, creating a continuity of relationships with both their patients and mentors. The program is designed to add primary care physicians to Rhode Island and improve the quality of care in the state. The school also hopes to inspire other medical schools to adopt similar programs.


AAMC Recommends Quality Improvement/Patient Safety Guidelines

Ensuring that every medical school and teaching hospital in the United States has access to a critical mass of faculty that is ready, able, and willing to be a role model and leader in education, in quality improvement, and patient safety (QI/PS), as well as committed to the reduction of health care costs, is the goal of a five-year initiative of the Association of American Colleges (AAMC) and the University Health System Consortium. It is their vision that this initiative be embedded across the continuum of physician development. The AAMC issued a report entitled "Teaching for Quality" focusing on three core recommendations to be accomplished over the next five years:

- integration of QI/PS concepts into meaningful learning experiences across the continuum of physician professional development
- proficiency of all clinical faculty in QI/PS competencies and the ability to identify, develop, and support a critical mass of faculty to train and educate students, residents, and colleagues in QI/PS
- common commitment to QI/PS by academic and clinical leadership that produces excellent health outcomes valued by health care professionals and the public

This will require the creation of a critical mass of faculty at the expert level and at least some at the master's level of QI/PS. The stages of development identified are: novice (medical student), advanced beginner (graduating medical student), competent (graduating resident), proficient (faculty), expert (education leaders in QI/PS), and master (QI/PS scholars).

(Association of American Medical Colleges. Teaching for quality: integrating quality improvement and patient safety across the continuum of medical education-report of an expert panel; January 2013.)
Global Health Experiences Offer Mutual Benefits

A survey that included interviews with health care professionals from the University of Namibia School of Medicine explored the interaction of local health care professionals in underdeveloped countries and health care professionals from developed countries. Participants from emerging nations were asked to reflect on their experiences with health care professionals from developed countries. The exchange revealed that a visiting student or teacher who lacked understanding about the local culture not only could cause offense but also could render the experience ineffective with both patients and local health care professionals.

Visiting health care professionals from more developed nations were seen as attempting to impose their visions of health and health care on the local environment. They were also perceived as trying to apply Western standards of care in settings with limited resources where such concepts would be impossible to implement. Another perception shared in the interviews noted that visiting health care professionals provided education sometimes at odds with capabilities of the local environment.

Despite their criticisms, participants felt there was more to gain than to lose, expressing a strong hope to improve the process for the mutual benefit. Overall, participants considered international collaboration to be a very good and healthy process for all involved, with both groups having something to offer.

(Kraeker C and Chandler C. “We learn from them, they learn from us: “ global health experiences and host perceptions of visiting health care professionals. Academic Medicine. 88:483-487; 2013.)
Continuing Medical Education Credit Form

One (1) hour of continuing medical education credit may be obtained by reading the *Medical Education Digest* and completing the following evaluation that is being used to assess the reader’s understanding of the content. Please circle the answers you believe to be correct for all four questions located on this two-sided form. To acquire CME credit, physicians must mail, fax, or deliver the form (also available online at [http://medicine.nova.edu](http://medicine.nova.edu)), including both the completed quiz and evaluation form by **August 15, 2013** to: Office of Education, Planning, and Research, Nova Southeastern University College of Osteopathic Medicine, 3200 South University Drive, Fort Lauderdale, Florida 33328. Email: lspeiser@nova.edu; Fax: (954) 262-3536. **Please complete and return the evaluation form attached on the reverse side by fax or email.**

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<tr>
<th>AOA or AMA No.</th>
<th>Print Full Name</th>
</tr>
</thead>
</table>

The correct answers will be published in the next issue of the *Medical Education Digest.*

1. **The shortening of the shift of residents required by ACGME resulted in:**
   a. No difference in number of patients seen by residents
   b. Reduced amount of time residents attended conferences
   c. Increase in medical error
   d. Lower passing rates on board certifying examinations

2. **The quality improvement/patient safety (QI/PS) program of the Association of American Medical Colleges hopes to achieve all the following except:**
   a. Obtain critical mass of faculty that is ready, able, and willing to be a role model
   b. Lead education in quality improvement and patient safety (QI/PS)
   c. Reduction of health care costs
   d. Extension of amount of time spent with patients

3. **The new dual degree in medicine and population health planned at the Brown University Alpert Medical School is designed to achieve all the following except:**
   a. Add primary care physicians to Rhode Island
   b. Have students acquire medical knowledge but also public health policy and leadership skills
   c. Offer the dual degrees of M.D. and M.P.H.
   d. Train students to work in interprofessional teams

4. **The specialty with the greatest percent of D.O.s in ACGME-accredited residency programs is:**
   a. Family medicine
   b. Emergency medicine
   c. Physical medicine and rehabilitation
   d. Obstetrics and gynecology

**Answers to the May/June 2013 CME questions:** 1. (d) 2. (d) 3. (a) 4. (c)

**Target Audience and Objectives**

The target audience includes physicians who have faculty appointments at a medical school or who train residents and fellows in hospital-based environments. It also is for non-physician faculty members who have the responsibility for teaching medical students and others who seek education in the continuum of medical education (e.g., residency, continuing education). Also, since residents are typically responsible during their training to train medical students, they too are part of the audience to which the *Medical Education Digest* is directed.

- To provide an overview from the world literature of medical education knowledge, concepts, and skills of contemporary, new, and innovative ways to facilitate learning among medical students, residents, and practicing physicians
- To identify sources of information regarding the medical education process
- To create curiosity among those responsible for the medical education process to read in depth some of those articles that are summarized in the *Medical Education Digest.*
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5) Were off-label products described? © Yes © No

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