Public Citizen—a consumer watch group—and the American Medical Student Association have charged that a study is unethical for extending first-year resident duty time from 16 to as many as 28 hours. Both groups stated that residents, as well as their patients, were exposed to harm and that there was also a failure to acquire informed consent.

They demanded the Accreditation Council for Graduate Medical Education (ACGME) rescind waivers on existing first-year resident hours. In addition, they made a demand to the Department of Health and Human Services for an investigation. In 2011, the ACGME limited first-year residents to 16-hour shifts called Flexibility in Duty Hour Requirements for Surgical Trainees.

The study is sponsored by Northwestern University in Evanston, Illinois. The American College of Surgeons and the American Board of Surgery are collaborating with the ACGME, while 160 hospitals are participating. Another trial, called Individualized Comparative Effectiveness of Models Optimizing Patient Safety and Residency Education, is aimed at internal medicine residents. The studies suggest that residents take 24-hour call rather than shorter shifts to improve continuity of care. Death within 30 days was the primary outcome, with serious morbidity within the same time being the secondary outcome. Public Citizen retorts that there are other ways to promote continuity of care besides longer shifts.

The University of Pennsylvania Institutional Review Board (IRB) classified the study “minimal risk” and also said it would not be practical to obtain informed consent from every internal medicine patient at all participating hospitals. The Northwestern University IRB classified the study as “exempt” since it is at the hospital level and does not consider it to be human subject research. The ACGME said that the studies were proposed by the Institute of Medicine (IOM) to determine the effects of resident hours on outcomes. But Public Citizen said that the studies call for exposing participants to known harm and is fundamentally unethical whether or not it was proposed by the IOM.

(Lowes R. Two trials extending resident hours called “unethical.” www.medscape; November 23, 2015.)
**NUMBERS OF MEDICAL SCHOOL APPLICANTS CONTINUE TO RISE**

Enrollment in U.S. medical schools increased 25 percent since 2002 to an all-time high of 20,630 for the 2015 entering class. Applicants rose by 6.2 percent to 52,550, or twice the percentage increase, for 2014. First-time applicants included 38,460 students. Diversification in 2015 also increased with Hispanic or Latino enrollees increasing by 6.9 percent to 1,988, while applicants increased by 10.3 percent to 4,839.

Among African Americans, there was an enrollment increase of 11.6 percent to 1,576, while the number of applicants increased by 16.8 percent to 4,661. American Indians and Alaska Natives enrollees decreased by 3.5 percent from 202 enrollees in 2014 to 195 in 2015. The percent of males and females enrolling this year was about the same as it was last year. Males accounted for approximately 52 percent, while females accounted for nearly 48 percent of enrolled students.

Among first-time applicants this year, the number of women rose by 6.2 percent to 18,724, while there was a 3.5 percent increase in first-time male applicants to 19,725. African American male enrollees increased by 9.2 percent.

(www.aamc.org/newsroom;Washington, D.C., October 22, 2015.)

**D.O.S IN ACGME AND AOA PROGRAMS**

Physicians with D.O. or M.D. degrees must complete Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Medical Association (AOA) accredited residency programs to acquire a license to practice. In 2011, there were 28,531 M.D. and D.O. new residents, of which 4,034 (14.1 percent) were D.O.s. The number of M.D. and D.O. residents in 2009 was 117,064, compared to 12,848—an increase of 13.1 percent. In 2009, the number of D.O. residents was 12,848 compared to 14,789 in 2011—an increase of 3.8 percent.

A total of 8,001 (62.2 percent) of the D.O. residents were in ACGME or combined ACGME/AOA accredited programs in 2009 compared to 8,889 D.O.s (60.1 percent) in 2011. Slightly more than half of the D.O. residents were in programs accredited only by the ACGME in 2011. In addition, in 2011, 17.8 percent of all D.O. residents were in family medicine programs compared to 8.9 percent of M.D. residents.

The combined total of D.O. primary care residents (i.e., family medicine, internal medicine, and pediatrics) was 6,005 in 2011 (40.6 percent) compared to 37,210 M.D. primary care residents (34.8 percent). The data also indicated that the most popular area of graduate medical education for D.O.s is family medicine, while internal medicine is the most popular specialty for M.D.s.


**NEW POLICIES RESPOND TO BURNOUT IN RESIDENTS**

“Medical training can exacerbate risk factors for mental illness, such as sleep deprivation and relocation to a new environment with little support,” said Dina Marie Pitta, an American Medical Association (AMA) student board member. “That is why it is so important that we help increase access to mental health care services for any student or resident physician who is experiencing depression or suicidal thoughts and find ways to continue to reduce the barriers that may stand in the way of getting the care they need.”

A recent study published in the *Journal of the American Medical Association* indicated that despite high rates of suicidal thoughts and mental health problems among residents, very few actually seek mental health services, mainly because of a concern about confidentiality. A special working conference was held in November 2015 by the Accreditation Council for Graduate Medical Education focusing on ways to improve resident well-being.

A new AMA policy promotes confidential, accessible, and affordable mental health services for medical students, residents, and fellows. Several online modules offered by the AMA through a website called STEPS Forward are designed to help physicians in practice and physicians in training recognize and address burnout. These include:

- preventing resident and fellow burnout
- preventing physician burnout
- improving physician resiliency

Burnout and suicide continue to plague the medical profession at much higher rates than the general population. In November 2015, during an AMA Interim Meeting of the physician community, a new policy was developed aimed at ensuring physicians in training have access to potentially life-saving mental health services. Suicide among male physicians is 40 percent higher than the general population, while among females it is 130 percent higher, leading to 300 to 400 physician deaths reported yearly.

(Farouk A. Stopping burnout a top priority for physicians in training. AMA Wire; November 18, 2015.)
Since the 1910 Flexner Report, the general format of medical schools has mostly been two years of basic science followed by two years of clinical training. Hofstra North Shore-Long Island Jewish School of Medicine begins its curriculum with eight weeks of instruction in which students become certified as emergency medical technicians. At Hershey’s Penn State College of Medicine, students become patient navigators in the first year of the curriculum by helping patients to negotiate the complex health care system.

New York University requires first-year medical students to track the database of every admission and charge in New York State and discuss why the average charge for delivering a baby is $3,000 in rural New York and $22,000 in New York City. Even though the U.S. health care system is data-driven, evidence-based, and patient-centered, medical education has been slow to change because of tradition, accreditation concerns, and national board examinations.

“While we continue to educate medical students in the science of medicine, we do not do as well in making them knowledgeable about the science of health care delivery or how one manages chronic disease, focuses on prevention and wellness, or works as part of a team,” said Susan Skochelak, vice president for medical education for the Association of American Medical Colleges.

Among recent changes was the addition of knowledge testing on the Medical College Admissions Test in areas of behavioral and social sciences. Traditional one-on-one interviews for medical school admission have been replaced in some schools with questions on how potential students would make tough decisions like delivering bad news. The University of California at Davis includes community residents joining with faculty members in applicant interviews.

The Mayo School of Medicine has converted from classroom lectures to an electronic format that allows students to learn on their own so time is available for discussions and case studies. The school also includes instruction in the science of health care delivery over the four years of study, as well as health care economics, biomedical informatics, and systems engineering. It even includes a course called Checkbook where students learn to track services provided to patients during clinical rotations and look for redundancies or routine tests of questionable value.

First-year students spend half days shadowing clinic schedulers, nurses, physician assistants, and nurse practitioners and act as patient care coordinators. An innovative activity requests students to evaluate their stress level, fatigue, and even risk of suicide. Courses in the first two years are pass/fail and not graded. Since it is available electronically, memorizing facts is not emphasized in some schools.

(Beck M. Innovation is sweeping through U.S. medical schools. The Wall Street Journal; February 16, 2015.)
Five stages of professional growth in an evolving physician are identified. Competence is indicated as the first, representing a fundamental standard of practice for all medical professionals throughout their careers. The other four stages are capability, responsibility, capacity, and citizenship. Competence answers two fundamental questions relating to performance of any single professional activity. First, could one do it? Second, would others recognize that he/she could do it?

The second stage is capability, signifying that one has grasped the appropriate knowledge base and technical skills, but also has the knowledge and those skills independent from other colleagues and supervisors and can add these to what constitutes the daily work of medical practice. This includes the nature and qualities unique to patients in response to their various needs and demands. If a practice was located in a safety-net clinic in a geographic and cultural setting quite different from where the physicians had lived, they would pay particular attention to the social dynamics that influenced their work. This attention helps lead physicians to acknowledge themselves as capable practitioners.

The next stage is responsibility, defined as the acceptance of the physician’s presence in other people’s lives as their personal physician, as a guide and coach, as a member of a team of caregivers, and as both a teacher and learner in the shared process of working to lessen the burden of disease and illness. This includes being responsible with one’s own patients, their companions, and their families, as well as with the physician’s day-to-day coworkers, such as members of the clinic administration, nurses, medical assistants, ancillary staff members, and front-desk receptionists.

Also included is being responsible with emergency department staff members, subspecialty consultants, and hospital personnel, all of whom at one time or another had important roles in the diagnosis and treatment of patients. In addition, the physician is responsible for doing his or her work, in all its dimensions, tending to and accompanying patients as best as possible on their illness journeys.

The fourth step is capacity. Do physicians have the capacity to look beyond all the challenges and complexities that are inherent in today’s medical environment and find creative ways to thrive in their work as physicians? This includes the knack to move beyond their own borders of professional comfort and expand their repertoire of responses in the face of the difficult life circumstances that patients present, as well as engage in the technologic innovations of modern-day practice in the context of the practice, such as desktop medicine, examination room computers, and system-based measures of quality? Finally, in spite of unforeseen professional setbacks and unavoidable course corrections, can physicians muddle along or even flourish in the face of change?

In the final stage, called citizenship, are physicians able to contribute to the communities in which they live and work and return, in kind, a small part of the richness of human experience they have been privileged to witness and participate in as physicians?

(Ventres W. Becoming a doctor: one physician’s journey beyond competence. Journal of Graduate Medical Education; 2014 Dec; 6(4): 631–633.)