

FEATURED ARTICLE

The Shortage of Doctors Is Worse Than You Think

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There's already a shortage of physicians in the U.S., and experts predict that we could need as many as 150,000 additional physicians by 2025. The shortage is the result of actions taken by the government, the public, and doctors themselves, and it won't be easy to remedy.



Back in the 1990s, when managed care first appeared, people thought it would make the delivery of health care so efficient that America wouldn't need as many physicians. Medical schools stopped making plans to increase enrollment. Teaching hospitals stopped expanding residency programs because the government put a cap on the number of residency positions that would be supported by Medicare funds as part of the Balanced Budget Act in 1997.

Because of these decisions, there has been very little increase in the supply of physicians in the past 15 years — not enough to keep up with the growth of the population, and barely enough to keep pace with retirements. The 1990s vision of a decreased need for doctors didn't turn out as planned. New drugs, treatments, and surgical techniques appear constantly, and the demand for physicians escalates as a result. In today's economy, there is little money in state budgets to expand medical schools, and scant support at the federal level for spending more Medicare dollars on residency training.

The American population is aging fast, and older people need more medical care than younger ones do. The baby boomers — the 77 million Americans born between 1946 and 1964 — are reaching the age of 65 at the rate of 10,000 a day. The group consisting of those age 80 and over is growing faster than any other segment of the population. This means that the shortfall between the supply of doctors and the demand for medical care is growing at an alarming rate.

The Shortage of Specialists

It's already well known that there is a shortage of primary care physicians. What's less well appreciated is that a shortage of specialists is also on the horizon.

By 2020 the U.S. will experience a shortage of over 90,000 physicians, and by 2025 the shortage will worsen to at least 130,000, according to projections by the Center for Workforce Studies of the Association of American Medical Colleges. Fully half of the shortages will be in *non-primary care* specialties. It makes sense. Older Americans will always rely on their primary care doctors to act as their advocates and manage their overall health care. But they also need surgeons to take out their colon cancers, breast cancers, and lung cancers, and medical oncologists to manage non-operable malignancies. They need cardiac and vascular surgeons to open up their blocked arteries. They need orthopedic surgeons to replace their aging joints, and cardiologists to treat their faltering heart rhythms.

Projected Supply and Demand, Full-time Equivalent Physicians Active in Patient Care, 2008-2025

Year	Supply – All Specialties	Demand – All Specialties	Shortage – All Specialties	Shortage – Primary Care	Shortage – Non-Primary Care
2008	699,100	706,500	7,400	7,400	0
2010	709,700	723,400	13,700	9,000	4,700
2015	735,600	798,500	62,900	29,800	33,100
2020	759,800	851,300	91,500	45,400	46,100
2025	785,400	916,000	130,600	65,800	64,800

Center for Workforce Studies, Association of American Medical Colleges

The need for specialist physicians is running head-on into both major demographic changes in American medicine and attitudinal changes among the students who are entering medical school.

As recently as the 1980s, the most competitive and sought-after residency positions were in surgery and internal medicine. Anesthesiology wasn't considered particularly desirable. Because there was a worrisome shortage of anesthesiologists, medical students at the top of the class were actively recruited for anesthesia residency positions, even at top-tier teaching hospitals. Today, however, residency positions in surgery and internal medicine go unfilled, and the most competitive residency positions are in radiology and dermatology — fields known for high pay and few emergencies. Surgical residencies are considered too long and demanding, and internal medicine no longer pays well in comparison.

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The advent of women going into medicine in large numbers is another factor in the shortage of specialists. Today, 47 percent of the students starting medical school are female, which is double the number from 20 years ago. Their choices of residency positions are skewed toward a handful of fields. Today, 80 percent of residents in obstetrics and gynecology are women, along with 65 percent in pediatrics, 63 percent in dermatology, 59 percent in allergy and immunology, 54 percent in family medicine, and 52 percent in pathology. Of those, the only critical shortage is in family medicine. There is an ample supply of general pediatricians — not surprising since birth rates in the U.S. have been flat since the 1970s — but not nearly enough fellowship-trained pediatric specialists in fields like pediatric pulmonology or endocrinology.

General surgery is one of the hardest-hit fields, with an anticipated shortfall of 21,400 surgeons in 2020. The actual number of general surgeons in practice is expected to fall to 30,800 by 2020 from 39,100 in 2000. A lack of general surgeons is forcing closure of many smaller hospitals in rural areas, because an emergency room must have a general surgeon on call. Many surgical subspecialties including cardiothoracic surgery, neurosurgery, orthopedics, and urology face serious shortages as well. Only 33 percent of general surgery residents are female, with even smaller percentages in the surgical subspecialties: 23 percent in urology, 17 percent in cardiothoracic surgery, 14 percent in neurosurgery, and 12 percent in orthopedics.

The Decrease in Physician FTEs

Keep in mind that projections for the shortage of doctors are based on full-time-equivalent (FTE) numbers. Today, however, more and more physicians are working less after residency than those physicians of a generation ago. Mean hours worked per week decreased by 7.2 percent, from 55 to 51 hours per week, between 1996 and 2008, according to the *Journal of the American Medical Association*, with fewer hours worked by physicians under 45 compared with those over 45. Though this may seem like a small change, it amounts to an effective loss of more than 36,000 physicians from the workforce.

The trend toward working part-time, which was almost unheard-of among physicians a generation ago, is increasing rapidly. The number of women physicians who reported working part-time increased to 44 percent this year, according to a survey of large group practices reported by the American Medical Group Association, compared to 22 percent for men. However, the male physicians who reported working part-time were overwhelmingly near the end of their careers, and decided to cut back rather than retiring altogether as they might have done if the recent recession had not decimated their retirement funds. In contrast, the majority of the female physicians who work part-time

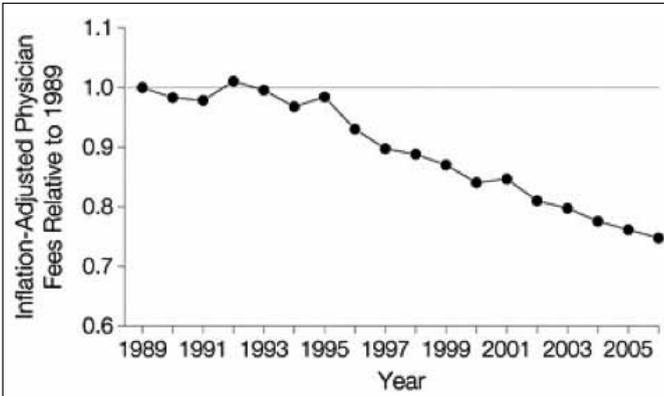
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are early in their careers, facing the demands of childbirth and young children. Younger male physicians, particularly once they marry, tend to work full-time due to economic necessity.

Today, nearly 40 percent of physicians are age 55 and older. Their work habits were established at a time when all physicians expected to work long hours. Although women physicians who are now 55 and older work several hours a week less than men, both male and female physicians continue to average more than 40 hours of work per week up to the age of 70. Women physicians between the ages of 65 and 69 actually work on average slightly more than men. It seems unlikely that the young physicians of today, male or female, will work at a comparable pace throughout their careers, worsening the shortfall of physicians in terms of FTEs.

The Decline in Physician Satisfaction With Work

For the first time, the level of dissatisfaction among American physicians is causing many to want to work less or leave the profession altogether. The continuing decline in payments from insurance plans and Medicare causes frustration and a feeling that physicians' work is devalued. Adjusted for inflation, physician fees have declined a full 25 percent since 1989, and no evidence suggests that this trend will improve.



Journal of the American Medical Association

Burdensome regulations, ever-increasing documentation requirements, and unaffordable overhead costs are adding to the pressures that physicians feel. Many are looking for a way out of clinical medicine, obtaining MBA degrees in order to work for corporations or ascend in hospital administration. Others launch writing careers or become entrepreneurs. Websites such as www.nonclinicaljobs.com and www.womenleavingmedicine.com attest to the profound unhappiness of many physicians with the current state of medicine.

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Unrealistic expectations on the part of the American public often place physicians in an impossible position. Doctors are urged to order fewer tests, yet have no protection from malpractice accusations in the event of a delayed diagnosis. Families frequently demand that physicians pursue extraordinary measures to prolong the existence of patients who have no hope of returning to comfortable life outside the hospital, and become hostile if doctors suggest any reduction in aggressive treatment. Then physicians bear the blame for the soaring costs of health care.

Though part-time work seems attractive, especially when children are young, it's fair to question whether it will increase physician satisfaction in the long term. It holds obvious advantages for employers, who aren't required to provide benefits for employees who work less than 30 hours per week. Kaiser Permanente, for example, provides a half day a week of paid educational time for physicians who work full-time, but none for part-time physicians. As in many fields, part-time practitioners are less likely to rise to positions of leadership. They are less likely to develop clinical expertise that will bring them challenging cases and interesting consults. Finally, part-time physicians are more likely to be financially dependent on a higher-earning spouse, putting them in a vulnerable position (that early feminists warned against) in the event that the relationship ends.

Another pressing concern for today's physicians is the fact that the current administration is widely perceived as a threat rather than an ally. Section 2706 of the Patient Protection and Affordable Care Act prohibits discrimination by insurance companies against health care providers as long as they are acting within the scope of their licenses. It sounds innocuous. But this "non-discrimination" clause opens the door for non-physicians to open clinics without physician oversight and bill insurers directly.

The Obama administration has made it clear that it completely supports independent practice by advanced practice nurses as a way of extending health care, meaning that the actions of these nurses — including diagnosis and drug prescription — would be completely ungoverned by physician supervision. However, there is no public acknowledgement of the differences in training between advanced practice nurses and physicians. Today, it's possible for a registered nurse to sit for the examination as a family nurse practitioner after completing only online coursework and 600 hours, or less than four months, of clinical training. The recent appointment for the first time of a nurse rather than a physician as the new acting head of the Centers for Medicare and Medicaid Services (CMS) solidified the view of many physicians that the administration has little respect for their educational achievements or concern for their interests.

Steps for the Future

American medicine gained its worldwide eminence because it encouraged innovation and rewarded excellence. There is evidence that the decline in physician pay is actually leading physicians to work less because there is little personal or financial reward for working more. Supporting fair pay for physicians would help to retain them in the profession of medicine, and motivate the brightest of the next generation's students to become physicians.

Rather than delegating the practice of medicine to mid-level practitioners, the U.S. should reaffirm its support for medical education by supporting the expansion of medical schools and of residency programs. If we fail to do that, we will undermine the standards of care that have made American medicine excel for the past hundred years. We will also encourage the immigration of thousands of doctors from Third World countries that can ill afford to lose them. As *The New York Times Magazine* documented in its March 11, 2012, story, "America Is Stealing the World's Doctors," once foreign doctors become established in the U.S., few of them return home.

How can we encourage young physicians to stay fully engaged in the practice of medicine? Physician mentors may have gone too far in the interests of political correctness by encouraging "work-life balance" rather than emphasizing responsibility to our patients and the personal gratification that results from being first-rate at what we do. We should encourage college students, both women and men, to think clearly about the commitment that is involved in being a physician before they ever begin medical school. Given the amount of tax funding that is involved in the medical school education and residency training of every physician, the American public has a right to expect medical care in return.

Combining parenthood and the practice of medicine will never be easy. But we could help young physicians by providing excellent child care facilities and preschools on hospital campuses. It would definitely be more humane if operating rooms started at an hour that would permit physicians to have breakfast with their families, and drop children off at school.

We can also point out that it isn't necessary to keep the same position for an entire career. Different jobs may be better suited to different stages in life. A position in an HMO or a large academic department, with well-defined hours and limited call, may be a good option for the years when children are small. On the other hand, a position with more night call and more days off may also be a good choice. A less flexible but more lucrative private practice position may be better suited for later years. No single solution is best for everyone.

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But with care and planning it shouldn't be necessary to back away from a solid commitment to the profession of medicine, which deserves our dedication and loyalty.

The fixes that are needed to maintain the supply of physicians won't be simple or quick. It will require great determination on our part to alter the political forces and the pay cuts that are causing physician discontent and driving many out of clinical medicine. But this much is clear — if the trajectory of physician supply and demand stays on its current course, we can only wonder who will be around to take care of us 20 or 30 years in the future.

References

1. Accreditation Council for Graduate Medical Education, *Data Resource Book*, Academic Year 2010–2011.
2. Dill MJ, Salsberg ES. The complexity of physician supply and demand: Projections through 2025. Center for Workforce Studies, Association of American Medical Colleges, November 2008.
3. Staiger DO, Auerback DI, Buerhaus PI. Trends in the work hours of physicians in the United States. *JAMA*; 2010;303(8):747-753.
4. Harris S. Physician shortage spreads across specialty lines. Association of American Medical Colleges Reporter, online publication; https://www.aamc.org/newsroom/reporter/oct10/152090/physician_shortage_spreads_across_specialty_lines.html.
5. Rosen D. "Raising Doctors to Treat Children." *The New York Times*, July 22, 2010; <http://www.nytimes.com/2010/07/23/opinion/23rosen.html>.
6. Elliott, VS. Demographics driving more flexible schedules. *American Medical News*; Vol 55 No. 7, April 9, 2012, p. 1.
7. McAllester M. "America Is Stealing the World's Doctors." *The New York Times Magazine*, March 11, 2012. <http://www.nytimes.com/2012/03/11/magazine/america-is-stealing-foreign-doctors.html>.

