Warnings about the impending physician shortage are becoming more dire as COVID-19 induces the nation’s aging physician workforce to contemplate early retirement or at least significantly reducing its workload.

“Many authorities agree that by 2025 the U.S. will face a shortage of physicians,” a top AMA executive told a federal health panel.

“New and existing medical schools have taken the first step in addressing the shortage by expanding the overall number of medical students enrolled in their respective institutions,” the AMA’s expert added. “The next step is to assure a sufficient number of residency training programs. Unfortunately, Medicare’s current cap on financial support for GME [graduate medical education] prevents teaching hospitals from expanding the number of training positions and often prevents new hospitals from establishing teaching programs.”

While still sadly relevant today, those words—which reflect longtime AMA policy—were spoken by Susan E. Skochelak, MD, MPH, the AMA’s former chief academic officer and group vice president of medical education, when she testified at a 2012 hearing convened by the Institute of Medicine Committee on the Governance and Financing of GME.

Congress is only now beginning to slowly act on the pleas for more federal GME support that Dr. Skochelak made almost a decade ago, and that the AMA and many others in organized medicine have supported for decades.

The AMA, as part of the GME Advocacy Coalition, supports the bipartisan Resident Physician Shortage Reduction Act of 2021 (S. 834/H.R. 2256) that would gradually provide 14,000 new Medicare-supported GME positions. The AMA’s SaveGME.org website explains in greater detail how funding for GME helps ensure resident physicians learn to provide the care that’s needed when it is
Funding for 1,000 new Medicare-supported GME slots was included in the $2.3 trillion Consolidated Appropriations Act of 2021. The legislation calls for up to 200 positions being added annually with the stipulation that no hospital can receive more than 25 new full-time equivalent residency positions in total.

Growth in the number of residency training slots has stagnated since passage of the Balanced Budget Act of 1997, which essentially capped the positions at existing programs. Still, there has been some growth.

There were 149,200 active medical residents and fellows in training during the 2020–2021 academic year, which was 2.9% more than the previous year, according to the Accreditation Council for Graduate Medical Education.

Similarly, there were a record-high 38,106 GME positions offered during the 2021 Main Residency Match, which was 2.3% higher than the record set in 2020. In addition, there were a record high 35,194 first-year positions open, which broke the previous record by 2.7%.

Learn more about the 1,000 new GME slots that are coming, and why Centers for Medicare & Medicaid Services must not hamper their use.

**Doctor shortage worsened by COVID-19**

But, given the severity of the projected shortages, this incremental growth is not nearly enough.

The nation faces a projected shortage of between 37,800 and 124,000 physicians within 12 years, according to *The Complexities of Physician Supply and Demand: Projections From 2019 to 2034* (PDF), a report released by the Association of American Medical Colleges (AAMC).

“A growing and aging population and an aging physician workforce—those are your major driving factors,” said Michael Dill, the AAMC’s director of workforce studies.

“What’s most striking about the projections year to year is how consistent they’ve been. The numbers have changed, but the general order of magnitude of the projected shortage has not,” Dill added. “That's the big take home looking at the projections year to year—the slight changes may bump them up or down, but the major underlying demographic forces driving the shortage have not changed year to year.”
What has changed this landscape, of course, is the COVID-19 pandemic.

“The main thing we’ve learned so far with respect specifically to the physician workforce is that COVID-19 has exacerbated all the problems that we already knew we had and, clearly, the shortage is one of them,” Dill said.

It is still unclear how many physicians suffered COVID-19 related severe illness and death. But more physicians will undoubtedly be required to address the lasting effects of long COVID and the negative impact of patients delaying or skipping care for chronic conditions during the pandemic, Dill said.

“We also knew we had a huge burnout problem before COVID-19, and I can guarantee you that the pandemic hasn't made that any better,” Dill said. “If you are already burnt out and then you had to make it through a pandemic, you’re going to be even more burnt out.”

The AAMC hopes to learn more this year after it conducts its second survey of a national sample of doctors. The first was conducted in 2019 and included responses from 6,000 practicing physicians.

This year’s survey will collect detailed data on physician work hours and patterns, retirement plans, use of telehealth, debt, burnout, and wellness “and a whole series of questions on how COVID is affecting these factors,” Dill said.

Another recent survey found that about 20% of physicians said they were likely to leave their current practice within two years, while one-third planned to reduce their work hours within the next 12 months.

AMA researchers and their colleagues found that burnout, workload, fear of infection, anxiety or depression due to COVID-19 and the number of years in practice were associated with intent to reduce work hours or leave, says the article “COVID-Related Stress and Work Intentions in a Sample of U.S. Health Care Workers,” published in Mayo Clinic Proceedings: Innovation, Quality & Outcomes. The AMA provided grant support for the study.

“While we anticipated that the stress of the pandemic would impact the people providing care, the extent of stress and the percentage of workers considering leaving is worrisome,” said the study’s lead author Christine A. Sinsky, MD, the AMA’s vice president of professional satisfaction.

“Our study demonstrates that the U.S. health care workforce is in peril,” Dr. Sinsky added. “If even one-third to one-half of nurses and physicians carry out their expressed intentions to cut back or leave, we won’t have enough staff to meet the needs of patients.”

Learn more about “medicine’s great resignation.”
Older patients require more care

Dr. Sinsky’s concern was echoed by AMA president Gerald E. Harmon, MD, in a recent AMA Leadership Viewpoints column.

If even just a portion of doctors follow through with their plans, “the impact on U.S. health care would be significant given ordinary circumstances—and it would potentially be devastating amid a new or resurgent public health emergency,” wrote Dr. Harmon, a South Carolina family physician.

Dr. Harmon also noted that more than 20% of active physicians will be 65 or older within the next decade and there aren’t enough younger physicians coming in to replace them. Compounding this shortage is the expected increase in the U.S. population and the growing percentage of Americans who will be 65 or older.

“Experience tells us that older adult patients demand sharply higher levels of care due to greater incidence of chronic disease, which will likely place much greater demand for physician services on a smaller pool of available physicians,” Dr. Harmon wrote. “In other words, the looming physician shortage is not just a crisis for tomorrow; it demands our attention today.”

Read Dr. Harmon’s AMA Leadership Viewpoints column, “Why we must act now to ensure an adequate physician workforce.”

Wave of retirements anticipated

In its biennial physician census, the Federation of State Medical Boards (FSMB) reported that the median age of today’s doctor is 51.7, or one year older than it was in 2010. More worryingly, the number of licensed physicians 60 and older climbed by 48% between 2010 and 2020, while the number of physicians under 50 grew only 16%.

Meanwhile, the number of licensed doctors 70 or older grew to 120,510, or 11.8% of the U.S. physician workforce. That’s up from 8.9% in 2010, according to the FSMB.

Men made up 63.1% of the 2020 physician workforce, compared with 68.6% in 2010. The percentage is expected to drop further as those 60 or older make up 38% of the male physician workforce, compared with just 18% of female physicians.

The FSMB cites a 2017 survey that found the average age that physicians intend to retire is 68, but it added that the average age is expected to drop.
“The most common reasons associated with working beyond age 65 have been enjoyment of the practice of medicine, social aspects of work and a desire to maintain their existing lifestyle,” the FSMB census says. “More recent data suggests, however, that physicians in late adulthood have experienced distinct hardships during the pandemic.”

Regarding a potential pandemic-driven wave of physician retirement, the AAMC’s Dill said that is a short-term concern as demographic data highlighting the aging physician workforce is well known and that the retirements had been anticipated in the long term. What was not necessarily anticipated, pre-pandemic, was a high number of early retirements.

“Just as we're trying to recover from the pandemic is not when you want a large cadre of physicians retiring,” he said. “But they’re both happening at the same time: the population and the physician workforce are both aging, and we are not training enough new physicians to make up for that—especially in the context of an aging and growing population.”

Learn more about burnout among women physicians in this “AMA Moving Medicine” interview with Vineet Arora, MD.

**More access requires more doctors**

The AAMC bases its starting number for the physician supply on an analysis of the 2019 AMA Physician Masterfile. Its updated demand projections reflect new data from medical expenditure surveys, risk-factor surveillance and U.S. Census Bureau population estimates.

Here is a breakdown of the U.S. physician population, according to July 2021 totals from the AMA Physician Masterfile:

- 818,426: Involved in direct patient care.
- 144,745: In resident training.
- 42,691: In administrative, research or teaching in non-patient care roles.

Specific AAMC projections include projected shortages of:

- Between 17,800 and 48,000 primary care physicians by 2034.
- Between 21,000 and 77,100 non-primary care physicians.

This includes shortages of:
The AAMC reports that physician shortages hamper efforts to remove barriers to care. If underserved populations had health care-use patterns similar to populations with fewer access barriers, the U.S. would be short between 102,400 and 180,400 physicians.

One scenario noted in the report involves shifts in the demand for physicians of certain specialties affected by evolving care delivery systems. As an example, the AAMC projects a lower demand for endocrinologists and higher demand for geriatricians—but it doesn’t attach any specific numbers to that particular shift.

Various projections take into account better access to preventive services, expanded use of telehealth and improvements in health care delivery that lower the need for hospitalizations and emergency care. Other projections adjust for wider use of physician assistants and advanced practice registered nurses in physician-led, team-based care models.

Some argue that one way to ease the physician shortage is to broaden the scope of practice for nonphysician health professionals—even though they undergo only a fraction of the medical education and training doctors receive. The AMA disagrees and believes patients deserve care led by physicians—the most highly educated, trained and skilled health care professionals. Through research, advocacy and education, the AMA defends the practice of medicine against scope-of-practice expansions that threaten patient safety.

“Advances in medicine, medical equipment and information technology continue to expand and improve prevention and treatment options, allow for faster and more accurate clinical diagnosis, and provide patients and clinicians with more data to inform their decisions,” the AAMC report says. “The effect of these advances on physician supply and demand is complex and unclear.”

Dill explained that a healthier population won’t dramatically lower the need for more physicians.

“Healthy people live longer and so, in the long run, they’re going to still need care and perhaps even more care because they will live longer,” he said. “If you do the right things in terms of meeting the health care needs of the population, you’re actually going to need to provide more health care later on—and we should absolutely do all those things to improve population health. But we need to be prepared for the consequences of that.”

The AMA Health Workforce Mapper is a free, customizable, interactive tool that illustrates the geographic distribution of the health care workforce. It gives you the data needed to help ensure our country’s patients have access to quality health care. Whether looking at state, county or metropolitan
area data, users can filter physicians and nonphysician health professionals by specialty and employment setting.

The key to any solution is recognizing the investment in time that is required.

“That's one of the points we've been trying to get across,” Dill said. “Even if we do all the things we need to do now, the big thing is that training more physicians is going to take a decade.”