You are likely familiar with the staggering physician shortage projections made by the experts at the Association of American Medical Colleges (AAMC). The nation will come up short on physicians within just a dozen years, by somewhere between 37,800 and 124,000 doctors.

While the AAMC research takes into account a wide array of factors such as the aging physician workforce and an older and sicker U.S. patient population, there’s a smaller figure that is, in its own way, even more alarming: 3,272.

By one calculation, that is the number of U.S. physicians in direct care who left the workforce between the start of 2019 and the fall of 2021, even before the Omicron wave slammed intensive care units and left too many doctors feeling desperate amid a “pandemic of mistrust.”

New research offers clues to the COVID-19 pandemic’s impact on the impending doctor shortage, and the picture it reveals is harrowing.

“Employment turnover among nearly all segments of the health care workforce has not yet fully recovered from the COVID-19 pandemic, with turnover rates among long-term care workers and physicians worsening over time,” according to the study published in *JAMA Health Forum*.

The study, for which researchers tracked exits from the health care workforce, notes that “physicians were the only occupational group to see continuous turnover increases over time.”

The researchers collected data from January 2019 to October 2021 from a nationwide household survey—the Current Population Survey (CPS)—that includes responses from almost 126,000 people working in health care.

An estimated 1.5 million health care workers lost employment in April 2020 as clinics temporarily closed and hospitals postponed surgeries and other procedures in an effort to limit the spread of the
SARS-CoV-2 virus, the study says.

Most of these jobs returned by the fall of 2020, but health care employment still lagged 2.7% behind pre-pandemic levels as of November 2021. Researchers estimated that 1.3% of physicians were either unemployed or left the labor force between January 2019 and March 2020. That grew to 1.6% by December 2020, then rose again to 1.7% by October 2021.

According to the AMA Masterfile, there are 818,000 physicians involved in direct patient care in the U.S. Performing a rough calculation—separate from the JAMA Health Forum study’s formal findings—the rise in doctor exits would translate to the nation losing an estimated 3,272 direct-care physicians between January 2019 and October 2021.

Unemployment among physicians fell but labor force exits rose during the January–October 2021 period, according to Bianca K. Frogner, PhD, co-author of the JAMA Health Forum study.

“This may point to early retirements but could also be due to people going back to school or those that are taking a break from work,” said Frogner, director of the University of Washington School of Medicine’s Center for Health Workforce Studies.

“While physicians may have the means to step away from the labor force—more than other, lower-paid health care workers—the years of investment in medical education makes walking away from their job a difficult decision,” she added. “There may also be a cohort of physicians, particularly women including women of color, who may have needed to step out of the workforce due to continued instability in child care.”

Frogner cited a previous JAMA Network Open study, published last June, that suggested this might be happening.


“The COVID-19 pandemic has been associated with loss of revenue, reduced work hours and reduced earnings for physicians in the United States,” the AAMC researchers wrote. “The percentage of doctors working full-time has fallen to 80.7% during the pandemic, from 84.2% before COVID-19. The percentage of parents of preschool-aged children among full-time, female physicians dropped to 14.1%, from 18%, but “did not significantly change among male physicians,” the AAMC researchers found.

“The decline in the percentage of parents with preschool-aged children among only female physicians may suggest a disproportionate uptake of child-care responsibilities among female physicians,” the
Searching for respite

Physician leaders and health care organizations are all too familiar with the AAMC physician shortage projections, as reported in *The Complexities of Physician Supply and Demand: Projections From 2019 to 2034* (PDF).

But they also are seeing and feeling today’s shortage impact. Health systems have come to realize that physicians need time to rest and recharge, but staffing shortages often get in the way of allowing this to happen, said Kirk J. Brower, MD.

Physicians “don’t take vacations because they can’t find coverage or it’s too hard to find coverage,” said Dr. Brower, chief wellness officer and professor of psychiatry at the University of Michigan Medical School, land faculty director of the new Michigan Medicine Wellness Office.

“Staffing shortages are a major issue for us—as with most other health care organizations—and staffing is an essential resource and burnout results when the demands of work exceed the resources to do the work.”

Even when physicians can take a break, patients often occupy their thoughts.

“Many people in psychiatry—as well as the rest of medicine—feel exhausted, and they have difficulty disconnecting from the work during their free time,” Dr. Brower said.

Shift in public attitude

Early in the pandemic, before vaccines were available, health workers were cheered as heroes. Then, medical misinformation began to flourish, public health mitigation measures such as mask-wearing became politicized and health workers were subjected to abuse and harassment.

“The cheers have gone away,” Frogner said.

Those days were recalled in a recent *Washington Post* op-ed column written by AMA member Megan L. Ranney, MD, MPH, an emergency physician and dean of the Brown University School of Public Health.
“Have Americans really forgotten the early days of the pandemic, when we rallied to ‘flatten the curve’ to preserve public health care for the sick?” Dr. Ranney wrote. “What happened to that spirit?”

But, even after the latest Omicron variant-related surge subsided, the tension remains.

“Our enjoyment of this lull in severe cases is undermined by concern over what’s around the corner,” Dr. Ranney said in an interview with the AMA.

“This is a strange moment: On the one hand, health care workers are relieved to see cases at all-time lows in many parts of the country,” Dr. Ranney said. “On the other hand, we’re watching with a sense of trepidation, because we have been through so many cycles in which the virus has come roaring back that another surge feels almost inevitable.

“And we have not yet seen adequate investment in the resources we will need—whether staff, supplies or public confidence—to manage another surge, particularly given that the congressional vote on funding for COVID relief is delayed,” she added.

A vivid example of how COVID-19 makes health care’s problems worse is that staffing shortages are exacerbated when those on the front line of patient care become patients themselves.

“I can’t begin to count the number of friends and colleagues who have had COVID,” Dr. Ranney said. “Most have returned to work, but a substantial minority have not—either because of pandemic stressors or persistent symptoms of disease. After infection, so many of us—nurses, techs, housekeeping, all of us—don’t have the stamina that our jobs demand.”

The problem could get much worse fast.

One in five physicians say it is likely they will leave their current practice within two years. Also, about one in three doctors and other health professionals say they intend to reduce work hours in the next 12 months, according to survey research that was supported by an AMA grant.

Basing their findings on more than 20,000 respondents at 124 institutions across the country, researchers 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 published in Mayo Clinic Proceedings: Innovation, Quality & Outcomes, “COVID-Related Stress and Work Intentions in a Sample of U.S. Health Care Workers.”

Learn more about medicine’s great resignation.


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How COVID-19 led to occupational distress

“A mass exodus” is not anticipated, but there are many anecdotal reports of physicians leaving clinical practice. And survey data shows that about 24% of physicians are moderately or more likely to leave their practice in the next two years, said the study’s lead author, Christine A. Sinsky, MD, the AMA’s vice president of professional satisfaction.

“We do not know precisely how many physicians will act on that intention to leave,” she said. “Previous studies have shown that approximately one-third of physicians who express such likelihood of leaving in two years will carry out that intention.”

While “occupational distress” has been a serious problem during the pandemic, Dr. Sinsky added that burnout was a factor in physicians reducing their hours or leaving practice long before the pandemic’s onset.

Wide-spanning change in the health care delivery system needs to emphasize physician well-being as essential to achieving national health goals. The AMA’s ongoing work to reduce physician burnout is striving to attack the dysfunction in health care by removing the obstacles and burdens that interfere with patient care.

The AMA offers physicians and health systems a choice of cutting-edge tools, information and resources to help rekindle a joy in medicine, including:

- AMA STEPS Forward®, a collection of more than 70 award-winning online toolkits that help physicians and medical teams make transformative changes to their practices and covers everything from managing stress and preventing burnout to improving practice workflow.
- The Joy in Medicine™ Health System Recognition Program, now in its third year, which recognizes health systems with a demonstrated commitment to reducing work-related burnout among care teams.
- Institutional assessments; the AMA assesses burnout levels within medical organizations to provide a baseline metric for implementing solutions and interventions that reduce system-level burnout rates and improve physician well-being.

The AMA continues to work on every front to address the physician burnout crisis. Through its research, collaborations, advocacy and leadership, the AMA is working to make the patient-physician relationship more valued than paperwork, preventive care the focus of the future, technology an asset and not a burden, and physician burnout a thing of the past.

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Exploring every angle

To ward off a physician shortage, the AMA has long advocated expanding graduate medical education (GME) and adding significant numbers of residency training positions. As part of the GME Advocacy Coalition, the AMA supports the bipartisan Resident Physician Shortage Reduction Act of 2021 (S. 834/H.R. 2256). That legislation would gradually provide 14,000 new Medicare-supported GME positions.

Efforts to mitigate the projected physician shortage must look at the problem from all angles, said Dr. Sinsky.

“While establishing new medical schools and increasing the training pipeline for physicians is one important approach to addressing the projected shortage of physicians, reducing the premature loss of physicians from the field is another—equally important—approach,” she said.

One health care organization is doing both. Northwest Permanente, a member of the AMA Health System Program, is aggressively working to reduce physician burnout, while promoting GME.

T. Ruth Chang, MD

“While it’s imperative that we continue to work on reducing burnout and returning joy to medicine as a means to extend careers, retaining the workforce we have is not enough to alleviate the projected shortage,” said T. Ruth Chang, MD, MPH, chief people officer and vice president at Northwest Permanente.

“We strategically invest in our graduate and undergraduate medical education,” Dr. Chang said, adding that this investment serves a dual purpose.
“Teaching brings joy and purpose to the preceptors, and the learners are our future colleagues,” she explained, noting that about one in four of Northwest Permanente clinicians have trained within the organization at some point in their education.

“Investing in the next generation of physicians and health care professionals is our most effective way of addressing the projected shortage,” said Dr. Chang, a family physician.

Dr. Brower, of the University of Michigan Medical School, believes reducing burnout by increasing “workplace well-being” can be an effective strategy for mitigating the projected physician shortage.

This includes work-home flexibility, having input on decisions that affect how doctors practice and boosting physician connections to organizational leadership.

“We expect our leaders to empower us to do our work, and those are the things that motivate us,” Dr. Brower said. “Those are the things that will make a big difference in alleviating the shortage.”

Read why doctors hit hardest by the pandemic are at higher risk of burnout.

**Recovery and renewal**

In addition to preventing or mitigating burnout, another strategy is to help physicians who have experienced burnout to recover and to renew their sense of purpose and rekindle their joy of medical practice.

Shawn C. Jones, MD

Both Dr. Brower and Shawn C. Jones, MD, a past-president of the Kentucky Medical Association, are open about their own experiences with burnout, how they rebounded and how promoting physician well-being can help mitigate the projected physician shortage.
“It’s definitely part of the answer,” said Dr. Jones, medical director of provider wellness for the Baptist Health Medical Group.

“When I suffered my episode of burnout several years ago, I realized I needed to take some time off and I took six weeks off and took care of myself,” he said. “When I came back, it was really with renewed vigor and energy, and it really made a complete difference—not only in my professional life, but my personal life.”

Feeling burned out is not a static situation where you either burnout out or not, he explained. Physicians tend to walk in and out of burnout, and it’s important to recognize when it’s happening and be able to take steps to mitigate it.

“It is very sad to see someone who retires early because they feel like they no longer have anything to give, and they have that sense of burnout,” Dr. Jones said.

That is why it is imperative for health care organizations, and for the health system as a whole, to invest in preventing and reducing physician burnout. An AMA-led study published in Mayo Clinic Proceedings found that nearly $1 billion in annual excess health care spending is due to the turnover of primary care doctors, with work-related burnout being a significant driver of those costs.

“Physician burnout is preventable and payers, health care organizations and others have a vested interest in making meaningful changes to reduce physician burnout,” said Dr. Sinsky, the study’s lead author.

Dr. Ranney agreed, citing a need to address the underlying causes of burnout that will make the longer-term doctor shortage harder to overcome.

“The question of how to reduce burnout gets at the need for systemic change to our entire health care system—not only to retain physicians, but to recruit new ones,” she said. “To actually reduce burnout, we need to allow physicians and other health professionals to practice based in both evidence and humanism—that is what I mean by systemic change.”