Overworked and Understaffed, More Than 1 in 4 US Nurses Say They Plan to Leave the Profession

Melissa Suran, PhD, MSJ

Many of the 4.5 million registered nurses in the US may be ready to quit. A 2022 national survey of almost 335,000 registered nurses, licensed practical nurses, and licensed vocational nurses published earlier this year by the National Council of State Boards of Nursing (NCSBN) found that more than a quarter planned to leave the profession by 2027. A subanalysis estimated that about 100,000 registered nurses had already left the nursing workforce, possibly due to burnout from the COVID-19 pandemic—mirroring results from an analysis of 2021 data.

Looking ahead, the figures are grimmer: in an April statement, NCSBN projected that the US may lose an additional 800,000 registered nurses within the next 4 years, “threatening the national health care system at large if solutions are not enacted.”

But it’s not yet time to panic, according to Linda Aiken, PhD, RN, MN, a professor of nursing and sociology at the University of Pennsylvania, where she is also the university’s founding director of the Center for Health Outcomes and Policy Research. Intention isn’t action: not all nurses who intend to quit go through with it, Aiken said in an interview with JAMA. “And nurses saying they want to leave their current job doesn’t mean they’re leaving nursing or the health care workforce altogether,” she explained.

As for the estimated 100,000 nurses who have resigned, Aiken said that’s actually not many overall, and their numbers are being replenished. In 2022, US nursing schools graduated more than 188,000 new nurses. And a study that Aiken coauthored found no evidence for large swaths of nurses leaving health care during the pandemic.

According to Aiken, there is no nursing shortage. The real issue plaguing nurses is burnout from understaffing.

Prepandemic Problems

Health care burnout is nothing new, noted Mark Linzer, MD, who directs the Hennepin Healthcare Institute for Professional Worklife, and unmanageable workloads are a key contributor.

Earlier this year, Linzer coauthored a study about the effects of work overload during the pandemic across the health care workforce. Nurses reported the highest burnout rates at 56%, compared with roughly 47% of physicians. Almost 47% of nurses said they were overloaded with work, and 41% intended to leave their job.

“Work overload is really detrimental to everyone,” Linzer, who is also a physician in general internal medicine at Hennepin County Medical Center and a professor of medicine at the University of Minnesota, said in an interview. “Time pressure, having little control over schedules, and being in a chaotic workplace has exacerbated the issue, he added.

Another issue is that many health care institutions require 12-hour shifts, often with rotating schedules, Aiken pointed out. “Working 12 hours, day in and day out, under these circumstances is burning out all of our health professionals,” she said.

And none of these problems originally stemmed from COVID-19.

“The pandemic illuminated cracks in the foundations of our health care system because everything got bad really fast,” Allison Norful, PhD, RN, an assistant professor at the Columbia University School of Nursing, explained in an interview. “Meeting the demands for care increased, and ethical challenges emerged from rationing care.”

In 2021, Aiken and her colleagues surveyed nearly 16,000 nurses and more than 5,000 physicians at 60 US magnet hospitals, which are accredited for excellence in nursing. “Even taking into account that these are some of the best hospitals, the burnout rates among doctors and nurses were very, very high,” Aiken said, noting that 32% of physicians and 47% of nurses reported high burnout. “If there aren’t enough nurses, then everybody suffers.”

Nurse burnout specifically was a factor associated with high turnover of both nurses and physicians. A whopping 87% of nurses but also 45% of physicians listed improving
nurse staffing as the most effective intervention for reducing burnout.

"Nurses are tired of being asked to do so much with little staffing," said Norful, who is also a nurse scientist at NewYork-Presbyterian Hospital. "They're being asked to take care of way too many patients, knowing that their patients aren't getting the face time that they should have in order to improve patient outcomes."

Although legislation has been introduced, hospitals don't yet have federally mandated staffing ratios. And only 4 states have enacted some form of minimum required nurse-to-patient ratios in hospitals, Modern Healthcare reported. Some nursing unions are also embedding staff-patient ratios in their contracts, Aiken said. But hospitals may still try to sidestep the requirements. This past May, Mount Sinai Hospital was fined about $127 000 to be divided among potentially 150 nurses who worked understaffed shifts in its neonatal intensive care unit, according to National Nurses United.

Nevertheless, registered nurses still gravitate to hospitals or community health settings for their first job, according to the US Bureau of Labor Statistics. "Most nurses have this idea that if you work in a hospital, it's very good training for your future," Aiken said. "It's like a leaky bucket: hospitals can attract nurses, but they can't keep them."

Turnover is costing the average hospital between $6.6 million and $10.5 million each year, according to NSI Nursing Solutions, a registered nurse recruitment firm. This is why more efforts need to be placed on nurse retention rather than recruitment, Norful mentioned.

During the pandemic, some hospitals received an influx of nurses from other institutions. Terry Fulmer, PhD, RN, an attending nurse at Mount Sinai Hospital, said she often saw nurses whom she didn't recognize. They had only begun working at the center months earlier. And the majority came from nursing homes, which are notoriously understaffed.

When it comes to registered nurse and certified nursing assistant understaffing, "at hospitals, it's bad, but at nursing homes, it's catastrophic," Jasmine Travers, PhD, MHS, RN, an assistant professor of nursing at New York University's Rory Meyers College of Nursing, said in an interview. A 2022 study coauthored by Aiken found that registered nurses gave significantly lower quality-of-care ratings to nursing homes than to hospitals. They also rated nursing homes as having worse work environments.

That could change with newly proposed minimum nurse staffing standards for nursing homes. In February 2022, US President Joe Biden pledged to establish minimum staffing requirements for Medicare- and Medicaid-certified nursing homes across the nation. Nineteen months later, on September 1, 2023, the Centers for Medicare & Medicaid Services (CMS) proposed the highly anticipated rule: every nursing home must have at least 1 registered nurse on duty at all times, and every resident must receive a minimum of about half an hour of care per day from a registered nurse and nearly 2.5 hours from a nurse aide.

But there was a snag. Just days before the proposed rule was announced, CMS accidentally leaked a commissioned study that found the proposed staffing standards were not high enough to ensure quality care. Shortly after, KFF reported that less than 20% of nursing facilities would meet the new CMS requirements for hours if enacted.

The proposed regulations are being met with mixed reviews. According to Linzer, staffing requirements could vary depending on patients' specific needs. For example, caring for 3 patients who don't require much beyond scheduled antibiotic treatments may not be as labor intensive as caring for 1 patient who is in critical condition or needs intense psychiatric care.

The American Nurses Association (ANA), a professional organization that represents registered nurses, supports the proposed rule. "Embracing setting specific ratios for nurses is a critical component of a much larger solution, [and] the American Nurses Association is pleased to see CMS recognize and prioritize this in the long-awaited proposed rule that would create federal nurse staffing standards in long term care facilities," the ANA wrote in a statement to JAMA.

But while safe staffing requirements may be a step in the right direction, some nurses are seeking more flexible opportunities.

Wanting More Agency

"When you look at the workforce, you don't really find evidence that a lot of nurses are leaving permanently, but you do find a lot of evidence that they're changing jobs," Aiken said.

Although the NCSBN survey found that many registered nurses are dissatisfied with their current positions, it's difficult to gauge where they're going. But there are some clues.

Nurse practitioners are among the fastest-growing occupations in the US, according to the Labor Bureau. As Norful pointed out, that means more registered nurses are pursuing advanced degrees. Becoming a nurse practitioner typically means increased clinical autonomy and more authority over patient care, she said.

But not everyone has the money to head back to school or the time to dedicate to studies.

During the pandemic, many registered nurses joined travel nursing agencies, Travers said. Not only do agencies offer better pay than most hospitals and nursing homes, she added, but they also allow for more flexible schedules.

"You can practice as a nurse at a hospital, resign, become a traveling nurse, and go back to the same hospital and make double the money because you're getting an agency rate instead of a staff rate," Fulmer, the president of The John A. Hartford Foundation, an organization focused on care for older adults, said in an interview.

But the trend is fading. "Now, the travel agencies aren't providing as lucrative financial support as they were before between the bonuses and the pay," Travers emphasized.

Another option that's gaining traction is virtual care. For example, Aiken said, some hospitals employ nurses to monitor patients in the intensive care unit and their vital signs remotely on a screen. Nurses could be "in Kansas, and they're watching monitors in a hospital in California," she explained.

Norful said some hospitals including NewYork-Presbyterian are trialing virtual nursing for admitting and discharging patients: "The patient is set up with a video call with a registered nurse who does all the intake on admission and then extensive education upon discharge."

But virtual nursing also has its challenges, Aiken remarked. "There's a disembodied voice coming into [patients'] rooms and doing what a nurse has always done." Mainly, remote nurses ask patients about symptoms and medication regimens and help with discharge planning when patients are ready to leave. But what if remote nurses see something on a monitor
that requires in-person assistance? They have to call a nurse who's physically there, Aiken said, increasing that nurse's workload and potential burnout.

Remote technologies "create jobs for nurses, but they don't really diminish the need for nurses on the inpatient side," she explained.

**Bumping Up the Numbers**

Nurse understaffing, unsurprisingly, is associated with poor quality of care. Studies have found that it can affect patient outcomes, including increased health care-associated infections and mortality. And "we see people who are less likely to get medication or pain addressed," Travers said.

Moreover, research has shown that racial disparities related to in-hospital cardiac arrests and stroke readmissions are reduced when hospitals have more nurses. A 2022 study coauthored by Travers examined nursing home staffing levels across neighborhoods. It found that facilities in severely disadvantaged communities had 30% fewer registered nurses, fewer staffing hours, and a higher proportion of Black residents.

Fulmer also noted that health disparities are exacerbated in rural areas. "I grew up in upstate New York in a very rural community, and I participate as a board member for a rural health network, and it's very hard to recruit," she said. Part of the problem is that nurses in rural towns reportedly make about $4500 less per year than those in urban regions, according to a 2021 study.

"I know nurses who rent an apartment in Manhattan, and 4 or 5 of them share the apartment, they do several shifts, and then take the money back home," Fulmer said.

One way to boost nurse staffing levels across the board could be through allocated funds to improve staffing outcomes and patterns. A recent study in *JAMA Network Open*, led by Travers, found that a forgivable loan program requiring institutions to use 60% to 75% of their loan to increase the number of nurses resulted in more staffing hours for licensed practical nurses and certified nursing assistants (but not registered nurses).

This past June, the Department of Health and Human Services (HHS) announced it will provide up to $100 000 in loan forgiveness to pediatric specialists if they work for at least 3 years in health professional shortage areas. Travers said the same should be offered to certified nursing assistants, nurses, and other clinicians working in nursing homes in underserved communities.

Implementing burnout reduction programs could be a way to mitigate turnover. "We're always grateful for any investment in nursing, but we need targeted resources to solve real problems—not just resources to grow the workforce, which is already very robust," he said. "And what concerns me so much is that we don't do it."

Linzer and his colleagues have found that workflow interventions go a long way in reducing clinician burnout. He also helped develop the Mini Z (for "zero burnout") survey, which institutions can use to measure clinician burnout and stress.

The federal government is pitching in, too. This past August, HHS announced awards of more than $100 million to train and grow the nursing workforce.

"That's an example of a well-meaning initiative, but it's not targeted enough to solve the shortages of nursing care at the bedside," Aiken said, adding that Medicare should establish a minimum nurse staffing standard as a condition of hospitals participating in the insurance program. "We're always grateful for any investment in nursing, but we need targeted resources to solve real problems—not just resources to grow the workforce, which is already very robust."

**Published Online:** October 4, 2023. doi:10.1001/jama.2023.10055

**Conflict of Interest Disclosures:** Dr Aiken reported receiving research support from the National Institutes of Health (NIH) through multiple grants. Dr Linzer reported being paid through his employer Hennepin Healthcare and receiving research support from the Agency for Healthcare Research and Quality, the American Medical Association, the Institute for Healthcare Improvement, the NIH, the Optum Office for Provider Advancement, and several large health systems. Dr Norful reported receiving grants from Columbia University and the National Institute of Mental Health and being a past consultant for Press Ganey and Associates. Dr Travers reported receiving financial awards from the National Institute on Aging and the Robert Wood Johnson Foundation and serving on the AARP Public Policy Institute Advisory Panel. Dr Fulmer reported being a board member of Bassett Healthcare Network in Cooperstown, New York. No other disclosures were reported.

**Note:** Source references are available through embedded hyperlinks in the article text online.