

3-year study of NPs in the ED: Worse outcomes, higher costs

MAR 10, 2023

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Nurse practitioners (NPs) delivering emergency care without physician supervision or collaboration in the Veterans Health Administration (VHA) increase lengths of stay by 11% and raise 30-day preventable hospitalizations by 20% compared with emergency physicians, says a working paper published by the National Bureau of Economic Research.

That higher preventable hospitalization rate “may reflect two possibilities,” says the working paper, written by David Chan, MD, PhD, associate professor of health policy at Stanford University School of Medicine, and Yiqun Chen, PhD, assistant professor of economics at the University of Illinois at Chicago.

One is that “NPs have poorer decision-making over whom to admit to the hospital, resulting in underadmission of patients who should have been admitted and a net increase in return hospitalizations, despite NPs using longer lengths of stay to evaluate patients’ need for hospital admission.”

The other possibility is that “NPs produce lower quality of care conditional on admitting decisions, despite spending more resources on treating the patient (as measured by costs of the ED care). Both possibilities imply lower skill of NPs relative to physicians.”

Overall, the study shows that NPs increase the cost of ED care by 7%, or about \$66 per patient. Increasing the number of NPs on duty to decrease wait times raised total health care spending by 15%, or \$238 per case—not including the cost of additional NP salaries. In all, assigning 25% of emergency cases to NPs results in net costs of \$74 million annually for the VHA.

“Increasing the number of NPs on duty decreases wait times, but increases resource utilization and adverse outcomes,” says the working paper. The primary contributor these higher costs was “lower productivity”—that is, NPs were likelier to order tests such as X-rays and CT scans and seek formal consults than were emergency physicians.

Patients deserve care led by physicians—the most highly educated, trained and skilled health professionals. That is why the AMA vigorously defends the practice of medicine against scope-of-practice expansions that threaten patient safety as part of the AMA Recovery Plan for America’s Physicians.

What sets this study apart

Unlike other research comparing the performance of physicians and nonphysicians and the impact of scope-of-practice expansions on cost and quality of care, this economic study looks beyond correlation by using a high-quality causal analysis.

And while many other studies attempt to draw comparisons based on NPs or other nonphysicians who are actually practicing in collaborative arrangements with physicians, this study leverages data from a time—2017 to 2020, right before the pandemic—in which NPs within the VHA were truly practicing without physician supervision.

The study found the physician-NP gap on cost and quality grew with patient complexity, with NPs being more likely to admit to the hospital patients with complex or severe conditions. The effect of NPs on lengths of stay and medical costs also rose with the complexity of the patient’s condition.

Physicians complete between 10,000 and 16,000 hours of clinical education and training—four years in medical school and another three to seven years of residency training. By comparison, NPs complete between 500–720 hours of clinical training during two or three years of graduate-level education. Learn more with the AMA about why education matters in scope of practice.

A study by researchers from Johns Hopkins University, the University of New Mexico and other institutions, found that few NPs are certified to deliver emergency care and that NP qualifications to practice in emergency departments vary widely among states.

Visit AMA Advocacy in Action to find out what’s at stake in fighting scope creep and other advocacy priorities the AMA is actively working on.