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Doctor and Nurse Replacement

Medscape recently commented on the case of Natasha Valle from Clarksville, Tennessee (1). Pregnant and scared she went to the local Tennova Healthcare hospital because she was bleeding. She didn't know much about miscarriage, but this seemed like one. In the emergency room, she was examined then sent home. She went back when her cramping became excruciating. Then home again. It ultimately took three trips to the ER on three consecutive days, generating three separate bills, before she saw a doctor who looked at her bloodwork and confirmed her fears. The hospital declined to discuss Valle's care, but 17 months before her three-day ordeal, Tennova had outsourced its emergency rooms to American Physician Partners, a medical staffing company owned by private equity investors. APP employs fewer doctors in its ERs as one of its cost-saving initiatives to increase earnings, according to a confidential company document obtained by Kaiser Health News and National Public Radio (2).

This staffing strategy has permeated hospitals, particularly emergency rooms and intensive care units, that seek to reduce their top expense-physician labor. While diagnosing and treating patients was once their domain, doctors are increasingly being replaced by nurse practitioners and physician assistants, collectively known as midlevel practitioners, who can perform many of the same duties and generate much of the same revenue for less than half of the pay.

However, a working paper, published by the National Bureau of Economic Research, analyzed roughly 1.1 million visits to 44 ERs throughout the Veterans Health Administration, where nurse practitioners can treat patients without oversight from doctors (3). Researchers found that treatment by a nurse practitioner resulted on average in a 7% increase in cost of care and an 11% increase in length of stay, extending patients' time in the ER by minutes for minor visits and hours for longer ones. These gaps widened among patients with more severe diagnoses, the study said, but could be somewhat mitigated by nurse practitioners with more experience.

From the hospitals' perspective, the extra cost, length of stay and increased admissions could add to the bottom line as long as the patient or third-party payer pays the extra costs. However, in many cases the patient is unable to pay and insurers have been looking for cost-cutting in other areas. If third party payers were to refuse to pay for the extra costs or increased litigation resulted from the hospital's staffing decisions, it seems likely these practices would quickly end.

In the intensive care unit (ICU) corporations and government agencies are replacing physicians with nurse practitioners (NPs) or physician assistants (PAs) sometimes collectively referred to as physician extenders (4). While these entities argue that they have been forced to hire physician extenders due to a supposed physician shortage, the truth is

that physicians are being systematically fired and replaced by lesser qualified clinicians on the basis of profit. Although advocates claim that studies show that physician extenders can provide comparable care to physicians, they fail to acknowledge that this research has always been done with supervised NPs. The truth is that there are no studies that show nurse practitioner provide similar safety and efficacy when practicing independently (4). Furthermore, most of the studies that purport to show NP safety have been of retrospective, nonrandomized, and followed patients over very short time frames. These studies were not appropriately designed to show whether NPs, especially practicing independently, can safely and effectively care for critically ill patients. Newer studies have revealed concerning gaps in the quality of care of some nurse practitioners, including increased unnecessary referrals to specialists (5) and increased diagnostic imaging (6).

Strained by the demand for more graduates, training programs for NPs are accepting less qualified applicants and no longer requiring nursing experience to become a nurse practitioner (7). Despite legislation allowing unsupervised nurse practitioners the right to provide medical care to patients, case law has repeatedly demonstrated that NPs are not held to the same legal standard as physicians in malpractice cases (4). Moreover, organizations are not being held responsible when they hire nurse practitioners to work outside of their scope of training (4).

Another concern is the effect of NPs and PAs in the ICU on resident and fellow education. With hours restrictions imposed for trainees the need for meaningful training experiences has never been greater. Studies utilizing NPs have examined patient outcomes which appear comparable to residents and fellows (8). The effect on resident and fellow education remains unknown although the trainees are often satisfied with less work but there may be future costs due to less well-trained physicians (9).
We have already commented on substituting nursing assistants for nurses (10). Not surprisingly, replacing registered nurses with less qualified nursing assistants or licensed practical nurses leads to a lower quality of care with increased mortality (11,12).

The bottom line is that when money is the bottom line, substituting physician extenders for physicians or nursing assistants for nurses makes a great deal of sense in the ER or ICU as long as third-party payers are willing to pay any potentially increased costs and there is a low concern over quality of care and patient outcomes. It is becoming increasingly hard to see a doctor anymore. The effect on resident and fellow education remains unknown although the trainees are satisfied with less work.

One wonders why regulatory organizations such as the Joint Commission, Centers for Medicare and Medicaid, ACGME, etc. have taken no action. Regulators need to address policies that place patients at risk. Physicians should support NPs and PAs as well as nurses when appropriate. However, the use of these physician extenders or nursing assistants to replace physicians or nurses may have untoward consequences. The administrative personnel who perceive financial benefits by eroding physician direction and autonomy need to be held accountable for their actions.

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References

1. Kelman B, Farmer B. Doctors Are Disappearing From Emergency Rooms as Hospitals Look to Cut Costs. February 13, 2023. Available at:

https://www.medscape.com/viewarticle/988196?src=WNL_trdalrt_pos1_230214&uac=9273DT&impID=5165828 (accessed 4/5/23).
2. Lender Presentation-Public Side. American Physician Partners. November 2021. Available at: https://www.documentcloud.org/documents/23605675-american-physician-partners-redact (accessed 4/5/23).
3. Chan DC Jr, Chen Y. The Productivity of Professions: Evidence from the Emergency Department. National Bureau of Economic Research. October 2022. [CrossRef]
4. Bernard R. The effects of nurse practitioners replacing physicians. Physicians Practice. Jan 30, 2020. Available at:
7. NurseJournal Staff. Nurse Practitioner Career Overview. NurseJournal. March 3, 2023. Available at: https://nursejournal.org/nurse-practitioner/ (accessed 4/5/23).
8. Landsperger JS, Semler MW, Wang L, Byrne DW, Wheeler AP. Outcomes of Nurse Practitioner-Delivered Critical Care: A Prospective Cohort Study. Chest. 2016 May;149(5):1146-54. [CrossRef] [PubMed]
9. Kahn SA, Davis SA, Banes CT, Dennis BM, May AK, Gunter OD. Impact of advanced practice providers (nurse practitioners and physician assistants) on surgical residents' critical care experience. J Surg Res. 2015 Nov;199(1):7-12. [CrossRef] [PubMed]
10. Robbins RA. Substitution of assistants for nurses increases mortality, decreases quality. Southwest J Pulm Crit Care. 2016;13(5):252. [CrossRef]
11. Aiken LH, Sloane D, Griffiths P, *et al.* Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. BMJ Qual Saf. 2017 Jul;26(7):559-568. [CrossRef] [PubMed]

https://www.physicianspractice.com/view/effects-nurse-practitioners-replacing-physicians (accessed 4/5/23).
5. Lohr RH, West CP, Beliveau M, Daniels PR, *et al.* Comparison of the quality of patient referrals from physicians, physician assistants, and nurse practitioners. Mayo Clin Proc. 2013 Nov;88(11):1266-71. [CrossRef] [PubMed]
6. Hughes DR, Jiang M, Duszak R Jr. A comparison of diagnostic imaging ordering patterns between advanced practice clinicians and primary care physicians following office-based evaluation and management visits. JAMA Intern Med. 2015 Jan;175(1):101-7. [CrossRef] [PubMed]

12. Kane RL, Shamliyan T, Mueller C, Duval S, Wilt TJ. Nurse staffing and quality of patient care. Evid Rep Technol Assess (Full Rep). 2007 Mar;(151):1-115. [PubMed]