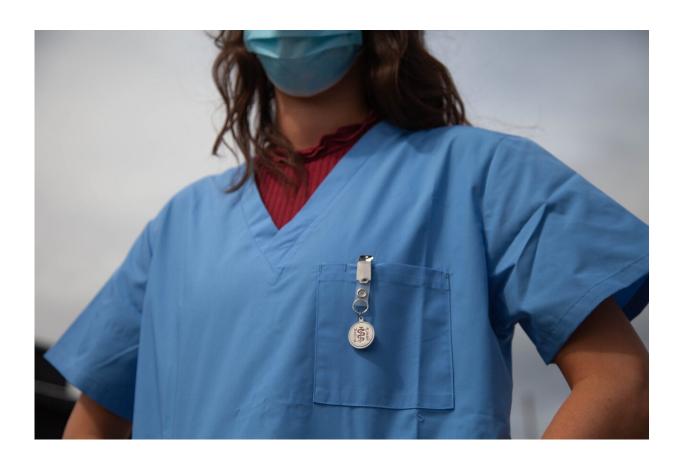# Replacing registered nurses in high stakes hospital care is dangerous to patients, research suggests

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A study published in *Medical Care* shows that substituting registered nurses (RN) with lower-wage staff (e.g. licensed practical nurses,

unlicensed assistive personnel) in hospital care is linked with more deaths, readmissions, longer hospital stays, poorer patient satisfaction, and higher costs of care.

The study, by the Center for Health Outcomes and Policy Research (CHOPR) at the University of Pennsylvania School of Nursing (Penn Nursing), comes at a time when hospitals are struggling to recruit and retain RNs in hospital care because of poor working conditions.

"Nurses in hospitals provide care for the sickest patients. It's high stakes care. The findings show that replacing RNs with non-RN staff is dangerous to patients," said lead-author, Karen Lasater, Ph.D., RN, Associate Professor and the Jessie M. Scott Term Chair in Nursing and Health Policy.

Though hospitals often cite a low supply of RNs as the reason they cannot hire enough, the latest research shows there is no evidence of an RN shortage in the US. Thus, there is no justification for substituting less qualified staff for RNs.

The researchers studied the outcomes of over 6.5 million Medicare patients in 2,676 general acute care hospitals across the U.S. They found that:

- Even a modest substitution in RN care is associated with poorer patient outcomes. A 10-percentage point reduction in the proportion of RNs was associated with 7% higher odds of dying in the hospital; as well as higher odds of readmission, experiencing a longer length of stay, and poorer patient satisfaction.
- Substituting RN care is associated with avoidable patient deaths. Researchers estimated that if every U.S. hospital reduced RN care by 10 percentage points, nearly 11,000 avoidable deaths

among Medicare patients could occur annually.

- Alternative hospital staffing models yield a poor return on investment for hospitals. Hospitals substituting lower-wage staff for RNs will not save money because longer lengths of stay will erase their labor savings.
- Medicare risks spending millions of dollars annually on avoidable, preventable hospital readmissions. The thousands of preventable readmissions associated with a 10-percentage point reduction in RNs translates to $68.5 million in avoidable costs paid by Medicare.

"The public has no way of assessing the adequacy of hospital RN staffing, and in all but two states (California and Oregon) there are no regulations establishing minimum safe RN staffing requirements in hospitals to protect the safety of patients," said senior author Linda Aiken, Ph.D., RN, Professor of Nursing and Founding Director of CHOPR.

"Rather than replacing RNs with less qualified staff, hospital leaders should focus on improving their work environments to retain RNs."

"With roughly half of hospital RNs reporting high levels of burnout, hospitals should focus on fixing the root causes of their burnout—chronic understaffing and poor work environments—not replacing RNs with lesser trained nursing staff that the evidence shows is likely dangerous to patients," said Lasater.

Provided by University of Pennsylvania School of Nursing