



Embargoed until 12:01AM Tuesday, April 20, 2010

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FIRST REVIEW OF CALIFORNIA LAW SETTING MAXIMUM NUMBER OF PATIENTS PER NURSE FOUND LIVES COULD BE SAVED; EIGHTEEN STATES CONSIDERING NURSE STAFFING LEGISLATION

(PHILADELPHIA)— In the first comprehensive evaluation of California’s landmark nurse staffing legislation mandating the maximum number of patients in a nurse’s hospital workload, researchers at the University of Pennsylvania have determined that the law prevents deaths from common surgeries, with the potential to save thousands of lives nationally.

The researchers compared deaths from common surgeries in California from 2005 to 2006, following enactment of the legislation, to surgical deaths in two states without legally mandated patient-to-nurse ratios during that same period, finding that there would have been 13.9 percent fewer surgical deaths in New Jersey and 10.6 percent fewer surgical deaths in Pennsylvania in 2006 if hospitals in these states had been staffed at the same levels set in California hospitals. The study, which involved surveys completed by 22,336 nurses, was funded by the National Institute of Nursing Research, part of the National Institutes of Health, and the Robert Wood Johnson Foundation. It is published online in the prestigious policy journal, *Health Services Research*.

“In these two states alone, 468 lives might have been saved over the two year period just among general surgery patients if the California nurse staffing levels were adopted,” said Linda H. Aiken, Ph.D., RN, the lead author and director of the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing. “Because all hospitalized patients are likely to benefit from improved nurse staffing, not just general surgery patients, the potential number of lives that could be saved by improving nurse staffing in hospitals nationally is likely to be many thousands a year,” said Dr. Aiken.

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California became the first state in the nation to mandate minimum nurse staffing levels in 1999 and then entered into an exhaustive process to set the ratios, varying by the demands of each type of unit, which went into effect January 1, 2004. The law specifies the maximum number of patients each nurse can care for at any time: specifically, nurses may care for no more than 5 patients on a medical-surgical unit; 4 pediatric patients; 2 patients in intensive care; 6 psychiatric patients; and 3 patients in labor and delivery.

The study examined outcomes from common surgeries including orthopedics, which can be elective, and excluded most emergency surgeries or extreme surgeries such as transplants. On medical-surgical units, California nurses cared for two fewer patients on average than nurses in New Jersey and 1.7 fewer than in Pennsylvania. Just adding one additional patient to hospital nurse workloads increases the patient's odds of dying by 13 percent in California, 10 percent in New Jersey, and by 6 percent in Pennsylvania. Aiken noted, "patients normally expect an improvement in their lives from these types of surgeries, not death."

Additionally, nurses in California hospitals that adopted the new ratios reported more job satisfaction, less burnout, and better quality of care. These measures are associated with the ability of hospitals to attract and retain nurses which is increasingly important as the U.S. faces a projected shortage of one million nurses by 2020 according to the Department of Health and Human Services.

"From a policy perspective, our findings are revealing. The California experience may inform other states that are currently debating nurse ratio legislation," the authors wrote, noting that Massachusetts, Minnesota, New Jersey, Illinois, and Oregon are among the 18 states currently evaluating the issue. "Improved nurse staffing, however it is achieved, is associated with better outcomes for nurses and patients."