



RN-to-Patient Staffing Ratios & Patient Safety

Studies by the nation's most respected scientific and medical researchers affirm the significance of California's RN-to-patient ratios for patient safety. As the Institute of Medicine's 2003 study put it, research now documents "what physicians, patients, other health care providers and nurses themselves have long known: how well we are cared for by nurses affects our health, and sometimes can be a matter of life or death."

- Patients cared for in hospitals with higher RN staffing levels were 68% less likely to acquire a preventable infection, according to a review of outcome data of 15,000 patients in 51 U.S. hospitals — *Medical Care*, June 2007.
- Improved RN staffing ratios are associated with a reduction in hospital-related mortality, failure to rescue, and lengths of stay. Every additional patient assigned to an RN is associated with a 7% increase in the risk of hospital acquired pneumonia, a 53% increase in respiratory failure, and a 17% increase in medical complications — *Agency for Healthcare Research and Quality*, May 2007.
- Patients hospitalized for heart attacks, congestive heart failure, and pneumonia are more likely to receive high quality care in hospitals with better RN staffing ratios — *Archives of Internal Medicine*, December 11/25, 2006.
- If all hospitals increased RN staffing to match the top 25% best staffed hospitals, more than 6,700 in-hospital patient deaths, and, overall 60,000 adverse outcomes could be avoided. The findings do not include the ancillary value to families of reduced morbidity, such as decreased pain and suffering and days lost from work, and huge economic savings for the hospitals — *Health Affairs*, January/February 2006.
- Cancer surgery patients are safer in hospitals with better RN-to-patient ratios. A study of 1,300 Texas patients undergoing a common surgery for bladder cancer documented a cut in patient mortality rates of more than 50%. Hospitals with low volume on cancer procedures can match standards of high volume urban medical centers just by increasing their RN ratios — *Cancer, Journal of the American Cancer Society*, September 2005.
- Cutting RN-to-patient ratios to 1:4 nationally could save as many as 72,000 lives annually, and is less costly than many other basic safety interventions common in hospitals, including clot-busting medications for heart attacks and PAP tests for cervical cancer — *Medical Care, Journal of the American Public Health Association*, August 2005.
- Chances of a hospital patient surviving cardiac arrest are lower during the night shift because staffing is usually lower at night, even though cardiac arrest occurs at all times of day or night — according to a report on 17,991 cardiac cases from 250 hospitals — *Annual meeting, American Heart Association*, November 2003.
- The Institutes of Medicine of the National Academy of Sciences reports that "nurse staffing levels affect patient outcomes and safety." Insufficient monitoring of patients, caused by poor working conditions and the assignment of too few RNs, increases the likelihood of patient deaths and injuries — *IOM*, November 4, 2003. Inadequate staffing precipitated one-fourth of all sentinel events — unexpected occurrences that led to patient deaths, injuries, or permanent loss of function — reported to JCAHO, the Joint Commission on Accreditation of Hospital Organizations, from 1997 to 2002 — *JCAHO*, August 7, 2002.
- Improved RN-to-patient ratios reduce rates of pneumonia, urinary infections, shock, cardiac arrest, gastrointestinal bleeding, and other adverse outcomes — *New England Journal of Medicine*, May 30, 2002.
- Up to 20,000 patient deaths each year can be linked to preventable patient deaths. For each additional patient assigned to an RN the likelihood of death within 30 days increased by seven percent. Four additional patients increased the risk of death by 31% — *Journal of the American Medical Association (JAMA)*, October 22, 2002.

