
SAFE STAFFING: CRITICAL FOR PATIENTS AND NURSES

Nurses play an integral role in the health care system. They provide acute care for patients in emergency rooms and intensive care units and administer medicine and other daily essentials throughout our country's hospitals. But far too often, nurses are overworked and under-supported as hospital administrators seek to lower costs and boost profits.

In the face of aggressive cost-cutting, minimum staffing levels are necessary to ensure the safety of patients and nurses. Adequate nurse staffing is key to improving patient care and nurse retention, while poor staffing endangers patients and drives nurses from the profession. Unfortunately, staffing problems are only set to get worse as baby boomers age and the demand for health care services grows, making staffing a growing concern for nurses and patients alike.

Safe Staffing Practices Improve Patient Care Outcomes

In 1999, California became the first state to pass a law setting a legal maximum patient-to-nurse staffing ratio in order to improve patient care. Since it was fully implemented in 2004, research specific to California has shown measurably improved patient outcomes, in line with the broader academic consensus about the positive impact of lowering nurse workloads.

- The most comprehensive study of the impact of the law came out in 2010 and compared hospitals in California to hospitals in New Jersey and Pennsylvania. Researchers found significantly better health outcomes in California, including lower surgical mortality rates, reduced inpatient deaths within 30 days of admission and a lower likelihood of death from failing to properly respond to symptoms.¹
- These conclusions are backed up by a 2018 meta-analysis of other research, which found for every increase of one nurse, patients had a 14 percent decrease in risk for in-hospital mortality.² An earlier analysis produced similar results, showing in 2007 that an increase of one full-time registered nurse in a unit per day would result in nine percent fewer hospital-related deaths in the ICU, 16 percent fewer deaths for surgical patients and six percent fewer deaths for medical patients.³
- In long-term care facilities, patients with more direct RN time (30 to 40 minutes daily per patient) reported fewer pressure ulcers, acute care hospitalizations, urinary tract infections, urinary catheters, and less deterioration in their ability to perform daily living activities.⁴
- While increased nurse staffing greatly improves patient outcomes in hospitals with positive nurse working conditions, it has little to no effect in hospitals that otherwise have poor nurse

working conditions. Good nursing work environments are characterized by positive working relationships between doctors and nurses, active nurse involvement in hospital decision making, management responding to nurse patient care concerns, continuing education programs for nurses and constant quality improvement for patient care programs.⁵

Inadequate Staffing Endangers Nurses and Patients Alike

The Bureau of Labor Statistics estimates that demand for registered nurses will increase 15 percent between 2016 and 2026, and 438,000 new nursing jobs will be created over this ten-year period.⁶ This increase in demand only stands to compound the existing nursing shortage and other hospital staffing problems, described by the American Nurses Association (ANA):

“Massive reductions in nursing budgets, combined with the challenges presented by a growing nursing shortage have resulted in fewer nurses working longer hours and caring for sicker patients. This situation compromises care and contributes to the nursing shorting by creating an environment that drives nurses from the bedside.”⁷

- High patient-to-nurse ratios are strongly associated with emotional exhaustion, job dissatisfaction and fatigue. Nurse fatigue (sometimes called burnout) can be described by a number of symptoms, including irritability, insomnia, headaches, back pain, weight gain, depression, and high blood pressure.⁸ According to a study in the *Journal of the American Medical Association*, each additional patient over four per nurse carries a 23 percent risk of increased “burnout” and a 15 percent decrease in job satisfaction. The same study found that each additional patient per nurse was associated with a seven percent increase in the likelihood of dying within 30 days of admission.⁹
- Working long hours with inadequate staffing also increases nurses’ risk of developing conditions such as musculoskeletal disorders, hypertension, and depression. In 2017, registered nurses had 24,540 reported incidents of illness or injury resulting in one or more days away from work. Nursing assistants reported an additional 34,210 incidents in the same year, an incidence rate exceeded only by law enforcement patrol officers.¹⁰
- Nurses’ cardiovascular health often suffers as a result of working long shifts and overtime. In a 2010 study, researchers showed a clear trend between frequent overtime work and incidents of heart disease, with workers reporting three to four hours of overtime per day being 60 percent more likely to have cardiovascular health disorders.¹¹
- But safe staffing policies can help reduce the risks faced by nurses and other healthcare professionals. A 2015 study of hospitals in California found 31.6% fewer RN injuries and 38.2% fewer LPN injuries than what would have been expected based on data from the other 49 states and the District of Columbia.¹²

Aside from the occupational hazards caused by understaffing and heavy workloads, numerous studies show a correlation between inadequate nurse staffing, poor nurse working conditions, and poor patient outcomes. High patient-to-nurse ratios are associated with an increase in medical errors, as well as patient infections, bedsores, pneumonia, MRSA, cardiac arrest, and accidental death.¹³

- For patients recovering from an in-hospital cardiac arrest, both nurse work environments and patient-to-nurse ratios are associated with survival rates. A 2016 study found that the likelihood of survival was 16 percent lower for patients in hospitals with poor nursing work environments and 5 percent lower for each additional patient per nurse on medical-surgical units.¹⁴
- Even temporary exposure to high nursing workloads and limited staffing can have a negative impact on patients. In 2017, researchers found that “exposure to as little as one day of high workload/staffing ratios is associated with a substantially increased risk of death in critically ill patients.”¹⁵
- Heavy nurse workloads, evidenced by shift length, is significantly related to decreases in patient satisfaction. In hospitals with large proportions of nurses working shifts of 13 hours or longer, more patients reported that they were not likely to recommend the hospital to family and friends compared to patients in hospitals with shift lengths of 11 hours or less.¹⁶
- Nurse fatigue itself can hurt patient care outcomes. A 2012 study found that reducing the number of nurses with high levels of fatigue (burnout) from the average of 30 percent to 10 percent could prevent 4,160 infections in Pennsylvania hospitals alone, saving approximately \$41 million.¹⁷

“When they’re understaffed, nurses are required to cut corners to get the work done the best they can. Then when there’s a bad outcome, hospitals fire the nurse for cutting corners.”

- Judy Smetzer, vice president of the Institute for Safe Medication¹⁸

Understaffing Exacerbates the Nursing Shortage

The demands of the nursing profession are forcing many nurses to consider part-time nursing, or alternative careers. In a 2011 survey, close to 45 percent of the surveyed nurses said they planned to make career changes in the next one to three years, with over one-third of those surveyed considering careers outside of nursing.¹⁹

- According to the American Association of Colleges of Nursing, the average RN cost-per-hire is around \$2,820.²⁰ Other studies estimate the overall turnover cost per RN at \$65,000.²¹ Another study showed that the average hospital is estimated to lose about \$300,000 per year for each percentage point increase in annual nurse turnover.²²

In addition to enforcing mandatory overtime, employers often use supplemental nurses to temporarily fill gaps in nurse staffing. These temporary nurses are more likely to be concentrated in hospitals with poor staffing ratios and inadequate resources. Temporary nurses make up between five and 15 percent of hospital nursing staffs in 55 percent of hospitals.²³

- Supplemental nursing staffs are expensive, especially when they are brought in from outside agencies. Hospitals generally pay between \$250,000 and \$400,000 to staffing agencies for every one million dollars spent on temporary-nurse staffing.²⁴

- Temporary nurses are often compensated at rates 25 percent to 40 percent above the average RN’s wages, further adding to cost and contributing to resentment among permanent nurses.²⁵
- As the percentage of temporary nurses employed goes up, the quality of patient care tends to go down. Hospitals with temporary nurse staffing under five percent reported fewer hospital-acquired infections and fewer patient falls than hospitals with temporary nurse staffing at five to 15 percent. The percentage of nurse work-related injuries was also significantly higher in hospitals where temporary nurses made up more than 15 percent of the total nursing staff.²⁶

Safe staffing may be an effective way to retain experienced nurses, lure those who left the field back, and attract students to the profession.

- Many researchers have found that factors such as mandatory overtime are inversely associated with nurses’ intention to stay in their jobs.²⁷ Right now, 17.5 percent of new registered nurses leave their first nursing job within the first year, and one in three nurses leave their first job within two years.²⁸
- While wage levels are an important part of determining how satisfied a nurse is with their job, it takes more than good pay to keep nurses in their jobs in the long-run. In fact, researchers have found that the most impactful way to decrease nurse fatigue and increase retention is to improve the work environment and maintain reasonable patient-to-nurse staffing ratios.²⁹
- Soon after patient-to-nurse ratio regulations went into effect in January 2004, the California Board of Nursing reported being inundated with RN applicants from other states. That year, applications for nursing licenses increased by more than 60 percent. By 2008, vacancies for registered nurses at California hospitals plummeted by 69 percent.³⁰
- In the 2010 study of California’s staffing law, both nurses and nurse managers agreed that the ratio legislation achieved its goals of improving recruitment and retention of nurses, reducing nurse workloads, and improving the quality of care.³¹

Safe Staffing Standards Do Not Burden Hospitals

The majority of available research shows that safe staffing practices are cost-effective for hospitals. High turnover rates and the overreliance on temporary nurse staffing increase the average cost per discharge (cost of inpatient care, including administration) and overall operating costs. Safe staffing policies improve nurse performance and patient-mortality rates and reduce turnover rates, staffing costs, and liability.

“It is costing hospitals more money not to spend money on nursing.”

- Linda Aiken, PhD, RN, FAAN, FRCN, director of the University of Pennsylvania’s Center for Health Outcomes and Policy Research³²

- One study in the *Journal of Health Care Finance* reported that while increased nurse staffing did increase operational costs for hospitals, it did not decrease the hospitals' overall profitability.³³
- Though nursing is often the largest line-item cost for hospitals, a 2013 study found that higher levels of nurse staffing contributed towards positive financial performance for hospitals in competitive markets as improved productivity, reductions in secondary infections and a reduction in the average length of patient stays lead to cost savings and productivity in the long-term.³⁴
- A 2009 study found that adding an additional 133,000 RNs to the hospital workforce across the U.S. would produce medical savings estimated at \$6.1 billion in reduced patient care costs. This does not include the additional value of increased productivity when nurses help patients recover more quickly, an estimated \$231 million savings per year.³⁵
- Safe staffing ratios also reduce the additional costs of supplemental nurses and staffing agencies, as nurse retention tends to go up with safe staffing.³⁶ Temporary nurses are more expensive for hospitals to hire and, as previously stated, do not provide the same quality of care when compared to staff nurses.

The Role of Other Healthcare Professionals

While much of the debate and research surrounding the issue of hospital staffing focuses on registered nurses, many other types of professionals and support staff work in important and understaffed patient care roles as well.

- Social workers can play a critical role in ensuring patients have the resources they need to continue receiving healthcare in a timely, cost-effective manner after they are discharged from the hospital. Studies have shown that increased support services from social workers in hospitals can lead to lower total hospital costs and increased physician follow up after discharge.³⁷
- Physical and occupational therapists play a similar role in ensuring patient care transitions are as smooth and successful as possible. Especially in the treatment of older adults, research shows that physical therapists should be relied on more in order to “assess and address posthospitalization physical and functional deficits.” Such changes can again play a role in reducing readmissions, improving patient care outcomes and reducing overall medical costs.³⁸
- It is estimated that at least one third of patients are malnourished when they arrive at American hospitals. While hospitals place responsibility for patient nutrition on dietitians, many institutions lack an adequate number of staff dietitians to adequately address all patient needs and existing dietitians' recommendations are often not implemented properly. To boost the quality of care and improve the chances for patient recovery, investments need to be made into professional dietitian services.³⁹
- All of these professionals are supported every day by licensed practical nurses, certified nursing assistants and other staff without whom hospitals would not function. Unfortunately, very little research has been done about the impact of having more or less of these support staff in hospitals.

Solutions to Improve Nurse Working Conditions and Reduce Fatigue

While nurse fatigue and the nursing shortage is lamented across the country, the push to boost hospital profit margins and reduce costs has left some nurses feeling left out of the conversation.

“We’re lauded for our work, but when we present our recommendations—what we need in order to provide quality care—we’re brushed off and ignored.”

- Christina Price, a critical care resource nurse and member of Vermont Federation of Nurses and Health Professionals, AFT Local 5221⁴⁰

Registered nurses and other healthcare professionals, through their unions and professional associations, have been advocating for staffing standards in various means for more than two decades. These standards can take various shapes, from the legislation in place in California since 1999 to proposals to require hospitals to establish nurse staffing committees that empower nurses to create facility-specific staffing policies, reviewing staffing levels for registered nurses, other professionals and support staff.

Nurses who are union members are also using their power at the bargaining table to push for improved staffing standards.

- At Englewood Hospital and Medical Center in New Jersey, nurses who are members of Health Professionals and Allied Employees, Local 5004 have enshrined core staffing ratios into their collective bargaining agreement. The ratios vary based upon unit and shift, and include a maximum of two patients per nurse in the medical/surgical ICU.
- Other collective bargaining agreements negotiated by nurses, set up a committee structure to review and monitor staffing policies. This is the case at Ashtabula County Medical Center in Ohio, where staff nurses, representatives from the Ohio Nurses Association, and a representative of the chief nursing officer review and evaluate staffing patterns to make recommendations for changes as needed.

Currently, 14 states have some type of law or regulation that addresses nurse staffing in hospitals.⁴¹

- While California is still the only state that mandates a required maximum patient-to-nurse ratio at all times, Massachusetts passed a law in 2014 requiring a maximum of two patients for every nurse in intensive care units.⁴²
- Seven states (CT, IL, NV, OH, OR, TX, WA) require hospitals to have committees responsible for developing staffing policies unique to their hospitals, one state (MN) requires hospitals’ chief nursing officers or their designee design a staffing plan in consultation with other hospital staff, and five states (IL, NJ, NY, RI, VT) require public disclosure and / or reporting of hospital staffing policies. And a recent study has pointed to public reporting as driving a slight decrease in nursing workloads in NJ.⁴³

- Additionally, 18 states (AK, CA, CT, ME, MD, MA, MN, MO, NH, NJ, NY, OR, PA, RI, TX, WA, WV) have laws that prohibit or severely restrict hospitals from assigning mandatory overtime to nurses.⁴⁴
- While nurses, patient advocates, and other organizations have organized in other states to pass safe staffing legislation similar to California's, they have encountered well-funded opposition campaigns, anchored by state hospital associations. Most recently, the Massachusetts Health and Hospital Association spent \$25.18 million to defeat the high profile 2018 ballot initiative campaign.⁴⁵

On the federal level, multiple attempts have been made to pass legislation in order to ensure safe staffing levels in every hospital, though none have been successful so far.

- Most recently, Senator Sherrod Brown (D-OH) and Rep. Jan Schakowsky (D-IL) reintroduced the Nurse Staffing Standards for Hospital Patient Safety and Quality Care Act in 2017, and the bill had four cosponsors in the Senate and 57 in the House of Representatives before the end of the 115th congress. This legislation and previous iterations has been endorsed by the AFL-CIO, American Federation of Government Employees, American Federation of Teachers, and the United Steelworkers, among other labor unions and nurses' organizations.

The Department for Professional Employees, AFL-CIO (DPE) comprises 24 national unions representing over four million people working in professional and technical occupations. DPE's affiliates represent teachers, physicians, engineers, computer scientists, psychologists, nurses, university professors, actors, technicians, and others in more than 200 professional occupations.

For more information on issues impacting professional and technical employees, please see DPE's website: www.dpeaflcio.org.

Source: DPE Research Department
815 16th Street, NW, 6th Floor
Washington, DC 20006

Contact: Ethan Miller
(202) 638-0320 ext.114
emiller@dpeaflcio.org

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