Is Your Hospital’s Nurse Staffing Safe?
How You Can Find Out.

A Consumers’ Guide to Understanding Hospital Nursing Staff Levels and Patient Health and Safety

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Overview

Hospitals are nursing institutions. Patients stay in hospitals for the nursing care. Nursing care is essential for a patient's survival of an injury, illness, or surgery that has required hospitalization.

And yet, cost-cutting by hospitals over the past 10 years has happened largely at the expense of nursing.

This cost-cutting continues even as hospital administrators inform the public that their jobs are getting harder and the costs of health care are increasing as hospitals patients nowadays tend to be sicker than in the past (a result of people living longer, and changes in the health care system which allow more procedures which used to be done in hospitals to be done on an outpatient basis).

Many hospitals continue to enact cost-cutting measures at the expense of nursing even as recent national studies show that staffing levels of nurses are directly related to patient health and safety, including patient mortality.

These ground-breaking national studies have documented the following:

- Approximately 80,000 preventable deaths each year are due to medical errors.
- The nursing shortage in our nation's hospitals has resulted in increased deaths and illness of patients.
- Low nurse staffing levels result in increased deaths and illnesses from heart attacks, shock, urinary tract infections, intestinal bleeding, hospital-acquired pneumonia, and complications of surgery such as shock or sepsis.
- Hospital RN nurse staffing levels are directly linked to patient mortality.
- Each additional patient per nurse above the 4:1 (patient:nurse) ratio is associated with a 7% increase in the likelihood of dying within 30 days of admission and a 7% increase in the odds of failure-to-rescue (deaths in surgical patients who develop serious complications).
- An increase in a nurse's patient workload from 4 to 8 patients would increase patient mortality rates by 31%.

As a result of these studies, the public is calling for an examination of nurse staffing levels in our hospitals. Both the New York Times and the Chicago Tribune have published editorials in October and November of 2002 calling on hospital administrators to listen to nurses and to increase nurse staffing levels. The Chicago Tribune editorial, titled “Dying for a Nurse” states that “nursing staff ratios are one of the many criteria by which an informed patient can make a choice between competing hospitals.”
The problem, of course, is that most hospital stays are unplanned and patients rarely have “a choice” about which hospital they will be using.

But even when informed consumers do have an opportunity to seek out information in order to make an informed choice, they do not know what questions to ask in order to elicit the relevant information, nor can they get answers to their questions.

Hospital administrators sensitive to consumers’ concerns and nurses’ complaints about nursing staff levels have developed euphemistic language that avoids answering the relevant questions and gives the impression that their hospitals’ nurse staffing levels are better than what they are.

In the interest of patient health and safety, and good working conditions for hospital staff (hospital staff working conditions are directly associated with patient health and safety!), consumers, community leaders, and health care advocates need to be able to “decode” hospital administration information about nurse staffing levels.

This guide has been written for that purpose. This guide provides information on the following topics:

• Recent research on hospital nurse staffing and patient mortality
• Hospital staff involved in patient care
• Strategies hospitals use to cut back on staff and how these cuts affect patients and nurses
• Ways that hospitals can make their staffing levels sound better than they are
• How to ask about staffing levels
• Other indicators of patient health and safety at hospitals.

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Section 1: Hospital Nurse Staffing and Patient Mortality – What You Need to Know About RN Nurses’ Patient Workloads

Recent national studies (most released in 2002) all show that hospital staffing levels of RN nurses are directly related to patient outcomes, including mortality.

**Institute of Medicine.** In 1999, the Institute of Medicine (IOM) published its report, *To Err Is Human: Building a Safer Health System,* which discusses the role of medical error in preventable deaths. The IOM report found that:

- Medical errors are one of the nation’s leading causes of death and injury.
- Medical errors kill 98,000 people in U.S. hospitals each year.
- These are *preventable* deaths.
- More people die from medical errors each year than die from highway accidents, breast cancer, or AIDS.
- Health care is a decade or more behind other high-risk industries in its attention to ensuring basic safety.
• The national costs of medical errors, in the form of health care costs, lost income, disability, etc. are estimated to be between $17 billion and $29 billion.

The IOM study advocates that health care organizations must create an environment in which safety will become a top priority. The report stresses the need for leadership by executives and clinicians, and for accountability for patient safety by boards of trustees or directors.

The report also states that public and private purchasers of health care insurance – such as businesses buying coverage for their workers – must make safety a top concern in their decisions about which health plans to purchase. The report also discusses why, until now, consumers have not pushed harder for patient safety. The IOM found that consumers have wrongly assumed that accrediting and certifying organizations are regulating for, and ensuring safety. Consumers have developed a false sense of security as a result of hospitals’ accreditations.

**New England Journal of Medicine Study.** In May 2002, the New England Journal of Medicine published a study by Harvard School of Public Health researcher Jack Needleman and his colleagues which was the first major study to document on a national scale the damage to patient health caused by inadequate nursing staff levels. In particular, the study shows that the nursing shortage in our nation’s hospitals has resulted in increased deaths and illnesses of patients.

Needleman and colleagues found that low nurse staffing levels result in increased deaths and illnesses from heart attacks, shock, urinary tract infections, intestinal bleeding, hospital-acquired pneumonia, and complications of surgery such as shock or sepsis.

**Patients in hospitals with low numbers of registered nurses are more likely to suffer and die from these preventable and treatable conditions.** Patients in hospitals with high levels of registered nurses are less likely to suffer and die from these conditions, and they are more likely to spend less time in the hospital.

Dr. Needleman stated that “I estimate that hundreds or, perhaps, thousands of deaths each year are due to low staffing.” Dr. Needleman calls registered nurses “the eyes and ears of the hospital.” He stated that nurses must have time to observe their patients in order to spot problems early.

It is important to note that no relationship was found between patients’ well-being or length of stay and the levels of aides or practical nurses. Registered nurses were the key factor.

**JCAHO Study Calls Nursing Shortage “A Prescription for Danger.”** On August 8, 2002, the Joint Commission on Accreditation of Healthcare Organizations, or JCAHO, called the shortage of nurses “a prescription for danger.”

JCAHO reported that the lack of nurses contributed to nearly a quarter of all unexpected problems that resulted in death or injury to hospital patients. Dr. Dennis O’Leary, JCAHO president stated that “We knew that some unanticipated deaths and permanent loss of function were related to inadequate numbers of nurses, but 24 percent surprised everybody.”

**Journal of the American Medical Association.** A study published in October 2002 in the Journal of the American Medical Association (Vol. 288 No. 16, by Aiken, Clarke, Sloane, Sochalski and Silber) directly links hospital nurse staffing levels to patient mortality. The study examined whether “surgical mortality” and “rates of failure-to-rescue” (deaths in surgical patients who develop serious
complications) are lower in hospitals where nurses carry smaller patient loads. The study found the following:

- Each additional patient per nurse was associated with a 7% increase in the likelihood of dying within 30 days of admission and a 7% increase in the odds of failure-to-rescue.
- An increase in the nurse’s patient workload from 4 patients to 6 patients would increase patient mortality rates by 14%.
- An increase in the nurse’s patient workload from 4 to 8 patients would increase patient mortality rates by 31%.

The study concludes that substantial decreases in mortality rates could result from increasing registered nurse staffing, especially for patients who develop complications such as aspiration pneumonia and hypotension/shock. The authors of the study state that “Registered nurses constitute an around-the-clock surveillance system in hospitals for early detection and prompt intervention when patients’ conditions deteriorate... it is not surprising that we found nurse staffing ratios to be important in explaining variation in hospital mortality.”

**JCAHO Accreditation No Clean Bill of Health; No Guarantee of Patient Health and Safety.** On November 10, the Chicago Tribune published a stunning article on JCAHO, the nation’s most influential health-care regulator, saying that JCAHO “serves the interests of the hospital industry over those of the public, giving its seal of approval to medical centers riddled by life-threatening problems and underreporting of patient deaths due to infections and hospital errors.” Even as JCAHO recognizes the dangerous understaffing of nurses in U.S. hospitals, JCAHO only denies accreditation to approximately 1% of the hospitals it inspects.

**USA Today Reports that Federal Trade Commission Is Investigating Hospital Mergers and Unkept Promises of Improved Efficiency, Cost-Savings and Patient Safety.** A November 13 USA Today article titled “Merged Hospitals Break Vow to Lower Patient Costs” reports that the U.S. Federal Trade Commission (FTC) is investigating the wave of hospital mergers that took place in the late 1990s. The article states that “hospital chains argued that the consolidations would cut costs and improve care. Instead, they appear to have improved the bottom line of the chains, giving them more leverage to raise prices – and fuel the recent surge in health costs.” The article goes on to state that these merged health corporations have resulted in unkept promises of improved efficiency, cost-savings and patient health and safety. The FTC is finding that these hospital mergers are not necessarily beneficial to local communities because they are not producing the improvements they promised, including improvements to patient health and safety.

**Section 2: Hospital Staff Involved in Your Care**

**Hospitals are nursing institutions. Patients stay in hospitals for the nursing care.** Nursing care is essential for a patient’s survival of an injury, illness, or surgery that has required hospitalization.

Many different hospital staff members are involved in providing or facilitating nursing care to patients.
All the staff positions described in this section are essential – everyone has an important role to play. However, staff members should not be expected to perform duties or functions that are outside their areas of training or expertise, or job descriptions. Likewise, staff members should not be subjected to unfair working conditions or unreasonable hours – in a hospital, these workers’ rights issues are also patient health and safety issues.

It is important to understand the different staff positions and what their roles are, and how working conditions or cuts to various staff positions ultimately affect the nursing care that patients receive, and impact the RN nurses’ capacity to deliver nursing care at your bedside (which, as the national studies show, is directly related to patient mortality). Hospital staff members do not want to perform duties for which they are not trained or licensed or feel equipped to perform. These staff members understand that patient health and safety is at stake, and they frequently report fear, anxiety and stress as a result of having to perform duties that are inappropriate to their jobs or level of training.

**Registered Nurse.** Recent national studies show that registered nurses (RNs) are the key factor in patients’ well-being in hospitals. RN nurse to patient ratios (RN nurse staffing levels) are directly related to patient mortality. A Registered Nurse (RN) has either an ADN (Associate Degree in Nursing), BS (Bachelors of Science in Nursing), or Diploma Nurse (graduate of a hospital based training program).

A Registered Nurse must give all IV medications and some of the pain medications. The Registered Nurse is responsible for developing the care plan for each patient, and supervising LPN’s (see below). A Registered Nurse is legally responsible for all her/his patients and must assess each patient every shift and when needed.

**Licensed Practical Nurse (or Licensed Vocational Nurse).** LPNs and LVNs support RNs in providing nursing care to patients. However, they must be supervised by an RN and are not trained or licensed to perform the same functions as an RN.

If an LPN has 5 patients, and an RN working the same unit has 5 patients, the RN is actually responsible for all 10 patients because she/he must supervise the LPN and perform all the functions that the LPN is not licensed or qualified to do.

**Nurses Aide, also known as: Technical Partner, Patient Care Assistant (PCA), Health Care Technician, Clinical Care Partner, Patient Support Associate.** These staff members’ duties vary from hospital to hospital. Typically, they take the patients’ vital signs (temp, blood pressure, heart rate, respiratory rate, and pain level. In addition they also do baths, feed patients, ambulate (help walk) patients, bring fresh water and linens, etc.

In some hospitals, the aides/technicians do blood draws for labs, do the EKG's, insert foley catheters, and measure blood sugar levels. At some hospitals they may also enter into the computer the MD's orders, and stock the supply cabinets. Their jobs overlap at times with the cleaning personnel.

Nurses aides/technicians typically receive less than 15 days on the job training, and yet, in many hospitals, they are performing functions that used to be reserved for LPNs or even RNs as a result of cost-cutting measures.

**Housekeeping, also called Service Partners (SPs) and Patient Service Assistants (PSAs).** These staff members are typically responsible for cleaning the rooms, supplying the rooms with toilet
paper, towels, and emptying trash. Also in many hospitals they transport the "stable" patients to various procedures or to the front door at discharge. In some facilities they are required to do more with, and for the patients – including feeding, turning, etc.

Under such circumstances, hygiene and infection-control can be a problem, especially when staff members are overworked and asked to perform functions outside of their job specifications. For example, it is not safe for personnel who are cleaning toilets to also be asked to feed patients. Many hospitals which required housekeeping staff to take on such additional duties as a result of reengineering or restructuring lost good housekeeping staff because these staff members did not want to take on direct patient care duties.

A well-staffed hospital will have dedicated housekeepers for each floor of the hospital.

The better trained that nurse aides/technicians and housekeeping staff are, the better that nurses are able to care for their patients.

**Unit Secretaries.** The secretaries perform many vital functions involving the flow of information necessary for patient care and the administration of the unit. Occasionally, a unit secretary may also be a Registered Nurse, and as a result of her/his degree, the hospital may count that staff member in their nursing staff counts in order to inflate the number of nurses, even though that staff member is not involved in direct patient care.

**Dedicated Phlebotomist.** A well-staffed hospital will ensure that each unit in the hospital has readily available access to a phlebotomist. Phlebotomists specialize in accessing veins and drawing blood for lab tests and other procedures.

**Dedicated EKG Technician.** A well-staffed hospital will ensure that each unit in the hospital has readily available access to an EKG technician. EKG technicians specialize in conducting EKG’s. While RN nurses and other staff members may be capable of doing EKG’s, it is important to understand that it takes approximately 15 minutes to take an EKG, and EKG’s are typically conducted when the patient is in some kind of medical distress. If a nurse is conducting the EKG, she/he will not be able to provide direct patient care while conducting the EKG.

**Discharge Planners.** A well-staffed hospital will ensure that Discharge Planners are on staff to assist patients and family members with their post-hospitalization care needs. Developing a discharge plan for a patient can be a time-consuming process involving coordination of resources and other health care providers. If nurses or other hospital staff members must do discharge planning, it will take them away from their other, more primary, responsibilities.

**Social Workers.** Like Discharge Planners, Social Workers are important staff members for providing additional services to patients and their families. Social Workers can assist patients and their families with understanding and qualifying for Medicare, Medicaid, disability benefits, and other necessary resources.

**Pharmacists/Pharmacy Technicians.** In-house Pharmacists and Pharmacy Technicians process pharmaceutical orders for patients and ensure the timely filling and delivery of medications for hospital patients.
**Lift Teams.** Lift Teams are staff members who assist with transporting moving or ambulating patients. Many hospitals have cut back on these staff members, and as a result, other staff members have had to take on these responsibilities at the risk of injury to themselves and their patients.

**NOTE:** Many of these staff members are considered “ancillary” staff because they are not always involved in “direct patient care.” However, their roles are obviously very important and essential to the primary purpose of hospitals, which is to provide nursing care. All “ancillary” staff perform duties that are essential. Just because their jobs go away as a result of downsizing, re-engineering, restructuring, or other euphemisms for cost-cutting, does not mean that the needs for the functions they perform go away.

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**Section 3:**

**Strategies Hospitals Use to Cut Back on Staff and How These Cuts Affect Patients and Nurses**

Cuts to the hospitals are nothing new. Over the past five to ten years, hospitals have enacted downsizing, reengineering, and other changes in staffing patterns.

Nationally, nurses have reported to their hospital administrators that these changes were hurting their patients, contributing to the nursing shortage at their hospitals, reducing morale, and undermining a patient-focused approach to health care.

Hospitals consistently state that these cuts do not affect patient care. However, nurses have reported that their increased workload due to cuts in other staff positions, combined with a decrease in nurses over the past few years, is cause for concern. And of course, the recent national studies have validated, to an alarming degree, what nurses have been reporting for several years.

Nurses have reported that specific strategies that hospital use to reduce staffing levels and costs include:

- short-staffing;
- keeping salaries low;
- use of unlicensed personnel for patient care;
- unwillingness to use agency nurses in times of need;
- mandatory overtime at times;
- not allowing overtime at other times;
- cuts to “ancillary” or non-direct patient care staff.

**How Nurse Staff Cuts Affect Patients and Nurses at Hospitals:**

Ideally, for most hospital units, one registered nurse (RN) is assigned to four patients. At this ratio of four patients to one RN, the following patient care is possible:

- patients get their medications on time;
- patients are thoroughly assessed;
- patients are assisted with activities of daily living;
- patients are given emotional support;
• nurses can educate and inform patients about procedures, medications, life style changes necessary for health and healing;
• nurses have time to collaborate with physicians, technicians, dieticians, and social workers in planning and implementing the patients’ health care;
• nurses have time to read the patients’ charts and conduct proper charting, and more.

Typically, following staffing cuts, the 4:1 ratio is changed so that nurses are taking care of eight to nine patients (which, according to the recent study published in JAMA, results in a 31% increase in patient mortality). This level of staffing results in nurses only having time to do a small portion of the work necessary for patient health and safety. At this level of staffing, nurses are forced to focus on delivering medications and doing the minimum charting necessary to protect their licenses and the hospital. At these levels of staffing, nurses are not able to properly monitor a patient’s health and possibly detect and prevent a deteriorating health situation. Additionally, at these levels of staffing, staff also suffer because there is little time for collaboration, support, and education.

As one nurse put it, “Taking care of eight or nine patients is not real nursing; but that is what’s acceptable at [my hospital]. It should not be acceptable, and it is NOT nursing, but it is what we are teaching our young nurses that nursing is.”

**How Cuts to “Ancillary” Staff at Hospitals Also Affect Nurses and Patient Health and Safety:**

Other staffing changes at Provena Covenant involved nurses working in “teams” with technicians (like a nurses aide) and service personnel. However, nurses frequently had to share “their” technicians or service personnel with other nurse “teams” because of short staffing, and that resulted in nurses having to perform duties including:

• cleaning patient rooms;
• cleaning toilets;
• fetching supplies;
• transporting patients;
• doing secretarial work, and more.

These kinds of activities have to get done. But when short staffing results in nurses performing these kinds of duties, patients suffer because nurses have less time for direct patient care. In other words, these are necessary activities, but when performed by nurses, these activities take nurses away from their patients.

Because of “ancillary” staffing cuts, Provena Covenant nurses have frequently had to become “jacks of all trades” to make up in reductions of staff including secretaries, social workers, and others. Nurses have had to perform secretarial, phlebotomy, and cleaning duties, as well as teaching inexperienced technicians how to take patients’ blood pressure or how to put them on the bedpan. This kind of teaching is called “on the job training” and is time-consuming and takes away from patient care provided by nurses.
Hospital administrators are aware of the national studies discussed in this guide, and they are under greater scrutiny to demonstrate adequate and safe nursing staff levels. At the same time, hospital administrators have developed various ways of presenting information about staffing levels that typically just make the levels sound better than they are.

The major strategy used by hospital administrators is to develop terms which allow them to lump together all kinds of staff members in a way that makes it sound like there are more clinically-licensed staff members involved in direct patient care than what there really are.

Hospital administrators make statements about:

- Increased nursing hours (but they do not define “nursing” or who is doing it or whether it involves “direct patient care”)
- Increasing nurses' hours “at the bedside” (but they may not say that the increase in hours is a result of nurses having to take on more housekeeping duties which actually, while placing them close to the patient, detract from the time they spend providing nursing care).

Here are some other ways that hospitals can make their staffing levels sound better than what they really are:

1. Include LPN’s in the ratio: an LPN needs to be supervised by an RN. Therefore if an LPN has 5 patients and the RN has 5, that RN is legally responsible for 10 patients, the RN must assess all 10 patients every shift and when needed.

2. Include the Charge Nurse in “nursing hour” calculations. Normally a charge nurse does not have a patient assignment. He/she is "in charge" – available as a resource to answer questions, determine the staffing for the next shift, work with admissions on when and where new patients go, and help in emergencies. On an average size floor of 20-30 patients, a dedicated Charge Nurse is essential and it is a full time job. But the charge should NOT be counted in the mix.

3. Include the "Care Coordinator", or Discharge Planners, or Home Health Care Planners. These nurses usually oversee the discharge planning, find nursing home placement, arrange transportation etc. They are not providing bedside care for the patient.

4. Including the Floor Director or Assistant Director in the count. Unless they are actually working on the floor with their own patient load, it is inappropriate to include them in direct patient care nurse staffing calculations.
5. Including the Resource Nurse or Float Nurses. Resource Nurses assist with problem solving, helping with admissions, helping at codes, etc. But Resource Nurses do not have their own patient loads. This is also true of Float Nurses who have not been assigned to a particular floor. A Float Nurse may be kept to fill in for emergencies, but is not to be counted in the ratio.

6. Often one hears administration talking about the number of "health care providers" working each shift. They want the public to think that the term "health care providers" refers to RN’s, but it does not, and consumers must ask questions to determine who the hospital is counting in its mix.

7. There are other RN nurses working in the hospital in the Operating Room, Emergency Room, and special procedures or in other capacities. Although these nurses are essential, they too should not be used to inflate the count of “direct patient care” nurses when determining patient to nurse ratios.

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Section 5: How to Ask About Staffing Levels

Despite how complicated hospitals can make it to get basic information about staffing levels and nurse to patient ratios, a patient who is hospitalized can simply ask the following question:

“Who is the Registered Nurse at my bedside tonight (or today), and how many other patients does she or he have?”

Consumers or community members and leaders who want to get more complete information about staffing levels must ask for the following:

• What is the Patient to RN nurse ratio?
• Please do not include LPN’s in the ratio.
• Please do not include charge nurses, care coordinators, discharge planners, or floor directors or assistants who are not involved in direct patient care with patients assigned directly to them.

Consumers should also pay attention to the following:

• Media reports of hospital staff layoffs, whether the positions terminated are nursing staff or “ancillary” staff – all such cuts ultimately affect patient care.

• Whether hospitals have readily available EKG Technicians and Phlebotomists, and dedicated Secretaries, Housekeepers, and other such “ancillary” staff on each floor or unit. If a hospital does not have such dedicated or readily available staff, then it is very likely that nursing and other staff members are having to pick up extra duties which detract from their specific roles and from direct patient care.

• Be suspicious of any hospital administrator who refuses, or claims to be unable to answer these kinds of questions or concerns.
Beyond nursing staff levels, there are other kinds of data or information that help consumers and community leaders assess patient health and safety at their hospitals. It is a challenge to get this kind of information, but it is important to ask for it and to track it over time – especially in relation to reported changes in staffing levels or other cost-cutting measures.

Specific data that can give you information about patient health and safety include:

- Rates of re-admission (which, if high, can indicate that patients are being dismissed prematurely, or they are being sent home with untreated complications or infections)
- Patient mortality rates
- Hospital-acquired infection rates (including pneumonia, urinary tract infections).

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