



# Nursing FAQs

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## Staffing Definitions and Concepts

### Introduction

Attempts to accurately measure the need for appropriate safe nurse staffing are met with challenges, despite accumulating evidence that nursing workload is associated with the quality of care delivered in acute care facilities. A number of adverse patient outcomes such as infection rates, pressure ulcers, falls, medication errors as well as mortality (Aiken, Clarke, Cheung, Sloane, Sochalski, and Silber, 2002; Needleman, Buerhaus, Mattke, Stewart, and Zelevinsky, 2002) have a proven correlation with unsafe staffing levels for nurses.

Nurses are repeatedly reporting unsafe staffing situations where patient and nurse safety are being compromised. Staffing concerns RNs because of the pressures put on them everyday by increasing patient intensity, increasing complexity of care in a compressed period of time, the fatigue they feel which increases over time, and the unexpected organizational demands added to the daily work life of a nurse.

The term staffing refers to job assignments, including the volume of work assigned to individuals, the professional skills required for particular job assignments, the duration of experience in a particular job category, and work schedules.

### What is the difference between a staffing shortage and a nursing shortage?

Staffing Shortage is an insufficient number, mix, and/or experience level of RNs and ancillary staff to safely care for the individual and aggregate needs of a specific patient population over a specified period of time.

Nursing Shortage is when the demand and need for RN services is greater than the supply of RNs who are qualified, available and willing to do the work.

### What are factors influencing a nursing staffing crisis?

- *Nursing intensity* which includes patient severity and turnover have not been consid-

ered in determining appropriate nurse staffing. Patient turnover has increased significantly requiring a similar amount of nursing care to be delivered in a shorter period of time during each patient stay. As patient turnover increases, admission, transfer, and discharge procedures take up an increasing proportion of the stay. Reducing lengths of stays result in even greater amounts of needed nursing care. Consequently, while average length of stay fell around 22% from 1993 to 2000, daily nursing workload per patient increased 19%. (Unruh and Fottler, 2006). The current reimbursement rate does not adjust payment for these changes.

- How hospitals are reimbursed in patient settings is of significant relevance to nursing practice. Nursing care is essentially invisible in budgets as it is "bundled" into the daily room

and board charges with other inpatient services making nursing a frequent target for budget cuts. The current mechanism for measurement across diagnostic-related categories (DRGs) is not sensitive enough to accurately capture cost differences. Routine acute and critical care unit patients, for example, will be calculated at the same daily rate despite a relationship between individual patients' condition and need for nursing care. Even though significant variability in nursing intensity and direct nursing costs within similar adult medical/surgical units currently exists, it is not accounted for in the prospective reimbursement mechanism under DRGs.

- Additional organizational demands on nursing time (often unexpected and unplanned), have increased significantly. Changes in documentation, frequent changes in management, regulatory/legal requirements, and technological changes in equipment and processes all contribute to a chaotic and unwelcoming environment for nurses.

## How is staffing generally measured?

Total nursing staff or hours per patient day (HPPD) - All staff or all hours of care including RN, LPN, UAPs, counted per patient day. A patient day is the number of days any one patient stays in the hospital, ie, one patient staying 10 days would be 10 patient days.

The *disadvantages* of using this system include:

- does not distinguish between skill mix of nursing staff
- is based on a retrospective estimate of the mid-night census that does not account for potential changes in condition over a 24 hour period
- includes paid, non-productive hours of time (vacations and holidays) in addition to productive hours of time
- does not account for significant differences in individual patient acuity, severity or patient population characteristics on a unit (age, cognition, language barriers)
- the nursing time required for essential surveillance, monitoring, critical watching, and continual assessment in order to prevent failure to rescue is not included in this task and procedure oriented system
- the significant increase in rate of patient turnover including the time for admissions, transfers, and discharges is not included in this calculation

## Common terms used in staffing

Skill Mix - The proportion or percentage of hours of care provided by one category of caregiver divided by the total hours of care. (A 60% RN skill mix indicates that RNs provide 60% of the total hours of care).

Nurse to Patient Ratio - The number of patients cared for by one nurse typically specified by job category (RN, LPN); this varies by shift and type of nursing unit.

Acuity - Reflects services provided to and for the patient and his or her significant others by identifying the time it takes nurses to complete a task related to the severity of a patients' (or group of patients) category of condition.

Patient Classification Systems (PCS) - Primarily focused on tasks and procedures performed by nursing staff to generate patient information for management of the care of an individual patient or a group of patients. The only intention of these PCS's often is to provide for daily staffing or budgeting decisions for a nursing unit.

- Variables often not included in patient acuity or classification systems are volume of patients, average length of stay, the numbers of admissions, discharges, and transfers (ADTs), skill mix, staff competencies, unit geography, and support services. Physician practice patterns, stability of types of diagnosis and number of physicians admitting to a unit are also important variables to be included in any staffing plan.

Intensity (PINI - Patient Intensity for Nursing Index) - A reliable and valid measure of a patient's need for hospital nursing care in medical/surgical and critical care units. Includes both the amount of care needed by patients in these units and the skill level required. Intensity has four dimensions - severity of illness, patient dependency, complexity of nursing care, and time. (Prescott, 1991; Welton et al, 2006)

- Severity of illness - Refers to the patient's medical condition and how ill the patient is in terms of the abnormality and instability of his/her physiological parameters.

- **Dependency** - This dimension consists of items related to patients' needs for assistance with activities of daily living, mobility, and potential for injury due to deficits in cognitive or communicative ability. (These items are typical of those commonly found in existing patient classification systems.)

- **Complexity of Care** - Based on the amount and type of knowledge and skill needed to perform tasks and procedures and also on the factors that complicate implementation of the nursing process associated with patient care eg familiarity of the decision maker with the type of problem, consequences of a mistake, availability of knowledge relevant to the problem, the number of variables the decision maker must consider. (Complexity of care has been included in other classification systems only to the degree that complexity is related to time).

- **Time** - Identified by nurses caring for patients at or near the end of a shift to produce a measure of the patient assignable time actually provided during that shift. (In most classification systems time is usually associated with specific tasks or categorical patient levels and requires the nurse rating early in the day or shift so that estimates of staffing needs for the subsequent 24 hours can be obtained.)

**Nursing Intensity Billing (NIB)** which will capture the differences in nursing care hours and reflects actual care given, across different diagnosis, is being proposed as a measure of more accurate costing of nursing care. (Welton, et al, 2006) In some studies, nursing rather than medical, diagnosis was an independent predictor of common hospital outcomes such as death or discharge to a nursing home, and resource

utilization, such as charges and length of stay, compared to the DRGs. (Welton, Unruh, and Halloran, 2006)

**Adverse outcomes/indicators** are terms used to serve as an indirect measure of the quality of the patient care such as pressure ulcers, falls, pneumonia, satisfaction with care, medication errors, and failure to rescue.

**Failure to rescue** is the lack of a nurses' ability to assess patient complications at an early stage which can affect patient morbidity and mortality. It is a function of both the quantity and quality of availability of nurse time.

**Complexity Compression** is the phenomenon that nurses experience when expected to assume additional, unplanned (unexpected) responsibilities while simultaneously conducting their multiple responsibilities in a condensed time frame. ([www.mnnurses.org](http://www.mnnurses.org))

## References

Aiken, Clarke, Sloane, Sochalski, Silber (2002). Hospital Nurse Staffing and Patient Mortality, Nurse Burnout and Job Dissatisfaction. *JAMA* 288, 1987-1993.

Needleman, Buerhaus, Mattke, Stewart and Zelevinsky (2002). Nurse Staffing and the Quality of Care in Hospitals. *New England Journal of Medicine*, 346(22), 1715-1722.

Unruh and Fottler, (2006). Patient Turnover and Nursing Staff Adequacy. *Health Research and Educational Trust*, 41 (2), pp. 559-611.

Prescott, Patricia, (1991). Nursing Intensity: Needed Today for More Than Staffing. *Nursing Economics*, 9 (6) pp. 409-414.

Welton, Fischer, DeGrace, and Zone-Smith, (2006). Nursing Intensity Billing, *JONA*, 36, (4), pp 181-188.

Welton, Unruh, Halloran, (2006). Nurse Staffing, Nursing Intensity, Staff Mix, and Direct Nursing Care Costs Across Massachusetts Hospitals, *JONA*, 36 (9), pp 416-425.

**QUESTIONS?** If you have additional questions or comments about this Nursing FAQ sheet please contact Carol Diemert, RN, MSN ([carol.diemert@mnnurses.org](mailto:carol.diemert@mnnurses.org)) or Cindy Schoenecker, RN, MA ([cindy.schoenecker@mnnurses.org](mailto:cindy.schoenecker@mnnurses.org)), Staff Specialists, Nursing Practice at the MNA office. Phone (651) 414-2800 or 1-800-536-4662.

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