

NURSE STAFFING

COLLECTING BASELINE PATIENT OUTCOME DATA SHOULD PRECEDE NURSE STAFFING CHANGES

Source

Potter, P., Barr, N., McSweeney, M., & Sledge, J. (2003). Identifying nurse staffing and patient outcome relationships: A guide for change in care delivery. *Nursing Economic\$, 21(4)*, 158-166.

Objective

To determine a baseline measure of nurse-sensitive patient outcomes in acute care hospitals and to examine the relationship between these patient outcomes and nurse¹ staffing at the unit level.

Background

During the 1990s, in an attempt to control costs, many acute care hospitals took steps that resulted in changes in the way care was delivered to patients. Reducing the number of registered nurses (RNs) and increasing the number of unlicensed assistive personnel (UAPs) on hospital units were two frequently employed restructuring methods. Such changes were often made without a thorough understanding of their impact on the quality of patient care. Before administrators and managers make nurse staffing decisions in a hospital or on a unit, it is important that they have baseline data on patient outcomes that are affected by nursing care and on the relationship between nurse staffing and patient outcomes. Collecting similar data after the implementation of nurse staffing changes would allow for comparisons to be made about impact of the changes on the quality of patient care.

Methods

- This prospective correlational study took place in an 879-bed tertiary care university teaching hospital in a large metropolitan area in Missouri.
- The sample comprised all 32 acute inpatient units in the hospital.

¹ In this study, 'nurse' refers to registered nurses (RNs), licensed practical nurses (LPNs) and unlicensed assistive personnel. The title for a practical nurse in Canada, with the exception of Ontario, is licensed practical nurse (LPN). In Ontario, the title for a practical nurse is registered practical nurse (RPN). In Canada, unlicensed assistive personnel such as nurse aides are often referred to as unregulated health care workers.



- Patient outcomes measured included: 1) administrative records of adverse events such as falls and medication errors; 2) self-reports from inpatients of symptom management, self-care and health status; and 3) post-discharge patient satisfaction.
- Nurse staffing variables included the average number of hours of nursing care per patient day on the day shift and the average percentage RN and average percentage UAP hours of direct care.
- The percentage of float nurses² and patient acuity were taken into account when examining the relationship between nurse staffing and patient outcomes.

Principal Findings

- As the percentage of hours of nursing care provided by RNs on the nursing units increased:
 - the level of pain perceived by patients decreased;
 - patients' perception of their self-care ability and their health status increased; and
 - satisfaction reported by patients post-discharge increased.

What do the Study Findings Mean?

- Increasing the number of hours worked by RNs on acute care units can be expected to improve patients' pain management as well as increase patients' satisfaction with care during hospitalization and their ability to care for themselves following discharge.
- Important indicators of quality care provided by RNs include:
 - managing patients' pain; and
 - increasing patients' self-care ability.
- Administrators and managers can use a tool such as the one described in this study to establish a database of quality patient outcomes in their hospitals to use as a benchmark when making evidence-based decisions about levels of nurse staffing and staff mix changes.
- Outcome databases can be used to plan professional development and continuing competence programs, quality improvement initiatives and clinical research.

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² Nurses from other hospitals or from outside the hospital who worked on the unit on the day shift.