Position Statement on
Mandated Nursing Ratios

Approved by the SHS Board of Directors, August 2005

The Issues

A chasm exists between the support for and opposition against mandated, legislated nurse-to-patient ratios. Some organizations advocate for ratios as a method to promote patient safety and nurse satisfaction. By contrast, groups in opposition state reasons such as loss of control at the hospital level, setting staffing levels based on ratios rather than patient dependency, and setting unrealistic demands for nurse recruiting in an environment of a nurse staffing shortage. Additionally, other reasons against ratios include an increase in hospital closures due to an inability to meet the staffing minimums; increase in Emergency Department diversions (denied access because a hospital cannot accommodate additional patients); delays in elective surgeries due to temporary operating room closures; and increased healthcare costs to meet legislated staffing levels.

As an example, the American Organization of Nurse Executives opposes mandated ratios. The organization suggests an increase in evidence-based and outcomes-driven research that includes patient acuity in the development of staffing guidelines.¹

Many members of the Society for Health Systems (SHS) have been instrumental in the development of systems to determine optimal clinical staffing. In doing so, multiple variables must be evaluated, so that an optimal staffing model:

- Matches clinical staffing to the specific needs of patients based on patients’ acuity, age, and ability to perform activities of daily living.
- Reflects the dependency of the patient upon nursing assistance, and takes into account the absence or presence of family support during the hospital stay.
- Takes into account hospital variables such as physical layout of the nursing unit, operating rooms, emergency department and support departments, technology available to the staff (such as manual or electronic nursing documentation, electronic medical records, medicine administration procedures, automated supply cabinets, and computerized physician order entry), the degree of turnover of the units (admissions, discharges and transfers), and the role of the hospital as either teaching or non-teaching, Level 1 trauma center or not, and any specializations within the hospital.
- Fluctuates staffing by shift and day based on variations in census and patient care requirements.
- Reflects the culture of the hospital with respect to provision of nursing care and skill mix of nursing providers.
- Is objective, repeatable, and tested to be a valid method to set staffing levels.
- Involves the major hospital stakeholders in developing the staffing model – including administrators, nursing leadership and staff, support and ancillary departments.

Most of these key variables are not addressed in a static, mandated nurse-to-patient ratio. An efficient, comprehensive staffing plan can only be developed through careful analysis with key stakeholders, and devised to adjust staffing requirements on a daily and shift basis. A static ratio target has many shortcomings and assumptions that are to the detriment of the efficient management of nursing care:

- All patients are not alike. A patient’s needs are individually different and must be assessed when assigning nursing care hours. Treating one patient as equivalent to all others is simplistic and will lead to incorrect staffing assumptions.
• All nursing units of the same specialty are not equivalent.
• All hospitals are not the same. Variations affect staffing such as urban or rural location, hospital culture, availability of nursing skill mix, and physical layout of the hospital.
• All nursing resources are not equivalent with respect to training and education.

Legislation Background
Several nurse-to-patient ratio laws have been either proposed or enacted at the state and federal levels. There is disagreement about the benefits and consequences of mandating ratios by governmental agencies. The advent of mandated ratios began in California with a bill introduced in 1999 with backing by the California Nurses Association. Recent legislation and proposals are summarized below:

• 1999 — California passed Assembly Bill 394, the first comprehensive legislation in the United States to mandate minimum staffing levels for nurses. AB 394 directed the California Department of Health Services to establish minimum, specific nurse-to-patient ratios by licensed nurse classification and by hospital unit. The legislation became effective on January 1, 2004; and the medical/surgical ratios were tightened effective January 1, 2005.

• January 2005 — Legislation S71, U.S. Senate (Senator Inouye), to amend Title XVIII of the Social Security Act to impose minimum nurse staffing ratios in Medicare participating hospitals, and limit amount of overtime by nurses. Bill is in committee.


• Six other states have enacted staffing regulations, but not specific ratios. An estimated eighteen additional states have introduced legislation that addresses nurse staffing and is in some stage of consideration.

Summary of Analysis and Research
Research on the effects of altering nurse-to-patient ratios and the resulting outcomes appears to be inconclusive. Although it is intuitive to say that increasing nurse staffing will have beneficial results on outcomes, safety, and nurse satisfaction, there does not seem to be a significant body of research on how to achieve this effectively and efficiently. A comprehensive literature review conducted in part by the University of California Davis Center for Nursing Research states, “We found no evidence to justify specific nurse-to-patient ratios in acute care hospitals, especially ratios that are not adjusted for case mix and skill mix.”

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) found that staffing levels have been a factor in 24% of sentinel adverse events that resulted in death, injury, or permanent loss of function. The JCAHO states, “Current mandated ratios, related legislative proposals, and other nurse staffing initiatives are aimed primarily at adding to the supply of nurses. However, these efforts do not address other critical issues, such as nurse competency, skill mix in relation to patient acuity, and ancillary staff support.” The JCAHO has endorsed “new standards that will require health care organizations to assess their staffing effectiveness by continually screening for potential issues that can arise from inadequate or ineffective staffing.”

A recent study of 799 hospitals found similar results, and also concluded that “the level of staffing by nurses is an incomplete measure of the quality of nursing care in hospitals.” Additionally, there has been little research regarding potential consequences, inherent tradeoffs, or the effectiveness of mandated staffing versus hospital-determined staffing policies.
Society for Health Systems Position

It is the position of the Society for Health Systems that:

- The benefits and consequences of static, across-the-board nurse staffing levels have not been sufficiently studied to endorse mandated nurse-to-patient ratios.
- It is doubtful that any unilateral requirement could be appropriate for all organizations due to variations in patient case-mix and other hospital-to-hospital differences.
- Mandated ratios are over-simplified and may lead to inefficient and sub-optimal care systems.
- Staffing policies established locally based on each hospital’s patient population are more appropriate and efficient, and are more aligned with the individual characteristics of patients, hospitals and communities.

SHS recommends:

- Hospitals, regulators, and professional organizations support current JCAHO staffing guidelines and initiatives.
- Education to key stakeholders regarding the many factors to be considered when developing staffing policies.
- The involvement of industrial, management and systems engineers, administrators and nursing leadership in developing staffing models using the most current management science.

SHS encourages hospitals to develop efficient, patient-centered staffing policies based on careful analysis of the multiple variables and considerations, such as:

- Differing patient needs based on acuity, age, mobility, and functionality.
- Fluctuations in care needs by shift and day.
- Nursing staff skill mix, education, and experience levels.
- Physical layout of nursing units, hospital departments, and ancillary support systems.
- Type of hospital (teaching/non-teaching, rural/urban, trauma center, etc).
- Available technology (electronic records, automated supply cabinets, etc).
- Patient turnover (average length-of-stay or bed turns).

References


2 “Hospital Nursing Staff Ratios and Quality of Care: Final Report on Evidence, Administrative Data, an Expert Panel Process, and a Hospital Staffing Survey”, UC Davis Center for Health Services Research in Primary Care and UC Davis Center for Nursing Research, May 2002.


About the Society for Health Systems

The Society for Health Systems (SHS) is a society of the Institute of Industrial Engineers. It is a professional organization comprised of healthcare analysts, management engineers, systems engineers, improvement professionals, clinicians and administrators. The Society membership has significant expertise in developing models to determine organizational resource needs and efficient operating systems in healthcare organizations, based on industrial engineering and management science concepts.

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