UTILIZATION GUIDE

for the ANA

PRINCIPLES *for Nurse Staffing*

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The science of measuring patient needs and nursing work has evolved since the earliest recorded efforts by the New York Academy of Medicine in 1922. In an effort to quantify nursing need in a post-war shortage, superintendents from ten training schools for nurses participated in a "time study of the bedside nursing required by the average type of case in the surgical, medical and pediatric services of an acute hospital." The findings: the average nursing care requirement among these patients was five hours and four minutes in a 24-hour period, or approximately five nursing hours per patient day. The author reports that, at that time, none of the hospitals in the city of New York had sufficient nurse staffing to meet that need. From this observation, the author surmised that "a statement can be made that the bed capacity alone does not indicate the availability of hospital facilities. Hospitals with a nursing standard falling so much below the requirements for adequate nursing as many of them do, should not consider themselves able to run at full capacity." (Lewinski-Corwin, 606).

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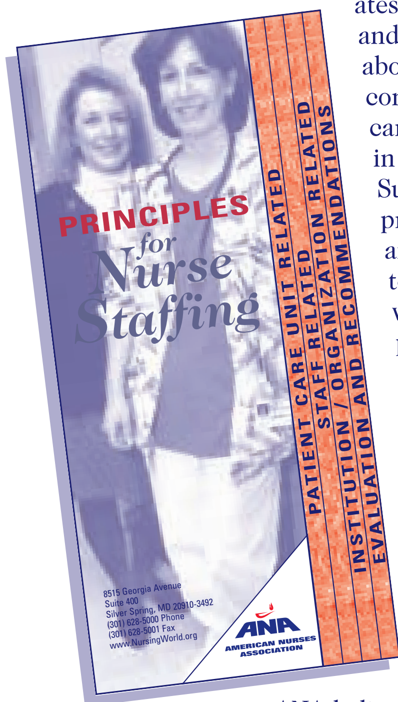
FOREWORD

Since the 1999 publication of ANA's *Principles for Nurse Staffing* (*the Principles*, Appendix A), staffing issues facing the profession have grown more complex as a result of a variety of issues, including the perceived shortage of registered nurses. Other factors, such as fewer nursing school graduates, aging populations of patients and nurses, increasing concerns about health care spending, and competing priorities for health care dollars, place the profession in a potentially perilous situation. Such pressures on nursing to provide nursing care to sicker and older patients cause nurses to seek the definitive answer for what is the right number of patients per RN within care units; what is the perfect staffing system; and who has found the answers. However, there are no perfect answers to these questions. Recent research has addressed these questions and is starting to provide some insights (Cho, et al. 2003, Needleman, et al., 2001, ANA, 2000, etc.).



ANA believes that the level where care is given is where these questions need to be addressed. The *Principles* are a framework to help nurses and administrators address questions about appropriate staffing, provide measurable criteria to assess the sufficiency of staffing and the criteria for reviewing staffing systems to ensure they are comprehensive in their framework. This utilization guide provides concrete information for applying the ANA *Principles for Nurse Staffing* in assessing the adequacy of nurse staffing on units.

INTRODUCTION

The ANA *Principles for Nurse Staffing* were developed to focus the health care industry on how complex nurse staffing decisions are and to identify the major elements to consider when evaluating the safety and appropriateness of nurse staffing. The principles also can serve as a guide to making nurse staffing decisions. The need for such principles was evident when, shortly after they were published, the *Principles* were incorporated into legislative and collective bargaining contract language. While the *Principles* were never meant to identify appropriate staffing levels for nursing units, they were meant to guide users in identifying or developing better tools and processes to improve nurse staffing.

Registered nursing is a "knowledge-based" practice. Although registered nurses perform tasks such as bed making, catheter insertion, and medication administration, the knowledge they have obtained through their educational programs and work experiences guides the decision making needed to provide the full scope of nursing care to the appropriate patient at the appropriate time in the appropriate setting. Sufficient staffing allows the registered nurse the freedom to apply that knowledge efficiently and effectively, and is therefore critical.

The ANA Congress on Nursing Practice and Economics (CNPE) has developed this guide for nurses in all positions and across all settings. It also may be useful to nurse entrepreneurs in the business of developing staffing systems for health care facilities and health care consultants, but its primary focus remains nurses who make staffing decisions.

DEVELOPMENT OF THE PRINCIPLES *for* *Nurse Staffing*

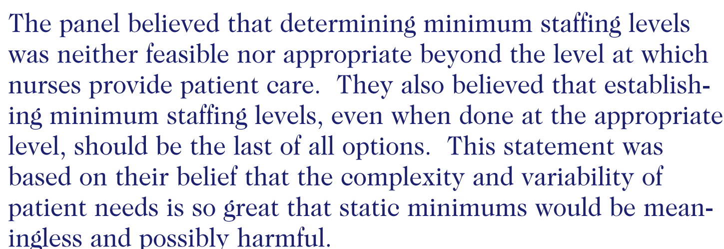
In 1997, ANA convened a panel of nurse experts and health services researchers with expertise in nurse staffing or nursing administration to help ANA develop an understanding of factors contributing to nurses' workloads and the adequacy of staffing decisions. The process included the following steps:

- A review and synopsis of all staffing and outcomes research conducted following the 1996 Institute of Medicine report *Nurse Staffing in Hospitals and Nursing Homes: Is it Adequate?*
- A synopsis of federal (Medicare Conditions of Participation) and state regulations related to nurse staffing requirements.
- A compilation of staffing standards set by specialty nursing organizations.

Following the completion of the above reviews, the panel met to begin its work.

The panel's discussion included, among other topics:

- Feasibility of identifying minimum safe staffing levels
- Levels and variability of patient acuity
- Individual nurse factors such as experience and expertise
- Organizational resources and support available to the patient care unit
- Issues related to the work environment.



The panel believed that determining minimum staffing levels was neither feasible nor appropriate beyond the level at which nurses provide patient care. They also believed that establishing minimum staffing levels, even when done at the appropriate level, should be the last of all options. This statement was based on their belief that the complexity and variability of patient needs is so great that static minimums would be meaningless and possibly harmful.

Since the panel thought that establishing minimum staffing levels could not be done safely, it developed a framework for evaluating the adequacy of nurse staffing. The panel identified the principles for nurse staffing, as well as criteria for determining the staffing needs for a care setting. The information is organized into four categories:

- The patient care unit (patient-specific and unit-specific factors)
- The nursing staff (experience and expertise)
- The organization (policies and practices)
- Evaluation (of the sufficiency of staffing).

With information organized into these categories, nursing staff, administrators, other health professionals, consumers and policy makers can better appreciate all the factors that must be considered in making safe staffing decisions. Identifying the complexity of nurse staffing decisions should highlight the dangers of the budget-balancing approach of laying off experienced RNs. This identification also serves policy and law makers, administrators and nurses by encouraging a new and holistic look at internal and external policies and decisions affecting patients' and nurses' well-being.

ANA PRINCIPLES *for Nurse Staffing*

Three underlying assumptions of these principles provide guidance for staffing decisions:

- Nurse staffing patterns and the level of care provided should not be based on the type of payer.
- Evaluation of any staffing system should include quality of nurses' work life outcomes as well as patients' outcomes.
- Staffing should be based on achieving quality of patient care indices, meeting organizational outcomes, and ensuring that the quality of nurses' work life is appropriate.

These assumptions state the major ethical concerns guiding ANA's conceptualization of the forces that drive nurse staffing decisions. First and foremost is the concern for the patient and the type of care the patient receives. Second is the concern for the well being of the nurse, which directly and indirectly affects patient care. As is required of registered nurses in all of the profession's foundational documents [*The Code of Ethics for Nurses with Interpretive Statements* (2000), *Nursing's Social Policy Statement, 2nd Ed* 2003) and *Nursing: Scope and Standards of Practice* (2004)], patient safety and well being is the critical factor that guides all decision making.

Beyond these assumptions, there are specific principles and important criteria relating to patients and the care unit, the nursing staff, and the organization (see Appendix A). These principles and criteria will be discussed in the rest of this document.

USING THE PRINCIPLES

Making nurse staffing decisions is a complex process requiring input from all levels within the nursing structure. Critical to this process are any patient classification and acuity systems currently being used. Since a number of each of these systems are in use, it is necessary to find out from the system's vendor which of the criteria found in the *Principles* are included in the system they offer. Knowing that, data on criteria not included in the systems can then be collected.

Determining patient classification and measuring nursing workload

In the more than 80 years since the original studies on nurse staffing, the science of measuring patient need and translating that information into staffing requirements has made significant advances. Nevertheless, it still lacks the specificity and reliability needed in 21st-century health care.

Giovannetti defines patient classification as the "categorization of patients according to some assessment of their nursing care requirements over a period of time" and the function of patient classification systems as "the identification and classification of patients into care groups or categories, and the quantification of these categories as a measure of the nursing effort required" (Giovannetti, 1979). These two concepts are critical to the staffing process.

Abdellah and Levine distinguish two major types of patient classification systems: "prototype evaluation" and "factor evaluation" (1965). Using prototype evaluation, the nurse reads among scenarios of sample patients and their care needs, and then selects one that most closely matches the patient being assessed. The patient is then assigned the associated acuity level or category number. The advantage of this system is that it simplifies the process and the time required for assessment. However, because of the subjective nature of this approach, a great deal of variability among nurse assessments of a single patient may occur. Thus, the reliability of the system is uncertain and the accuracy of the assessments questionable.

When evaluating factors, the rater selects from a menu of the care requirements and interventions that apply to the patient being assessed, or the system identifies the interventions from documentation in the electronic patient record. Each of the requirements has its own associated (but invisible) value regarding time required to deliver that care. When totaled, the patient's acuity level/category and the hours of nursing care required are both determined. That information is then added to the data on other patients (aggregated), and the number of staff required for the unit is calculated. However, not all tools have the capacity to distinguish among the hours of care needed and identify the appropriate mix of staff (RN, LPN/LVN, unlicensed personnel) needed. Professional nursing judgment is needed in all of these systems to ensure that the output meets the actual clinical needs of the nursing unit.

VanSlyck (1991) adds to the categories of patient classification systems. Systems having values associated with interventions that only account for the time required to accomplish them are known as timed-task systems. Timed-task systems are based on industrial models and provide only a portion of the staffing requirements: the overall hours of staff time needed. Timed-task systems are uni-dimensional and thus are unable to determine hours of care according to skill level. It is then the professional judgment of a registered nurse that must decide how the staff is apportioned among RNs, LPNs and assistive personnel.

Assessment and intervention systems, on the other hand, can project staffing needs in terms of both number and skill mix. The difference is that, rather than simply associating time with activities, these systems have been developed to also interpret the skill level required for various patient care activities. In reality, the nursing care process has been embedded in each intervention. As a result, once the appropriate information has been entered and calculated, staffing for the next shift would be suggested both in number and mix.

Although originally focused on a better way to capture patient needs in making staffing decisions, classification systems have other benefits. These benefits, through daily documentation and collection of patient care needs, can provide patient data and staffing information, which helps to identify trends and project staffing and budget needs for subsequent years.

The role of professional judgment

As stated earlier, a patient classification or acuity system is only one part of a staffing system. Professional judgment is critical in evaluating the results of a classification or acuity system in light of the registered nurses' knowledge of the nursing needs of the patients on any unit. Blindly accepting an automated system's output without a knowledgeable person's critical review is inviting trouble.

Consider the following two examples. Mrs. R., 75 years old, is two days post-operative following a cholecystectomy. All of her vital signs are stable. She is walking with minimal assistance, eating a soft diet; and bathing with no assistance. Her family visits daily. Mrs. R. could be cared for by unlicensed assistive personnel. She is very stable and recovering quickly from her surgery. Family is present and provides support. The RN will provide oversight of the assistive personnel's care but is not the care provider.

Mr. J. is a 75-year-old with moderate emphysema and cardiac insufficiency who is hospitalized with congestive heart failure. He is on a cardiac monitor, IV medications, a central venous catheter, a foley catheter, oxygen cannula, strict intake and output measurement, skin breakdown prevention measures, vital signs every 30 minutes and respiratory treatments to prevent pneumonia and pneumothorax. Mr. J. has no family or friends who stay with him. This patient is critically ill and requires a high level of care by an expert registered nurse.

These examples profile two patients with potentially high levels of acuity but totally different nursing care needs. Such differences require the assessment of classification and acuity system output by registered nurses with knowledge of the patients being included in the staffing system.

In the decision about which registered nurses, licensed practical nurses and other assistive personnel are assigned to a particular unit, the classification systems do not take into account such things as who works best with dying patients and their families, who works best with respiratory patients, who has the skills to manage a patient's complex needs and who handles a frightened patient best. These are very subjective characteristics of the nursing care providers involved in this staffing system. If care is to be appropriate for the patient and the work

fulfilling for the care provider, such subjective characteristics must be taken into account when staffing. Using such information in staffing decisions requires the knowledge and understanding of an experienced registered nurse.

As can be seen in the *Principles*, there are a number of variables relating to the patient, nurse and organization that will affect staffing decisions. For example, if there are patients on a unit who are receiving blood products throughout the night, who will go to the blood bank? Does the hospital have a "transport" or "runner" service to meet such needs? If someone from the nursing unit must go pick up the blood in the blood bank, who will do that? How will that need for a member of the nursing staff to be out of the unit for a period of time affect the care of the unit's patients? Such issues are real and often multiply in many care settings. For example, if a home health nurse has a patient who requires complex care, how do that patient's needs affect the nurse's other patients or other nurses' workload assignments? How will they affect staffing decisions?

In another example, the classification tool projects a need for five registered nurses in coronary care, and one of the five nurses is a new graduate, another is working a double shift and a third is being assigned from Labor & Delivery. What staffing decisions should be made to ensure proper nurse staffing on this coronary care unit? Perhaps additional or more experienced RNs might be required to complete the staff complement for that unit on that shift. This is possibly the most important step in the staffing process, but it is not factored into classification tools and includes considerations that are only recently being considered. The considerations are unique to facilities, shifts, seasons and other factors, and are absolutely critical in making staffing adjustments that increase the ability of the nursing staff to deliver safe, quality care to their patients.

It becomes obvious how much subjective input is needed in making staffing decisions when you review the principles contained in the *Principles for Nurse Staffing*. The clinically skilled and knowledgeable registered nurse familiar with the patients and nursing staff must review the output of staffing systems if staffing decisions are to be made in the best interest of patients and care providers.

Decision-making resources

A range of resource materials should be made available to support registered nurses involved in the staffing process. Keeping this information ready can clarify and expedite the decision-making process and help to answer a range of questions, as well as support decision-making. Some useful resources are:

- Current *Nursing: Scope and Standards of Nursing* (ANA)
- Appropriate scopes and standards of specialty nursing practice
- Current State Nurse Practice Act and Scope of Practice information (State Board of Nursing)
- Current *Code of Ethics with Interpretive Statements* (ANA)
- Copies of relevant facility policies and procedures (staffing, floating, agency use, etc.)
- Copies of the current collective bargaining agreement/contract (if applicable)
- Copies of contracts with outside staffing agencies
- Information on competencies of agency staff
- *The Bill of Rights for Registered Nurses* (ANA)
- *Principles for Delegation*.

Patient Acuity Systems: Purchasing Decisions

The principles in the *Standards* can serve as a guide to assessing the comprehensiveness of any system under consideration. Direct care nursing staffs should participate in the evaluation process or at least provide structured and focused input to decision-makers on purchases of systems affecting staffing decisions.

Including staff from all departments that provide or use data resulting from such systems will help decision-makers better understand the changing nature of care delivery and help increase their sensitivity to the effect such systems may have on the staff.

At the same time the systems are assessed, staffing-related policies and procedures should be reviewed and evaluated. These may be found in an organization's policies and procedures manual, collective bargaining agreements, contracts with outside agencies or protocols developed at the unit level.

While the evaluation of a product is the job of the organization's management, that work can be made easier by providing them the *Principles* and staff input from those who will use the system. Working collaboratively on the process also can increase buy-in from staff and confidence in the product purchased. It is highly recommended that the organization's decision-makers and vendors receive a copy of the ANA *Principles for Nurse Staffing* before the vendor's visit so that they can incorporate information in their presentation about how their product addresses the principles.

In addition to the nursing staff — at all levels and across all units within the facility — others may benefit from being involved in the education and selection process and may provide valuable input because of the nature of their work. While each organization is unique, some suggestions for who should be included are:

- Information technology staff (Is the tool computerized? Will it work with the computer system and programs in place?)
- Finance department staff (Will the tool provide information that can be used to determine budget projections? Can the tool capture revenue generated as a result of nursing care?)
- Quality assurance/risk management staff (Will the tool help to project staffing that improves patient safety and outcomes, or help to identify at what point staffing levels affect patient safety and outcomes?)

When an organization has determined it will purchase a patient classification or acuity system, staff at various levels within the organization should meet with vendors to hear about the capabilities of their products and to provide information that will be important in the implementation process.

Checklist of acuity systems

Questions that might provide important and relevant information about any system include some of the following:

1. What is your philosophy on nurse staffing?
2. Can you identify how your system addresses the *Principles* and captures the data necessary to include the criteria in your system?
3. How does your product help a facility meet the staffing effectiveness requirements of JCAHO?
4. Can you explain the role you see registered nurses playing in determining appropriate staffing?
5. What departments within a hospital should be involved in evaluating your product?
6. Where is the information used in determining patient acuity derived?
7. How is patient acuity determined?
8. How is skill mix determined?
9. How many client hospitals are currently using your staffing system?
10. What is the average length of time your client hospitals have used your product?
11. What do your clients find most beneficial about your system?
12. What do your clients find most difficult about your system?
13. What have clients who chose not to use your system seen as shortcomings?
14. What additional benefits result from using your staffing system?
15. How much training is involved in using your system?
16. Who provides the training to use your system, and who receives the training?
17. What does the training encompass?
18. What is the average start-up time for your system?
19. What software is and is not compatible with your system?
20. How reliable/valid is your system?
21. How do you measure for reliability and validity?
22. How often is this measurement completed?
23. What patient and nurse outcome data does your system collect to evaluate trends in staffing sufficiency?
24. Where is the information gathered during the classification process stored?

Evaluating a system

It is critical to evaluate any system used to do staffing. The evaluation should include the assessment of whether the systems output (i.e., suggested staffing mix and levels) meets the needs of the patients and nurses on the nursing care unit. Recognizing that, evaluating the sufficiency of staffing may not reflect the accuracy of the instrument alone, but also may evaluate the effectiveness of the entire staffing process. Research in acute care provides evidence that when Magnet™ criteria are met; including RN participation in decisions related to staffing, RNs have higher job satisfaction (Kramer & Schmalenberg, 1991; Aiken, Havens, & Sloan, 2000) and lower nurse burnout (Aiken, Sochalski, & Lake, 1997; Aiken, Havens, & Sloan 2000). In addition, there is some evidence that such facilities experience improved patient outcomes, such as higher patient satisfaction (Aiken, Sloane, & Sochalski, 1998) and a lower mortality rate (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).

Research in acute care provides evidence that when Magnet™ criteria are met; including RN participation in decisions related to staffing, RNs have higher job satisfaction.

Moreover, it is critical that the sufficiency of staffing is measured on an ongoing basis that, at a minimum, should include collection and analysis of nursing-sensitive structure, process and outcome indicators. ANA's 1997 foundational work on the identification of these elements has yielded a framework for establishing the linkages between nurse staffing and patient outcomes but also has provided policy groups and regulatory agencies with criteria to evaluate patient safety.

The indicators used or under development by ANA in the National Database for Nursing Quality Indicators (NDNQI, 2005) are listed below:

- Mix of RNs, LPNs and assistive personnel caring for patient
- Total nursing care hours provided per patient day (RNs, LPNs, assistive personnel)

- Contract agency staff
- Pressure ulcers
- Patient falls
- Patient falls with injury
- RN staff satisfaction
- Pediatric pain assessment cycle
- Pediatric peripheral intravenous infiltration
- Restraint use (psychiatry)
- Violent behavior (psychiatry)
- RN voluntary turnover
- Nursing musculoskeletal injuries.

These data are collected at the nursing unit level. More detailed information on the ANA nursing-sensitive quality indicators, their standardized definitions and NDNQI can be found at http://www.nursingworld/NDNQI.

In addition to evaluating the above data, the ANA *Principles for Nurse Staffing*, stating that the quality of work life has an impact on the quality of care delivered, recommends that trends in the following also should be monitored as a measure of sufficient staffing:

- Work-related staff illness and injury rates
- Overtime rates
- Flexibility of human resource policies and benefit packages
- Evidence of compliance with applicable federal, state and local regulations.

According to the *Principles,* the ultimate goal of staffing should be to ensure that "the quality of patient care is maintained, the quality of organizational outcomes is met and the quality of nurses' work life is acceptable" (ANA, 2000). Changes in staffing should be based on analysis of standardized, routinely collected indicators that capture both patient care outcomes and nurse outcomes. Critical to this process is the standardized definitions and collection methods of all indicators.

The importance of measuring reliability and validity

An additional consideration in the assessment process is evaluating the reliability of those persons who collect the data. Several factors support the need for these measurements:

- Frequent turnover in staff
- Human fallibility
- The changing environment
- The need to make projections for future staffing and budget requirements
- The need to meet external requirements for valid and reliable patient acuity systems.

What is reliability? Reliability means that the instruments and the individuals using them produce consistent and accurate results. Before implementing any new technology, including new patient classification instruments, the users of the technology — in this case RNs — need to be thoroughly trained in their use and then evaluated at specified intervals to be sure that they are following the collection definitions and methods accurately. In addition, inter-rater reliability, the measurement for accuracy between and among nursing staff collecting the data, is critical. Inter-rater reliability measurements check that all data collectors are obtaining the same results. ANA recommends that, at a minimum, inter-rater reliability be measured twice a year.

What is validity? We know the patient classification instrument is valid if it measures the scope of nursing care needs for patients in order to predict staffing required in order to deliver that care. Validity is not an all or none concept but can exist in degrees and can be measured from a range of perspectives. Three types of validity important to this discussion include:

- **Face validity** — a judgment as to whether or not the instrument in question appears to be measuring the desired concept (Brockopp and Tolsma, 190).
- **Content validity** — is a judgment regarding how well the instrument represents the characteristics to be assessed (Brockopp and Tolsma, 190).
- **Construct validity** — refers to the extent to which a participant actually possesses the characteristic under study (Brockopp and Tolsma, 190).

"The validity of an instrument (how well it measures what it is supposed to measure) is essential to the success of any research endeavor" (Brockopp and Tolsma, 191).

It is important to note that **any** change in a data collection instrument invalidates its validity. If changes in any instrument are needed, the organization should work with the instrument developer or statisticians to re-establish the instrument's reliability and validity.

Staffing frustrations might make inflating information entered into a classification instrument seem like a good option to establish the need for more staff, however, to maximize the benefits of a classification tool, accuracy and consistency are the keys. If the instrument does not seem to be projecting the need for adequate or appropriate staffing, it is recommended that staff work with the organization's administration at the unit level to collect data to demonstrate the system's inadequacy. Then such data can be presented to the appropriate upper-level management responsible for staffing decisions and the staffing system.

Frequently asked questions

Where can one go for expert advice on classification/acuity tools?
The ANA *Principles for Nurse Staffing* provides a comprehensive perspective on the critical considerations for evaluating an existing or potential patient classification tool. However, finding or understanding how a particular instrument measures those considerations are measured and obtaining guidance in developing a more wide-ranging process requires expert support from the instrument's vendor.

How do you know if the system really works?
Vendors should be willing to provide names of facilities and contacts who can talk with you directly about how the system has functioned in their facility. Use some of the questions developed for the vendor interview in your conversations with customers to compare responses. In some cases, visits can be arranged providing potential customers with opportunities to see systems up and running in other facilities, and to talk with staff about their experiences.

Who should be involved in data review, and what data should be evaluated?
In addition to unit staff and managers, quality assurance/risk management staff can benefit from the review of patient and nurse-related data. ANA believes that the nursing-sensitive quality indicators (http://www.nursingworld.org/NDNQI) should be used in the evaluation process. In addition, other specific data recommendations have been listed in the Evaluation section of the *Principles* (http://www.nursingworld.org/readroom/stffprnc.htm).

How frequently should data be reviewed?
At a minimum, data should be reviewed twice a year. If unacceptable or unanticipated trends in patient safety or nurse well-being become evident, more frequent review may be necessary. It is recommended that in times of rapid change in staff, administration, patient population or ownership data should be evaluated on a quarterly basis.

What do you do if expertise is needed to assist in data review?
To ensure that all participants have a similar foundation in the review of data and are able to make some assessment of the value and meaning of the data collected, it is recommended

that some basic education on statistics and research methods be provided. In similar situations, ANA has developed curricula and jointly participated in this process in concert with a local (nurse) researcher who can be more routinely accessible over the course of time. If not available on staff, nursing or health services researchers at a nearby university or college could provide similar assistance.

Are there other options for data analysis?

More than 800 hospitals currently participate in the National Database for Quality Indicators (NDNQI), a database for nursing-sensitive indicators, developed and maintained under a contract with ANA. NDNQI provides facilities with quarterly (unit-level) reports for their facility, as well as benchmarking data with similar facilities.

Where can facilities or nurses go for more assistance with patient classification systems?

ANA cannot make recommendations about specific vendors. However, it can provide criteria for assessing and answers to general questions. Also, the reference section included in this guide includes articles that also may answer readers' questions.

If you have further questions about how to understand the ANA *Principles for Nurse Staffing*, or how to use them in assessing or developing a staffing process for your care environment, please contact the ANA Department of Nursing Practice and Policy for assistance. In addition, you can contact vendors to receive information on their individual systems. Health care consultants often can provide information.

APPENDIX A

PRINCIPLES *for* Nurse Staffing

Introduction

Adequate nurse staffing is critical to the delivering of quality patient[1] care. Identifying and maintaining the appropriate number and mix of nursing staff is a problem experienced by nurses at every level in all settings. Regardless of organizational mission, tempering the realities of cost containment and cyclical nursing shortages with the priority of safe, quality care has been difficult, in part, because of the paucity of empirical data to guide decision-making. Since 1994, the recognition of this critical need for such empirical data has driven many American Nurses Association (ANA) activities, including identifying nursing-sensitive indicators, establishing of data collection projects using these indicators within the constituent member associations (CMAs) and providing ongoing lobbying at federal and state levels for inclusion of these data elements within state and national data collection activities. In 1996, the Institute of Medicine produced its report "The Adequacy of Nurse Staffing in Hospitals and Nursing Homes" (Wunderlich, et al., 1996) in which it, too, recognized the need for such data. Despite these efforts, heightened and more immediate attention to issues related to the adequacy of nurse staffing is needed to ensure the provision of safe, quality nursing care.

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[1] "...the recipients of nursing care are individuals, groups, families, or communities...the individual recipient of nursing care can be referred to as patient, client, or person. ...The term "patient" is used throughout to provide consistency and brevity..." (ANA, 1995. Nursing's Social Policy Statement).

Wunderlich, G.S., Sloan, F.A. and Davis, C.K. (1996). *Nursing Staff in Hospitals and Nursing Homes: Is it Adequate?* Washington, DC: National Academy Press.

Policy Statements

- Nurse staffing patterns and the level of care provided should not depend on the type of payer.
- Evaluation of any staffing system should include quality of work life outcomes as well as patient outcomes.
- Staffing should be based on achieving quality of patient care indices, meeting organizational outcomes and ensuring that the quality of the nurses' work life is appropriate.

Principles

The nine principles identified by the expert panel for nurse staffing and adopted by the ANA Board of Directors on November 24, 1998, are listed below. A discussion of each of the three categories follows the list.

I. Patient Care Unit Related

a. Appropriate staffing levels for a patient care unit reflect analysis of individual and aggregate patient needs.
b. There is a critical need either to retire or seriously question the usefulness of the concept of nursing hours per patient day (NHPPD).
c. Unit functions necessary to support delivery of quality patient care also must be considered in determining staffing levels.

II. Staff Related

a. The specific needs of various patient populations should determine the appropriate clinical competencies required of the nurse practicing in that area.
b. Registered nurses must have nursing management support and representation at both the operational and executive level.
c. Clinical support from experienced RNs should be readily available to those RNs with less proficiency.

III. Institution/Organization Related

a. Organizational policy should reflect an organizational climate that values registered nurses and other employees as strategic assets and exhibits a true commitment to filling budgeted positions in a timely manner.
b. All institutions should have documented competencies for nursing staff, including agency or supplemental and traveling RNs, for those activities that they have been authorized to perform.
c. Organizational policies should recognize the myriad needs of both patients and nursing staff.

I. Patient Care Unit Related

There is a critical need either to retire or seriously question the usefulness of the concept of nursing hours per patient day. It is becoming increasingly clear that when determining nursing hours of care, one size (or formula) does not fit all. In fact, staffing is most appropriate and meaningful when it is predicated on a measure of unit intensity that takes into consideration the aggregate population of patients and the associated roles and responsibilities of nursing staff. Such a unit of measure must be operationalized to take into consideration the totality of the patients for whom care is being provided. It must not be predicated on a simple quantification of the needs of the "average" patients but also must include the "outliers." The following critical factors must be considered in the determination of appropriate staffing (see Table I):

- Number of patients
- Levels of intensity of the patients for whom care is being provided
- Contextual issues including architecture and geography of the environment and available technology
- Level of preparation and experience of those providing care.

Appropriate staffing levels for a patient care unit reflect analysis of individual and aggregate patient needs. The following specific patient physical and psychosocial considerations should be taken into account:

- Age and functional ability
- Communication skills

- Cultural and linguistic diversities
- Severity and urgency of admitting condition
- Scheduled procedures
- Ability to meet health care requisites
- Availability of social supports
- Other specific needs identified by the patient and by the registered nurse.

Unit functions necessary to support delivery of quality patient care must also be considered in determining staffing levels:

- Unit governance
- Involvement in quality measurement activities
- Development of critical pathways
- Evaluation of practice outcomes.

Table 1

Matrix for Staffing Decision-Making

Items	*Elements/Definitions*
Patients	Patient characteristics and number of patients for whom care is being provided
Intensity of unit and care	Individual patient intensity; across-the-unit intensity (taking into account the heterogeneity of settings); variability of care; admissions, discharges and transfers; volume
Context	Architecture (geographic dispersion of patients, size and layout of individual patient rooms, arrangement of entire patient care units and so forth); technology (beepers, cellular phones, computers); same unit or cluster of patients
Expertise	Learning curve for individuals and groups of nurses; staff consistency, continuity and cohesion; cross-training; control of practice; involvement in quality improvement activities; professional expectations; preparation and experience

II. Staff Related

The specific needs of various patient populations should determine the clinical competencies required of the practicing nurse. Role responsibilities and competencies of each nursing staff member should be well articulated, well defined and documented at the operational level (Aiken, 1994). Registered nurses must have nursing management support and representation (first-line manager) at both the operational level and the executive level (nurse executive) (Aiken, 1994). Clinical support from experienced RNs should be readily available to those RNs with less proficiency (McHugh et al., 1996). The following nurse characteristics should be taken into account when determining staffing:

- Experience with the population being served
- Level of experience (novice to expert)
- Education and preparation, including certification
- Language capabilities
- Tenure on the unit
- Level of control of practice environment
- Degree of involvement in quality initiatives
- Measure of immersion in activities, such as nursing research, that add to the body of nursing knowledge
- Measure of involvement in interdisciplinary and collaborative activities regarding patient needs in which the nurse takes part
- The number and competencies of clinical and non-clinical support staff the RN must collaborate with and supervise.

Aiken, L.H., Smith, H.L. and Lake, E.T. (1994). "Lower Medicare mortality among a set of hospitals known for good nursing care." Medical Care. 32(8), 771–787.

McHugh, M., West, P., Assatly, C., Duprat, L., Howard, L, Niloff, J., Waldo, K., Wandel, J., Clifford, J. (April 1996). "Establishing an interdisciplinary patient care team." *Journal of Nursing Administration*. 26(4), 21–27.

III. Institution/Organization Related

Organizational policy should reflect an organizational climate that values registered nurses and other employees as strategic assets and exhibits a true commitment to filling budgeted positions in a timely manner. In addition, personnel policies should reflect the agency's concern for employees' needs and interests (McClure, et al., 1983).

All institutions should have documented competencies for nursing staff, including agency or supplemental and traveling RNs, for those activities that they have been authorized to perform (JCAHO, 1998). When floating between units occurs, there should be a systematic plan in place for cross-training of staff to ensure competency (JCAHO, 1998). Adequate preparation, resources and information should be provided for those involved at all levels of decision-making. Opportunities must be provided for individuals to be involved to the maximum amount possible in making the decisions that affect them. (Williams and Howe, 1994). Finally, any use of disincentives for reporting near misses and errors should be eliminated to foster continuous quality improvement (Leape, 1994).

In addition, the organizational policies should recognize the myriad needs of both patients and nursing staff and provide the following:

- *Effective* and *efficient* support services (transport, clerical, housekeeping, laboratory and so forth) to reduce time away from patient care and the need for the RN to engage in "re-work" (Prescott et al., 1991)
- Access to timely, accurate, relevant information provided by communication technology that links clinical, administrative and outcomes data
- Sufficient orientation and preparation including nurse preceptors and nurse experts to ensure RN competency
- Preparation specific to technology used in providing patient care
- Necessary time to collaborate with and supervise other staff
- Support in ethical decision-making

- Sufficient opportunity for care coordination and arranging for continuity of care and patient or family education
- Adequate time for coordination and supervision of nursing assistive personnel by RNs
- Processes to facilitate transitions during work redesign, mergers and other major changes in work life (Bridges, 1991)
- The right for staff to report unsafe conditions or inappropriate staffing without personal consequence
- A logical method for determining staffing levels and skill mix.

McClure, M.L., Poulin, M.A., Sovie, M.D. and Wandelt, M.A. (1983). *Magnet Hospitals: Attraction and Retention of Professional Nurses*. Kansas City, MO: American Nurses Association.

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Leape, L. (1994) "Error in Medicine." *Journal of the American Medical Association*, 272,(23), 1851–1857.

Prescott, P., Ryan, J.W., Soeken, K.L., Castorr, A.H., Thompson, K.O. and Phillips, C.Y. (1991). "The patient intensity for nursing index: A validity assessment." *Research in Nursing and Health*, 14, 213–21.

Bridges, W. (1991). *Managing Transitions: Making the Most of Change*. Reading, MA: Addison-Wesley Publishing Company.

Evaluation

Adequate numbers of staff are necessary to reach a minimum level of quality patient care services. Ongoing evaluation and bench-marking related to staffing are necessary elements in the provision of quality care. At a minimum, this should include collection and analysis of nursing-sensitive indicators (ANA, 1997) and their correlation with other patient care trends. It has been shown that the quality of work life has an impact on the quality of care delivered. Therefore, on an ongoing basis, the following trends should be evaluated:

- Work-related staff illness and injury rates (Shogren and Calkins, 1995)
- Turnover/vacancy rates
- Overtime rates
- Rate of use of supplemental staffing
- Flexibility of human resource policies and benefit packages
- Evidence of compliance with applicable federal, state and local regulations
- Levels of nurse staff satisfaction.

Staffing should be such that the quality of patient care is maintained, the quality of organizational outcomes are met and that the quality of nurses' work life is acceptable. *Changes in staffing levels, including changes in the overall number and/or mix of nursing staff, should be based on analysis of standardized, nursing-sensitive indicators. The effect of these changes should be evaluated using the same criteria.* Caution must be exercised when interpreting data related to staffing levels and patterns and patient outcomes in the absence of consistent and meaningful definitions of the variables for which data are being gathered.

American Nurses Association (1997). *Implementing Nursing's Report Care: A Study of RN Staffing, Length of Stay and Patient Outcomes*. Washington, DC: American Nurses Publishing.

Shogren, B. and Calkins, A. (1995). Minnesota Nurses Association Research Project on Occupational Injury/illness in Minnesota Between 1990–1994. St. Paul, MN, The Minnesota Nurses Association.

RECOMMENDATIONS

Shifting the nursing paradigm away from an industrial model to a professional one would move the industry and organizations away from the technical approach of measuring time and motion to one that examines myriad aspects of using knowledge workers to provide quality care. This shift would spell the end to the "nurse-is-a-nurse-is-a nurse" mentality by focusing on the complexity of unit activities and levels of nurse competency needed to provide quality patient care. To facilitate this shift, ANA makes the following recommendations:

- A distinct, standardized definition of unit intensity must be developed. Factors to be taken into consideration in developing such a definition include:
  - Number of patients within the unit
  - Levels of intensity of all of the patients for whom care is being provided
  - Contextual issues including architecture and geography of the environment and available technology
  - Level of preparation and experience (i.e., competency) of those providing care.
- Data should be gathered to address the relationship between staffing and patient outcomes, including but not limited to:
  - Improvement in health status
  - Achievement of appropriate self-care
  - Demonstration of health-promoting behaviors
  - Patient length of stay or visit
  - Health-related quality of life
  - Patient perception of being well cared for
  - Symptom management based on guidelines (Mitchell, et al., 1997).

Mitchell, P.H., Heinrich, J., Moritz, P. and Hinshaw, A.S. (1997). "Outcome measures and care delivery systems: Introduction and purposes of conference." *Medical Care Supplement*. 35(11), NS1–NS5.

APPENDIX B

Registered Nurse Utilization of Unlicensed Assistive Personnel

Summary

The American Nurses Association (ANA) recognizes that unlicensed assistive personnel provide support services to the registered nurse that are required for the RN to provide nursing care in today's health care settings.

The current changes in the health care environment have and will continue to alter the scope of nursing practice and its relationship to the activities delegated to unlicensed assistive personnel (UAP). The concern is that in virtually all health care settings, UAPs are inappropriately performing functions that are within the legal practice of nursing. This is a violation of the state nursing practice act and is a threat to public safety. Today, it is the nurse who must have a clear definition of what constitutes the scope of practice with the reconfiguration of practice settings, delivery sites and staff composition. Professional guidelines must be established to support the nurse in working effectively and collaboratively with other health care professionals and administrators in developing appropriate roles, job descriptions and responsibilities for UAPs.

The purpose of this position statement is to delineate ANA's beliefs about the use of UAPs in helping provide direct and indirect patient care under the direction of a registered nurse.

Unlicensed Assistive Personnel

The term unlicensed assistive personnel applies to an unlicensed individual who is trained to function in an assistive role to the licensed nurse in providing patient/client activities as delegated by the nurse. The activities generally can be categorized as either direct or indirect care.

Direct patient care activities are delegated by the registered nurse and assist the patient/client in meeting basic human needs. This includes activities related to feeding, drinking,

positioning, ambulating, grooming, toileting, dressing and socializing and may involve collecting, reporting and documentation data related to these activities.

Indirect patient care activities focus on maintaining the environment and the systems in which nursing care is delivered and only incidentally involve direct patient contact. These activities assist in providing a clean, efficient and safe patient care environment and typically encompass categories such as housekeeping and transporting, clerical, stocking and maintaining supplies.

Utilization

Monitoring the regulation, education and utilization of unlicensed assistive personnel to the registered nurse has been ongoing since the early 1950s. While the time frames and environmental factors that influence policy may have changed, the underlying principles have remained consistent:

IT IS THE NURSING PROFESSION that determines the scope of nursing practice;
IT IS THE NURSING PROFESSION that defines and supervises the education, training and utilization for any unlicensed assistant roles involved in providing direct patient care;
IT IS THE RN who is responsible and accountable for the provision of nursing practice;
IT IS THE RN who supervises and determines the appropriate utilization of any unlicensed assistant involved in providing direct patient care; and
IT IS THE PURPOSE of unlicensed assistive personnel to enable the professional nurse to provide nursing care for the patient.

ANA assumes that the provision of safe, accessible and affordable nursing care for the public may include the appropriate use of unlicensed assistive personnel and that the changes in the health care environment have and will continue to alter the activities delegated to UAPs.

Therefore, it is the nursing profession's responsibility to establish and the individual nurse to implement the standards for the practice and utilization of UAPs involved in assisting the nurse in direct patient care activities. This is accomplished through national standards of practice and the definitions of nursing in state nursing practice acts.

To understand the roles and responsibilities between the RN and the UAP, ANA recognizes that clarifying professional nursing care delivery and the activities that can be delegated within the domain of nursing is essential. The act of delegation is the transfer of responsibility for the performance of an activity from one person to another while retaining accountability for the outcome.

It is the RN who uses professional judgment to determine the appropriate activities to delegate. The determination is based on the concept of protecting the public and includes consideration of the needs of the patients, the education and training of the nursing and assistive staff, the extent of supervision required and the staff workload. Any nursing intervention that requires independent, specialized, nursing knowledge, skill or judgment cannot be delegated.

Effective Date: December 11, 1992 [Please note: ANA work on the UAP issue has been ongoing. For additional information see House of Delegates (HOD) policies, HOD Summaries of Proceedings, and Nursing Trends and Issues.]
Status: New Position Statement
Originated by: Congress on Nursing Economics Congress of Nursing Practice
Adopted by: ANA Board of Directors
Related Past Action:
Scope of Nursing Practice, House of Delegates, 1987
ANA Opposition to the AMA proposal to Create Registered Care Technologists, House of Delegates, 1988

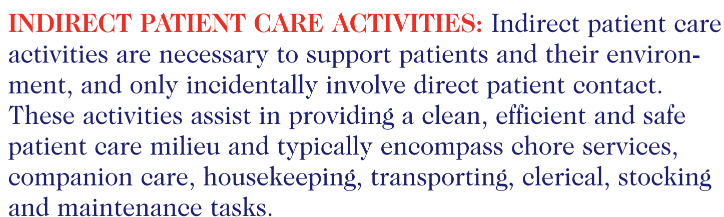
Attachment I: Definitions Related to ANA 1992 Position Statements on Unlicensed Assistive Personnel

The ANA Task Force on Unlicensed Assistive Personnel developed the following definitions to clarify the ANA position statements on the role of the Registered Nurse working with unlicensed assistive personnel. These definitions reflect a review of current regulatory, legal practice and professional terminology and are intended to be used only in the context of these position statements.

UNLICENSED ASSISTIVE PERSONNEL: An unlicensed individual who is trained to function in an assistive role to the licensed registered nurse in providing patient/client care activities as delegated by the nurse. The term includes, but is not limited to nurses aides, orderlies, assistants, attendants or technicians.

TECHNICIAN: A technician is a skilled worker who has specialized training or education in a specific area, preferably with a technological interface. If the role provides direct care or supports the provision of direct care (Monitor tech, ER tech, GI tech), it should be under the supervision of a Registered Nurse.

DIRECT PATIENT CARE ACTIVITIES: Direct patient care activities assist the patient/client in meeting basic human needs within the institution, at home or in other health care settings. This includes activities such as assisting the patient with feeding, drinking, ambulating, grooming, toileting, dressing and socializing. It may involve collecting, reporting, and documenting data related to the above activities. This data is reported to the RN, who uses the information to make a clinical judgment about patient care. Delegated activities to the UAP do not include health counseling or teaching, nor do they require independent, specialized nursing knowledge, skill or judgment. (Judgment is defined as the intellectual process that a nurse exercises in forming an opinion and reaching a clinical decision based upon an analysis of the evidence or data.)



INDIRECT PATIENT CARE ACTIVITIES: Indirect patient care activities are necessary to support patients and their environment, and only incidentally involve direct patient contact. These activities assist in providing a clean, efficient and safe patient care milieu and typically encompass chore services, companion care, housekeeping, transporting, clerical, stocking and maintenance tasks.

DELEGATION: The transfer of responsibility for the performance of an activity from one individual to another while retaining accountability for the outcome. Example: the nurse, in delegating an activity to an unlicensed individual, transfers the responsibility for the performance of the activity but retains professional accountability for the overall care.

ASSIGNMENT: The downward or lateral transfer of both the responsibility and accountability of an activity from one individual to another. The lateral or downward transfer of skill, knowledge and judgment must be made to an individual. The activity must be within the individual's scope of practice.

SUPERVISION: The active process of directing, guiding and influencing the outcome of an individual's performance of an activity. Supervision is generally categorized as on-site (the nurse being physically present or immediately available while the activity is being performed) or off-site (the nurse has the ability to provide direction through various means of written and verbal communications).

GLOSSARY

Acceptable	An overall positive assessment of the quality of care made by an individual or group. It is usually based on many dimensions of care including cost, appropriateness, availability and effectiveness (JCAHO, 9).
Acuity	The degree of dependency or functional status of the patient; the degree or state of disease or injury existing in a patient prior to treatment. The greater the level of acuity, the greater the number of health care resources (e.g., health professionals, laboratory services, operating rooms, special care units) required to treat the patient (JCAHO, 428).
Aggregate patient needs	Consideration of the totality of the patients for whom care is being provided. Not predicated on a simple quantification of the needs of the "average" patients but also includes the "outliers." These areas include: psychosocial needs of patient and family member; amount of teaching to be done; care needs that, on the surface, are unrelated to current illness but still require care; amount of support services patient requires and who performs these; usual number of discharges, admissions, transfers, accommodations (ANA *Principles for Nurse Staffing* — Appendix A).
Antecedent	A preceding event, condition, or cause (Merriam-Webster Online).
Appropriate	The degree to which the care and services provided are relevant to an individual's clinical needs, given the current state of knowledge (JCAHO, 104).

Assignment	The downward or lateral transfer of both the responsibility and accountability of an activity from one individual to another. The lateral or downward transfer of skill, knowledge and judgment must be made to an individual. The activity must be within the individual's scope of practice (ANA *Registered Nurse Utilization of Unlicensed Assistive Personnel* — Appendix B).
Assignment despite objection	A registered nurse (RN) receiving an assignment that in her or his professional judgment places the patients at risk has an obligation to take action. The action of refusing an assignment requires the immediate completion of a form utilized to provide documentation that in the professional registered nurse's opinion, the assignment is unsafe and places the patients at risk (United American Nurses).
Benchmarking	The continual and collaborative discipline of measuring and comparing the results of key work processes with those of the best performers. It is learning how to adapt best practices learned through the benchmarking process that promotes breakthrough process improvements and builds healthier communities (Gift, RG and Mosel, D).
Competency	An individual's capability to perform up to defined expectations (JCAHO, 201).
Complexity of care	A quantification of patient antecedents (including precipitating events, episode of care, intensity and so forth), volume and transactional issues (ANA *Principles for Nurse Staffing* — Appendix A).
Delegation	The transfer of responsibility for the performance of an activity from one person to another while retaining accountability for the outcome (ANA *Principles for Delegation*).

Deployment	To spread out, utilize or arrange, especially strategically (Merriam-Webster Online).
Intensity	The amount or degree of service provided to a patient (JCAHO, 401).
Matrix organization	An organization that uses a multiple command system whereby an employee may be accountable to a particular manager for overall performance as well as to one or more leaders of particular projects (JCAHO, 1998).
Organizational context	Architecture (geographic dispersion of patients, size and layout of individual patient rooms, arrangement of entire patient care units and so forth); technology (beepers, cellular phones, computers); same unit or cluster of patients (ANA *Principles for Nurse Staffing* — Appendix A).
Quality (of) care	The degree to which health care services for individuals and populations increases the probability of desired health outcomes and is consistent with current professional knowledge of best practice (IOM, 1999).
Ratio	The relationship between two counted sets of data, which may have a value of zero or greater (JCAHO, jcaho.org/dscc/dsc/application/dsc_glossary).
Staffing	The analysis and identification of a health care organization's human resource requirements, recruitment of persons to meet those requirements and initial placement of those persons to ensure adequate numbers, knowledge and skills to perform the organization's work (JCAHO, 749).
Sufficient	Enough to meet the needs of a situation or a proposed end (Merriam-Webster Online).
Transactional	Related to a corresponding action or activity involving two parties or things that reciprocally affect or influence each other (Merriam-Webster Online).

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Available from American Nurses publishing (1-800-637-0323) is *Principles for Nurse Staffing with Annotated Bibliography*, which provides background information on which the principles are based.

Single copies of this brochure are available free to constituent member association members only by calling 1-800-274-4ANA. Ask for item UGPNS-1. Multiple copies of this brochure and information about ordering other ANA publications can be obtained by calling 1-800-637-0323.

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