PRINCIPLES OF STAFFING & WORKFORCE MANAGEMENT: THE FUTURE OF NURSING AS HOLISTIC PROVIDERS AND ADVOCATES OF CARE

The Principles of Nurse Resources Aligned with the Triple Aim

The Institute for Healthcare Improvement's (IHI's) Triple Aim strives to optimize health system performance. Initially articulated by Berwick (2008), per the Triple Aim, reforming health care requires the simultaneous pursuit of three dimensions:

- Improving patient experience of care (including quality and satisfaction)
- Improving health of populations
- Reducing per capita cost of health care

The Institute for Healthcare Improvement (IHI) was officially founded in 1991, but its antecedents began in the late 1980s as part of the National Demonstration Project on Quality Improvement in Health Care. IHI is committed to redesigning health care into a system without errors, waste, delay, and unsustainable costs.

Bodenheimer & Sinksy (2014) recommend that the Triple Aim should be updated to include a fourth aim: address clinician and staff satisfaction, and work-life balance. Staff satisfaction is also the underpinning for the Magnet Program development (ANA, ANCC, n.d.). It is built around the variables that institutions and nursing services create—the magnetism—that attracts and retains quality nurses.

The Triple/Quadruple Aim (henceforth as *Triple Aim*) sets to achieve quality care delivery at the level of patient centered care. Nurses, as providers of care, are uniquely qualified to best orchestrate and maximize each dimension of the Triple Aim framework:

> *Nursing is a practice discipline and occurs as one nurse and one patient, family or community at a time. The encounter between a nurse and patient forms a fundamental bond that defines not only nursing as a profession, but each individual nurse as a provider of care. Nursing practice drives value and nurses have a direct and intimate influence on the quality, safety, and costs of patient centered care. If we define nursing value as the function of outcomes divided by costs, there is a need to better define those measures and analytics for patient*

level costs and outcomes of nursing care. This fundamental shift to capture the patient or consumer impact of nursing care is an important expansion of how nursing value is quantified. This will require rethinking how we view nursing care delivery beyond solely measuring nursing in terms of tasks or ratios and staffing levels, to one that recognizes the individual and collective accomplishments and results provided by each nurse across the broad spectrum of care. True nursing value can only be described by measurement of the clinical and financial impact of nursing care. (Pappas & Welton, 2015)

The Triple Aim and overall impact on care delivery are meant to translate across the continuum of care, beginning at the individual level and expanding to population health at the systems level. For example, the Centers for Medicare & Medicaid Services (CMMS) *Reform of Requirements for Long-Term Care Facilities* (2016) is an update of the original 1991 document to reflect not only changes in theory and practice, but to reinforce the Triple Aim tenets to strengthen and modernize the nation's health care system, providing access to high quality care and improved health at lower cost.

> Registered nurses (RNs) are chartered with the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations (ANA, n.d., c). As providers and advocates of care, RNs practice in all healthcare settings: hospitals, nursing homes, medical offices, ambulatory care centers, community health centers, schools, and retail clinics. They also provide health care in more surprising locations such as camps, homeless shelters, prisons, sporting events, and tourist destinations (ANA, n.d., d).

Preface: Nurses and Staffing—A Complex and Multilevel Healthcare and Delivery Issue

Since the original 1999 publication of *ANA's Principles for Nurse Staffing*, staffing issues facing the profession have reached multidimensional heights in complexity. Aging populations of patients and nurses, competing priorities for health care dollars, and regional registered

nurse shortages individually and collectively place the profession in a potentially perilous situation. To add to the mix future nursing school graduates may not be able to meet increasing workforce demands characterized by a blossoming baby boomer population and retiring senior nurses. Such pressures on registered nurses (RNs) to provide expert care across the spectrum of healthcare consumers—from neonates to frail elders—cause nurses to seek the definitive answer for ascertaining the right number of patients per RN within care units; the optimum staffing system; and the optimum skill mix of licensed and unlicensed nursing personnel needed to meet a patient's needs (Kurtzman, 2010a). Research has addressed these issues and begins to provide solutions (See Annex-- Safe Staffing Literature Review, 2017). However, further research is needed to provide answers and workable staffing models in demanding settings.

The Many Dimensions of Nursing and Staffing

Nurses' Professional Characteristics, Outcomes of Care, and Levels of Care

Nurse staffing is more than just meeting a "ratio" of a certain number of nurses for a given number of patients. Ultimately, any nursing care delivery system must provide the necessary nursing resources to meet each patient's individual needs and the unit's collective needs. All nurses are providers of care. As such, the individual characteristics of each nurse—experience, knowledge, specific skill set, and overall attitude and professional judgment—directly impact the outcomes of care. This is achieved individually as part of the professional accountability and responsibility for each nurse, but also collectively among groups of nurses working collaboratively with other healthcare team members to provide the optimal care to each patient at an optimum price (cost) to achieve best value. From a systems standpoint, each care setting must balance both quality and safety towards achievement of best practices and outcomes with the overall expenditure of nursing resources and the costs associated with those resources to achieve an optimum outcome of care (Li, et al., 2011; Welton & Harper, 2015).

ANA believes that the interaction where care is given—the encounter between a nurse and patient/healthcare consumer, family, or community—is where these concerns need to be addressed and solutions developed. The *Principles* document provides a framework to help

direct care nurses, nurse leaders and health care administrators address questions about appropriate staffing levels, provide measurable criteria to assess the sufficiency of staffing, skill mix, experience, assignment patterns, and readiness of nurses and nursing staff to provide patient care, and the criteria for reviewing staffing systems within a nursing care delivery system (Cathro, 2013; Sir, Dundar, Barker Steege & Pasupathy, 2015). The *Principles* document also provides a framework to ensure there are comprehensive mechanisms in place within a nursing care delivery system to address fluctuations in the nursing workforce and to ensure that nursing resources are adapted and applied in a timely manner to meet the changing needs of patients, units, populations, or communities.

Registered nursing is a "knowledge-based" practice with a significant psychomotor skills component. Although RNs perform tasks such as sterile dressing changes and medication administration, the knowledge and expertise they obtain through their educational programs and work experiences guide the clinical decision-making and cognitive skills needed to provide the full scope of nursing care to the right patient at the right time in the right setting. Having an adequate complement of registered nurses and other nursing personnel within a particular clinical setting is a necessary first step to providing optimum care. However, a nurse's experience, expertise with a patient population, educational preparation, as well as attitude, professional bearing, and belief in essential nurse caring and healing also have an important role in achieving optimum outcomes of care.

Major ethical and foundational work guide 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 requires. 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 each of the profession's foundational documents—*The Code of Ethics for Nurses with Interpretive Statements* (ANA, 2015a), *Guide to Nursing's Social Policy Statement* (Fowler, 2015), and *Nursing: Scope and Standards of Practice, 3rd Edition* (ANA, 2015b)—patient safety and well-being are the critical factor that guides all decision-making.

The Care Settings of Registered Nurses and Staffing

Nurses provide care in many different places, geographic locations, and at different times or days, but always in a continual professional relationship. The classic setting is an inpatient unit where nurses provide continuous, around the clock care. Other venues which provide continuous care are skilled nursing facilities, long term acute care (LTAC), rehabilitation facilities, and inpatient hospice. Alternatively, settings may provide intermittent encounters with patients/healthcare consumers, families or communities such as a home health nurse, school-based nurse, nurse educators, ambulatory care, surgery centers, or public health nursing. These divergent locales where nursing care is provided are relevant to understanding how to staff and assign nurses based on needs of the patients (or families and communities). For example, in settings that require continuous care, as in hospitals or skilled nursing facilities, nurses care for groups of patients simultaneously and there is a need to understand the acuity of the population in order to predict the number and expertise of each nurse needed during a particular time period, as well as assign patients to nurses who possess the expertise for that patient assignment (Needleman, 2013).

For intermittent encounters with patients, such as hospice or home health care, need is based on a particular visit and the individualized services provided during the time a nurse encounters the patient or between visits when activities such as care coordination may occur. Unlike inpatient nursing care, home or hospice visits are typically provided by a single nurse who travels to the patient so additional considerations are necessary to access the patient population and reasonably assess care needs and types of services required by each patient. The care setting is an important consideration in determining where and how nurses are allocated to patient care. In the inpatient environment, considerable overlap in care may exist. For example, an experienced nurse may mentor a new graduate, both of whom are providing care. In a home health or other settings where nurses may be providing care alone with a patient or family member, consideration needs to be given to the preparation and experience of that nurse to deliver optimum care. Supporting nursing care in settings were patients are remote or where access to supplies and technology may be factors in providing safe and high quality care, present yet another varied setting.

Effective, Safe, Timely Care Delivery

Defining Appropriate Nurse Staffing

Appropriate nurse staffing and assignment are a match of registered nurse education, experience and competence with the needs of the recipient of nursing care services in the context of the practice setting and situation. The provision of appropriate nurse personnel is necessary to reach safety and quality care outcomes. To achieve these outcomes, nurses at all levels engage in dynamic processes of multi-faceted decision-making that consider a wide range of variables to include, but not limited to: personal nurse attributes such as temperament, education/preparation, and experience; unit resources of number, type, and skill mix of RN, LPN/LVN, unlicensed assistive personnel (UAP); and environmental turbulence, i.e., rapid admissions, turnovers, and/or discharges (Aiken, et al., 2017).

Core Components of Nurse Staffing (Avalere, 2015)

In 2015, the American Nurses Association (ANA) collaborated with *Avalere, LLC* to explore the clinical case for using optimal nurse staffing models to achieve improvements in patient outcomes. Core components outlined include:

- All settings should have well-developed, dynamic staffing guidelines with measurable nurse-sensitive outcomes specific to that setting and healthcare consumer population.
- RNs at all levels are full partners working with other healthcare professionals in collaborative, interdisciplinary partnerships.
- RNs must have a substantive and active voice in staffing decisions to ensure the necessary time with patients to meet care needs and overall nursing responsibilities.
- Staffing needs are determined based on an analysis of a patient's status (e.g., degree of stability, intensity, and acuity), and the environment in which the care is provided. Other considerations to be included are: professional characteristics and skill set, and previous staffing patterns that have been shown to improve outcomes.
- Appropriate nurse staffing should be based on allocating the appropriate number of competent RNs to a care situation; pursuing quality of care indices; meeting

consumer-centered and organizational outcomes; meeting federal and state laws and regulations; and attending to a safe, quality work environment.

- Cost-effectiveness is an important consideration in delivery of safe, quality care. In order to maximize the true value of the nurse providing care, nursing costs per patient need to be measured and linked with reimbursement, performance metrics, and value-based nursing care models.
- Reimbursement structure should not influence nurse staffing patterns or the level of care provided. In order to do this, a better understanding of nursing finance is necessary, to identify nursing services costs as well as their revenues within the overall business of caring. Ultimately decisions on how many nurses and other personnel—the skill and experience mix—need to be considered and calculated at the individual patient level rather than broad bundling centered on staffing ratios.

Organizational transparency and accountability frequently aid efforts, through accessible and often comparative channels, to measure and hold institutional leadership and care providers responsible for their decisions and actions regarding criteria for employment and nurse staffing decisions, including assignments. Along with performance-based payment programs, both the Department of Health and Human Services (HHS) and the National Academy of Medicine (NAM) [formerly the Institute of Medicine (IOM)]have recognized transparency and accountability as key components to healing a US healthcare system that is inefficient, fragmented, and unsafe (Kurtzman, 2010b). Transparency can be addressed by using existing data to link the care of nurses to patient outcomes and costs of care. Future efforts to identify best practices on nurse staffing and assignment patterns will use increasingly sophisticated data collection and analysis techniques that use evolving data science and business intelligence methods to help nursing and health care leaders optimize nursing care delivery systems.

ANA's policy advocacy for quality care to promote transparency has been successful in key steps to achieve public reporting of staffing and skill mix data through work at the National Quality Forum (NQF). Specifically, reporting these nurse staffing measures and outcomes publicly will act as an effective quality policy lever to reduce staffing variance in hospital nurse staffing and skill mix that is associated with patient death and harm (ANA, n.d., a). Future policy

efforts may include pay for nursing performance measures as well as adjusting reimbursement to providers based on the value rather than amount of nursing care provided to each patient.

Cost Efficient, Equitable, Patient Centered Care

RNs Fiscal Knowledge Base

Today, nurses at all levels must understand the relationship between staffing; costs; and patient/healthcare consumer, employee and, organizational outcomes. Questions we can ask and areas for exploration include:

- How do nurse staffing levels and patient assignments maximize care delivery and what are the associated costs of nursing care at the individual patient level?
- What additional real-time data are needed to optimize nursing care delivery?
- How can we benchmark nursing care across different settings to assure best outcomes at optimum cost?
- Which settings are providing the best value nursing care and how can those practices be emulated across the broad spectrum of care settings?

Further discussion is needed on how the costs of nursing care, the actual time and direct costs of nurses are allocated to individual patients, as well as the indirect costs of a nursing care delivery system are incorporated into current billing and reimbursement for healthcare. In doing so, an alignment of payment for optimum nursing care provided can be articulated and two major public policy problems can be addressed:

1. In current healthcare payment policy, nursing care is generally hidden within daily room rates or facility fees; therefore, the actual expert professional care provided by registered nurses and these service costs are unknown to patients or administrators. Some patients consume more nursing care but are charged the average, other receive less care than average but are billed at a higher rate. There is clear evidence when nurse staffing falls below needed care, there is an increase in adverse events and higher costs of care compared to adequate staffing levels (Aiken, et al., 2007; McHugh, et al., 2016; Pappas, 2008).

2. There is a perverse incentive for facilities to cut nursing care as it represents one of the largest components of healthcare expenditures and is not directly linked to billing and payment for care. Therefore it is imperative that nursing care be identified within the national healthcare payment structure, allocated directly to usage consumed per patient, payment be aligned with adequate and appropriate nursing care consumed, and data from nurse billing systems be used to identify metrics of optimum nursing care.

A **perverse incentive** is one that has an undesirable or contrary result from that which is intended (Masaki Flynn, 2009).

The staffing process can be considered in four phases:

- **Forecasting**, to include budgeting and planning based on expected future patient volume and acuity
- **Scheduling** of adequate number of nurses and other nursing personnel to address current needs of patients
- **Assigning** staff based on needs of each patient and balanced workload across the scheduled nurses and nursing personnel
- **Improving**, to include monitoring and analyzing, performance, quality and safety, and outcomes of nursing care

Scheduling and staffing assignments help operationalize the budget plan, while the process of improving and adjusting these variables based on analysis ensures the delivery of an exceptional experience of care in a cost-effective manner (ANA, n.d., b).

Principles Related to the Patient/Healthcare Consumer (ANA, 2012b)

Nurse staffing decisions should be based on the characteristics and needs of the individual patient, family, and population served. These include, but are not limited to, patient:

- Age and functional ability
- Communication skills

- Cultural and linguistic diversities
- Complexity of care needs, based on severity, intensity, acuity, and stability of condition,
- Existence and severity of multiple morbid conditions
- Scheduled procedure(s)
- Ability to meet healthcare requisites
- Availability of social supports
- Transitional care, within or beyond the healthcare setting
- Continuity of care
- Environmental turbulence (i.e., rapid admissions, turnovers, and/or discharges)
- Other specific needs identified by the patient/healthcare consumer, the family, and the registered nurse.

In any approach used to determine appropriate nurse staffing, consideration must be given to the elements affecting care at the individual setting level. No single method, model or assessment tool (e.g., nursing hours per patient day [NHPPD], case mix index (CMI), nursing intensity weights, mandatory nurse-to-patient ratios) has provided sufficient evidence to be considered optimal in all settings and all situations. Each setting should have staffing guidelines based on safety indicators and outcomes specific to that area and population.

"Professional" governance structures underscore the role of professionals and their obligation to make a positive contribution to the lives of individuals and communities. The structures must address 4 core elements of professional practice: accountability, partnership, ownership, and equity. "Shared" governance was introduced over 45 years ago as an approach to structural empowerment where nurses embody and operationalize autonomy and control over practice (Clavelle, O'Grady, Weston, & Verran, 2016).

The following elements are to be considered when making the determination:

- Professional/Shared governance for nursing practice
- Involvement in quality measurement activities
- Quality of work environment of nurses

- Development and implementation of comprehensive plans of care
- Practice environment
- Architectural geography of unit and institution
- Evaluation of practice outcomes that include quality, safety and costs
- Available technology and support services
- Evolving evidence

Principles Related to Organization and Workplace Culture

Florence Nightingale in *Notes on Hospitals* (1863) eloquently observed:

> *In attempting to arrive at the truth, I have applied everywhere for information, but in scarcely an instance have I been able to obtain hospital records fit for any purposes of comparison. If they could be obtained, they would enable us to decide many other questions besides the one alluded to. They would show subscribers how their money was being spent, what amount of good was really being done with it, or whether the money was not doing mischief rather than good; they would tell us the exact sanitary state of every hospital and of every ward in it, where to seek for causes of insalubrity and their nature; and, if wisely used, these improved statistics would tell us more of the relative value of particular operations and modes of treatment than we have any means of ascertaining at present. They would enable us, besides, to ascertain the influence of the hospital with its numerous diseased inmates, its overcrowded and possibly ill-ventilated wards, its bad site, bad drainage, impure water, and want of cleanliness - or the reverse of all these - upon the general course of operations and diseases passing through its wards; and the truth thus ascertained would enable us to save life and suffering, and to improve the treatment and management of the sick and maimed poor.*

Healthcare leaders must create a workplace environment that values registered nurses and other employees as critical assets. Policies should support the ability of RNs to practice to the full extent of their education, scope of practice, and top of their licensure. To maximize safe

patient care and quality outcomes, health system leaders should recognize that in addition to appropriate registered nurse staffing, they must provide inter-professional support and ancillary services. These include at a minimum:

- Sufficient orientation and preparation, including direct and indirect supervision by nurse preceptors, nurse experts, nurse educators and mentors to ensure registered nurse competency in patient care delivery and utilization of clinical technology
- Access to timely, accurate, relevant information provided by technology that links clinical, administrative, and outcome data to aid in care planning and implementation
- Timely coordination, supervision, and delegation to trained unlicensed assistive personnel as needed to maximize safety
- Support in ethical decision-making in care planning and care delivery
- Resources and pathways for care coordination and health education for the patient/healthcare consumer and/or family
- Effective, efficient, and timely support services (e.g., transport, clerical, housekeeping, and laboratory) to minimize service 'turn-around time'
- Preparation and ongoing training for competency in technology or other tools
- Sufficient time for accurate, contemporaneous patient documentation
- Time to accommodate documentation created by integration of technology, electronic records, surveillance systems, and regulatory requirements.
- Processes to facilitate transitions during work redesign, mergers, and other major changes in work life from the unit level to the organization system level
- Create a culture of values that support respect, trust, collaboration, and team building across the professions that cultivate loyalty and ultimately retention.
- Create unique opportunities and resources for the registered nurse to maintain continuing education and engagement in lifelong learning as part of professional responsibility.

The specific needs of the population served should determine the appropriate competencies of the registered nurse practicing in that area. The organization must specify the appropriate credentials, competencies required, and qualifications of RNs for its populations of patients, and hire RNs who meet those qualifications, while ensuring nurses are permitted to practice to the full extent of their education, competency, scope of practice, and top of licensure.

The following nurse characteristics should be taken into account when determining nurse staffing:

- Licensure
- Experience with the population being served
- Level of expertise (i.e., novice to expert)
- Competency with technology and clinical interventions
- Professional certification
- Educational preparation
- Language and communication capabilities
- Organizational experience

Staffing plans must accommodate for experienced registered nurses across the staffing schedule who can offer clinical support to other staff. Adjustments in staffing and assignments should be considered to incorporate mentoring and skill development needs of nurses.

Factors such as nurse satisfaction, burnout, turnover, retention, precepting students or new staff, mentoring, care coordination, skill with technology, use of agency or contractual staff, competency requirements, and staff development should be monitored regularly to ensure that staffing outcomes are measured and adjusted. **Nursing students and precepted students are not staff and cannot be treated as such.**

Registered nurses must have the decision-making authority to alter staffing in real time to accommodate changing and anticipated healthcare consumer needs, registered nurse competency and skill levels, in order to assure appropriate staffing in rapidly fluctuating situations.

Documentation and Communication within the Healthcare Team (ANA, 2010)

Nurses and other healthcare providers aim to share information about patients and organizational functions that is accurate, timely, contemporaneous, concise, thorough, organized, and confidential.

Information is communicated verbally and in written and electronic formats across all settings. Written and electronic documentation provide durable and retrievable records. Foremost of such electronic documentation is the electronic health record (EHR), which provides an integrated, real-time method of informing the healthcare team about the patient status. To enable the healthcare team to ensure informed decisions and provide high quality care in the continuity of patient care, timely documentation of the following types of information should be made and maintained in a patient's EHR :

- Assessments
- Clinical problems
- Communications with other healthcare professionals regarding the patient
- Communication with and education of the patient, family, and the patient's designated support person and other third parties
- Medication records (ie, MAR)
- Order acknowledgement, implementation, and management
- Patient clinical parameters
- Documentation of interventions
- Patient responses and outcomes, including changes in the patient's status
- Plans of care that reflect the social and cultural framework of the patient

High quality documentation is:

- Accessible
- Accurate, relevant, consistent and complete
- Auditable
- Clear, concise, and complete

- Legible/readable (particularly in terms of the resolution
- and related qualities of EHR content as it is displayed
- on the screens of various devices)
- Timely, contemporary, and sequential
- Reflective of the nursing process
- Authenticated; that is, the information is truthful, the author is identified, and nothing has been added or inserted

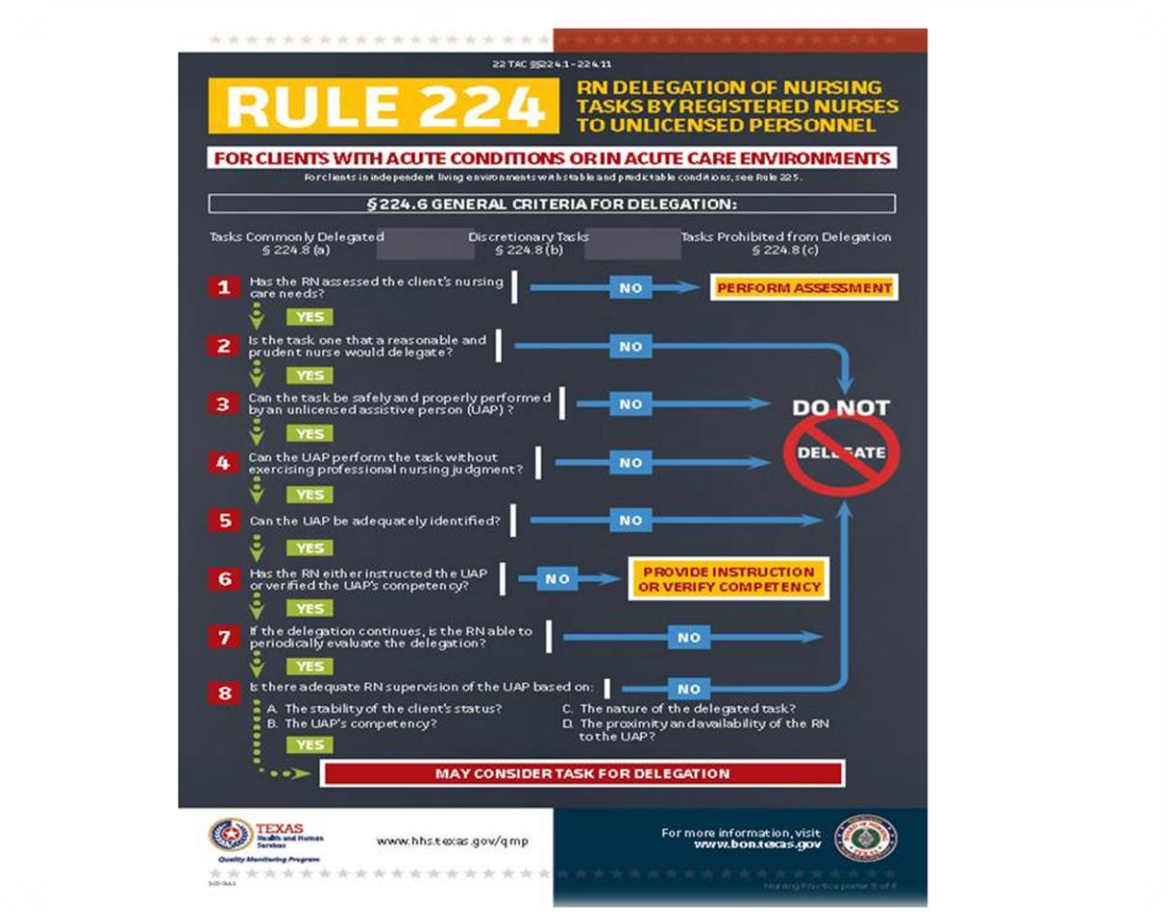
Delegation by Registered Nurses to Unlicensed Assistive Personnel (UAP) (ANA, 2012a)

The following principles provide guidance and inform the registered nurse's decision-making about delegation:

- The nursing profession determines the scope and standards of nursing practice
- The RN takes responsibility and accountability for the provision of nursing practice
- The RN directs care and determines the appropriate utilization of resources when providing care
- The RN may delegate tasks or elements of care but does not delegate the nursing process itself
- The RN considers facility/agency policies and procedures and the knowledge and skills, training, diversity awareness, and experience of any individual to whom the RN may delegate elements of care
- The decision to delegate is based upon the RN's judgment concerning the care complexity of the patient, the availability and competence of the individual accepting the delegation, and the type and intensity of supervision required
- The RN acknowledges that delegation involves the relational concept of mutual respect
- Nurse leaders are accountable for establishing systems to assess, monitor, verify, and communicate ongoing competence requirements in areas related to delegation
- The organization/agency is accountable to provide sufficient resources to enable appropriate delegation

- The organization/agency is accountable for ensuring that the RN has access to documented competency information for staff to whom the RN is delegating tasks
- Organizational/agency policies on delegation are developed with the active participation of registered nurses

An example of a delegation algorithm:



Principles Related to the Practice Environment (ANA, 2012b)

Staffing is a structure and process that affects safety of patients, nurses themselves, and others in the environment. Institutions employing a culture of safety must recognize appropriate nurse staffing as integral to achieving goals for patient safety and quality:

- Registered nurses have a professional obligation to report unsafe conditions or inappropriate staffing that adversely impacts safe, quality care; and the right to do so without reprisal.
- Registered nurses should be provided a professional nursing practice environment in which they have control over nursing practice and autonomy in their workplace.
- Appropriate 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 in decision-making related to the practice of nursing.
- Routine mandatory overtime is an unacceptable solution to achieve appropriate nurse staffing. Policies on length of shifts; management of uninterrupted periods for meals and rest; and overtime should be in place to ensure the health and stamina of nurses and prevent fatigue-related errors.

Principles of Health Information Technology

ANA's Principles for Health System Transformation (ANA, 2016)

For decades, ANA has been advocating for healthcare reforms that would guarantee access to high-quality healthcare for all. With the passage of the Patient Protection and Affordable Care Act (PPACA), millions of people have greater protection against losing or being denied health insurance coverage, and better access to primary and preventive services. In 2016, ANA developed Principles for Health System Transformation, to include:

- Ensure universal access to a standard package of essential healthcare services for all citizens and residents.
- Optimize primary, community-based and preventive services while supporting the cost-effective use of innovative, technology-driven, acute, hospital-based services.
- Encourage mechanisms to stimulate cost-effective use of healthcare services while supporting those who do not have the means to share in costs.
- Ensure a sufficient supply of a skilled workforce dedicated to providing high quality healthcare services.

Healthcare Systems

Documentation systems should be designed to have interoperability across the healthcare system such that the documentation can be sent to and received by other systems in a useable format. The documentation interoperability and information transfer includes nursing documentation. To facilitate interoperability and transferability, standardized terminologies should be utilized to:

- Describe all aspects of nursing care, including assessment, identification of problems, nursing diagnoses and interventions, nursing-sensitive outcomes, evaluation, and recommendations
- Provide method to accurately document errors (commission, omission, and near misses) that meet a national standard
- Ensure nurses (prepared in nurse informatics or similar specialties), at the level of the healthcare system, in collaboration with regulatory agencies, contribute to the design and development of data storage and retrieval systems that function in a timely and efficient manner

Determining the right number and type of nursing staff required to meet patient care needs historically is viewed as the foundation of workforce management systems. From Florence Nightingale's initial efforts to assign patients to particular wards based on severity of illness to more focused studies from the 1960's forward, the need for accurate data on patient care requirements has continued to grow.

Patient Classification and Acuity Systems (ANA, n.d., b)

The term Patient Classification Systems refers to measurement systems in nursing that reflect actual patient care needs for staffing purposes. The term is also referred to as Acuity Systems, although the concept of "Acuity" denotes unidimensional illness severity in the medical sense. A literature review demonstrates that the majority of the nursing community continues to prefer the more inclusive term Patient Classification to reflect the broader bio-psycho-social-

spiritual mandate of nursing. Therefore, for purposes of this discussion, the term Patient Classification/Acuity System (PCAS) is used. Design Principles for PCAS include the following:

- Validity and reliability
- Simplicity and efficiency
- Objectivity
- Acceptability
- Tool Development
- Nursing Work

If a Patient Classification/Acuity tool is valid and being used correctly, the results of the ratings should be accurate and dependable consistently. Reliability of these systems should be well established when initially developed or purchased, and the ongoing reliability of patient ratings should be assessed routinely. When a Patient Classification/Acuity System is under development, an RN with health information technology expertise in measurement methods should be involved throughout the tool development, and metrics integrated with the EHR be evaluated by additional RNs utilizing the system.

Conclusion

Despite the concerted efforts at all levels of the nursing profession to address 'staffing' in relation to nursing care, heightened and more immediate attention is required to assure the provision of safe, quality nursing care. Appropriate nurse staffing must be considered an asset to ever-evolving healthcare systems, rather than simply a cost factor. Evidence demonstrates that nursing care has a direct impact on the overall quality of services received, and that when registered nurse staffing is optimal, adverse events and costs decline, and overall outcomes improve. It is imperative that the healthcare paradigm shift towards better health at lower costs includes an increased emphasis on the importance of appropriate nurse staffing to aid healing and recovery and to avoid harm and poor outcomes. Nurses make a tremendous contribution to quality care and successful outcomes: the value of registered nurse staffing cannot be underestimated. With appropriate staffing, nurses can lead the Triple Aim charge to

improve the patient experience of care; improve the health of populations; and reduce the per capita cost of healthcare, while maximizing a satisfying professional experience.

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Glossary

Accreditation: A voluntary, self-regulatory process by which governmental, nongovernmental, or voluntary associations or other statutory bodies grant formal recognition to programs or institutions that meet stated quality criteria**.**

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.

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.

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.

Code of ethics: The provisions that make explicit the primary goals, values, and obligations of a profession. In the United States, professional nurses abide by and adhere to the ANA Code of Ethics for Nurses.

Competency: An individual's capability to perform up to defined expectations.

Complexity of care: A quantification of patient antecedents (including precipitating events, episode of care, intensity and so forth), volume and transactional issues.

Credentialing: Processes designating that an entity has met established standards set by an agent, governmental or non-governmental, that is acknowledged as being qualified to carry out this responsibility.

Cultural competency: A process in which the nurse continuously strives to achieve the ability and availability to effectively work within the cultural context of a client (individual, family, community).

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.

Deployment: To spread out, utilize or arrange, especially strategically.

Direct care nurse: The nurse providing care directly to patients, excluding the nurse manager and nurse executive. Direct care activities can be reflected as partial full-time equivalents (FTEs).

Electronic health record (EHR): A longitudinal electronic record of patient health information and automated and streamlined to the clinician's workflow. An EHR can help generate a complete record of a clinical patient encounter in any care delivery setting, and thus support other care-related activities, including evidence-based decision support, quality management, and outcomes reporting. Such information is generated by one or more encounters.

Evidence-based practice: A process founded on the collection, interpretation, and integration of valid, important, and applicable patient-reported, clinician observed, and research-derived evidence. The best available evidence, moderated by patient circumstances and preferences, is applied to improve the quality of clinical judgments.

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.

Interdisciplinary: Reliant on the overlapping skills and knowledge of each team member and discipline, resulting in synergistic effects where outcomes are enhanced and more comprehensive than the simple aggregation of the team members' individual efforts.

Interprofessional: Reliant on the overlapping knowledge, skills, and abilities of each professional team member. This can drive synergistic effects by which outcomes are enhanced and become more comprehensive than a simple aggregation of the individual efforts of the team members.

Intensity: The amount or degree of service provided to a patient.

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.

Nurse administrator/executive: A registered nurse who orchestrates and influences the work of others in a defined environment, most often healthcare focused, to enhance the shared vision of an organization or institution. The goals of their efforts are a quality product focused on safety and the requisite infrastructures that seek to meet the expectations of the nursing profession, the consumer, and society.

Nursing: Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations.

Nursing-sensitive indicators: Those that reflect the structure, process and outcomes of nursing care. Structure indicators measure aspects of the supply, skill level, and education and certification of nursing staff. Process indicators measure aspects of nursing care such as assessment, intervention, and RN job satisfaction. Nursing-sensitive patient outcome indicators (such as pressure ulcers, falls, and IV infiltrations) are those that improve with a greater quantity or quality of nursing care.

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.

Quality (of) care: The degree to which healthcare services for individuals and populations increases the probability of desired health outcomes and is consistent with current professional knowledge of best practice.

Ratio: The relationship between two counted sets of data, which may have a value of zero or greater.

Safeguards: Measures taken to protect an information system and its contents against unauthorized disclosure, and limit access to authorized users.

Sufficient: Enough to meet the needs of a situation or a proposed end.

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).

Telehealth: The use of electronic information and telecommunications technologies in such activities as long-distance clinical health care, patient and professional health-related education, public health, and health administration.

Transactional: Related to a corresponding action or activity involving two parties or things that reciprocally affect or influence each other.

Annexes

Principles of Nurse Staffing, 2d Edition (2012): https://www.nursingworld.org/~4af4f2/globalassets/docs/ana/ethics/principles-of-nurse--staffing--2nd-edition.pdf

Principles for Delegation by Registered Nurses to Unlicensed Assistive Personnel (UAP) (2012): https://www.nursingworld.org/~4af4f2/globalassets/docs/ana/ethics/principlesofdelegation.pdf

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