Definitions and Distinguishing Characteristics of Neuroscience Nursing Practice

DEFINITIONS

"*Nursing* integrates the art and science of caring and focuses on the protection, promotion, and optimization of health and human functioning, prevention of illness and injury, and alleviation of suffering through compassionate presence. Nursing is the diagnosis and treatment of human responses, and advocacy in the care of individuals, families, groups, communities, and populations in recognition of the connection of all humanity" (ANA, 2021, p. 1).

Neuroscience nursing is a unique nursing specialty that integrates the art and science of caring while addressing the needs and care of individuals with biological, psychological, social, and spiritual alterations because of nervous system conditions (Webb, 2000). This encompasses all levels of human existence, from basic bodily functions to advanced processes of the human mind. Neuroscience nurses identify and treat human responses to actual or potential health problems related to phenomena affected by nervous system conditions. Phenomena addressed within the context of neuroscience nursing practice include consciousness and cognition, communication, affiliate relationships, mobility, rest and sleep, sensation, elimination, sexuality, self-care, and integrated regulation. In

addition, neuroscience nurses teach about preventing neurological injury or illness, conduct research, provide management services, and facilitate quality improvement for individuals with neurological diseases and conditions (Olson, 2017). Recipients of neuroscience nursing care are individuals with potential or actual nervous system conditions, their families and support persons, and the society in which they live.

DISTINGUISHING CHARACTERISTICS

The American Nurses Association (ANA, 2021) identifies essential features of nursing and nursing practice.

Nursing

- Integrates the art and science of caring. In neuroscience nursing, integrating art and science are critical when individuals are unable to speak for themselves due to altered consciousness, cognition, or communication.
- Protects, promotes, and optimizes health and human functioning. In neuroscience nursing, this may include assessment and optimization of environmental adaptations in response to new or prolonged neurological changes.
- Prevents illness and injury. Neuroscience nurses individualize nursing care and education for individuals and caregivers based on assessment of their needs.
- Facilitates healing. Neuroscience nurses are adept at critically distinguishing, analyzing, and communicating the significance of findings from the neurologic exams they conduct.
- Alleviates suffering through compassionate presence. Neuroscience nurses acknowledge and attend with compassion to the unique, multidimensional patient, family, or healthcare clinician needs that arise from experiencing a neurologic illness or injury or caring for someone with a neurological illness or injury.

Nursing is

- The diagnosis and treatment of human responses, and
- Advocacy in the care of individuals, families, groups, communities, and populations in recognition of the connection of all humanity.

Specific phenomena defined by the American Association of Neuroscience Nurses (AANN) that comprise the domains of neuroscience nursing include

- *Consciousness and cognition*: the awareness of and interaction with the surrounding environment, as well as higher thought processes; alterations include problems such as coma, memory impairment, and seizure sequelae;
- *Communication*: the language of interaction with others; alterations include language impairments secondary to aphasias or dysarthria;
- *Affiliate relationships*: the ability to form and maintain social support relationships; alterations include social isolation and role changes secondary to nervous system disease;
- *Mobility*: the ability to move freely within the environment; alterations include various forms of paralysis and paresthesia;
- *Rest and sleep*: phenomena necessary for restorative function; alterations include the spectrum of sleep disorders;
- *Sensation*: the ability to sense and distinguish internal and external stimuli; alterations include decreased sensation and pain;
- *Elimination*: bodily excretion of waste products; alterations include bowel and bladder dysfunction secondary to nervous system disease;
- *Sexuality*: the ability to interact and maintain a sexual relationship; alterations include sexual dysfunction secondary to nervous system disease;

- *Self-care*: the ability to provide for one's basic needs; alterations include the inability to care for oneself; and
- *Integrated regulation*: the interrelationship between the nervous system and other body systems; alterations include loss of regulatory control (Stewart-Amidei & Kunkel, 2000).

HISTORICAL PERSPECTIVE ON NEUROSCIENCE NURSING STANDARDS AND EVOLUTION OF PRACTICE

In the mid-twentieth century and beyond, advances in medical treatment and healthcare technology led to the evolution of nursing specialties. Specialized education, training, and certification ensued in both traditional and novel areas of clinical practice, such as neuroscience nursing. The exciting area of neuroscience nursing was formalized as a specialty in 1968, with the formation of the AANN, then named the American Association of Neurosurgical Nurses. In 1985, the organization's name was changed to the American Association of Neuroscience Nurses to better reflect the diversity of practice of its members.

A statement of the standards of neurologic and neurosurgical nursing practice was first completed in 1977 and approved by the executive committee of the ANA's division of medical-surgical nursing practice and the AANN. A separate statement of neuroscience nursing's scope of practice was first completed in 1986 by the AANN Nursing Practice Committee. This document served to describe the parameters of nursing practice for the specialty, identify the populations served and practice settings, and distinguish qualifications of nurses in the specialty and the type of care rendered to individuals. This description was useful to the neuroscience nurse in defining goals and to the public for clarifying expectations.

In 1993, the standards and scope of practice statements were combined into a single document and updated to address expanded options for neuroscience nursing in the 1990s. In 2002, the third revision, *Scope and Standards of Neuroscience Nursing Practice*, reflected practice evolutions at the beginning of the new millennium. The borders of nursing practice have grown in recent years with potential for continued change with ongoing healthcare reforms. A renewed emphasis is placed on care of individuals across the lifespan and a spectrum of health states rather than focusing on episodes of illness.

Neuroscience nursing practice has evolved along with clinical advances. Previously, neuroscience nursing care focused primarily on symptom management and prevention of secondary complications. While these approaches continue to be necessary, advancements have offered new hope for persons who experience many neurological conditions, incidents, situations, or episodes. For example, in recent decades, care of the patient with multiple sclerosis has evolved from symptomatic care to educating individuals and caregivers about the many pharmacologic agents available. A particular challenge for this population is self-administration of immunomodulating drugs, which neuroscience nurses may help to facilitate.

Another example relates to the advancement of care of the patient who has had a stroke. Neuroscience nurses are now vital members of the interdisciplinary teams that are improving outcomes for individuals with stroke by participating in the delivery of thrombolytic and interventional endovascular therapies. Neuroscience nursing practice also extends to education geared toward early recognition of stroke symptoms. Advances in clinical monitoring, including intracranial pressure monitoring and brain tissue oxygenation monitoring, have allowed neuroscience nurses to become more skilled in applying data about neurologic function to the plan of care.

Neuroscience nursing research findings have contributed to improved outcomes for children with seizures and epilepsy, families of persons with brain tumors, and patients with many other neurological conditions, incidents, situations, or episodes.

As neuroscience nursing evolved as a unique specialty, so have practice opportunities for APRNs. Increased availability of advanced education combined with the shortage of primary and specialty care providers, the need to improve quality of care, restricted residency hours, and promotion of cost-effective care have led to increasing use of APRNs. The number of neuroscience APRNs has grown in recent decades, reflecting the complexity and diversity of the field. *Neuroscience Nursing: Scope and Standards of Practice, Second Edition*, a collaboration between AANN and ANA, was the first to incorporate neuroscience APRNs nursing scope and standards content. In 2009, work began on a stand-alone scope of practice and standards document for APRNs (Stewart-Amidei et al., 2010).

Neuroscience APRNs currently practice across the lifespan and along the continuum of care. While all the innovative areas APRNs practice in are too numerous to include, a few examples are provided. One group reported on providing a pediatric palliative care program for families of children with medical complexities including neurologic and neuromuscular conditions (Pituch et al., 2022). Another group reported on implementing an APRN-led clinic to improve follow-up care for patients who had an ischemic stroke (Mitchell et al., 2022).

As the number and opportunities for acute care nurse practitioners have increased, the successful integration of these types of providers into the healthcare setting has been a challenge. In neurocritical care, APRNs have been instrumental in role development, implementation, and evaluation to optimize the performance of their dynamic roles in intensive care settings. APRNs in neurocritical care have been leaders in expanding and enhancing patient care within the medical practice and collaborating with physicians and other clinicians to provide a full scope of patients care (Yeager, 2009).

Neuroscience Nursing's Scope and Standards of Practice

DESCRIPTION OF THE SCOPE OF NEUROSCIENCE NURSING PRACTICE

The specialty of neuroscience nursing encompasses a broad range of nursing practice. This scope of practice statement describes the who, what, where, when, why, and how associated with neuroscience nursing practice and roles. Neuroscience nurses provide care to individuals at risk for or experiencing problems due to a neurologic condition, their families, and the communities in which they live. Neuroscience nurses provide care across the lifespan. Care during or following neurologic conditions includes, but is not limited to, attention to communication and advance care planning, coordination and transitions of care, and pain and symptom management. Furthermore, neuroscience nurses incorporate three aspects of palliative nursing into their practice: communication and advance care planning, coordination and transitions of care, and pain and symptom management. Major disease categories or conditions that concern neuroscience nurses include degenerative diseases (such as multiple sclerosis and Alzheimer's disease), tumors of the nervous system, neuromuscular diseases (such as myasthenia gravis), traumatic injury to the brain or spine, stroke and other cerebrovascular diseases, seizures/ epilepsy, pain, diseases of the spine, movement disorders (such as Parkinson's disease and dystonia), and developmental problems of the nervous system (Hickey & Strayer, 2020). Neuroscience nurses also focus on preventing nervous system conditions through health promotion, community education, and research. The depth and breadth to which individual neuroscience nurses engage in the total scope of neuroscience nursing practice depends on their education, experience, role, work environment, and regulatory bodies. This is addressed in greater detail later in this document.

Neuroscience nursing is built on a core body of knowledge that reflects its dual components of science and art (Hickey & Strayer, 2020). Neuroscience nursing requires judgment and skill based on principles of the biological, physical, psychological, behavioral, and social sciences, with specific focus on neurologic function. Neuroscience nurses employ critical thinking to integrate objective data with knowledge gained from assessing an individuals' subjective experiences. Neuroscience nurses use critical thinking to apply the best available evidence and research data to diagnosis and treatment. Neuroscience nurses continually evaluate quality and effectiveness of nursing practice and seek to optimize outcomes.

The Science of Neuroscience Nursing

Neuroscience nurses, as practice scholars, utilize science and engage in clinical science as a basis of evidence-based practice and care (Hickey et al., 2019). The science of neuroscience nursing is based on an analytical framework of critical thinking composed of assessment, diagnosis, and identification of outcomes, planning, implementation, and evaluation. This is known as the nursing process. These steps serve as the foundation of clinical decision-making and support evidence-based practice. Wherever they practice, neuroscience nurses use the nursing process and other types of critical thinking to respond to the needs of the populations they serve. Neuroscience nurses use strategies that support optimal outcomes most appropriate to the patient or situation, being mindful of resource utilization and conservation.

Neuroscience nurses rely on the application of scientific evidence to guide their policies and practices, but also as a way of quantifying nurses' impact on individual health outcomes. For example, neuroscience nurses have used a bundled approach to improve the recognition and time-to-treatment for strokes that occur in the hospital (Drollinger & Prasun, 2023). An example of neuroscience nurses' leadership in the area of evidence translation and practice implementation is the development of the

AANN Clinical Practice Guidelines series, which provides evidence-based recommendations for the care of individuals with specific conditions, such as traumatic brain injury or brain tumor, or practices such as mobilization of individuals with neurologic injury (AANN, 2012; 2014; 2021). Early mobilization of patients with neurologic conditions in intensive care units has been a recent area of focus, in particular with patients who have external ventricular drains in place or are mechanically ventilated (AANN. 2021; Moyer et al., 2021).

Neuroscience nurses also generate new knowledge in their field through scientific research. AANN has periodically set research priorities, with the aim of advancing the science and practice of neuroscience nursing. Most recently an AANN task force used the Delphi technique to identify impactful neuroscience nursing research categories and topics (Bautista et al., 2022). The following were selected by neuroscience nurse experts:

- *Assessment*: Assessment parameters for specific neurological conditions
- Biomarkers
 - Recovery from various relevant neurologic injury/disease processes
 - Intervention efficacy in various relevant neurologic injury/ disease
 - Neuro/oncology and targeted treatments
- Nursing Care Outcomes
 - Interventions to improve outcomes
 - Care across a spectrum of neuroscience problems
 - ICP Monitoring
 - Neuro Infections
 - Degenerative Spine Disease
 - Parkinson's Disease
 - Care across the lifespan
 - Pediatric patients
- Quality of Life: Relevant neurologic injury/disease populations
- Technology: Symptom monitoring

The following strategies have been identified to improve the overall impact of neuroscience nursing research in all topic areas (Bautista et al., 2022):

- Evaluate specific neuroscience nursing interventions using rigorous scientific designs
- Address the lifespan and continuum of patient populations cared for by neuroscience nurses
- Define neuroscience nursing sensitive outcomes in order to test the effectiveness of interventions as compared to describing current state
- Incorporate biomarkers as a measure of response to nursing and medical interventions
- Expand neuroscience nursing in areas of emerging trends (e.g., caregivers, technology, biomarkers)

The Art of Neuroscience Nursing

The art of neuroscience nursing is based on compassion and respect for human dignity. A compassionate approach to patient care mandates that care is provided competently, provided and accomplished through both independent practice and partnerships. Collaboration may occur between professional colleagues or with healthcare consumers. The art of caring is central to neuroscience nursing practice and is represented in the personal relationship between the nurse and the patient. The art of caring goes beyond emotional human connections, extending to the ability to respond to the human aspects of health and illness during critical moments in a way that promotes healing and social justice.

The art of neuroscience nursing embraces dynamic processes that affect the human person, including, for example, spirituality, healing, empathy, mutual respect, and compassion. These intangible aspects are fostered by compassion, helping, listening, mentoring, coaching, teaching, exploring, being present, supporting, touching, intuition, empathy, service, cultural competence, tolerance, acceptance, nurturing, mutually creating, and conflict resolution.

Neuroscience nursing focuses on the promotion and maintenance of health and the prevention or resolution of disease, illness, or disability. Human needs are met in the context of a culturally sensitive, caring, and personal relationship by the neuroscience nurse. Neuroscience nursing includes the diagnosis and treatment of human responses to actual or potential health problems. Neuroscience nurses employ practices that are restorative, supportive, and promotive in nature:

- *Restorative* practices modify the impact of neurologic illness or disease.
- *Supportive* practices are oriented toward modification of relationships or the environment to support health.
- *Promotive* practices mobilize healthy patterns of living, foster personal and family development, and support self-defined goals of individuals, families, communities, and populations.

DEVELOPMENT AND FUNCTION OF NURSING STANDARDS

The standards of neuroscience nursing practice are authoritative statements of the duties that all neuroscience nurses, regardless of role or population, are expected to competently perform (ANA, 2021). The standards published herein may be utilized as evidence of a legal standard of care. The standards are subject to change with the dynamics of the neuroscience nursing specialty—as new patterns of professional practice are developed and accepted by neuroscience nurses, the education community, and the public—and as changes in societal trends occur.

This document includes 18 standard statements that provide the neuroscience nurse with a framework for outlining an expansive scope of practice. The language is intentionally broad and serves to paint an overall picture of practice. The roles and activities of the neuroscience nurse may be specific to practice setting and directed by state, institution, or group practice requirements. The standard statements enclosed in this document perform optimally when tailored and applied to the specifics of a particular nursing practice focus or setting.

Each standard statement is accompanied by several basic competencies. The competency statements, in turn, may be further specified according to practice setting. Competencies are specific, measurable elements that interpret, explain, and facilitate practical use of a standard. The competencies may be used to demonstrate evidence of compliance with individual standards but are not exhaustive and may be circumstantial. For example, the plan of care (Standard 4. Planning) may not be able to be developed with or communicated to the unresponsive patient who has no identified family caregiver.

Competencies may be used by neuroscience nurses to appraise professional performance and identify content for academic and continuing education curricula. Neuroscience nurses can also use the competencies to inform others of practice expectations.

THE NURSING PROCESS

Neuroscience nurses use the nursing process to deliver care. The nursing process is often conceptualized linearly, moving from assessment to diagnosis, outcomes identification, planning, implementation, and evaluation. However, these steps are often necessarily interrelated, as one step may inform another (Figure 1; ANA, 2015).

The Neuroscience Nursing Standards of Practice coincide with the steps of the nursing process. The nursing process begins with assessment. These standards focus specifically on neurologic assessment. Data gathered from the neurologic assessment are used to plan and implement nursing interventions specific to the patient's neurologic condition. Interventions may support bodily functions and promote healing and recovery of the acutely ill, enhance adaptation to persistent neurologic deficits for the chronically ill, facilitate patient and family coping, and teach individuals and their families about disease processes, adaptation techniques, and therapies. The neuroscience nurse evaluates patient outcomes on an ongoing basis and revises the care plan as necessary. Further, application of clinically relevant research findings promotes evidence-based care and development of creative, therapeutic nursing interventions to improve outcomes for individuals with neurologic conditions.

Ethical principles are applied in any care rendered. Similarly, the Neuroscience Nursing Standards of Professional Performance relate to how the professional nurse adheres to the Neuroscience Nursing Standards of Practice, completes the nursing process, and addresses other practice issues and concerns (ANA, 2021).



From: Nursing Scope and Standards of Practice (3rd ed., p. 14), American Nurses Association, 2015.

TENETS OF NEUROSCIENCE NURSING PRACTICE

Four tenets characterize contemporary neuroscience nursing practice, and are reflective of nursing practice as a whole:

1. Neuroscience Nursing Practice Is Individualized

Neuroscience nursing practice respects diversity and is individualized to meet the unique needs of the patient. The patient is defined as the individual with or at risk for a neurologic condition, and their family, group, community, or population who is the focus of attention and to whom the neuroscience nurse is providing services as sanctioned by state regulatory bodies. For example, the neuroscience nurse recognizes that each person with a brain tumor or stroke will present different signs and symptoms, and care must be individualized according to identified needs.

Furthermore, neuroscience nurses use theoretical and evidence-based knowledge to advocate for and collaborate with individuals in assessing, diagnosing, and identifying outcomes, and planning, implementing, and evaluating individualized care. Nursing interventions are intended to incorporate a shared decision-making model that prioritizes individualized care and contributes to quality outcomes. Critical thinking underlies each step of the nursing, problem-solving, and decision-making processes. The nursing process is cyclical and dynamic, with each step informing both the previous step and the succeeding step. The nursing process is also patient centered, interpersonal, collaborative, and universally applicable.

2. Neuroscience Nurses Coordinate Care by Establishing Partnerships

Neuroscience nurses establish partnerships with persons, families, communities, support systems, and other providers, utilizing in-person and electronic communication methods to reach a shared goal of delivering healthcare. Collaborative, interprofessional team planning is based on recognition of each discipline's value and contributions, mutual trust, respect, open discussion, and shared decision-making. Neuroscience nurses frequently partner with other disciplines, such as physical therapy, occupational therapy, and speech therapy, to optimize care. One example is the use of an interprofessional approach to provide optimal care for a vulnerable veteran population with amyotrophic lateral sclerosis (Jaffa et al., 2017). Care may also be coordinated with other specialties, including (but not limited to) pediatrics, psychiatry, or geriatrics. Neuroscience nurses may need to collaborate with any specialty regarding a neuroscience patient and maintain knowledge in emerging specialties to optimize patient care.

3. Caring and Health Are Central to the Practice of Neuroscience Nursing

Professional nursing promotes healing and health in a way that builds a relationship between the neuroscience nurse and individuals. "Caring is a

conscious judgment that manifests itself in concrete acts, interpersonally, verbally, and non-verbally" (Gallagher-Lepak & Kubsch, 2009, p. 171). Neuroscience nurses communicate caring through touch, verbal communication, and nonverbal behaviors while also promoting self-care, environmental care, and societal care.

4. A Strong Link Exists Between the Professional Work Environment and Neuroscience Nurses' Ability to Provide Quality Patient Care and Achieve Optimal Patient Outcomes

Neuroscience nurses have an ethical obligation to maintain and improve healthcare environments that are conducive to providing quality healthcare (ANA, 2010). Elements of a healthy work environment have been extensively studied and document the relationship between effective practice and quality of the work environment. Neuroscience nurses must maintain and improve the healthcare environment for both nurses and individuals in order to prevent injury and illness as well as promote health.

HEALTHY WORK ENVIRONMENTS FOR NEUROSCIENCE NURSES

Negative, demoralizing, and unsafe conditions in the workplace, emanating from a physical or psychologically unhealthy environment, contribute to nursing errors, ineffective delivery of care, conflict, and stress among healthcare teams and those they serve. The neuroscience nurse is expected to contribute toward the reduction or elimination of physical and psychological health risks in the employment setting, thus creating a healthy work environment.

The Institute of Medicine (IOM) reported that safety and quality problems exist when dedicated health professionals work within systems that neither prepare nor support them in achieving optimal patient care outcomes (2004). Rapid changes, such as reimbursement modification and costcontainment efforts, new healthcare technologies, and changes in the healthcare workforce, have influenced the work and work environment for all nurses. Concentrating on key aspects of the work environment, encompassing people, physical places, and tools, can enhance healthcare working conditions and improve safety. Key aspects include utilizing transformational leadership and evidence-based care management, maximizing workforce capability, creating and sustaining a culture of safety and research, evaluating workspace design and redesign to prevent and mitigate errors, addressing potential pollutants in the work environment, and promoting the effective use of telecommunications.

Creating and maintaining a healthy work environment requires effort. Establishing and maintaining a healthy work environment requires all nurses, not only neuroscience nurses, to

- Be proficient in skilled communication;
- Foster true collaboration with partners across all disciplines;
- Be effective decision-makers in policy, in directing and evaluating clinical care, and in leading organizations;
- Ensure appropriate staffing that matches nurse competencies to patient needs;
- Foster meaningful recognition of the value of self and others; and
- Embrace the role of a leader in creating and sustaining a healthy work environment.

The Magnet Recognition Program (ANCC, 2014; 2023) also addresses the professional work environment, requiring that Magnet-designated facilities adhere to the model components of transformational leadership, structured empowerment, exemplary professional practice, new knowledge, innovation and improvements, and empirical quality results.

These collective principles of a healthy employment environment apply to neuroscience nurses who work in any healthcare environment. This requires the neuroscience nurse to collaborate often and well, to communicate the important contributions of nursing to the health and well-being of those with neurologic conditions, and to assume leadership roles in settings where they are employed.

Issues specific to a healthy work environment for neuroscience nurses relate to the nature of the intense issues and phenomena encountered in neuroscience practice. While many challenges exist in all areas of nursing practice, neuroscience nurses may more frequently encounter issues that affect their emotional health. One research study reported that the implementation of resilience rooms (dedicated spaces for nurses to decompress) in neuroscience units helped to decrease emotional distress and burnout in a sample of 396 neuroscience nurses (Prendergast et al., 2023). Thus, neuroscience nurses continue to strive toward creating healthy work environments.

APPLICATION OF PROVISIONS OF THE CODE OF ETHICS FOR NURSES

Neuroscience nurses incorporate the nine provisions of the *Code of Ethics for Nurses* (ANA, 2015). The following are examples of how the neuroscience professional incorporates these provisions:

Provision 1: The neuroscience nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person.

The neuroscience nurse focuses on helping individuals meet their needs, including physical, emotional, cognitive, social, and spiritual needs. Each patient is an individual, and care must be tailored to meet the healthcare needs encompassing all aspects of an individual's life, culture, and community.

Provision 2: The neuroscience nurse's primary commitment is to the patient, whether an individual, family, group, community, or population.

The neuroscience nurse always maintains professional boundaries with their patients, whether individuals, families, groups, communities, or a population. The neuroscience nurse is always alert for potential conflicts of interest that may affect individuals and disclose inappropriate information. The neuroscience nurse always prioritizes the well-being of their patient, whether an individual, family, group, community, or population. Provision 3: The neuroscience nurse promotes, advocates for, and protects the rights, health, and safety of the patient.

The neuroscience nurse cares for the patient without judgment. In addition, the neuroscience nurse provides holistic and altruistic care to bring the patient to utmost health and improve their quality of life. Neuroscience nurses provide creative critical thinking for positive and safe outcomes. The neuroscience nurse demonstrates positive demeanor while developing trust and mutual respect, and while incorporating healing interactions that benefit the patient.

Provision 4: The neuroscience nurse has authority, accountability, and responsibility for nursing practice, making decisions, and taking action consistent with the obligation to promote health and provide optimal care.

The neuroscience nurse recognizes their role in the nursing profession and their responsibility to provide competent care to individuals with neurological conditions, guided by the laws of their state and protocols of their facility. The neuroscience nurse takes actions such as advocating at the patient level, as well as using their expertise in the profession to provide guidance for practice changes.

Provision 5: The neuroscience nurse owes the same duties to self as to others, including the responsibility to promote health and safety, preserve wholeness of character and integrity, maintain competence, and continue personal and professional growth.

The neuroscience nurse maintains personal health, safety, and overall physical, emotional, psychological, and spiritual well-being to mitigate burnout and fatigue. The neuroscience nurse maintains personal and professional integrity and wholeness of character to avoid endangering a patient, family, community, or nursing practice. The neuroscience nurse engages in activities to increase their knowledge and maintain competence to promote personal and professional growth to reciprocate and interact in the world in which they live.

Provision 6: The neuroscience nurse, through individual and collective effort, establishes, maintains, and improves the ethical environment of the work setting and conditions of employment that are conducive to safe, quality healthcare.

The neuroscience nurse engages in skilled communication and fosters collaboration with multiple disciplines to promote autonomy within the healthcare environment. The neuroscience nurse, individually and as part of a team, demonstrates integrity and respect in the practice of nursing, in which solutions and concerns are addressed to promote self-worth and respect.

Persons with a neurologic condition are often unable to move independently and may require a great deal of physical assistance, thereby placing the neuroscience nurse at risk for injury. Neuroscience nurses can use special equipment, including mechanical lifts, or services such as lift teams to protect themselves. Persons with neurologic conditions may present unfavorable behaviors that can injure themselves, family members, or healthcare staff. Within their work environment, neuroscience nurses promote safety by observing for escalating violent behaviors, working as a team to diffuse violent behaviors, and educating family members and coworkers about how to best deal with safety concerns.

Provision 7: In all roles and settings, the neuroscience nurse advances the profession through research and scholarly inquiry, professional standards development, and the generation of both nursing and health policy.

In 2017, to advance the profession of neuroscience nursing, the AANN created a standing committee on clinical science. The objective of the committee is to advance clinical science through research, scholarly inquiry, and quality. Key achievements of this committee have been to define clinical science (Hickey et al., 2019) and the set research priorities for neuroscience nursing (Bautista et al., 2022).

Provision 8: The neuroscience nurse collaborates with other health professionals and the public to protect human rights, promote health diplomacy, and reduce health disparities. Based on evidence, the neuroscience nurse provides care for all individuals regardless of race, color, sex, national origin, age, disability, genetic information, creed, or socioeconomic status, with consideration of cultural values that can promote or hinder health and wellness. The neuroscience nurse advocates on behalf of all individuals for best practice, care access (inclusive of preventive, episodic, and chronic care), healthy living environments, and health education.

Provision 9: The profession of nursing, collectively through its professional organizations, must articulate nursing values, maintain the integrity of the profession, and integrate principles of social justice into nursing and health policy.

The neuroscience nurse works collectively through their professional association, AANN (a premier organizational affiliate of the ANA), to articulate neuroscience nursing values, maintain the integrity of the profession, and integrate principles of social justice into nursing and health policy.

SCHOLARSHIP IN NEUROSCIENCE NURSING

Scholarship is a hallmark of all professions and includes research and practice scholarship. Building the science for practice and care is a major responsibility of each profession. AANN has assumed this responsibility in numerous ways: publishing clinical practice guidelines and articles to inform the readership about knowledge development and its application to practice, supporting the application of neuroscience nursing knowledge through active engagement with other professional organizations focused on neuroscience patient care, and influencing health policy to address the needs of neuroscience patients and practice. It is through these efforts that the scholarship of neuroscience nursing is framed. AANN works synergistically with the American Board of Neuroscience Nursing (ABNN) and the Agnes Marshall Walker Foundation (AMWF) through a shared vision that together AANN, ABNN, and AMWF are the three pillars driving neuroscience nursing excellence and scholarship (Hickey et al., 2019).

MODEL OF PROFESSIONAL PRACTICE REGULATION

The Model Representing Regulation of Professional Nursing Practice (Figure 2) reaffirms the profession's focus on the safety, quality, and evidence-base of nursing practice. The *Neuroscience Nursing: Scope and Standards of Practice* are derived from this model.



From American Nurses Association, 2021.