

**American Association of Neuroscience Nurses (AANN)
POSITION STATEMENT
IMPACT ON QUALITY OF CARE/HEALTH OUTCOMES**

BACKGROUND

In 2003, the American Nurses Association (ANA) asked AANN to provide the nursing community with a position statement on the impact of neuroscience nurses on quality of care/health outcomes.

The Issue: To effectively communicate neuroscience nurses' impact on quality of care/health outcomes.

INTENT

The purpose of this statement is to communicate 1) scientific and clinical findings of neuroscience nurses' impact on quality of care/health outcomes and, 2) recommendations for implications and future directions.

RATIONALE

AANN has committed itself to the overall objectives and goals of the strategic plan of "Nursing's Agenda for the Future." This plan parallels the mission and vision of AANN which states that:

The mission of the American Association of Neuroscience Nurses is to work for the highest standards of care for neuroscience patients by advancing the science and practice of neuroscience nursing. The Association accomplishes its mission through continuing education, information dissemination, standard setting and advocacy on behalf of neuroscience patients, families and nurses.

POSITION STATEMENT

Neuroscience nursing is a unique area within the nursing discipline, which specializes in the care of individuals across the lifespan who have biopsychosocial alterations due to nervous system dysfunction such as stroke, brain and spinal cord neoplasms and trauma, back pain, and epilepsy. The practice of neuroscience nursing encompasses many levels of care including the acute, subacute, rehabilitative and chronic care in a variety of roles.

Definition of Terms

Impact: To impact is to strongly influence a process such as the delivery of quality patient care or an outcome (i.e. shortened length of stay). This impact can be made directly or indirectly by neuroscience nurses in a variety of roles as staff nurses, educators, advanced practice nurses, nurse researchers, and managers/administrators.

Many forces positively influence the impact neuroscience nurses make on quality of care/health outcomes. A few such forces include 1) use of the nursing process; 2) administrative support; 3) collaboration among health care providers; 4) patient focused care; and 5) educated, competent nurses. These forces, if limited, can negatively influence the impact neuroscience nurses make on quality of care/health outcomes.

Direct: Neuroscience nurses provide direct nursing care, independently and collaborately, in the critical, acute, subacute, and rehabilitative phases of neurological illness. Direct care is not a function of position (i.e., staff nurse) but that of role, such as educator, direct care giver, counselor. Use of the nursing process results in the identification of actual and potential problems. Neuroscience nurses directly prevent complications of increased intracranial pressure and those associated with prolonged immobility including aspiration pneumonia, decubiti, deconditioning, alterations in gastrointestinal function. Throughout this process both the patient and families/caregivers needs are addressed.

In addition, neuroscience nurses directly impact length of stay by facilitating diagnostic testing and therapies as well as the coordination of discharge planning.

Indirect: Neuroscience nurse indirectly impact quality of care/health outcomes through community endeavors. Examples of these efforts include, but are not limited to, participation in injury prevention programs such as the “Think First” program for brain and spinal cord injury.

Neuroscience nurses organize and participate in health screenings, and are recognized speakers on such topics as stroke, hypertension, and cholesterol, often in conjunction with other professional groups such as the American Stroke Association.

Neuroscience nurses organize and facilitate many types of support groups for both neuroscience patients as well as their caregivers. Members of AANN serve on advisory panels for professional groups, often communicating health information to consumers.

Quality of Care: A major concern in health care policy is that of quality: quality of care, quality of life, quality of service, quality of measurement. Quality of care can be viewed simply as what is done or not done for a patient. Needed services are identified that, given at the right time, place, and manner, will assure positive outcomes.

Health Outcomes: Health outcomes are measurable endpoints of care. They apply to individuals or groups of individuals such as families and communities. Examples of health outcomes that apply to neuroscience nursing care and target populations are increased cognition, decreased pain, adaptation, free from injury, and increased mobility.

METHODS

Neuroscience nurses have generated a plethora of knowledge through research that enhances our understanding of patient responses to disease states (i.e., depression in individuals with Parkinson's Disease). A review of the literature from 19080 to the present yielded many reviews of research yet only two major themes demonstrated the impact that neuroscience nurses

make on the quality of care received by neuroscience patients: 1) the area of intracranial pressure (ICP), and 2) cost containment/financial savings.

Research aimed at understanding the impact of nursing activities on ICP dates back to the 1980's with work done by Pamela Mitchell and others (Mitchell, et al., 1981; Synder, 1983). These findings have shaped the practice of neuroscience nursing in the care of the neurosurgical patient, including the head-injured population. Nursing interventions focus on positioning, limiting respiratory therapies, timing multiple interventions, and inclusion of additional therapies such as touch and music. More recent reviews of the literature on the influence of inadequate pain management, and chest physiotherapy with trendelenberg positioning on cerebrovascular dynamics offers insight into the negative outcomes of these interventions (Leith, 1998; Villeneuve & Hodnett, 1990).

Utilization of nursing care plans and advanced practice nurses has been examined in terms of monetary outcomes. The use of nursing care plans in a spinal cord injured population can result in decreased overtime and subsequent, cost savings (Quinn, 1990). Acute care nurse practitioners caring for neurosurgical patients save institutions monies by decreasing length of stay and complication rates (Russell, VorderBruegge, & Burns, 2002).

Although the majority of research done focuses on individual institutions with small sample sizes and therefore, limits its generalizability, a foundation for understanding 1) the pathophysiology of intracranial dynamics in relation to nursing activities and treatments, and 2) a coordinated nursing focus to the care of neuroscience patients, has been firmly established for continued growth in neuroscience nursing research. Neuroscience nursing interventions have been further identified through the Delphi technique (Ackerman, 1992) and extend beyond ICP related care to include precautionary measures (i.e., seizures, aspiration) and management of seizures, the environment, and patient behavior.

SUMMARY

Based on this background information and scientific and clinical findings, the American Association of Neuroscience Nurses promotes the following actions:

1. To promote continued research on the impact that neuroscience nurses make on quality of care and health outcomes with emphasis on multi-center studies.
2. To promote a better understanding of neuroscience nursing interventions and their impact on quality of care/health outcomes.
3. To communicate the direct and indirect impact neuroscience nurses on quality of care/health outcomes through formal and informal written and verbal mechanisms.

REFERENCES

- Ackerman, L. L. (1992). Interventions Related to Neurological Care. Nursing Clinics of North America, 27, 325-346.
- Leigh, B. (1998). Pharmacological Management of Pain after Intracranial Surgery. Journal of Neuroscience Nursing, 30, 220-224.

Mitchell, P.M., Ozuna, J., Lipe, H. (1981). Moving the Patient in Bed: Effects on Intracranial Pressure. Nursing Research, 30, 212-218.

Quinn, P. (1990). Standardized Nursing Care Plans for Acute Care SCI: Improved Documentation. SCI Nursing, 7 (10), 4-7.

Russell, D., VorderBruegge, M., & Burns, S. (2002). Effect of an Outcome-Managed Approach to Care of Neuroscience Patients by Acute Care Nurse Practitioners. American Journal of Critical Care, 11, 353-362.

Synder, M. (1983). Relation of Nursing Activities to Increases in ICP. Journal of Advanced Nursing, 8, 273-279.

Villeneuve, M. J., & Hodnett, E. D. (1990). Cerebrovascular Status and Trendelenburg Position in Severe Head Injury. AXON, 11 (3), 64-67.

AANN Task Force Members:

Donna Avanecean, RN, Chairperson

Joan Censullo, RN

Susan B. Fowler, RN

Lucy Hood, RN

Approved, AANN Board of Directors, November 14, 2003.

© November 2003, American Association of Neuroscience Nurses: No part of this statement may be reproduced without the written consent of the American Association of Neuroscience Nurses.



4700 West Lake Avenue
Glenview, IL 60025-1485
888/557-2266 Toll-Free
877/734-8677 Fax
info@aann.org
www.aann.org