Author Name\*, Author Name\*\*, initials then surnames, separated by commas, appear here

\*This is the first author’s affiliation and location

\*\*This is the second author’s affiliation and location

ABSTRACT:

The abstract should be under 250 words.

FORMAT

The preferred format in the text of the Abstract is Arial 12 pt, Spacing - 0 pt before, 6 pt after, and Line Spacing - at least 14 pt.

TABLES/FIGURES

Table 1.1 This is a style for Table Titles. “Table 1.1, 1.2 etc” should be in bold. Table captions should appear above tables.

Figure 1.1 This is a style for Figure Titles. “Figure 1.1, 1.2 etc” should be in bold. Figure legends should appear below figures.

REFERENCES

As per CSIRO citing and referencing guide

Abstracts are due 18 January 2025. Abstracts must be sub

Dr. Patricia Zrelak, PhD, RN, NEA-BC, ASC,-BC, CCRN, SCRN, CNRN, CHQP, PHN, FAHA, has an extensive background in neuroscience nursing and is currently the stroke program manager for Kaiser Permanente, Northern California. She is also the liaison between WFNN and the American Association of Neuroscience Nurses. She has served on numerous national boards, including the AANN guideline editorial board, and is a frequent national and international speaker on neuroscience related issues. .

**Bridging Knowledge Gaps in Neuroscience Nursing: The AANN Neuro 101 Toolkit for Effective Onboarding and Orientation of New Nursing Staff**

*Patricia (Pat) Ann Zrelak, PhD, RN, NEA-BC, CNRN, SCRN, ASC-BC, CCRN, CPHQ, PHN, FAHA*

*\* Regional Offices, Kaiser Permanente, Northern California Region*

*\*\* AANN International Liaison*

***Abstract:***

The complexity of neuroscience nursing, driven by the intricacies of the nervous system and diverseneurological conditions, presents significant challenges in ensuring staff are competent to care for this vulnerable patient population.  Recognizing an urgent need for standardized neuroscience orientation, the American Association of Neuroscience Nurses (AANN) developed the Neuro 101 Toolkit through a structured process, including a Delphi study to identify essential components. This toolkit addresses these challenges by equipping new and temporary staff, including travelers and float nurses, with the knowledge and skills necessary to provide safe, high-quality care.

The Neuro 101 Toolkit includes a quick-reference checklist, practical resources on common diagnoses, neurological assessments, seizure and epilepsy management, stroke protocols, and spinal care. Additionally, preceptor tools, such as orientation frameworks, skill acquisition strategies, and advocacy materials, enable efficient and effective onboarding. The toolkit fosters competence in patient assessment, intervention, and education by providing evidence-based guidance and practical clinical tools.

This presentation will explore how the toolkit enhances the integration of new staff into neuroscience units, ensuring consistent, accessible education and improving patient safety. Feedback from users demonstrates its value in reducing onboarding challenges and improving outcomes across care settings. Building on this success, a similar process is now underway to develop a toolkit tailored to Neuro ICU orientation. This presentation will illustrate how the Neuro 101 Toolkit represents a pivotal innovation in supporting neuroscience nursing and AANN membership globally, with significant implications for improving patient care and workforce readiness while providing a framework for future work.

American Association of Neuroscience Nursing. *Neuro 101 Toolkit,* [*Neuro 101 Toolkit | American Association of Neuroscience Nurses*](https://apps.aann.org/store/product-details?productId=781730795)*, accessed January 11, 2025.*

**Improving the Hyperacute Care of Patients with Suspected Acute Central Retinal Artery**

*Patricia (Pat) Ann Zrelak, PhD, RN, NEA-BC, CNRN, SCRN, ASC-BC, CCRN, CPHQ, PHN, FAHA\**

*\* Regional Offices, Kaiser Permanente, Northern California Region*

**BACKGROUND:**

Central retinal artery occlusion (CRAO) is a form of acute ischemic stroke that causes severe visual loss. Time is important in its treatment as the retina is extremely sensitive to ischemia. Current literature suggests that treatment with intravenous thrombolytic therapy may be effective, although there is a lack of high-quality randomized studies and patient selection is important to prevent further harm.

**AIM:**

To review the background, pathophysiology, current treatment options, and efforts implemented by integrated healthcare system of 21 hospitals in Northern California to improve the emergent treatment of patients with potential CRAO.

**METHODS**:

After a review of the literature and current performance we implemented a process for remote (electronic) fundoscopy in all Emergency Departments, and added tele-ophthalmology to the stroke alert process in cases of suspected CRAO.

**RESULTS**:

The new process has resulted in faster evaluation of suspected cases with a median treatment time less than 45 minutes. It also provides a team approach to evaluation that includes ophthalmology, vascular neurology, neuro-radiology, and an emergency department physician. This process has decreased variability in the workup in this patient population, ensuring all patients have access to timely specialized experts and timely treatment, when appropriate. This has resulted in an increase in treatment rates. Outcomes are similar to published results, with only around 20% of cases having excellent outcomes, thus highlighting the need for additional trials in this area.

**REFERENCE:**

Mac Grory , Schrag M, Biousse V, et al. [on behalf of the American Heart Association Stroke Council; Council on Arteriosclerosis, Thrombosis and Vascular Biology; Council on Hypertension; and Council on Peripheral Vascular Disease](https://www.ahajournals.org/doi/10.1161/STR.0000000000000366#con11). Management of Central Retinal Artery Occlusion: A Scientific Statement From the American Heart Association. *Stroke*, 52(6);e282-294. <https://doi.org/10.1161/STR.0000000000000366>

**Achieving Door-in Door-Out Median of 75 Minutes for Endovascular Stroke Therapy Across 21 Medical Centers in Northern California**

*Patricia (Pat) Ann Zrelak, PhD, RN, NEA-BC, CNRN, SCRN, ASC-BC, CCRN, CPHQ, PHN, FAHA\**

*\* Stroke Program Manager, Regional Offices, Kaiser Permanente, Northern California*

**BACKGROUND:** Time to endovascular stroke therapy (EST) in patients with an acute ischemic stroke (AIS) due to large vessel occlusion (LVO) is essential in minimizing brain cell loss and maximizing functional patient outcomes. Achieving fast door-in door-out (DIDO) times requires a highly reliable stroke alert process, with fast door-to-IV thrombolytic times in eligible patients and rapid response times from Emergency Medical Services/ambulance companies for patient transport.

**AIM:** To describe how an integrated hospital system in Northern California decreased their DIDO times for EST to a median of less than 75 minutes collectively across 21 facilities of various size and location.

**METHODS:** A multifaceted approach was taken to decrease DIDO times that included more accurate capture of arrival and discharge times, the use of tenecteplase instead of alteplase, therefore minimizing the need for critical care transport, a designed neuroscience transfer center protocol, having the tele-stroke physician call for transfer to limit the number of handoffs in communication, focus on maintaining fast door to needle treatment times for IV thrombolytics, minimizing EMS turn-over time, timely drill down on every case, and inclusion of the DIDO metric on the leadership dashboard.

**RESULTS:** In 2024, DIDO times decreased from 29% within 75 minutes to 46% for all patients (0-24 hours), and to 55% for cases within the 0-6 hours window (early EST). However, performance between hospitals differed. Regardless, most hospitals demonstrated improvement after flat performance since the inception of the 75-minute metric eight years prior.

**REFERENCES:**

Flores, Alan, Seró L, Ustrell X, Pellisé A, Viñas J, et al. Catalan Stroke Code and Reperfusion Consortium. Door‐In–Door‐Out Time Effect on Clinical Outcome According to Reperfusion Time in Endovascular Treatment.  *Stroke: Vascular and Interventional Neurology. 2022;2*(6):e000257. doi: 10.1161/SVIN.122.000337

McTaggart RA, Moldovan K, Oliver LA, Dibiasio EL, Baird GL, Hemendinger ML, Haas RA, Goyal M, Wang TY, Jayaraman MV. Door‐in‐door‐out time at primary stroke centers may predict outcome for emergent large vessel occlusion patients. *Stroke*. 2018;49:2969–2974

**Nursing’s Role in Psychosocial Health Management After a Stroke Event**

*Patricia (Pat) Ann Zrelak, PhD, RN, NEA-BC, CNRN, SCRN, ASC-BC, CCRN, CPHQ, PHN, FAHA\**

*\* Stroke Program Manager, Regional Offices, Kaiser Permanente, Northern California*

Psychosocial symptoms such as depression, stress, anxiety, and fatigue are common among stroke survivors, affecting a significant proportion of individuals. Psychosocial symptoms are often underdiagnosed in stroke survivors, leading to inadequate treatment and poorer outcomes. The session aims to review the findings from the recent publication entitled *Nursing's Role in Psychosocial Health Management After a Stroke Event: A Scientific Statement from the American Heart Association.* This paper points out the crucial role nurses play in monitoring symptoms, educating patients and families, implementing interventions, and coordinating care across the continuum of stroke recovery.

Zrelak PA, et al American Heart Association Council on Cardiovascular and Stroke Nursing and Council on Lifestyle and Cardiometabolic Health (2024) Nursing's Role in Psychosocial Health Management After a Stroke Event: A Scientific Statement From the American Heart Association. *Stroke* 55(10):e281-e294. doi: 10.1161/STR.0000000000000471.