

Respond, Intervene and Escalate: Acute Stroke Events in the Post Anesthesia Care Unit

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Background Information: In the post-anesthesia care unit (PACU) setting there can be challenges in differentiating between anesthesia-related versus thrombolytic neurologic deficits. The ability to accurately assess, differentiate and escalate care is imperative to improve outcomes. The occurrence of acute stroke events in the peri-operative setting at a comprehensive cancer center emphasized the need for an evidence-based and comprehensive approach to assessment, communication and documentation of risk factors for thrombotic complications.

Objectives of the Project: This project aimed to improve the knowledge of nurses related to assessment, management, and escalation of stroke symptoms, and improve patient outcomes in the PACU.

Process of Implementation: An assessment consisting of 8 questions evaluating knowledge of institutional resources about and the process of stroke assessment and management was administered to 152 PACU & Intervention radiology (IR) nurses prior to and following an educational intervention. Results informed a multimodal educational intervention which included: a power point presentation, evidence-based standards for neurological assessment, and assessment-focused case studies. Interprofessional discussion reinforced available institutional resources and standards for assessment, management, and escalation of stroke symptoms. Quarterly mock stroke and escalation education events are conducted in collaboration with anesthesiologists to maintain clinical competencies. These sessions included an algorithm-based clinical decision aid to guide escalation of care based on assessment findings that is also now used in clinical practice. The electronic health record was enhanced to include defined documentation fields for stroke indicators.

Statement of Successful Practice: Survey results suggest an improvement in overall knowledge of assessment, management, and escalation of stroke symptoms from a mean score of 68% at baseline to 85% post-intervention; with knowledge of acute stroke interventions improved from 69% to 91%. Since the introduction of the educational intervention patients demonstrating neurologic deficits have been identified and escalated more quickly, resulting in no sentinel events over the past two quarters.

Implications for Advancing the Practice of Perianesthesia Nursing: Early recognition of acute stroke symptoms in the peri-operative setting is crucial to the safety and wellness of our patients. PACU staff benefit from multi-modal educational interventions to improve knowledge regarding assessment, management and escalation of acute events.