



### Presented by

#### **RoAnna Kingman, MSN, ARNP, RNFA, SCRNP, CNRN**

RoAnna Kingman received her BSN and MSN degrees with a specialty as a family nurse practitioner from the University of Miami. She has extensive clinical experience in neuroscience with a focus in acute and chronic care of the neurosurgical patient, but also has clinical expertise and experience in surgery, stroke neurology, emergency medical care, critical care and hospital administration.

RoAnna is currently the executive director of the Marcus Neuroscience Institute in Boca Raton, FL. She began her career as an ICU nurse at a Level I trauma center in West Palm Beach before dedicating her career to neuroscience. She progressed on to become the director of neuroscience and clinical ARNP at Florida Medical Center, where she developed and led a successful comprehensive stroke program. She has also taught many college level nursing courses and is passionate about precepting and mentoring future nurse leaders and clinicians.

RoAnna's experience as a top level hospital executive and program builder give her a broad understanding of policy, legal and ethical considerations, as well as the financial issues that impact nursing. She has a seemingly limitless amount of energy and enthusiasm that keep the audience engaged in the subject matter and is well-known for bringing real-life scenarios and practical knowledge to her courses and seminars.

### **11 Contact Hours | 2 Pharmacology Hours | Course Length: 636 minutes**

### **Program Description**

The purpose of this course is to provide all nurses caring for acute stroke patients with the knowledge of the different types of stroke and the newer recommendations used in the management of stroke based on the newer AHA Guidelines for the Management of Patients with Ischemic and Hemorrhagic Stroke. This course will provide a complete review of material covered on the SCRNP Exam.

### **Program Learning Outcomes**

*This program prepares the learner to:*

1. Self-report at an 85% rate an increased level of knowledge necessary to pass the SCRNP Exam.
2. Relate the new care pathways for the ischemic and hemorrhagic stroke patients and how they affect the outcomes of this patient population.

# Topics Covered

## 1 Anatomy and Physiology

169 minutes

### Module Description

This review of the brain's anatomy is designed to provide information that is pertinent for the nurse to care for stroke patients more effectively. It provides a detailed review of the meninges, including hematomas and CSF production and excretion. The vascular system review provides clarity on the anterior and posterior circulation and the areas perfused by each vessel. The review of the cerebrum clarifies the function of each lobe as well as deficits seen after an infarct in the corresponding territory. The review of the cerebellum, brain stem, and cranial nerves details their function and deficits incurred after a stroke.

### Module Learning Outcomes

*This module prepares the learner to:*

1. Identify and discuss basic brain structures.
2. Identify and discuss vascular anatomy to stroke syndromes.
3. Apply knowledge of basic vascular anatomy to stroke syndromes.
4. Apply knowledge of the cerebrum, brain stem and cerebellum, along with their related stroke symptoms.
5. Understand the production and excretion of cerebrospinal fluid.
6. Identify the origination of the cranial nerves.

## 2 Hyperacute Care

126 minutes

### Module Description

Hyperacute management of stroke includes all phases of prehospital and emergency room care. Prehospital management includes EMS notification, recognition and transportation to the closest most appropriate stroke center to manage the patient's symptoms.

Emergency room management includes care of the stroke patient from the time they arrive until they are either transferred to another facility, discharged, or admitted to the appropriate stroke unit. This module describes the best practice for evaluating and treating the stroke patient within the recommended timeline established by current guidelines. It also discusses recognizing stroke mimics, establishing eligibility for thrombolytic and endovascular therapy, preventing and treating adverse effects and documentation of appropriate stroke and functional scores.

### Module Learning Outcomes

*This module prepares the learner to:*

1. Discuss the role of the dispatcher and EMS providers in triaging patients to the most appropriate level of care within the recommended amount of time.
2. Describe the prehospital-focused assessment of the stroke patient by EMS.
3. Identify stroke syndromes.
4. Identify and describe stroke mimics.
5. Describe the stroke timeline.
6. Identify the history used to determine a stroke patient's eligibility to receive thrombolytic therapy.
7. Discuss the dose and calculation of Alteplase and Tenecteplase therapy.
8. Describe the adverse effects of thrombolytic therapy and the treatment.
9. Discuss the approved endovascular treatment therapies for the management of ischemic stroke.

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### 3 Acute Care

71 minutes

#### Module Description

Acute care of the stroke patient begins upon admission to the hospital in a monitored bed and continues until the time of discharge. This module covers recommendations for managing the acute stroke patient after admission and treating associated complications that may arise during the hospital stay. It includes management of post thrombotic bleeding, hypertension, dysphagia, DVT, skin breakdown, cerebral edema and management of increased intracranial pressure.

#### Module Learning Outcomes

*This module prepares the learner to:*

1. Identify the treatment goals associated with the care of an acute ischemic stroke patient.
2. Discuss the common complications that arise in an acute stroke patient.
3. Discuss the management of common complications that arise in an acute stroke patient.
4. Discuss the management of hypertension in the acute care environment.
5. Identify and discuss the two most common infections that occur following a stroke and how to prevent them.
6. Identify and discuss how to recognize and treat cerebral edema and increased intracranial pressure (ICP).

### 4 Cerebrovascular Disease

136 minutes

#### Module Description

Cerebrovascular disease encompasses many stroke disorders. This module will cover transient ischemic attacks, thrombotic and embolic ischemic strokes, and subarachnoid and intracerebral hemorrhages. They are reviewed regarding risk factors, presentation, diagnosis, treatment, and complications. This module also covers the diagnosis and management of carotid stenosis. Other causes of strokes, including cerebral venous thrombosis, arterial venous malformations, carotid and vertebral dissections, and cavernous malformations are discussed in this section. The etiology, management and treatment of aneurysms will also be discussed.

#### Module Learning Outcomes

*This module prepares the learner to:*

1. Discuss transient ischemic attacks and their management.
2. Discuss the ischemic cascade.
3. Explain core and penumbra.
4. Discuss carotid stenosis and medical and surgical treatment and management.
5. Explain the definition of ischemic stroke.
6. Identify the different classifications of ischemic stroke.
7. Explain the most common etiology of a subarachnoid hemorrhage (SAH) and an intracerebral hemorrhage.
8. Identify and explain aneurysms
9. Identify the timing of the common complications following an SAH, including vasospasm, rebleeding and cerebral edema.
10. Discuss the causes and diagnoses of cerebral venous thrombosis, moyamoya disease, CNS vasculitis, arterial malformations, arterial venous fistulas and dissections.

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## 5 Post-Acute Care

44 minutes

### Module Description

Rehabilitation for stroke patients begins upon discharge of the patient to an inpatient rehabilitation facility or to an outpatient setting with a rehab care plan. Rehabilitation requires a multidisciplinary approach for the stroke survivor to be able to return to as closely as possible to his or her prestroke baseline or learn alternative methods to adapt to their “new normal.” This module will provide information needed to identify the different levels of rehabilitation care as well as treatment modalities. It will also cover prevention of complications that may delay transfers and discharges.

### Module Learning Outcomes

*This module prepares the learner to:*

1. Discuss the levels of rehabilitation care.
2. Discuss the goals of rehabilitation.
3. Describe different treatment modalities utilized to prevent poststroke complications.
4. Discuss the importance of patient and caregiver emotional support.

## 6 Primary and Secondary Preventative Care

90 minutes

### Module Description

This module discusses the difference between primary and secondary preventive care, modifiable and nonmodifiable risk factors associated with stroke, and how to educate each patient based on their individual risk factors. The module also covers treatment for modifiable risk factors.

### Module Learning Outcomes

*This module prepares the learner to:*

1. Discuss the difference between primary and secondary prevention.
2. Discuss the difference between modifiable and nonmodifiable risk factors.
3. Discuss the impact of risk factors on stroke patients.
4. Discuss management of risk factors.
5. Discuss diet, nutrition and exercise recommendations.
6. Discuss teaching methods to use when educating patients and their families.

## Accreditation

### **RN/LPN/LVN/Other: 11 Contact Hours** ***Includes 2 Pharmacology Contact Hours***

MED-ED, Inc. is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (**ANCC**).

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If your profession is not listed, we suggest contacting your board to determine your continuing education requirements and

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