

# Risk Adjustment Coding Academy- Coding Focus

## Stroke – A Medical Emergency



Stroke, also known as an infarction or cerebrovascular accident (CVA), occurs when the blood supply to the brain is significantly decreased or completely cut off by a blockage in the arteries. The lack of blood results in a decrease in oxygen which can cause brain cell death.

Strokes are considered to be a medical emergency, as immediate treatment is needed to lessen the damage to the brain and prevent other serious complications.<sup>1</sup> They are the fifth leading cause of death in the United States.<sup>2</sup>

### Types of Stroke

There are two main types of stroke: ischemic and hemorrhagic. Ischemic strokes account for about 85% of strokes, and are either thrombotic or embolic in nature.

A thrombotic stroke occurs when a clot forms within the arteries that supply the brain with blood. The clot may be caused by fatty plaque deposits, which reduce the flow of blood.

An embolic stroke occurs when a clot, known as an embolus, forms away from the brain, and is carried through the

body until it lodges in the smaller arteries near the brain.

### Symptoms and Treatment

The most common symptoms of a stroke include:

- Facial droop
- Difficulty speaking
- Paralysis or numbness in the face, leg or arm.
- Headache
- Loss of or changes in vision

Emergency medical intervention is essential to reduce the damage to the brain.

Strokes are often confirmed through testing. An MRI, CT scan, cerebral angiogram or carotid ultrasound may be required to locate any clots. Aspirin is a common treatment, given immediately to prevent the blood from any further clotting. In some cases, an injection of tissue plasminogen activator (TPA) may be required to help dissolve the clot, or a procedure to remove the clot mechanically may be required.

### Coding Guidance

In ICD-9-CM, diagnosis codes for occlusion and stenosis of precerebral and cerebral arteries (code categories 433 and 434) required a fifth digit which would indicate that an infarction or stroke (HCC 100) had occurred as a result of the occlusion or stenosis.<sup>3</sup>

Per AHA Coding Clinic, "Codes from categories 430-437 should be used throughout the initial episode of care for

an acute cerebral hemorrhage or infarction...Once a patient has completed the initial treatment or is discharged from care, codes from category 438 should be assigned instead of codes from the 430-437 series to identify residual neurologic deficits."<sup>4</sup> There are personal history code(s) to report when no residual condition(s) are present.

In ICD-10-CM, code category I63 should be utilized when the medical documentation indicates that an infarction or stroke has occurred. There are specific codes which indicate the cause of the infarction, such as embolism or thrombosis, as well as the specific affected arteries. The sixth digit provides additional information which designates the affected side when applicable.<sup>5</sup>

The amount of specificity and detail available in ICD-10-CM make complete and accurate documentation essential. Coders will need to thoroughly review the record in order to locate and assign the correct diagnosis code.

### Resources:

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- <sup>1</sup> Mayo Clinic. (n.d.). Stroke. Retrieved October 5, 2016, from [mayoclinic.org](http://mayoclinic.org)
  - <sup>2</sup> What is Stroke? (2016) Retrieved October 5, 2016, from [Stroke.org](http://Stroke.org)
  - <sup>3</sup> Hart, A. C., Stegman, M. S., & Ford, B. (2011). ICD-9-CM for physicians, volumes 1 & 2: 2012 professional: International Classification of Diseases, 9th revision, Clinical Modification. Eden Prairie, MN: OptumInsight.
  - <sup>4</sup> AHA Coding Clinic, 1998, Fourth Issue, "Clarification- old cerebrovascular accidents
  - <sup>5</sup> Anita Schmidt, K.K., & P.W. (2016). ICD-10-CM Expert for Physicians. Optum360