

STROKE AND LATE EFFECTS

- A stroke should only be coded as active during the initial event while in the acute care setting
- After discharge, CVA/stroke is coded according to the presence or absence of residual effects (sequela)
- OIG has identified acute CVA as a diagnosis at high-risk for being miscoded, resulting in improper payments

Clinical Concepts

A cerebrovascular accident (CVA), or stroke, is an acute medical emergency occurring when there is damage to the brain due to a sudden interruption of its blood supply.

CVAs are classified into two major types:

- **Ischemic** – blockage due to thromboembolism, occlusion, or stenosis; most common type
- **Hemorrhagic** – bleeding due to rupture of a cerebral vessel

Complications depend on the type of stroke, degree of brain damage, the body systems affected and how quickly treatment is received. Complete recovery can occur or there may be permanent residual deficits.

Documentation Matters

History – document the date(s) of onset and/or discharge from a hospital setting, presence or absence of current symptoms related to a past CVA, results of prior diagnostic testing, and any previous medical or surgical interventions. Indicate whether the patient needs assistance with activities of daily living.

Exam – document positive physical findings and any cognitive or neurological deficits that are due to a past CVA, such as weakness, numbness, loss of balance, or cognitive impairment.

Assessment – document the type of CVA, the affected vessel and the cause, if known. Link any associated conditions or contributing factors.

Plan – document the treatment or management plan for residual deficits or disability related to the past CVA, as well as any prophylactic measures intended to prevent a future stroke. Link prescription medications and referrals for physical, occupational or speech therapy and home health. Include a timeline for reevaluation and follow-up.

Coding Guidance

For accurate code assignment to occur, the following information must be documented in the progress note:

- **Clinical status:**
 - Acute (*ED and inpatient only*)
 - Historical/Old

- **Type, cause and affected vessel (if known):**

- Ischemic
 - Thrombosis, embolism or stenosis/occlusion
 - Precerebral or cerebral arteries
- Hemorrhagic
 - Subarachnoid, intracerebral or subdural

- **Sequelae (if present):**

- Cognitive
 - Memory, visuospatial, psychomotor, social/emotional deficit
- Speech
 - Aphasia, dysphasia, dysarthria, fluency disorder
- Monoplegia or hemiplegia/hemiparesis
 - Upper and/or lower extremity
 - Laterality
 - Dominant or non-dominant side
- Other
 - Apraxia, dysphagia, facial weakness, ataxia

Do not use acute CVA codes (I60-I67*) in the outpatient setting. These are only coded at onset during the initial episode of care. After discharge, CVA is coded according to the presence or absence of residual deficits. Update the problem list and use sequelae or the history code for follow-up visits and annual exams:

- Sequelae of cerebrovascular disease (I69*)
- Personal history of CVA/TIA without residual deficits (Z86.73)

Providers should clearly document cause-and-effect relationships between the old CVA and current residual deficits using linking terms, such as “due to,” “secondary to,” “associated with,” or “related to”. Continue to document and code sequelae as long as the deficits persist and are clinically significant.

Documentation of CVA and its residual effects that is inconsistent, contradictory or conflicting may result in a query for clarification.

References

[Up to Date: Stroke Etiology, Classification and Epidemiology](#)
[ICD-10-CM Official Guidelines for Coding & Reporting](#)
[HHS-OIG: High-Risk Diagnosis Codes Toolkit](#)

CVA/Stroke Diagnoses

ICD-10-CM	Code Description	ICD-10-CM	Code Description
I69.0*	Sequelae of nontraumatic subarachnoid hemorrhage	I69.1*	Sequelae of nontraumatic intracerebral hemorrhage
I69.2*	Sequelae of other nontraumatic intracranial hemorrhage	I69.3*	Sequelae of cerebral infarction
I69.8*	Sequelae of other cerebrovascular disease	I69.9*	Sequelae of unspecified cerebrovascular disease

Note: Category I69 is to be used to indicate conditions in I60-I67 as the cause of sequelae. The 'sequelae' include conditions specified as such or as residuals which may occur at any time after the onset of the causal condition.

Note: Codes listed below are for cerebral infarction; 5th & 6th characters are the same for all types of CVA/stroke.

Sequelae	ICD-10-CM	Code Description	HCC Model
Cognitive	I69.310	Attention/concentration deficit following cerebral infarction	-
	I69.311	Memory deficit following cerebral infarction	-
	I69.312	Visuospatial deficit/spatial neglect following cerebral infarction	-
	I69.313	Psychomotor deficit following cerebral infarction	-
	I69.314	Frontal lobe/executive function deficit following cerebral infarction	-
	I69.315	Cognitive social/emotional deficit following cerebral infarction	-
	I69.318	Other cognitive deficit following cerebral infarction • Must specify, link, and code the "other" deficit	-
Speech & Language	I69.320	Aphasia following cerebral infarction	-
	I69.321	Dysphasia following cerebral infarction	-
	I69.322	Dysarthria following cerebral infarction	-
	I69.323	Fluency disorder following cerebral infarction	-
	I69.328	Other speech/language deficit following cerebral infarction • Must specify, link, and code the "other" deficit	-
Paralytic Syndromes	I69.33*	Monoplegia of upper limb following cerebral infarction	CMS/HHS
	I69.34*	Monoplegia of lower limb following cerebral infarction	CMS/HHS
	I69.35*	Hemiplegia/Hemiparesis following cerebral infarction	CMS/HHS
	I69.36*	Other paralytic syndrome following cerebral infarction • Must specify, link, and code the "other" deficit	CMS/HHS
Other	I69.390	Apraxia following cerebral infarction	-
	I69.391	Dysphagia following cerebral infarction	-
	I69.392	Facial weakness following cerebral infarction	-
	I69.393	Ataxia following cerebral infarction	-
	I69.398	Other sequelae of cerebral infarction • Must specify, link, and code the "other" deficit	-
None	Z86.73	Personal history of cerebral infarction without residual deficits	-

*Additional characters needed to complete code

Additional Diagnoses to Consider

ICD-10-CM	Code Description	HCC Model
F01*	Vascular dementia	CMS
F17.21*	Nicotine dependence, cigarettes	-
F32 - F33*	Major depressive disorder	CMS/HHS
I10 - I16*	Hypertension	-
I48*	Atrial fibrillation and flutter	CMS/HHS
I65*	Occlusion and stenosis of precerebral arteries	-
I66*	Occlusion and stenosis of cerebral arteries	-
R26*	Abnormalities of gait and mobility	-
R53.2	Functional quadriplegia	CMS/HHS
Z74.1	Need for assistance with personal care	-
Z79.01	Long term (current) use of anticoagulants	-
Z91.81	History of falling	-
Z99.3	Dependence on wheelchair	-

*Additional characters needed to complete code