

Supplement 1. Illustration of examples of multiple ICD-10 codes for a single ICD-9 code.

ICD-9	Description	ICD10	Description
430	Subarachnoid hemorrhage	I6000	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
		I6001	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
		I6002	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
		I6010	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
		I6011	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
		I6012	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
		I6020	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery
		I6021	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery
		I6022	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery
		I6030	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery
		I6031	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
		I6032	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
		I604	Nontraumatic subarachnoid hemorrhage from basilar artery
		I6050	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery
		I6051	Nontraumatic subarachnoid hemorrhage from right vertebral artery
		I6052	Nontraumatic subarachnoid hemorrhage from left vertebral artery
		I606	Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I607	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery		
I608	Other nontraumatic subarachnoid hemorrhage		
I609	Nontraumatic subarachnoid hemorrhage, unspecified		
431	Intracerebral Hemorrhage	I610	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
		I611	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
		I612	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
		I613	Nontraumatic intracerebral hemorrhage in brain stem
		I614	Nontraumatic intracerebral hemorrhage in cerebellum

ICD-9	Description	ICD10	Description
		I615	Nontraumatic intracerebral hemorrhage, intraventricular
		I616	Nontraumatic intracerebral hemorrhage, multiple localized
		I618	Other nontraumatic intracerebral hemorrhage
		I619	Nontraumatic intracerebral hemorrhage, unspecified
433.01	Basilar artery occlusion/stenosis with infarction	I6302	Cerebral infarction due to thrombosis of basilar artery
		I6312	Cerebral infarction due to embolism of basilar artery
		I6322	Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries
433.10	Carotid artery occlusion/stenosis w/o cerebral infarction	I6521	Occlusion and stenosis of right carotid artery
		I6522	Occlusion and stenosis of left carotid artery
		I6523	Occlusion and stenosis of bilateral carotid arteries
		I6529	Occlusion and stenosis of unspecified carotid artery
433.11	Carotid artery occlusion/stenosis with cerebral infarction	I63031	Cerebral infarction due to thrombosis of right carotid artery
		I63032	Cerebral infarction due to thrombosis of left carotid artery
		I63039	Cerebral infarction due to thrombosis of unspecified carotid artery
		I63131	Cerebral infarction due to embolism of right carotid artery
		I63132	Cerebral infarction due to embolism of left carotid artery
		I63139	Cerebral infarction due to embolism of unspecified carotid artery
		I63231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
		I63232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
		I63239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries
433.21	Vertebral artery occlusion/stenosis with cerebral infarction	I63011	Cerebral infarction due to thrombosis of right vertebral artery
		I63012	Cerebral infarction due to thrombosis of left vertebral artery
		I63019	Cerebral infarction due to thrombosis of unspecified vertebral artery
		I63111	Cerebral infarction due to embolism of right vertebral artery
		I63112	Cerebral infarction due to embolism of left vertebral artery
		I63119	Cerebral infarction due to embolism of unspecified vertebral artery
		I63211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries
		I63212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral arteries

ICD-9	Description	ICD10	Description
		I63219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries
434.00	Cerebral thrombosis w/o cerebral infarction	I6601	Occlusion and stenosis of right middle cerebral artery
		I6602	Occlusion and stenosis of left middle cerebral artery
		I6603	Occlusion and stenosis of bilateral middle cerebral arteries
		I6609	Occlusion and stenosis of unspecified middle cerebral artery
		I6611	Occlusion and stenosis of right anterior cerebral artery
		I6612	Occlusion and stenosis of left anterior cerebral artery
		I6613	Occlusion and stenosis of bilateral anterior cerebral arteries
		I6619	Occlusion and stenosis of unspecified anterior cerebral artery
		I6621	Occlusion and stenosis of right posterior cerebral artery
		I6622	Occlusion and stenosis of left posterior cerebral artery
		I6623	Occlusion and stenosis of bilateral posterior cerebral arteries
		I6629	Occlusion and stenosis of unspecified posterior cerebral artery
		I663	Occlusion and stenosis of cerebellar arteries
434.01	Cerebral thrombosis with cerebral infarction	I6330	Cerebral infarction due to thrombosis of unspecified cerebral artery
		I63311	Cerebral infarction due to thrombosis of right middle cerebral artery
		I63312	Cerebral infarction due to thrombosis of left middle cerebral artery
		I63319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery
		I63321	Cerebral infarction due to thrombosis of right anterior cerebral artery
		I63322	Cerebral infarction due to thrombosis of left anterior cerebral artery
		I63329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery
		I63331	Cerebral infarction due to thrombosis of right posterior cerebral artery
		I63332	Cerebral infarction due to thrombosis of left posterior cerebral artery
		I63339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery
		I63341	Cerebral infarction due to thrombosis of right cerebellar artery
		I63342	Cerebral infarction due to thrombosis of left cerebellar artery
		I63349	Cerebral infarction due to thrombosis of unspecified cerebellar artery
		I6339	Cerebral infarction due to thrombosis of other cerebral artery

ICD-9	Description	ICD10	Description
		I636	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic