Supplemental Appendix

Appendix table 1

Category	Code Type	Code	Description
Pericarditis (which	ICD9-DX	420.0	Acute Pericarditis in diseases classified elsewhere
includes all	ICD10-DX	130.0	Acute nonspecific idiopathic pericarditis
diagnoses of	ICD9-DX	420.90	Acute pericarditis, unspecified
pericarditis that	ICD9-DX	420.91	Acute idiopathic pericarditis
were not intervened	ICD9-DX	420.99	Other acute pericarditis
upon)	ICD9-DX	423.0	Hemopericardium
	ICD9-DX	423.1	Adhesive pericarditis
	ICD9-DX	423.2	Constrictive pericarditis
	ICD9-DX	423.8	Other specified diseases of pericardium
	ICD9-DX	423.9	Unspecified disease of the pericardium
	ICD10-DX	130.0	Acute nonspecific idiopathic pericarditis
	ICD10-DX	130.1	Infective pericarditis
	ICD10-DX	130.8	Other forms of acute pericarditis
	ICD10-DX	130.9	Acute pericarditis, unspecified
	ICD10-DX	131.2	Hemopericardium, not elsewhere specified
	ICD10-DX	131.3	Pericardial effusion (noninflammatory)
	ICD10-DX	131.8	Other specified diseases of the pericardium
	ICD10-DX	131.9	Disease of the pericardium, unspecified
Tamponade or	ICD-9 DX	423.9	Cardiac Tamponade
intervention	ICD-10 DX	131.4	Cardiac Tamponade
	ICD-9 PX	37.0	Pericardiocentesis
	ICD-10 PX	0W9C30Z	Drainage of Mediastinum with Drainage Device,
			Percutaneous Approach
	ICD-10 PX	0W9C3ZZ	Drainage of Mediastinum, Percutaneous Approach

0W9D30Z	Drainage of Pericardial Cavity with Drainage Device,
	Percutaneous Approach
0W9D3ZX	Drainage of Pericardial Cavity, Percutaneous Approach,
	Diagnostic
0W9D3ZZ	Drainage of Pericardial Cavity, Percutaneous Approach
0W9D40Z	Drainage of Pericardial Cavity with Drainage Device,
	Percutaneous Endoscopic Approach
0W9D4ZX	Drainage of Pericardial Cavity, Percutaneous Endoscopic
	Approach, Diagnostic
0W9D4ZZ	Drainage of Pericardial Cavity, Percutaneous Endoscopic
22212	Approach
	Pericardiocentesis; initial
	Pericardiocentesis; subsequent
G9408	Patients with cardiac tamponade and/or
	pericardiocentesis occurring within 30 days
G9409	Patients without cardiac tamponade and/or
	pericardiocentesis occurring within 30 days
37.10	Incision of Heart, Not Otherwise Specified
02N60ZZ	Release Right Atrium, Open Approach
02N63ZZ	Release Right Atrium, Percutaneous Approach
02N64ZZ	Release Right Atrium, Percutaneous Endoscopic Approach
02N70ZZ	Release Left Atrium, Open Approach
02N73ZZ	Release Left Atrium, Percutaneous Approach
02N74ZZ	Release Left Atrium, Percutaneous Endoscopic Approach
37.11	Cardiotomy
02C60ZZ	Extirpation of Matter from Right Atrium, Open Approach
02C63ZZ	Extirpation of Matter from Right Atrium, Percutaneous
	Approach
02C64ZZ	Extirpation of Matter from Right Atrium, Percutaneous
	Endoscopic Approach
02C70ZZ	Extirpation of Matter from Left Atrium, Open Approach
	0W9D3ZZ 0W9D4OZ 0W9D4ZX 0W9D4ZZ 33010 33011 G9408 G9409 37.10 02N60ZZ 02N63ZZ 02N64ZZ 02N70ZZ 02N70ZZ 02N74ZZ 37.11 02C60ZZ 02C63ZZ

ICD-10 PX	02C73ZZ	Extirpation of Matter from Left Atrium, Percutaneous Approach
ICD-10 PX	02C74ZZ	Extirpation of Matter from Left Atrium, Percutaneous Endoscopic Approach
ICD-10 PX	02PA0YZ	Removal of Other Device from Heart, Open Approach
ICD-10 PX	02PA4YZ	Removal of Other Device from Heart, Percutaneous Endoscopic Approach
ICD-10 PX	02WA0YZ	Revision of Other Device in Heart, Open Approach
ICD-10 PX	02WA3YZ	Revision of Other Device in Heart, Percutaneous Approach
ICD-10 PX	02WA4YZ	Revision of Other Device in Heart, Percutaneous
		Endoscopic Approach
CPT	33310	Cardiotomy, exploratory
CPT	33315	Cardiotomy, exploratory with cardiopulmonary bypass
ICD-9 PX	37.12	Pericardiotomy
ICD-10 PX	02CN0ZZ	Extirpation of Matter from Pericardium, Open Approach
ICD-10 PX	02CN3ZZ	Extirpation of Matter from Pericardium, Percutaneous Approach
ICD-10 PX	02CN4ZZ	Extirpation of Matter from Pericardium, Percutaneous Endoscopic Approach
ICD-10 PX	02NN0ZZ	Release Pericardium, Open Approach
ICD-10 PX	02NN3ZZ	Release Pericardium, Percutaneous Approach
ICD-10 PX	02NN4ZZ	Release Pericardium, Percutaneous Endoscopic Approach
ICD-10 PX	0W9D00Z	Drainage of Pericardial Cavity with Drainage Device, Open Approach
ICD-10 PX	0W9D0ZX	Drainage of Pericardial Cavity, Open Approach, Diagnostic
ICD-10 PX	0W9D0ZZ	Drainage of Pericardial Cavity, Open Approach
ICD-10 PX	0WCD0ZZ	Extirpation of Matter from Pericardial Cavity, Open Approach
ICD-10 PX	0WCD3ZZ	Extirpation of Matter from Pericardial Cavity, Percutaneous Approach

ICD-10 PX	0WCD4ZZ	Extirpation of Matter from Pericardial Cavity,
		Percutaneous Endoscopic Approach
ICD-9 PX	37.24	Biopsy of Pericardium
ICD-10 PX	02BN0ZX	Excision of Pericardium, Open Approach, Diagnostic
ICD-10 PX	02BN3ZX	Excision of Pericardium, Percutaneous Approach,
		Diagnostic
ICD-10 PX	02BN4ZX	Excision of Pericardium, Percutaneous Endoscopic
		Approach, Diagnostic
ICD-9 PX	37.31	Pericardiectomy
ICD-10 PX	02BN0ZZ	Excision of Pericardium, Open Approach
ICD-10 PX	02BN3ZZ	Excision of Pericardium, Percutaneous Approach
ICD-10 PX	02BN4ZZ	Excision of Pericardium, Percutaneous Endoscopic
		Approach
ICD-10 PX	02TN0ZZ	Resection of Pericardium, Open Approach
ICD-10 PX	02TN3ZZ	Resection of Pericardium, Percutaneous Approach
ICD-10 PX	02TN4ZZ	Resection of Pericardium, Percutaneous Endoscopic
		Approach
ICD-9 PX	37.49	Other Repair of Heath and Pericardium
ICD-10 PX	02163Z7	Bypass Right Atrium to Left Atrium, Percutaneous
		Approach
ICD-10 PX	02H60YZ	Insertion of Other Device into Right Atrium, Open
		Approach
ICD-10 PX	02H63YZ	Insertion of Other Device into Right Atrium, Percutaneous
		Approach
ICD-10 PX	02H64YZ	Insertion of Other Device into Right Atrium, Percutaneous
		Endoscopic Approach
ICD-10 PX	02H70YZ	Insertion of Other Device into Left Atrium, Open Approach
ICD-10 PX	02H73YZ	Insertion of Other Device into Left Atrium, Percutaneous
		Approach
ICD-10 PX	02H74YZ	Insertion of Other Device into Left Atrium, Percutaneous
		Endoscopic Approach

ICD-10 PX	02HA0YZ	Insertion of Other Device into Heart, Open Approach
ICD-10 PX	02HA3YZ	Insertion of Other Device into Heart, Percutaneous
		Approach
ICD-10 PX	02HA4YZ	Insertion of Other Device into Heart, Percutaneous
		Endoscopic Approach
ICD-10 PX	02HK0YZ	Insertion of Other Device into Right Ventricle, Open
		Approach
ICD-10 PX	02HK3YZ	Insertion of Other Device into Right Ventricle,
		Percutaneous Approach
ICD-10 PX	02HK4YZ	Insertion of Other Device into Right Ventricle,
		Percutaneous Endoscopic Approach
ICD-10 PX	02HL0YZ	Insertion of Other Device into Left Ventricle, Open
100 40 00	00111017	Approach
ICD-10 PX	02HL3YZ	Insertion of Other Device into Left Ventricle, Percutaneous
ICD 40 DV	02111 43/7	Approach
ICD-10 PX	02HL4YZ	Insertion of Other Device into Left Ventricle, Percutaneous
ICD 10 DV	02111101/7	Endoscopic Approach
ICD-10 PX	02HN0YZ	Insertion of Other Device into Pericardium, Open
ICD 10 DV	02111121/7	Approach
ICD-10 PX	02HN3YZ	Insertion of Other Device into Pericardium, Percutaneous
ICD-10 PX	02HN4YZ	Approach Insertion of Other Device into Pericardium, Percutaneous
ICD-10 PX	UZHIN41Z	Endoscopic Approach
ICD-10 PX	02QA0ZZ	Repair Heart, Open Approach
ICD-10 PX	02QA0ZZ 02QA3ZZ	Repair Heart, Open Approach
ICD-10 PX	02QA3ZZ 02QA4ZZ	Repair Heart, Percutaneous Endoscopic Approach
ICD-10 PX	02QA4ZZ 02QN0ZZ	Repair Pericardium, Open Approach
ICD-10 PX	02QN0ZZ 02QN3ZZ	Repair Pericardium, Percutaneous Approach
ICD-10 PX	02QN3ZZ 02QN4ZZ	Repair Pericardium, Percutaneous Endoscopic Approach
ICD-10 PX	37.91	Open Chest Cardiac Massage
ICD-9 PX	37.91 02QA0ZZ	Repair Heart, Open Approach
ICD-TO LY	UZUMUZZ	Repair Heart, Open Approach

CPT	33015	Tube pericardiostomy
CPT	33300	Repair of cardiac wound, without bypass
CPT	33305	Repair of cardiac wound with cardiopulmonary bypass
ICD-9 PX	37.93	Injection of Therapeutic Substance into Pericardium
ICD-10 PX	3E080GC	Introduction of Other Therapeutic Substance into Heart,
		Open Approach
ICD-10 PX	3E083GC	Introduction of Other Therapeutic Substance into Heart,
		Percutaneous Approach

^{*}Stroke/TIA codes are contained in Appendix Table 2

Appendix table 2.

Logic Code	Description	Code Type	Codes	Description	Additional Logic
A1	Atrioesophageal	ICD-9 DX	530.89	Other specified disorders of esophagus	
AI	fistula	ICD-10 DX	K22.8	Other specified diseases of esophagus	
		ICD-9 DX	862.22	Injury to esophagus without menton of open wound in cavity	
	Atrioesophageal fistula ICD-9 DX 530.89 Other specified disorders of esophagus ICD-10 DX K22.8 Other specified diseases of esophagus ICD-9 DX 862.22 Injury to esophagus without menton of open wound in cavity ICD-9 DX 998.6 Persistent postoperative fistula ICD-9 DX 530.4 Perforation of esophagus Esophageal Injury/ Esophageal ICD-9 PX 42.84 Repair of esophagus (thoracic part) ICD-10 DX T81.83XA Persistent postprocedural fistula, not elsewhere classified ICD-10 DX T81.83XA Persistent postprocedural fistula, initial encount in the control of esophagus (thoracic part) Persistent postprocedural fistula, initial encount in the control of esophagus (thoracic part) Persistent postprocedural fistula following tracheostomy ICD-10 DX T81.83XA Persistent postprocedural fistula following tracheostomy ICD-9 PX 42.4 Excision of esophagus Tracheo-esophagus Pertial esophagectomy ICD-9 PX 42.41 Partial esophagectomy Repair of esophageal fistula, not elsewhere classified ICD-9 PX 42.84 Suture of laceration of esophagus ICD-9 PX 43.5 ICD-9 PX 43.5 ICD-9 PX 43.5 Excision of Esophagus, Open Approach				
		ICD-9 DX	530.4	Perforation of esophagus	
A2		ICD-9 PX	42.84		
	hematoma	ICD-10 DX	S27.81xx	Injury of esophagus (thoracic part)	
		ICD-10 DX	T81.83XA	Persistent postprocedural fistula, initial encounter	
		ICD-10 DX	K22.3	Perforation of esophagus	
		ICD-10 DX	J95.04	, -	
		ICD-9 PX	42.4	Excision of esophagus	
		ICD-9 PX	42.41	Partial esophagectomy	
	Atrioesophageal ICC fistula ICD ICC ICC ICC Esophageal Injury/ Esophageal ICD ICD ICD ICD ICD ICC ICC ICC ICC ICC	ICD-9 PX	42.42	Total esophagectomy	
		ICD-9 PX	42.84		
В		ICD-9 PX	42.82	Suture of laceration of esophagus	
	Resection	ICD-9 PX	43.9	Total gastrectomy	
		ICD-9 PX	43.5		
		ICD-10 PX	ODB50ZZ	Excision of Esophagus, Open Approach	
		ICD-10 PX	ODB53ZZ	Excision of Esophagus, Percutaneous Approach	

	105 40 57	ODB57ZZ	Excision of Esophagus, Via Natural or Artificial
	ICD-10 PX		Opening
	ICD-10 PX	0DT50ZZ	Resection of Esophagus, Open Approach
	ICD-10 PX	0DT54ZZ	Resection of Esophagus, Percutaneous Endoscopic Approach
	ICD-10 PX	ODT57ZZ	Resection of Esophagus, Via Natural or Artificial Opening
	ICD-10 PX	ODT58ZZ	Resection of Esophagus, Endo
	ICD-10 PX	ODB40ZZ	Excision of Esophagogastric Junction, Open Approach
	ICD-10 PX	ODB43ZZ	Excision of Esophagogastric Junction, Percutaneous Approach
	ICD-10 PX	ODB44ZZ	Excision of Esophagogastric Junction, Perc Endo Approach
	ICD-10 PX	ODB47ZZ	Excision of Esophagogastric Junction, Via Opening
	ICD-10 PX	ODT40ZZ	Resection of Esophagogastric Junction, Open Approach
	ICD-10 PX	0DT44ZZ	Resection of Esophagogastric Junction, Perc Endo Approach
	ICD-10 PX	ODT47ZZ	Resection of Esophagogastric Junction, Via Opening
	ICD-10 PX	ODT48ZZ	Resection of Esophagogastric Junction, Endo
	ICD-10 PX	0DQ50ZZ	Repair Esophagus, Open Approach
	ICD-9 PX	42.81	Insertion of permanent tube into esophagus
	ICD-10 PX	0DH50DZ	Insertion of Intraluminal Device into Esophag, Open Approach
C Esophageal stenting	ICD-10 PX	0DH50UZ	Insertion of Feeding Device into Esophagus, Open Approach
	_ ICD-10 PX	0DH53DZ	Insertion of Intraluminal Device into Esophag, Perc Approach

		ICD-10 PX	0DH53UZ	Insertion of Feeding Device into Esophagus, Perc Approach
		ICD-10 PX	0DH54DZ	Insertion of Intralum Dev into Esophag, Perc Endo Approach
		ICD-10 PX	0DH54UZ	Insertion of Feeding Device into Esophag, Perc Endo Approach
		ICD-10 PX	0DH57DZ	Insertion of Intraluminal Device into Esophagus, Via Opening
		ICD-10 PX	0DH57UZ	Insertion of Feeding Device into Esophagus, Via Opening
		ICD-10 PX	0DH58DZ	Insertion of Intraluminal Device into Esophagus, Endo
		ICD-10 PX	0DH58UZ	Insertion of Feeding Device into Esophagus, Endo Esophagoscopy, flexible, transoral; with
		СРТ	43212	placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)
		CDT	43266	Esophagogastroduodenoscopy, flexible, transoral; with placement of endoscopic stent (includes preand post-dilation and guide wire passage, when
-		CPT CPT	519.2	performed)
D	Mediastinal infection	ICD-9 DX	519.2	Mediastinitis Other diseases of mediastinum, not elsewhere classified
D	iviediastifial ifflection	ICD-10 DX	J98.51	Mediastinitis
		ICD-10 DX	J98.59	Other diseases of mediastinum, not elsewhere classified
E	Air Embolism	ICD-9 DX	999.1	Air embolism as a complication of medical care, not elsewhere classified
	(pulmonary/cardiac)	ICD-9 DX	909.3	Late effect of complications of surgical and medical care

		ICD-10 DX	T80.0XXA	Air embolism following infusion, transfusion and therapeutic injection, initial encounter	
		ICD-10 DX	T80.0XXD	Air embolism following infusion, transfusion and therapeutic injection, subsequent encounter	
		ICD-10 DX	T80.0XXS	Air embolism following infusion, transfusion and therapeutic injection, sequela	
F	Hematemesis	ICD-10 DX	K92.0	Hematemesis	
		ICD-9 DX	430	Subarachnoid hemorrhage	
		ICD-9 DX	431	Intracerebral hemorrhage	
		ICD-9 DX	433.01	Occlusion and stenosis of basilar artery with cerebral infarction	EXCLUSION: If
		ICD-9 DX	433.10	Occlusion and stenosis of carotid artery without mention of cerebral infarction	
		ICD-9 DX	433.11	Occlusion and stenosis of carotid artery with cerebral infarction	any of the qualifying
		ICD-9 DX	433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	claims have: 800 <= DX Code <= 804.9, 850 <= DX Code <= 854.1 in any DX
G	Stroke/TIA	ICD-9 DX	433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	
		ICD-9 DX	433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	position OR DX V57xx as the
		ICD-9 DX	433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	principal DX Code, then
		ICD-9 DX	434.00	Cerebral thrombosis without mention of cerebral infarction	EXCLUDE.
		ICD-9 DX	434.01	Cerebral thrombosis with cerebral infarction	
		ICD-9 DX	434.10	Cerebral embolism without mention of cerebral infarction	
		ICD-9 DX	434.11	Cerebral embolism with cerebral infarction	

ICD-9 DX	434.90	Cerebral artery occlusion, unspecified without mention of cerebral infarction	
ICD-9 DX	434.91	Cerebral artery occlusion, unspecified with cerebral infarction	
ICD-9 DX	435.0	Basilar artery syndrome	
ICD-9 DX	435.1	Vertebral artery syndrome	
ICD-9 DX	435.3	Vertebrobasilar artery syndrome	
ICD-9 DX	435.8	Other specified transient cerebral ischemias	
ICD-9 DX	435.9	Unspecified transient cerebral ischemia	
ICD-9 DX	436	Acute, but ill-defined, cerebrovascular disease	
ICD-9 DX	997.02	latrogenic cerebrovascular infarction or hemorrhage	
ICD-10 DX	G45.0	Vertebro-basilar artery syndrome	EXCLUSION: If
ICD-10 DX	G45.1	Carotid artery syndrome (hemispheric)	any of the
ICD-10 DX	G45.2	Multiple and bilateral precerebral artery syndromes	qualifying claims have any
ICD-10 DX	G45.8	Other transient cerebral ischemic attacks and related syndromes	of the following codes in any DX
ICD-10 DX	G45.9	Transient cerebral ischemic attack, unspecified	position then
ICD-10 DX	G46.0	Middle cerebral artery syndrome	EXCLUDE:
ICD-10 DX	G46.1	Anterior cerebral artery syndrome	S01.90XA, S02.0XXA,
ICD-10 DX	G46.2	Posterior cerebral artery syndrome	S02.0XXB,
ICD-10 DX	G46.3	Brain stem stroke syndrome	S02.10XA,
ICD-10 DX	G46.4	Cerebellar stroke syndrome	S02.10XB,
ICD-10 DX	G46.5	Pure motor lacunar syndrome	S02.101A,
ICD-10 DX	G46.6	Pure sensory lacunar syndrome	S02.101B,
ICD-10 DX	G46.7	Other lacunar syndromes	S02.102A,
ICD-10 DX	G46.8	Other vascular syndromes of brain in cerebrovascular diseases	S02.102B, S02.109A,

	C07 21	Intraoperative hemorrhage and hematoma of a	S02.109B,
ICD 10 DV	G97.31	nervous system organ or structure complicating a	S02.11GA,
ICD-10 DX		nervous system procedure	S02.11GB,
	C07.33	Intraoperative hemorrhage and hematoma of a	S02.11HA,
ICD 10 DV	G97.32	nervous system organ or structure complicating	S02.11HB,
ICD-10 DX		other procedure	S02.110A,
ICD 40 DV	160.00	Nontraumatic subarachnoid hemorrhage from	S02.111A,
ICD-10 DX		unspecified carotid siphon and bifurcation	S02.112A,
100 10 00	160.01	Nontraumatic subarachnoid hemorrhage from	S02.113A,
ICD-10 DX		right carotid siphon and bifurcation	S02.110B,
	160.02	Nontraumatic subarachnoid hemorrhage from left	S02.111B,
ICD-10 DX		carotid siphon and bifurcation	S02.112B,
	160.10	Nontraumatic subarachnoid hemorrhage from	S02.113B,
ICD-10 DX		unspecified middle cerebral artery	S02.118A,
	160.11	Nontraumatic subarachnoid hemorrhage from	S02.118B,
ICD-10 DX	100.11	right middle cerebral artery	S02.119A,
	160.12	Nontraumatic subarachnoid hemorrhage from left	S02.119B,
ICD-10 DX	100.12	middle cerebral artery	S02.19XA,
	160.2	Nontraumatic subarachnoid hemorrhage from	S02.19XB,
ICD-10 DX	100.2	anterior communicating artery	S02.2XXA,
	100.20	Nontraumatic subarachnoid hemorrhage from	S02.2XXB,
ICD-10 DX	160.30	unspecified posterior communicating artery	S02.3XXA,
		Nontraumatic subarachnoid hemorrhage from	S02.30XA,
ICD-10 DX	160.31	right posterior communicating artery	S02.3XXB,
		Nontraumatic subarachnoid hemorrhage from left	S02.30XB,
ICD-10 DX	160.32	posterior communicating artery	S02.31XA,
.02 20 27.		Nontraumatic subarachnoid hemorrhage from	S02.31XB,
ICD-10 DX	160.4	basilar artery	S02.32XA,
.00 10 DX		Nontraumatic subarachnoid hemorrhage from	S02.32XB,
ICD-10 DX	160.50	unspecified vertebral artery	S02.40AA,
ICD TO DY		anspectica vertebrarantery	

ICD-10 DX I60.51	160.51	Nontraumatic subarachnoid hemorrhage from	S02.40AB,
		right vertebral artery	S02.40BA,
	160.52	Nontraumatic subarachnoid hemorrhage from left	S02.40BB,
ICD-10 DX		vertebral artery	S02.40CA,
	160.6	Nontraumatic subarachnoid hemorrhage from	S02.40CB,
ICD-10 DX	100.0	other intracranial arteries	S02.40DA,
	160.7	Nontraumatic subarachnoid hemorrhage from	S02.40DB,
ICD-10 DX	100.7	unspecified intracranial artery	S02.40EA,
ICD-10 DX	160.8	Other nontraumatic subarachnoid hemorrhage	S02.40EB,
	160.9	Nontraumatic subarachnoid hemorrhage,	S02.40FA,
ICD-10 DX	160.9	unspecified	S02.40FB,
	164.0	Nontraumatic intracerebral hemorrhage in	S02.400A,
ICD-10 DX	161.0	hemisphere, subcortical	S02.400B,
	164.4	Nontraumatic intracerebral hemorrhage in	S02.401A,
ICD-10 DX	161.1	hemisphere, cortical	S02.401B,
	164.0	Nontraumatic intracerebral hemorrhage in	S02.402A,
ICD-10 DX	161.2	hemisphere, unspecified	S02.402B,
	164.0	Nontraumatic intracerebral hemorrhage in brain	S02.411A,
ICD-10 DX	161.3	stem	S02.411B,
	164.4	Nontraumatic intracerebral hemorrhage in	S02.412A,
ICD-10 DX	161.4	cerebellum	S02.412B,
	161.5	Nontraumatic intracerebral hemorrhage,	S02.413A,
ICD-10 DX		intraventricular	S02.413B,
ICD-10 DX		Nontraumatic intracerebral hemorrhage, multiple	S02.42XA,
	161.6	localized	S02.42XB,
ICD-10 DX	161.8	Other nontraumatic intracerebral hemorrhage	S02.600A,
ICD-10 DV	10210	Nontraumatic intracerebral hemorrhage,	S02.600B,
ICD-10 DX	161.9	unspecified	S02.601A,
ICD TO DX		Cerebral infarction due to thrombosis of	S02.601B,
ICD-10 DX	163.00	unspecified precerebral artery	S02.602A,
_ ICD-T0 DX		anspecifica precerebrarantery	

ICD-10 DX	163.011	Cerebral infarction due to thrombosis of right vertebral artery	S02.602B, S02.609A,
ICD-10 DX		Cerebral infarction due to thrombosis of left	S02.609B,
ICD-10 DX	163.012	vertebral artery	S02.61XA,
ICD IO DX		Cerebral infarction due to thrombosis of bilateral	S02.610A,
ICD-10 DX	163.013	vertebral arteries	S02.610B,
.02 20 27.		Cerebral infarction due to thrombosis of	S02.611A,
ICD-10 DX	163.019	unspecified vertebral artery	S02.611B,
		Cerebral infarction due to thrombosis of basilar	S02.612A,
ICD-10 DX	163.02	artery	S02.612B,
	162.024	Cerebral infarction due to thrombosis of right	S02.62XA,
ICD-10 DX	163.031	carotid artery	S02.620A,
	162.022	Cerebral infarction due to thrombosis of left	S02.62XB,
ICD-10 DX	163.032	carotid artery	S02.620B,
	163.039	Cerebral infarction due to thrombosis of	S02.621A,
ICD-10 DX		unspecified carotid artery	S02.621B,
	163.09	Cerebral infarction due to thrombosis of other	S02.622A,
ICD-10 DX		precerebral artery	S02.622B,
	163.10	Cerebral infarction due to embolism of	S02.63XA,
ICD-10 DX	105.10	unspecified precerebral artery	S02.630A,
	163.111	Cerebral infarction due to embolism of right	S02.63XB,
ICD-10 DX		vertebral artery	S02.630B,
	I63.112	Cerebral infarction due to embolism of left	S02.631A,
ICD-10 DX		vertebral artery	S02.631B,
	163.119	Cerebral infarction due to embolism of	S02.632A,
ICD-10 DX	103.113	unspecified vertebral artery	S02.632B, S02.64XA,
	163.12	Cerebral infarction due to embolism of basilar	S02.640A,
ICD-10 DX	103.12	artery	S02.64XB,
	163.131	Cerebral infarction due to embolism of right	S02.640B,
ICD-10 DX	103.131	carotid artery	

163.132	Cerebral infarction due to embolism of left carotid	S02.641A,
	•	S02.641B,
163.139		S02.642A,
	·	S02.642B,
163.19		S02.65XA,
.00.20	•	S02.650A,
163.20	·	S02.65XB,
103.20	or stenosis of unspecified precerebral arteries	S02.650B,
162 211	Cerebral infarction due to unspecified occlusion	S02.651A,
105.211	or stenosis of right vertebral artery	S02.651B,
162 212	Cerebral infarction due to unspecified occlusion	S02.652A,
105.212	or stenosis of left vertebral artery	S02.652B,
162 212	Cerebral infarction due to unspecified occlusion	S02.66XA,
163.213	or stenosis of bilateral vertebral arteries	S02.66XB,
163.219	Cerebral infarction due to unspecified occlusion	S02.67XA,
	or stenosis of unspecified vertebral artery	S02.670A,
162.22	Cerebral infarction due to unspecified occlusion	S02.670B,
163.22	or stenosis of basilar artery	S02.671A,
162 224	Cerebral infarction due to unspecified occlusion	S02.671B,
163.231	or stenosis of right carotid arteries	S02.672A,
160 000	Cerebral infarction due to unspecified occlusion	S02.672B,
163.232	or stenosis of left carotid arteries	S02.69XA,
163.233	Cerebral infarction due to unspecified occlusion	S02.61XB,
	or stenosis of bilateral carotid arteries	S02.62XA,
	Cerebral infarction due to unspecified occlusion	S02.63XA,
163.239	·	S02.64XA,
	·	S02.65XA,
163.29	·	S02.66XA,
	·	S02.67XB,
163.30	unspecified cerebral artery	S02.69XB,
	I63.139 I63.19 I63.20 I63.211 I63.212 I63.213 I63.219 I63.22 I63.231 I63.232 I63.233 I63.239 I63.29	artery Cerebral infarction due to embolism of unspecified carotid artery Cerebral infarction due to embolism of other precerebral artery Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral artery Cerebral infarction due to unspecified occlusion or stenosis of basilar artery Cerebral infarction due to unspecified occlusion or stenosis of basilar artery Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries Cerebral infarction due to thrombosis of

	163.311	Cerebral infarction due to thrombosis of right	S02.8XXA,
ICD-10 DX		middle cerebral artery	S02.80XA,
	163.312	Cerebral infarction due to thrombosis of left	SO2.8XXB,
ICD-10 DX		middle cerebral artery	S02.80XB,
	163.313	Cerebral infarction due to thrombosis of bilateral	S02.81XA,
ICD-10 DX	103.313	middle cerebral arteries	S02.81XB,
	163.319	Cerebral infarction due to thrombosis of	S02.82XA,
ICD-10 DX	103.313	unspecified middle cerebral artery	S02.82XB,
	163.321	Cerebral infarction due to thrombosis of right	S02.91XA,
ICD-10 DX	105.521	anterior cerebral artery	S02.91XB,
	162 222	Cerebral infarction due to thrombosis of left	S02.92XA,
ICD-10 DX	163.322	anterior cerebral artery	S02.92XB,
	162 222	Cerebral infarction due to thrombosis of bilateral	S06.0X0A,
ICD-10 DX	163.323	anterior cerebral arteries	S06.0X1A,
	163.329	Cerebral infarction due to thrombosis of	S06.0X2A,
ICD-10 DX		unspecified anterior cerebral artery	S06.0X3A,
	163.331	Cerebral infarction due to thrombosis of right	S06.0X4A,
ICD-10 DX		posterior cerebral artery	S06.0X5A,
	163.332	Cerebral infarction due to thrombosis of left	S06.0X6A,
ICD-10 DX		posterior cerebral artery	S06.0X7A,
	163.333	Cerebral infarction due to thrombosis of bilateral	S06.0X8A,
ICD-10 DX		posterior cerebral arteries	S06.0X9A,
		Cerebral infarction due to thrombosis of	S06.1X0A,
ICD-10 DX	163.339	unspecified posterior cerebral artery	S06.1X1A,
		Cerebral infarction due to thrombosis of right	S06.1X2A,
ICD-10 DX	163.341	cerebellar artery	S06.1X3A,
		Cerebral infarction due to thrombosis of left	S06.1X4A,
ICD-10 DX	163.342	cerebellar artery	S06.1X5A,
		Cerebral infarction due to thrombosis of bilateral	S06.1X6A,
ICD-10 DX	163.343	cerebellar arteries	S06.1X7A,

ICD-10 DXIO3.349unspecified cerebellar arterySO6.1X9A, Cerebral infarction due to thrombosis of other cerebral arterySO6.2X0A, Co6.2X1A, SO6.2X1A, SO6.2X1A, SO6.2X2A, Cerebral infarction due to embolism of unspecified cerebral arterySO6.2X2A, SO6.2X3A, SO6.2X3A, SO6.2X3A, SO6.2X3A, Cerebral infarction due to embolism of right middle cerebral arterySO6.2X4A, SO6.2X5A, SO6.2X		163.349	Cerebral infarction due to thrombosis of	S06.1X8A,
ICD-10 DX IG3.39 Cerebral artery S06.2X1A, Cerebral infarction due to embolism of unspecified cerebral artery S06.2X3A, Cerebral infarction due to embolism of right middle cerebral artery S06.2X5A, Cerebral infarction due to embolism of left middle cerebral artery S06.2X5A, Cerebral infarction due to embolism of left middle cerebral artery S06.2X5A, Cerebral infarction due to embolism of left middle cerebral artery S06.2X5A, Cerebral infarction due to embolism of bilateral middle cerebral arteries S06.2X5A, Cerebral infarction due to embolism of S06.2X5A, middle cerebral arteries S06.2X5A, middle cerebral arteries S06.2X5A, Cerebral infarction due to embolism of S06.2X5A, middle cerebral artery S06.2X1B, Cerebral infarction due to embolism of right anterior cerebral artery S06.2X1B, Cerebral infarction due to embolism of left anterior cerebral artery S06.2X3B, Cerebral infarction due to embolism of bilateral anterior cerebral arteries S06.2X5B, Cerebral infarction due to embolism of bilateral anterior cerebral arteries S06.2X5B, Cerebral infarction due to embolism of right unspecified anterior cerebral artery S06.2X5B, S06.2X5B, Cerebral infarction due to embolism of right posterior cerebral artery S06.301A, posterior cerebral artery S06.301A, posterior cerebral artery S06.303A, S06.30	ICD-10 DX	103.343	unspecified cerebellar artery	S06.1X9A,
ICD-10 DX IG3.40 ICD-10 DX IG3.411 ICD-10 DX IG3.411 ICD-10 DX IG3.411 ICD-10 DX IG3.412 ICD-10 DX IG3.413 ICD-10 DX IG3.413 ICD-10 DX IG3.414 ICD-10 DX IG3.415 ICD-10 DX IG3.416 IG3.417 ICD-10 DX IG3.417 ICD-10 DX IG3.418 ICD-10 DX IG3.419 ICD-10 DX IG3.421 ICD-10 DX IG3.421 ICD-10 DX IG3.421 ICD-10 DX IG3.421 ICD-10 DX IG3.422 ICD-10 DX IG3.422 ICD-10 DX IG3.423 ICD-10 DX IG3.423 ICD-10 DX IG3.424 ICD-10 DX IG3.425 ICD-10 DX IG3.426 ICD-10 DX IG3.427 IG3.427 ICD-10 DX IG3.428 ICD-10 DX IG3.429 ICD-10 DX IG3.429 ICD-10 DX IG3.420 IG3.421 ICD-10 DX IG3.421 IG3.422 ICD-10 DX IG3.423 ICD-10 DX IG3.423 ICD-10 DX IG3.424 ICD-10 DX IG3.425 ICD-10 DX IG3.427 ICD-10 DX IG3.427 ICD-10 DX IG3.428 ICD-10 DX IG3.431 ICD-10 DX IG3.431 ICD-10 DX IG3.432 ICD-10 DX IG3.433 ICD-10 DX IG3.433 ICD-10 DX IG3.434 ICD-10 DX IG3.435 ICD-10 DX IG3.437 ICD-10 DX IG3.437 ICD-10 DX IG3.438 ICD-10 DX IG3.439 ICD-10 DX IG3.439 ICD-10 DX IG3.439 ICD-10 DX IG3.430 ICD-10 DX IG3.431 ICD-10 DX IG3.433 ICD-10 DX IG3.433 ICD-10 DX IG3.434 ICD-10 DX IG3.435 ICD-10 DX IG3.437 ICD-10 DX IG3.437 ICD-10 DX IG3.438 ICD-10 DX IG3.439 ICD-10 DX IG3.439 ICD-10 DX IG3.439 ICD-10 DX IG3.430 IG3		163 39	Cerebral infarction due to thrombosis of other	•
ICD-10 DX ICD-10	ICD-10 DX	103.33	cerebral artery	·
ICD-10 DX IG3.411 unspecified cerebral artery ICD-10 DX IG3.411 pride cerebral infarction due to embolism of right ICD-10 DX IG3.412 Cerebral infarction due to embolism of left middle cerebral artery ICD-10 DX IG3.413 pride cerebral infarction due to embolism of left middle cerebral artery ICD-10 DX IG3.414 Cerebral infarction due to embolism of bilateral middle cerebral arteries ICD-10 DX IG3.415 pride cerebral infarction due to embolism of bilateral middle cerebral arteries ICD-10 DX IG3.416 pride cerebral arteries ICD-10 DX IG3.427 pride cerebral infarction due to embolism of right anterior cerebral artery ICD-10 DX IG3.427 pride cerebral artery ICD-10 DX IG3.428 pride cerebral arteries IG3.429 pride cerebral artery ICD-10 DX IG3.429 pride cerebral arteries ICD-10 DX IG3.431 pride cerebral arteries ICD-10 DX IG3.432 pride cerebral arteries IG3.433 pride cerebral artery IGD-10 DX IGS.433 pride cerebral artery IGS.2X3A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X9B, S06.2X8B, S06.2X3B, S06.2XBB, S06.2XBB, S06.2XBB, S06.2XBB, S06.30A, S		163.40	Cerebral infarction due to embolism of	·
ICD-10 DX IG3.411 middle cerebral artery Cerebral infarction due to embolism of left middle Cerebral artery S06.2X5A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X7A, S06.2X8A, Middle cerebral arteries S06.2X8A, Middle cerebral arteries S06.2X8A, Middle cerebral arteries S06.2X8A, Middle cerebral arteries S06.2X9A, S06.2X9A, S06.2X9A, S06.2X9A, S06.2X9A, S06.2X9A, S06.2X9A, S06.2X9A, S06.2X0B, S06.2X0B, S06.2X1B, S06.2X1B, S06.2X1B, S06.2X1B, S06.2X3B, S06.2X3B, S06.2X3B, S06.2X3B, S06.2X4B, S06.2X4B, S06.2X5B, S06.2X5B, S06.2X5B, S06.2X7B, S06.2X7B, S06.2X7B, S06.2X7B, S06.2X7B, S06.2X7B, S06.2X8B, S06.2X7B, S06.2X8B, S06.2X9B, S06.2X9B, S06.2X9B, S06.2X9B, S06.2X9B, S06.301A, S06.301A, S06.301A, S06.303A, S06.303A, S06.305A, S06.305A, S06.306A, S06.307A	ICD-10 DX	103.40	unspecified cerebral artery	·
ICD-10 DX ICD-10		163 /111	Cerebral infarction due to embolism of right	·
ICD-10 DX IGA.413 ICD-10 DX IGA.413 ICD-10 DX IGA.4143 ICD-10 DX IGA.415 ICD-10 DX IGA.417 ICD-10 DX IGA.419 ICD-10 DX IGA.419 ICD-10 DX IGA.421 ICD-10 DX IGA.421 ICD-10 DX IGA.421 ICD-10 DX IGA.422 ICD-10 DX IGA.423 ICD-10 DX IGA.423 ICD-10 DX IGA.424 ICD-10 DX IGA.425 ICD-10 DX IGA.426 ICD-10 DX IGA.427 ICD-10 DX IGA.427 ICD-10 DX IGA.428 ICD-10 DX IGA.429 ICD-10 DX IGA.429 ICD-10 DX IGA.431 ICD-10 DX IGA.431 ICD-10 DX IGA.432 ICD-10 DX IGA.433 ICD-10 DX IGA.433 ICD-10 DX IGA.434 ICD-10 DX IGA.434 ICD-10 DX IGA.435 ICD-10 DX IGA.436 ICD-10 DX IGA.437 ICD-10 DX IGA.437 ICD-10 DX IGA.437 ICD-10 DX IGA.438 ICD-10 DX IGA.439 ICD-10 DX I	ICD-10 DX	103.411	middle cerebral artery	·
ICD-10 DX ICD-10		162 /112	Cerebral infarction due to embolism of left middle	·
ICD-10 DX IG3.413 middle cerebral arteries Cerebral infarction due to embolism of unspecified middle cerebral artery ICD-10 DX IG3.421 Cerebral infarction due to embolism of right anterior cerebral artery ICD-10 DX IG3.422 Cerebral infarction due to embolism of left anterior cerebral artery ICD-10 DX IG3.423 Cerebral infarction due to embolism of left anterior cerebral artery ICD-10 DX IG3.423 Cerebral infarction due to embolism of bilateral anterior cerebral arteries ICD-10 DX ICD-10 DX IG3.431 Cerebral infarction due to embolism of unspecified anterior cerebral artery ICD-10 DX IG3.431 Cerebral infarction due to embolism of right posterior cerebral artery ICD-10 DX IG3.432 Cerebral infarction due to embolism of right posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of left posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral arteries ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral arteries ICD-10 DX IGG. 2X3B, SOG. 2X4B, SOG. 30AA, SOG. 30	ICD-10 DX	103.412	cerebral artery	•
ICD-10 DX ICD-10		162 /112	Cerebral infarction due to embolism of bilateral	·
ICD-10 DX ICD-10	ICD-10 DX	105.415	middle cerebral arteries	·
ICD-10 DX ICD-10		162 /110	Cerebral infarction due to embolism of	· ·
ICD-10 DX ICD-10	ICD-10 DX	103.413	unspecified middle cerebral artery	•
ICD-10 DX ICD-10		163.421	Cerebral infarction due to embolism of right	
ICD-10 DX IG3.422 anterior cerebral artery ICD-10 DX IG3.423 Cerebral infarction due to embolism of bilateral anterior cerebral arteries ICD-10 DX IG3.429 Cerebral infarction due to embolism of unspecified anterior cerebral artery ICD-10 DX IG3.431 Cerebral infarction due to embolism of right posterior cerebral artery ICD-10 DX IG3.432 Cerebral infarction due to embolism of left posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral artery ICD-10 DX IG3.433 Cerebral infarction due to embolism of bilateral posterior cerebral arteries ICD-10 DX IG3.439 Cerebral infarction due to embolism of SOG.2X5B, SOG.2X7B, SOG.2X7B, SOG.2X7B, SOG.2X8B, SOG.2X8B, SOG.2X9B, SOG.2X9B, SOG.300A, SOG	ICD-10 DX		anterior cerebral artery	
ICD-10 DX ICD-10		163.422	Cerebral infarction due to embolism of left	
ICD-10 DX IG3.423 ICD-10 DX IG3.429 ICD-10 DX	ICD-10 DX		anterior cerebral artery	
ICD-10 DX ICD-10		163.423	Cerebral infarction due to embolism of bilateral	
ICD-10 DX IG3.429 ICD-10 DX IG3.431 ICD-10 DX ICD-10 DX ICD-10 DX ICD-10 DX IG3.431 ICD-10 DX IG3.432 ICD-10 DX IG3.433 ICD-10 DX IG3.434 ICD-10 DX IG3.435 ICD-10 DX IG3.436 IG3.437 ICD-10 DX IG3.438 ICD-10 DX IG3.439 ICD-10 DX IG3.431 ICD-10 DX IG3.433 ICD-10 DX IG3.433 ICD-10 DX IG3.433 ICD-10 DX IG3.433 ICD-10 DX ICD-10 D	ICD-10 DX		anterior cerebral arteries	
ICD-10 DX Unspecified anterior cerebral artery Cerebral infarction due to embolism of right posterior cerebral artery S06.300A, S06.301A, Cerebral infarction due to embolism of left posterior cerebral artery Cerebral infarction due to embolism of bilateral posterior cerebral arteries Cerebral infarction due to embolism of S06.305A, S06.305A, S06.306A, S06.306A, S06.307A		163.429	Cerebral infarction due to embolism of	
ICD-10 DX ICD-10	ICD-10 DX		unspecified anterior cerebral artery	
ICD-10 DX ICD-10		163.431	Cerebral infarction due to embolism of right	•
ICD-10 DX ICD-10	ICD-10 DX		posterior cerebral artery	•
ICD-10 DX posterior cerebral artery S06.304A, S06.305A, S06.306A, S06.306A, S06.307A		162 422	Cerebral infarction due to embolism of left	· · · · · · · · · · · · · · · · · · ·
ICD-10 DX ICD-10 DX ICD-10 DX ICZ rebral infarction due to embolism of bilateral posterior cerebral arteries Cerebral infarction due to embolism of S06.305A, S06.306A, S06.307A	ICD-10 DX	103.432	posterior cerebral artery	
Cerebral infarction due to embolism of S06.306A, S06.3074		162 422	Cerebral infarction due to embolism of bilateral	· · · · · · · · · · · · · · · · · · ·
Leading Cerebral infarction due to embolism of Social A39	ICD-10 DX	163.433	posterior cerebral arteries	· · · · · · · · · · · · · · · · · · ·
ICD-10 DX unspecified posterior cerebral artery		162 420	Cerebral infarction due to embolism of	· · · · · · · · · · · · · · · · · · ·
	ICD-10 DX	103.439	unspecified posterior cerebral artery	506.307A,

	163.441	Cerebral infarction due to embolism of right	S06.308A,
ICD-10 DX		cerebellar artery	S06.309A,
	163.442	Cerebral infarction due to embolism of left	S06.310A,
ICD-10 DX	1001112	cerebellar artery	S06.311A,
	163.443	Cerebral infarction due to embolism of bilateral	S06.312A,
ICD-10 DX	105.445	cerebellar arteries	S06.313A,
	163.449	Cerebral infarction due to embolism of	S06.314A,
ICD-10 DX	103.443	unspecified cerebellar artery	S06.315A,
	163.49	Cerebral infarction due to embolism of other	S06.316A,
ICD-10 DX	105.45	cerebral artery	S06.317A,
	163.50	Cerebral infarction due to unspecified occlusion	S06.318A,
ICD-10 DX	103.50	or stenosis of unspecified cerebral artery	S06.319A,
	163.511	Cerebral infarction due to unspecified occlusion	S06.320A,
ICD-10 DX	163.511	or stenosis of right middle cerebral artery	S06.321A,
	163.512	Cerebral infarction due to unspecified occlusion	S06.322A,
ICD-10 DX		or stenosis of left middle cerebral artery	S06.323A,
	163.513	Cerebral infarction due to unspecified occlusion	S06.324A,
ICD-10 DX		or stenosis of bilateral middle cerebral arteries	S06.325A,
	163.519	Cerebral infarction due to unspecified occlusion	S06.326A,
ICD-10 DX		or stenosis of unspecified middle cerebral artery	S06.327A,
	162 524	Cerebral infarction due to unspecified occlusion	S06.328A,
ICD-10 DX	163.521	or stenosis of right anterior cerebral artery	S06.329A,
	162 522	Cerebral infarction due to unspecified occlusion	S06.330A,
ICD-10 DX	163.522	or stenosis of left anterior cerebral artery	S06.331A,
	162 522	Cerebral infarction due to unspecified occlusion	S06.332A,
ICD-10 DX	163.523	or stenosis of bilateral anterior cerebral arteries	S06.333A,
	160 500	Cerebral infarction due to unspecified occlusion	S06.334A,
ICD-10 DX	163.529	or stenosis of unspecified anterior cerebral artery	S06.335A,
	162 524	Cerebral infarction due to unspecified occlusion	S06.336A,
ICD-10 DX	163.531	or stenosis of right posterior cerebral artery	S06.337A,

	163.532	Cerebral infarction due to unspecified occlusion	S06.338A,
ICD-10 DX		or stenosis of left posterior cerebral artery	S06.339A,
	163.533	Cerebral infarction due to unspecified occlusion	S06.340A,
ICD-10 DX	100.000	or stenosis of bilateral posterior cerebral arteries	S06.341A,
		Cerebral infarction due to unspecified occlusion	S06.342A,
	163.539	or stenosis of unspecified posterior cerebral	S06.343A,
ICD-10 DX		artery	S06.344A,
	163.541	Cerebral infarction due to unspecified occlusion	S06.345A,
ICD-10 DX	105.541	or stenosis of right cerebellar artery	S06.346A,
	163.542	Cerebral infarction due to unspecified occlusion	S06.347A,
ICD-10 DX	105.542	or stenosis of left cerebellar artery	S06.348A,
	162 542	Cerebral infarction due to unspecified occlusion	S06.349A,
ICD-10 DX	163.543	or stenosis of bilateral cerebellar arteries	S06.350A,
	162 540	Cerebral infarction due to unspecified occlusion	S06.351A,
ICD-10 DX	163.549	or stenosis of unspecified cerebellar artery	S06.352A,
	162.50	Cerebral infarction due to unspecified occlusion	S06.353A,
ICD-10 DX	163.59	or stenosis of other cerebral artery	S06.354A,
	162.6	Cerebral infarction due to cerebral venous	S06.355A,
ICD-10 DX	163.6	thrombosis, nonpyogenic	S06.356A,
ICD-10 DX	163.89	Other cerebral infarction	S06.357A,
ICD-10 DX	163.9	Cerebral infarction, unspecified	S06.358A,
TED TO DA		Occlusion and stenosis of right middle cerebral	S06.359A,
ICD-10 DX	166.01	artery	S06.360A,
ICD 10 DX		Occlusion and stenosis of left middle cerebral	S06.361A,
ICD-10 DX	166.02	artery	S06.362A,
ICD-10 DX		Occlusion and stenosis of bilateral middle cerebral	S06.363A,
ICD-10 DX	166.03	arteries	S06.364A,
ICD-10 DX			S06.365A,
ICD-10 DX	166.09	Occlusion and stenosis of unspecified middle	S06.366A,
ICD-TO DX		cerebral artery	S06.367A,
ICD 10 DV	166.11	Occlusion and stenosis of right anterior cerebral	S06.368A,
ICD-10 DX		artery	

ICD-10 DX	166.12	Occlusion and stenosis of left anterior cerebral	S06.369A,
	100.12	artery	S06.370A,
	166.13	Occlusion and stenosis of bilateral anterior	S06.371A,
ICD-10 DX	100.13	cerebral arteries	S06.372A,
	166.19	Occlusion and stenosis of unspecified anterior	S06.373A,
ICD-10 DX	100.13	cerebral artery	S06.374A,
	166.21	Occlusion and stenosis of right posterior cerebral	S06.375A,
ICD-10 DX	100.21	artery	S06.376A,
	166.22	Occlusion and stenosis of left posterior cerebral	S06.377A,
ICD-10 DX	100.22	artery	S06.378A,
	100.33	Occlusion and stenosis of bilateral posterior	S06.379A,
ICD-10 DX	166.23	cerebral arteries	S06.380A,
	100.20	Occlusion and stenosis of unspecified posterior	S06.381A,
ICD-10 DX	166.29	cerebral artery	S06.382A,
ICD-10 DX	166.3	Occlusion and stenosis of cerebellar arteries	S06.383A,
ICD-10 DX	166.8	Occlusion and stenosis of other cerebral arteries	S06.384A,
.02 20 27.		Occlusion and stenosis of unspecified cerebral	S06.385A,
ICD-10 DX	166.9	artery	S06.386A,
.02 20 27.		Reversible cerebrovascular vasoconstriction	S06.387A,
ICD-10 DX	167.841	syndrome	S06.388A,
100 10 07		Other cerebrovascular vasospasm and	S06.389A,
ICD-10 DX	167.848	vasoconstriction	S06.4X0A,
ICD-10 DX	167.89	Other cerebrovascular disease	S06.4X1A,
ICD-10 DX	107.03	Intraoperative cerebrovascular infarction during	S06.4X2A,
ICD-10 DX	197.810		S06.4X3A,
ICD-10 DX		cardiac surgery	S06.4X4A,
ICD-10 DX	197.811	Intraoperative cerebrovascular infarction during	S06.4X5A,
ICD-10 DX		other surgery	S06.4X6A,
ICD 10 DV	197.820	Postprocedural cerebrovascular infarction	S06.4X7A,
ICD-10 DX		following cardiac surgery	S06.4X8A,
ICD 40 DV	197.821	Postprocedural cerebrovascular infarction	S06.4X9A,
ICD-10 DX		following other surgery	

S06.5X1A, S06.5X2A, S06.5X3A, S06.5X4A, S06.5X5A, S06.5X6A, S06.5X7A, S06.5X8A, S06.5X9A, S06.6X0A, S06.6X1A, S06.6X2A, S06.6X3A, S06.6X4A, S06.6X5A, S06.6X6A, S06.6X7A, S06.6X8A, S06.6X9A, S06.810A, S06.811A, S06.812A, S06.813A, S06.814A, S06.815A, S06.816A, S06.817A, S06.818A, S06.819A, S06.820A,

S06.5X0A,

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S06.822A,
S06.823A,
S06.824A,
S06.825A,
S06.826A,
S06.827A,
S06.828A,
S06.829A,
S06.890A,
S06.891A,
S06.892A,
S06.893A,
S06.894A,
S06.895A,
S06.896A,
S06.897A,
S06.898A,
S06.899A,
S06.9X0A,
S06.9X1A,
S06.9X2A,
S06.9X3A,
S06.9X4A,
S06.9X5A,
S06.9X6A,
S06.9X7A,
S06.9X8A,
S06.9X9A, OR
Z51.89 as the
principal DX

S06.821A,

Code then EXCLUDE.

					EXCLUDE.
				Systemic inflammatory response syndrome due to	
		ICD-9 DX	995.94	noninfectious process with acute organ	
Н	Multi-organ failure			dysfunction	
		ICD-10 DX	R65.1x	Systemic inflammatory response syndrome (SIRS)	
		ICD-9 DX	038.xx	of non-infectious origin	
		ICD-9 DX	472.1	Septicemia Chronic Pharungitis	
		ICD-9 DX	785.50	Chronic Pharyngitis	
			785.52	Unspecified Shock	
		ICD-9 DX		Septic shock	
		ICD-9 DX	790.7	Bacteremia	
		ICD-9 DX	421.0	Acute and subacute bacterial endocarditis	
		ICD-9 DX	421.9	Acute endocarditis, unspecified	
		ICD-9 DX	424.9x	Endocarditis, valve unspecified	
		ICD-9 DX	995.91	Sepsis	
	Infection/sepsis	ICD-9 DX	995.92	Severe sepsis	
I	(including septic	ICD-9 DX	998.5	Other complications of procedures, NEC; postoperative infection	
	shock)	ICD-9 DX	998.59	Other postoperative infection	
		ICD-9 DX	999.3x	Complications of medical care, not elsewhere classified; other infection	
		ICD-10 DX	A40.x	Streptococcal sepsis	
		ICD-10 DX	R65.2x	Severe sepsis	
		ICD-10 DX	R78.81	Bacteremia	
		ICD-10 DX	133.0	Acute and subacute infective endocarditis	
		ICD-10 DX	133.9	Acute and subacute endocarditis, unspecified	
		ICD-10 DX	138	Endocarditis, valve unspecified	
		ICD-10 DX	A41.xx	Other sepsis	
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ICD-10 DX K68.11 Postprocedural retroperitoneal abscess ICD-10 DX T81.12xx Postprocedural septic shock ICD-10 DX R41.82 Altered mental status, unspecified ICD-10 DX R41.0 Disorientation unspecified ICD-10 DX R40.0 Somnolence ICD-10 DX R40.1 Stupor ICD-10 DX R40.2 Coma ICD-10 DX R40.4 Transient alteration of awareness ICD-9 DX 780.60 Fever, unspecified Fever presenting with conditions classified elsewhere ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere L Chest pain ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.10 Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase ICD-10 DX K21.0 GERD with Esophogitis			ICD-10 DX	T81.4xxx	Infection following a procedure
ICD-10 DX R41.82 Altered mental status, unspecified ICD-10 DX R41.0 Disorientation unspecified ICD-10 DX R40.0 Somnolence ICD-10 DX R40.1 Stupor ICD-10 DX R40.2 Coma ICD-10 DX R40.4 Transient alteration of awareness ICD-9 DX 780.60 Fever, unspecified ICD-9 DX 780.61 Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere ICD-10 DX R50.82 Postprocedural fever ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	K68.11	Postprocedural retroperitoneal abscess
Altered mental status ICD-10 DX			ICD-10 DX	T81.12xx	Postprocedural septic shock
Altered mental status ICD-10 DX			ICD-10 DX	R41.82	Altered mental status, unspecified
Altered mental status ICD-10 DX R40.1 Stupor ICD-10 DX R40.2 Coma ICD-10 DX R40.4 Transient alteration of awareness ICD-9 DX 780.60 Fever, unspecified Fever presenting with conditions classified elsewhere ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere ICD-10 DX R50.82 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R70.9 Chest pain, unspecified ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	R41.0	Disorientation unspecified
ICD-10 DX R40.1 Stupor ICD-10 DX R40.2 Coma ICD-10 DX R40.4 Transient alteration of awareness ICD-9 DX 780.60 Fever, unspecified Fever presenting with conditions classified elsewhere ICD-9 DX 780.61 Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere ICD-10 DX R50.82 Postprocedural fever ICD-10 DX R50.82 Postprocedural fever ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase	Ì	Altored montal status	ICD-10 DX	R40.0	Somnolence
ICD-10 DX R40.4 Transient alteration of awareness ICD-9 DX 780.60 Fever, unspecified 780.61 Fever presenting with conditions classified elsewhere ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere ICD-10 DX R50.82 Postprocedural fever ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase	J	Aitereu mentai status	ICD-10 DX	R40.1	Stupor
ICD-9 DX 780.60 Fever, unspecified Fever presenting with conditions classified elsewhere REFURD 1CD-10 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere REFURD 1CD-10 DX REF			ICD-10 DX	R40.2	Coma
K Fever ICD-9 DX 780.61 Fever presenting with conditions classified elsewhere ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere Fever presenting with conditions classifi			ICD-10 DX	R40.4	Transient alteration of awareness
K Fever ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere ICD-10 DX R50.82 Postprocedural fever Chest pain ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-9 DX	780.60	Fever, unspecified
K Fever ICD-9 DX 780.62 Postprocedural fever Fever presenting with conditions classified elsewhere ICD-10 DX R50.81 Postprocedural fever Chest pain ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R07.89 Chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.1 Dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-0 DV	780.61	•
ICD-10 DX R50.81 Fever presenting with conditions classified elsewhere	К	Fever		780 62	
ICD-10 DX R50.81 elsewhere ICD-10 DX R50.82 Postprocedural fever L Chest pain		1 6 7 6 1	ICD 3 DX		·
L Chest pain ICD-10 DX R07.9 Chest pain, unspecified ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	R50.81	•
Chest pain ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	R50.82	Postprocedural fever
ICD-10 DX R07.89 Other chest pain ICD-10 DX R13.1 Dysphagia ICD-10 DX R13.19 Other dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase		Chast nain	ICD-10 DX	R07.9	Chest pain, unspecified
ICD-10 DX R13.19 Other dysphagia M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase	L	Criest pain	ICD-10 DX	R07.89	Other chest pain
M Dysphagia ICD-10 DX R13.10 Dysphagia unspecified ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	R13.1	Dysphagia
ICD-10 DX R13.14 Dysphagia pharyngoesophageal phase			ICD-10 DX	R13.19	Other dysphagia
1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	М	Dysphagia	ICD-10 DX	R13.10	
			ICD-10 DX	R13.14	Dysphagia pharyngoesophageal phase
			ICD-10 DX	K21.0	GERD with Esophogitis

Appendix Table 3.

Definition	Code Logic				
Definite AEF					
	(A1 or A2) AND Death				
	or				
	(B or C) AND (A1 or A2 or D or E or F)				
Highly Probab	le AEF				
	(B or C) AND (G or H or I or J or K or L or M)				
	or				
	(D or E or F) AND Death				
	or				
	(G and I) AND Death				
Sensitivity Analysis					
	(A1 or A2 or D or E or F or G or H or I or J or K or L or M)				
	Any 2 of the above				
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