



HCHS/SOL STROKE ABSTRACTION FORM

ID NUMBER:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	FORM CODE: STR	Contact	<input type="text"/>	<input type="text"/>	SEQ #	<input type="text"/>	<input type="text"/>
								VERSION: 1 05/28/2020	Occasion					

ADMINISTRATIVE INFORMATION

0a. Completion Date:	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0b. Staff ID:	<input type="text"/>	<input type="text"/>	<input type="text"/>							
0c. Event ID:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	0d. Event Date:	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Instructions: Answers are derived from the medical records received. Do not complete this form until all records are received (or classified as unobtainable) as indicated on the Verification of ICD Discharge Codes Form

A. General Information

1. Date of arrival: (mm/dd/yyyy)	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
a. Time of arrival:	<input type="text"/>	<input type="text"/>	:	<input type="text"/>	<input type="text"/>					
2. What was the primary admitting diagnosis code?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
3. Date of discharge/death: (mm/dd/yyyy)	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. What was the primary discharge diagnosis code?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
5. Mode of arrival from home/scene:										
Unknown										9 <input type="checkbox"/>
EMS										1 <input type="checkbox"/>
Private transport/taxi/walk-in										2 <input type="checkbox"/>
Transfer from another hospital										3 <input type="checkbox"/>
Mobile stroke unit										4 <input type="checkbox"/>
6. Was the participant transferred from this hospital to another?										
No	0	<input type="checkbox"/>	Yes	1	<input type="checkbox"/>	Unknown	9	<input type="checkbox"/>		
7. Was a DNR/DNI or Withdrawal of Care order present during this hospitalization?										
No	0	<input type="checkbox"/>	Yes	1	<input type="checkbox"/>	Unknown	9	<input type="checkbox"/>		

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B. Medical History

8. Were there new neurological signs/symptoms present upon this admission?

No 0 Yes 1 Unknown 9

9. Did the participant's stroke or TIA occur during this hospitalization?

No/NR 0 Yes 1

10. Did the event occur in the setting of a procedure within the last 30 days or during this hospitalization?

No/NR 0 *Skip to 11* Yes 1

a. If yes, what procedure? (answer 0=No/NR or 1=Yes for each procedure)

1. Cerebral Angiogram No/NR 0 Yes 1

2. Coronary Angiogram No/NR 0 Yes 1

3. Cardiac Surgery or Procedures
(e.g. stenting, LVAD, TAVR, etc.) No/NR 0 Yes 1

4. Carotid Endarterectomy No/NR 0 Yes 1

5. Carotid Stenting No/NR 0 Yes 1

6. Other No/NR 0 Yes 1

a. Specify: _____

11. Date/time of onset of current neurological symptoms:

a. Date Known? No 0 *Skip to 12* Yes 1

b. Date: (mm/dd/yyyy) / /

c. Time Known? No 0 *Skip to 12* Yes 1

d. Time: :

12. When was the participant last known to be free of deficits?

a. Date Known? No 0 *Skip to 13* Yes 1

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b. Date: (mm/dd/yyyy) //

c. Time Known? No 0 **Skip to 13** Yes 1

d. Time: :

13. Was there a history of previous stroke?

No 0 **Skip to 14** Yes 1 Unknown 9 **Skip to 14**

a. Date Known? No 0 **Skip to 13c** Yes 1

b. Date of most recent stroke: (mm/dd/yyyy) //

c. Type of stroke:

- Unknown 9 **Skip to 14**
- Ischemic 1 **Skip to 14**
- Intracranial hemorrhage 2 **Skip to 13c1**
- Subarachnoid hemorrhage 3 **Skip to 13c3**

1. If the participant had an ICH, was hematoma evacuation performed? No 0 Yes 1 Unknown 9

2. Did the participant receive an intra-hematoma tPA infusion? No 0 Yes 1 Unknown 9

For any answer to 13c2, skip to 14

3. If the participant had an SAH, was an aneurysm found? No 0 Yes 1 Unknown 9

4. Was aneurysm coiling performed? No 0 Yes 1 Unknown 9

5. Was aneurysm clipping performed? No 0 Yes 1 Unknown 9

14. Is there a history of previous TIA? No 0 **Skip to 15** Yes 1 Unknown 9 **Skip to 15**

a. Date Known? No 0 **Skip to 15** Yes 1

b. Date of most recent TIA: (mm/dd/yyyy) //

15. Does the participant have a history of coronary artery disease?

No 0 Yes 1 Unknown 9

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16. Does the participant have a history of peripheral vascular disease?

No 0 Yes 1 Unknown 9

17. Does the participant have a history of carotid disease?

No 0 Yes 1 Unknown 9

18. Does the participant have end stage renal disease?

No 0 Yes 1 Unknown 9

19. Does the participant have a history of diabetes?

No 0 Yes 1 Unknown 9

20. Does the participant have a history of hypertension?

No 0 Yes 1 Unknown 9

21. Does the participant have a history of dyslipidemia or prior therapy for such?

No 0 Yes 1 Unknown 9

22. Does the participant have a history of smoking?

No 0 Yes 1 Unknown 9

23. Does the participant have a history of alcohol use disorder?

No 0 Yes 1 Unknown 9

24. Does the participant have a history of illicit stimulant use within four weeks prior to this hospitalization?

No 0 Yes 1 Unknown 9

25. Are any of the following conditions documented as having been present prior to or during this hospitalization?

	<u>No/NR</u>	<u>Yes</u>
a. Recent myocardial infarction	0 <input type="checkbox"/>	1 <input type="checkbox"/>
b. intracardiac thrombus or intracardiac tumor	0 <input type="checkbox"/>	1 <input type="checkbox"/>
c. atrial fibrillation/atrial flutter	0 <input type="checkbox"/>	1 <input type="checkbox"/>

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- 1. Was there ≥ 24 hours of cardiac monitoring for this participant? 0 1
- d. left-sided atrial enlargement on echocardiogram 0 1
- e. rheumatic heart disease 0 1
- f. systemic embolus 0 1
- g. hematologic abnormality (hypercoagulable state) 0 1
- h. hematologic abnormality (hemorrhagic) 0 1
- i. migraine headaches 0 1
- j. left-sided bioprosthetic valve 0 1
- k. left-sided mechanical valve 0 1

C. Signs and Symptoms

26. If the new neurological signs/symptoms resolved, how long did they last?
1. *Less than 24 hours* 2. *Twenty four - forty eight hours*
3. *Greater than 48 hours* 4. *Unknown* 5. *Not applicable*

27. Was an NIHSS recorded? No 0 **Skip to 27b** Yes 1

a. If yes, what was the score? **Skip to 28**

b. If no, complete the scores in the following Items (descriptions in Question by Question Instructions - QxQ)

- 1. LOCa 0 1 2 3
- 2. LOCb 0 1 2
- 3. LOCc 0 1 2
- 4. Best Gaze 0 1 2
- 5. Visual Fields 0 1 2 3
- 6. Facial Palsy 0 1 2 3
- 7. Motor Arm
 - a. Left 0 1 2 3 4

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- b. Right 0 1 2 3 4
- 8. Motor Leg
 - a. Left 0 1 2 3 4
 - b. Right 0 1 2 3 4
- 9. Limb Ataxia 0 1 2
- 10. Sensory 0 1 2
- 11. Best Language 0 1 2 3
- 12. Dysarthria 0 1 2
- 13. Extinction and Inattention 0 1 2
- 14. Total Score: [save form and click arrows to calculate]

28. Was the participant asleep at the time of the event?

No 0 Yes 1 Unknown 9

29. Severe headache at onset of symptoms or on hospital admission?

No 0 Yes 1 Unknown 9

30. Vomiting?

No 0 Yes 1 Unknown 9

31. Blurry Vision?

No 0 Yes 1 Unknown 9

32. Diplopia?

No 0 Yes 1 Unknown 9

33. Vertigo?

No 0 Yes 1 **Skip to 35** Unknown 9

34. Dizziness?

No 0 Yes 1 Unknown 9

35. Seizure?

No 0 **Skip to 36** Yes 1 Unknown 9 **Skip to 36**

a. Was this the first neurological symptom?

No 0 Yes 1 Unknown 9

D. Neurological Exam (Skip to 48 if retrospective NIHSS Q27b was completed)

36. Level of Consciousness:

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Normal 0 Abnormal 1 Unconscious 2 Unknown 9

37. Aphasia: No 0 Yes 1 Unknown 9

38. Hemianopsia: No 0 Yes 1 Unknown 9

39. Any abnormality of Cranial Nerves III, IV, or VI:
No 0 **Skip to 40** Yes 1 Unknown 9 **Skip to 40**

a. Location of abnormality: (1 = Left, 2 = Right, 3 = Both, 9 = NR)

40. Horizontal Gaze Palsy (Conjugate Gaze Deviation):
No 0 **Skip to 41** Yes 1 Unknown 9 **Skip to 41**

a. Location of Gaze Deviation: (1 = Left, 2 = Right, 3 = Both, 9 = NR)

41. Dysphagia: No 0 Yes 1 Unknown 9

42. Dysarthria: No 0 Yes 1 Unknown 9

43. Weakness (paresis): No 0 **Skip to 44** Yes 1 Unknown 9 **Skip to 44**

a. Face (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

b. Arm (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

c. Leg (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

44. Sensory Deficit: No 0 **Skip to 45** Yes 1 Unknown 9 **Skip to 45**

a. Face (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

b. Arm (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

c. Leg (1 = Left, 2 = Right, 3 = Both, 4 = None, 9 = NR)

45. Visual Fields Abnormality: No 0 Yes 1 Unknown 9

46. Ataxic Gait: No 0 Yes 1 Unknown 9

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47. Hemiataxia: No 0 Yes 1 Unknown 9

E. Diagnostic Tests

48. First Recorded Blood Pressure: / mmHg

49. First Glucose Level:

50. Was a Lumbar Puncture performed? No/NR 0 **Skip to 51** Yes 1

a. Lumbar Puncture Diagnosis: Normal 0 Abnormal 1 Unknown 9

51. Was one or more CT scan/s of the head performed during this hospitalization?

No 0 **Skip to 52** Yes, one CT 1 Yes, two or more CTs 2 NR 9 **Skip to 52**

a. If yes, date of first CT: (mm/dd/yyyy) //

b. Was acute or subacute stroke diagnosed on the first CT?

No 0 Yes 1 Unknown/NR 9
If only one CT was performed, skip to 52

c. If two or more were performed, date of last CT: //

d. Was acute or subacute stroke diagnosed on the last CT, or was any stroke identified on the last CT that was not previously identified on the first CT?

No 0 Yes 1 Unknown/NR 9

52. Was Magnetic Resonance Imaging (MRI) including the head performed?

No 0 **Skip to 53** Yes 1 Unknown/NR 9 **Skip to 53**

a. Was acute or subacute stroke diagnosed on the MRI?

No 0 Yes 1 Unknown/NR 9

b. Was a Diffusion Weighted Imaging (DWI) study performed?

No 0 **Skip to 53** Yes 1 Unknown/NR 9 **Skip to 53**

c. DWI Diagnosis: Normal 0 Abnormal 1 Unknown/NR 9

53. Was Cerebrovascular Angiography performed?

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No 0 **Skip to 54** Yes 1 Unknown/NR 9 **Skip to 54**

If yes, indicate if any of the following were done:

- a. Date: (mm/dd/yyyy) //
- b. CTA Head: No 0 Yes 1 NR 9
- c. CTA Neck: No 0 Yes 1 NR 9
- d. MRA Head: No 0 Yes 1 NR 9
- e. MRA Neck: No 0 Yes 1 NR 9
- f. Carotid Doppler: No 0 Yes 1 NR 9
- g. Transcranial Doppler: No 0 Yes 1 NR 9
- h. Catheter Angiogram: No 0 Yes 1 NR 9

Extracranial Studies

- i. Stenosis – Right Internal Carotid Artery: No 0 Yes 1 NR 9
- j. Stenosis – Left Internal Carotid Artery: No 0 Yes 1 NR 9
- k. Stenosis – Right Vertebral Artery: No 0 Yes 1 NR 9
- l. Stenosis – Left Vertebral Artery: No 0 Yes 1 NR 9

Intracranial Studies

- m. Stenosis – Right Internal Carotid Artery: No 0 Yes 1 NR 9
- n. Stenosis – Left Internal Carotid Artery: No 0 Yes 1 NR 9
- o. Stenosis – Right Vertebral Artery: No 0 Yes 1 NR 9
- p. Stenosis – Left Vertebral Artery: No 0 Yes 1 NR 9

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- q. Stenosis – Right Middle Cerebral Artery: No 0 Yes 1 NR 9
- r. Stenosis – Left Middle Cerebral Artery: No 0 Yes 1 NR 9
- s. Stenosis – Right Anterior Cerebral Artery: No 0 Yes 1 NR 9
- t. Stenosis – Left Anterior Cerebral Artery: No 0 Yes 1 NR 9
- u. Stenosis – Right Posterior Cerebral Artery: No 0 Yes 1 NR 9
- v. Stenosis – Left Posterior Cerebral Artery: No 0 Yes 1 NR 9
- w. Stenosis – Basilar Artery: No 0 Yes 1 NR 9

54. Was a transthoracic echocardiography study performed?

No/NR 0 **Skip to 55** Yes 1

a. If yes, what was the ejection fraction?

55. Was a transesophageal echocardiography study performed?

No/NR 0 **Skip to 56** Yes 1

a. If yes, what was the ejection fraction?

If both 54 and 55 are No/NR, skip to 57

56. Please indicate the presence on either type of echocardiogram of each of the following:

- a. Intracardiac Thrombus: No 0 Yes 1 NR 9
- b. Mitral Stenosis: No 0 Yes 1 NR 9
- c. Mitral Regurgitation: No 0 Yes 1 NR 9
- d. Aortic Stenosis: No 0 Yes 1 NR 9
- e. Aortic Regurgitation: No 0 Yes 1 NR 9
- f. Poor Ventricular Function: No 0 Yes 1 NR 9
- g. Dilated Left Ventricle: No 0 Yes 1 NR 9

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- h. Ascending Aortic Arch Atheroma: No 0 Yes 1 NR 9
1. If yes: Mild 1 Moderate 2 Severe 3 NR 9
- i. Atrioseptal Aneurysm: No 0 Yes 1 NR 9
- j. Patent Foramen Ovale (PFO): No 0 Yes 1 NR 9
- k. Valve Vegetations: No 0 Yes 1 NR 9
- l. Artificial Valve: No 0 Yes 1 NR 9
- m. Left Atrial Enlargement: No 0 Yes 1 NR 9

F. Laboratory Tests - First available lab values

57. Sodium (mmol/L or mEq/L):

58. Serum creatinine (mg/dL): .

59. BUN (mg/dL):

60. Hemoglobin (g/dL): .

61. Hematocrit (%): .

62. INR: .

63. PTT:

- a. Was this an activated PTT (aPTT)? No 0 Yes 1 NR 9

64. Platelet count (x1000):

65. Total Cholesterol (mg/dL):

66. LDL (mg/dL):

67. HbA1c (%):

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G. Treatment

68. Did the participant receive thrombolytic treatment for stroke?

No 0 *Skip to 69* Yes 1 Unknown 9 *Skip to 69*

a. If yes, did the participant suffer symptomatic ICH post tPA?

No 0 Yes 1 Unknown 9

69. Did the participant receive endovascular therapy (EVT) for ischemic stroke?

No 0 *Skip to 70* Yes 1 Unknown 9 *Skip to 70*

a. If yes, did the participant suffer symptomatic ICH post EVT?

No 0 Yes 1 Unknown 9

70. Did the participant receive osmotic/hypertonic treatment?

No 0 Yes 1 Unknown 9

71. Was decompressive hemicraniectomy performed?

No 0 Yes 1 Unknown 9

H. Discharge

72. Was the participant alive at discharge? No 0 Yes 1 *Skip to 73*

a. If no, was an autopsy performed?

No 0 *Skip to 78* Yes 1 NR 9 *Skip to 78*

1. Autopsy Diagnosis *Skip to 78*

(1 = recent bleeding of saccular aneurysm/subarachnoid hemorrhage 2 = hemorrhagic infarction of the brain, 3 = lacunar stroke, 4 = embolic stroke, 7 = other)

73. Was the participant able to ambulate independently before the current hospitalization?

No 0 Yes 1 Unknown/NR 9

74. Was the participant able to ambulate independently at discharge?

No 0 Yes 1 Unknown/NR 9

75. Where was the participant discharged to?

(1 = Home, 2 = Acute Rehabilitation, 3 = Skilled Nursing Facility, 4 = Assisted Living, 5 = Hospice, 6 = Other/Unknown)

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76. At the time of discharge, did the participant require more help from another person for everyday activities compared to status prior to event?

No 0 Yes 1 Unknown/NR 9

77. Was a Modified Rankin Scale done at discharge?

No 0 *Skip to 77b* Yes 1 Unknown/NR 9 *Skip to 77b*

a. If yes, what was the score? *Skip to 78*

b. If no or not recorded, at discharge was the participant:

- Back to Normal 0
- Exhibiting S/S related to stroke but otherwise without disability 1
- Able to ambulate independently with some disability 2
- Dependent on others for some ADLs, but able to walk 3
- Moderately severe disability 4
- Bedridden (requires 24/7 care) 5
- Unknown/NR 9

I. Medications

78. Prior to admission, did the participant receive any of the following medications?

- a. Oral Anticoagulants
Apixaban, Rivaroxaban, Dabigatran, Edoxaban No/NR 0 Yes 1
- b. Beta Blockers No/NR 0 Yes 1
- c. Calcium Channel Blockers No/NR 0 Yes 1
- d. ACE Inhibitor or ARB No/NR 0 Yes 1
- e. Scheduled aspirin (not PRN) No/NR 0 Yes 1
- f. Heparin or Enoxaparin No/NR 0 Yes 1
- g. Coumadin, warfarin, panwarfarin, dicumarol No/NR 0 Yes 1
- h. Anti-platelet agents (non-aspirin) No/NR 0 Yes 1
- i. Statin or other lipid-lowering medication No/NR 0 Yes 1

79. During hospitalization or at discharge, did the participant receive any of the following medications?

- a. Oral Anticoagulants No/NR 0 Yes 1

