Cohort Stroke Abstraction Form

FORM CODE: STR
VERSION: F 5/6/2019

ID NUMBER: __________ CONTACT YEAR: ________
LAST NAME: __________ INITIALS: __________

Instructions: The Stroke Form is completed for each eligible Cohort hospitalization for stroke as determined by the Cohort Eligibility Form. Event ID must be entered above. NOTE: In this version Questions 3a-13 are deleted. For ICD diagnoses and procedure codes, demographics, date and time of arrival at hospital, or transfer information please see the CHI form.

A. HOSPITAL INFORMATION

1.a. Hospital number: ________

1.b. Medical record number: __________

2. Has the hospital chart for this event been located? ............. Yes Y No N

Go to Item 56

14. Date of discharge or death:

mm/dd/yyyy

15. Discharged ....... Alive A

Go to Item 17 Dead D
### Cohort Stroke Abstraction Form

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Length of time between onset of new neurologic symptoms/signs and death:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Less than 24 hours</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 24-48 hours</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Greater than 48 hours</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Unknown</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Not Applicable</td>
<td>N</td>
<td></td>
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<tr>
<td>Go to Item 19a.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

17. Did the discharge diagnosis include any of these codes?:

- ICD-9: 430, 431, 432, 433, 434, 436 OR
- ICD-10: I60.x, I61.x, I62.x, I63.x, I65.x, I66.x, or I67.x?
  - Yes Y
  - No... N

18. Did any neurologic symptoms/signs last > 24 hours? ....... Yes Y

| Go to Item 56 |

19.a. Were there new neurological symptoms/signs leading to or present upon admission to this hospital? ......... Yes Y

| Go to Item 21 |

20. Did new neurological symptoms/signs develop during this hospitalization? .... Yes Y

| Go to Item 56 |

21. Date of onset of current neurological event:

| m | m | d | d | y | y | y | y |

22. Was the onset of the predominant neurologic symptom(s)/sign(s) either sudden or rapid? ............ Yes Y

| No | N |

| Unknown | U |

23. History of previous stroke (also review previous discharge diagnoses) ........... Yes Y

| Go to Item 26. |

| Unknown | U |

24. Month/year of first stroke:

| m | m | y | y | y | y | y |

25. Month/year of most recent stroke:

| m | m | y | y | y | y | y |

26. History of previous TIA: ....... Yes Y

| Go to Item 28 |

| No | N |

| Unknown | U |
### Cohort Stroke Abstraction Form

#### 27. Month/year of first and most recent TIA:
- **a. First:** ..........
m m y y y
- **b. Most Recent:** ....
m m y y y

#### 28. History of myocardial infarction prior to the onset of this event:
- **Yes** Y
- **No** N
- **Unknown** U

#### 29. Are any of the following conditions documented as having been present within four weeks prior to or during this hospitalization?
- **a. Myocardial infarction**
  - (IF YES, COMPLETE HRA FORM) ....... Yes Y
  - **No** N
  - **Unknown** U

- **b. Intracardiac thrombus or intracardiac tumor (myxoma)** ....... Yes Y
  - **No** N

#### 29.c. Atrial fibrillation or flutter
- **Yes** Y
- **No** N

#### d. Rheumatic heart disease, valvular heart disease (e.g., mitral stenosis, artificial heart valve)
- **Yes** Y
- **No** N

#### e. Subacute bacterial endocarditis
- **Yes** Y
- **No** N

#### f. Systemic embolus (including angiographically identified embolus)
- **Yes** Y
- **No** N

#### 29.g.1. Hematologic abnormality: hypercoagulable state e.g., DIC
- **Yes** Y
- **No** N

#### g.2. Hematologic abnormality: hemorrhagic e.g., leukemia, thrombocytopenia, DIC
- **Yes** Y
- **No** N

#### h. Brain tumor (benign or malignant, primary or metastatic)
- **Yes** Y
- **No** N
Cohort Stroke Abstraction Form

29.i. Major head trauma, e.g., subdural hematoma, epidural hematoma, skull fracture ....... Yes Y No N

j. Another nonstroke disease process which likely caused a focal neurologic deficit or coma ....... Yes Y No N

Go to Item 30a.

k. Specify: _______________________________

30. Were any of the following performed or present in the week prior to the onset of acute neurologic symptoms?

- a. Cardiac catheterization Yes Y No N
- b. Open heart surgery ..... Yes Y No N
- c. Cerebral angiography ... Yes Y No N
- d. Carotid endarterectomy . Yes Y No N

30.e. Therapy with anticoagulants (Heparin, Warfarin (Coumadin)) ........... Yes Y No N

f. Therapy with thrombolytic agents (streptokinase, TPA, urokinase) ........ Yes Y No N

B. PHYSICIAN DOCUMENTATION OF NEW SYMPTOMS OR SIGNS PRESENT ON OR LEADING TO THIS ADMISSION, OR OCCURRING DURING HOSPITALIZATION:

31.a. Headache at onset or admission ........ Yes Y No N

Go to Item 32a.

31.b. Indicate severity:
- Severe S
- Mild/moderate M
- Unspecified U

c. What was the duration?
- Less than 24 hours L
- 24 hours or more M
- Unknown U

32.a. Vertigo ................. Yes Y No N

Go to Item 33

b. What was the duration?
- Less than 24 hours L
- 24 hours or more M
- Unknown U
### Cohort Stroke Abstraction Form

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.a.</td>
<td>Convulsions</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Go to Item 34.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Was this the first neurologic symptom?</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>34.</td>
<td>Meningeal signs:</td>
<td></td>
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<tr>
<td></td>
<td>Stiff neck (nuchal rigidity); limitation on leg extension, neck flexion (Kernig, Brudzinski)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>35.a.</td>
<td>Coma, unconsciousness, stupor occurring within 12 hours after onset of the neurologic event</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Go to Item 36.</td>
<td>No</td>
<td>N</td>
</tr>
<tr>
<td>b.</td>
<td>What was the duration?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than 24 hours</td>
<td>L</td>
<td></td>
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<tr>
<td></td>
<td>24 hours or more</td>
<td>M</td>
<td></td>
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<tr>
<td></td>
<td>Unknown</td>
<td>U</td>
<td></td>
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<tr>
<td>36.a.</td>
<td>Aphasial</td>
<td>Y</td>
<td>N</td>
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<tr>
<td></td>
<td>Go to Item 37.</td>
<td></td>
<td></td>
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<tr>
<td>b.</td>
<td>What was the duration?</td>
<td></td>
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<tr>
<td></td>
<td>Less than 24 hours</td>
<td>L</td>
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<tr>
<td></td>
<td>24 hours or more</td>
<td>M</td>
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<tr>
<td></td>
<td>Unknown</td>
<td>U</td>
<td></td>
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<tr>
<td>37.</td>
<td>Pre-retinal (Subhyaloid) Hemorrhages</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>38.a.</td>
<td>Hemianopia</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Go to Item 39.</td>
<td>No</td>
<td>N</td>
</tr>
<tr>
<td>b.</td>
<td>What was the duration?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less than 24 hours</td>
<td>L</td>
<td></td>
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<tr>
<td></td>
<td>24 hours or more</td>
<td>M</td>
<td></td>
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<tr>
<td></td>
<td>Unknown</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>39.a.</td>
<td>Diplopia</td>
<td>Y</td>
<td>N</td>
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<tr>
<td></td>
<td>Go to Item 40.</td>
<td>No</td>
<td>N</td>
</tr>
<tr>
<td>b.</td>
<td>What was the duration?</td>
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</tr>
<tr>
<td></td>
<td>Less than 24 hours</td>
<td>L</td>
<td></td>
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<tr>
<td></td>
<td>24 hours or more</td>
<td>M</td>
<td></td>
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<tr>
<td></td>
<td>Unknown</td>
<td>U</td>
<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th><strong>Cohort Stroke Abstraction Form</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>40.a. Dysphagia (difficulty in swallowing), dysarthria, dysphonia, or tongue deviation ...........</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Y</td>
</tr>
<tr>
<td><strong>b. What was the duration?</strong></td>
</tr>
<tr>
<td>Less than 24 hours</td>
</tr>
<tr>
<td>24 hours or more</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>L</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>U</td>
</tr>
</tbody>
</table>

| **Go to Item 41.** |

| **41.a. Weakness, paresis or paralysis affecting the face .......** | **Go to Item 42.** |
| Yes | No |
| Y  | N  |

| **b. Indicate affected side(s):** | **c. What was the duration?** |
| Right side | Less than 24 hours |
| Left side  | 24 hours or more |
| Both sides | Unknown |
| R         | M        |
| L         | U        |

| **d. What was the duration of the weakness, paresis, or paralysis affecting the extremities?** |
| Less than 24 hours | 24 hours or more | Unknown |
| L                  | M                  | U        |

| **42.a. Weakness, paresis or paralysis affecting the extremities .......** | **42.c. Leg: (Circle one)** |
| Yes | No |
| Y | N |
| **Go to Item 43.** |

| **b. Arm: (Circle one)** |
| Affected, side unspecified | Right Only |
| Left Only | Both |
| Neither | | |
| U | R |
| L | B |
| N | N |

| **d. What was the duration of the weakness, paresis, or paralysis affecting the extremities?** |
| Less than 24 hours | 24 hours or more | Unknown |
| L | M | U |
43.a. Loss of sensation, tingling, paresthesias, hemianesthesia affecting the face .... Yes Y

Go to Item 44.

No N

b. Indicate affected side(s):

- Right side R
- Left side L
- Both sides B
- Unknown U

c. What was the duration?

- Less than 24 hours L
- 24 hours or more M
- Unknown U

44.a. Loss of sensation, tingling, paresthesias, hemianesthesia affecting the extremities

Go to Item 45.

Yes Y

No N

b. Arm: (Circle one)

- Affected, side unspecified U
- Right Only R
- Left Only L
- Both B
- Neither N

c. Leg: (Circle one)

- Affected, side unspecified U
- Right Only R
- Left Only L
- Both B
- Neither N

d. What was the duration?

- Less than 24 hours L
- 24 hours or more M
- Unknown U

d. What was the total duration of the loss of sensation, tingling, paresthesias, hemianesthesia affecting the extremities?

- Less than 24 hours L
- 24 hours or more M
- Unknown U

d. Gait disturbance ....... Yes Y

Go to Item 46.

No N

b. What was the duration?

- Less than 24 hours L
- 24 hours or more M
- Unknown U

d. Cranial Nerve III Palsy: ............... Yes Y

No N

- Less than 24 hours L
- 24 hours or more M
- Unknown U
### Cohort Stroke Abstraction Form

<table>
<thead>
<tr>
<th align="left">46.b. Other neurologic symptom: ...........</th>
<th align="left">Yes Y</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left"></td>
<td align="left">No N</td>
</tr>
<tr>
<td align="left">If yes, specify: .............................................</td>
<td align="left"></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th align="left">47.a. Was lumbar puncture performed? ...........</th>
<th align="left">Yes Y</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">Go to Item 48.</td>
<td align="left"></td>
</tr>
</tbody>
</table>

| 47.b. Date: / / m m d d / y y y y |
| :------------------------------- | :--- |

<table>
<thead>
<tr>
<th align="left">47.c. Traumatic? ..............</th>
<th align="left">Yes Y</th>
</tr>
</thead>
</table>

#### C. LABORATORY TESTS PERFORMED THIS ADMISSION:

| 47.d. Appearance: . Clear fluid | C |
| :------------------------------ | :|
| Xanthochromic | X |
| Gross blood | B |
| Unknown | U |

<table>
<thead>
<tr>
<th align="left">47.e. Microscopic RBCs (Tube 1):</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">Zero RBCs cu.mm.</td>
</tr>
<tr>
<td align="left">1-999 RBC cu.mm.</td>
</tr>
<tr>
<td align="left">1000+ RBC cu.mm.</td>
</tr>
<tr>
<td align="left">Unknown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th align="left">47.f. Microscopic RBCs (Tube 2):</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">No tube</td>
</tr>
<tr>
<td align="left">Zero RBCs cu.mm.</td>
</tr>
<tr>
<td align="left">1-999 RBC cu.mm.</td>
</tr>
<tr>
<td align="left">1000+ RBC cu.mm.</td>
</tr>
<tr>
<td align="left">Unknown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th align="left">47.g. Lumbar puncture diagnosis:</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">Normal Study</td>
</tr>
<tr>
<td align="left">Exclusionary pathology</td>
</tr>
<tr>
<td align="left">Unrelated pathology or traumatic tap</td>
</tr>
<tr>
<td align="left">Bloody (non-traumatic) or xanthochromic</td>
</tr>
</tbody>
</table>
Cohort Stroke Abstraction Form

48.a. Was cerebral angiography performed? ............ Yes Y

Go to Item 49.

No N

b. Date: m m d d y y y y

c. Angiography diagnosis

- Normal study A
- Exclusionary pathology B
- Unrelated pathology C
- Ruptured aneurysm D
- Avascular mass without evidence ruptured aneurysm/AVM E

48.d. Stenosis - Right internal carotid

- Not studied A
- 0-29% stenosis B
- 30-69% stenosis C
- 70-89% stenosis D
- > 90% stenosis E

If B, C, D, or E, specify percentage.

d.1. %

e. Stenosis - Left internal carotid

- Not studied A
- 0-29% stenosis B
- 30-69% stenosis C
- 70-89% stenosis D
- > 90% stenosis E

If B, C, D, or E, specify percentage.

e.1. %

49.a. Was at least one CT scan performed during this hospitalization? ...... Yes Y

Go to Item 51.

No N

b. What was approximate time between symptom onset and the first CT scan?

- Less than 24 hours A
- 24-48 hours B
- Greater than 48 hours C
- Unknown U

d. First CT diagnosis

- Normal study A
- Exclusionary pathology B
- Unrelated pathology C
- Normal study, but done within 48 hours of symptom onset D
- Subarachnoid hemorrhage E
- Intracerebral hematoma F
- Ischemic infarction, with no evidence of hemorrhage G

d.1. %

c. Date of first CT scan: m m d d y y y y

d. Date of first CT scan:

e. Date of first CT scan:

49.b. What was approximate time between symptom onset and the first CT scan?

49.c. Date of first CT scan:

49.d. First CT diagnosis

49.e. First CT diagnosis

49.f. First CT diagnosis
50.a. Were two or more CT scans performed during this hospitalization? ........ Yes Y  No N  

Go to Item 51.

b. What was approximate time between symptom onset and the last CT scan?
   - Less than 24 hours A
   - 24-48 hours B
   - Greater than 48 hours C
   - Unknown U

50.c. Date of last CT scan during this hospitalization:
   - [ ] / [ ] [ ] [ ] [ ] y y y

50.d. Last CT diagnosis
   - Normal study A
   - Exclusionary pathology B
   - Unrelated pathology C
   - Normal study, but done within 48 hours of symptom onset D
   - Subarachnoid hemorrhage E
   - Intracerebral hematoma F
   - Ischemic infarction, with no evidence of hemorrhage G

51.a. Were any other CT scans performed after the onset of acute neurologic symptoms/signs, but before admission to this hospital? ........ Yes Y  No N  

Go to Item 52.

b. What was approximate time between symptom onset and the first CT scan prior to this hospitalization?
   - Less than 24 hours A
   - 24-48 hours B
   - Greater than 48 hours C
   - Unknown U

51.c. Date of pre-admission CT scan:
   - [ ] / [ ] [ ] [ ] y y y y

d. Pre-admission CT diagnosis
   - Normal study A
   - Exclusionary pathology B
   - Unrelated pathology C
   - Normal study, but done within 48 hours of symptom onset D
   - Subarachnoid hemorrhage E
   - Intracerebral hematoma F
   - Ischemic infarction, with no evidence of hemorrhage G
52.a. Was Magnetic Resonance Imaging (MRI) including the head performed?  ... Yes Y
            No N

Go to Item 53.

b. What was approximate time between symptom onset and the MRI? (If > 1 MRI, pick the most meaningful.)
   Less than 24 hours A
   24-48 hours B
   Greater than 48 hours C
   Unknown U

c. Date:
   m m d d y y y y

52.d. MRI diagnosis:
   Normal study A
   Exclusionary pathology B
   Unrelated pathology C
   Normal study, but done within 48 hours of symptom onset D
   Subarachnoid hemorrhage E
   Intracerebral hematoma F
   Ischemic infarction, with no evidence of hemorrhage G

53.a. Was B-Mode and/or Doppler Ultrasound on carotid(s) performed? ............ Yes Y
            No N

Go to Item 54.

b. Date:
   m m d d y y y y

53.c. Ultrasound diagnosis - Right internal carotid
   Not studied A
   0-29% stenosis B
   30-69% stenosis C
   70-89% stenosis D
   > 90% stenosis E
   "Hemodynamically significant lesion" F

If B, C, D, or E, specify percentage:

c.1. %

53.d. Ultrasound diagnosis - Left internal carotid
   Not studied A
   0-29% stenosis B
   30-69% stenosis C
   70-89% stenosis D
   > 90% stenosis E
   "Hemodynamically significant lesion" F

If B, C, D, or E, specify percentage:

d.1. %

54.a. Was a craniotomy performed (post event)? .......... Yes Y
            No N

Go to Item 55.

b. Date:
   m m d d y y y y
54.c. Craniotomy diagnosis

- No pathology A
- Exclusionary pathology B
- Unrelated pathology C
- Ruptured aneurysm D
- Intracerebral hematomma E
- Infarction F

55.a. Was an autopsy performed? ............ Yes Y

Go to Item 56.

C. Autopsy diagnosis

- b. Recent bleeding of saccular aneurysm ..... Yes Y
  No N

- c. Intracerebral hemorrhage ............ Yes Y
  No N

- d. Recent nonhemorrhagic infarction of brain ... Yes Y
  No N

55.e. Recent infarcted area (bland or hemorrhagic) .......... Yes Y

f. Source of emboli in a vessel of any organ, or an embolus in the brain .......... Yes Y

56. Abstractor Number: ......

D. ADMINISTRATIVE INFORMATION:

57. Date Abstracted: 

  m m d d / y y y y

58. Are there any serum creatinine values?

  Yes................... Y
  No................... N

Record the value of the first, last, and highest measurements of serum creatinine (mg/dl):

1: First: 

2. date: 

(mm/dd/yyyy)

3. Last (if more than one): 

4. date: 

(mm/dd/yyyy)

5. Highest of remaining values (if more than two): 

6. date: 

(mm/dd/yyyy)