

**NOTE: The hospital inventory is subject to annual updates.**

**Instructions for Paul Coverdell National Acute Stroke Program (PCNASP) Hospital Inventory Survey**

The intent of the Paul Coverdell National Acute Stroke Program hospital inventory is to better understand issues associated with acute stroke care. Responses will be used to identify what types of QI interventions work in particular settings, where gaps exist, and how we can better help hospitals with fewer resources. Additionally, this survey will provide vital information to both CDC and State Health Departments about the capacity of hospitals for stroke care. When this survey is submitted to CDC by State Health Departments, it does not contain identifiable hospital information to protect the confidentiality of hospitals. Responses will be aggregated and may be used as additional information to patient-level data collected as part of PCNASP.

This survey should be filled out, or at least reviewed, by the stroke coordinator or other designee involved in stroke care. Because of the goals of the inventory, please base your answers on practical availability and use of the procedures and resources. For example, your hospital might have written care protocols that are used in less than 50% of cases. If so, then the answer to questions in B.2 would be “No”. Alternatively, some procedures employed at your hospital (pre-notification from EMS) might not be formalized, but regularly take place. In this situation, the answer to question C.2 would be “Always”/ “Sometimes”. Throughout the survey, circle radio buttons indicate that you should select one best answer; checkboxes indicate that you should select all answers that apply. This hospital inventory survey is completed by hospitals and then transmitted to their respective State Health Department (PCNASP awardee) as an electronic file or paper form, based on the request of your State Health Department.

Public reporting of this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a current valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-1108)

**A. Hospital Infrastructure**

1. Hospital code (as assigned through the PCNASP): \_\_\_\_\_
2. What is your hospital's Rural-Urban Commuting Area (RUCA) code? *To determine this, navigate to the Rural Health Information Hub website (<https://www.ruralhealthinfo.org/am-i-rural>). Enter your hospital's address in the search bar and click "locate". Then click on the orange "run report" button in the map. Scroll down to find your hospital's RUCA Code by census tract (e.g. 1.1) and provide this number for the inventory survey.* \_\_\_\_\_
3. Current hospital size (number of licensed beds): \_\_\_\_\_
4. Total number of inpatient discharges (not including observation only, ED patients, ED transfers) in the most recent calendar year: \_\_\_\_\_
5. Total number of acute stroke discharges (primary diagnosis only; see list of ICD-9 and ICD-10 codes in the PCNASP Resource Guide appendix) in the most recent calendar year:  
\_\_\_\_\_
  - a. [Optional] Total number of acute ischemic stroke discharges in the most recent calendar year: \_\_\_\_\_
  - b. [Optional] Total number of TIA discharges in the most recent calendar year:  
\_\_\_\_\_
  - c. [Optional] Total number of subarachnoid hemorrhagic stroke discharges in the most recent calendar year: \_\_\_\_\_
  - d. [Optional] Total number of intracerebral hemorrhagic stroke discharges in the most recent calendar year: \_\_\_\_\_
  - e. [Optional] Total number of stroke (type unspecified) discharges in the most recent calendar year: \_\_\_\_\_

**B. Acute Stroke Care**

1. Does your hospital have a designated acute stroke team? *(A stroke team includes at least one physician and one other health care provider such as a nurse or physician extender. The team is available 24 hours per day and can see patients within 15 minutes of being called. The physician can be a neurologist, emergency physician or another specialist, but must have experience and expertise in diagnosing and treating cerebrovascular disease.)*  
 Yes  
 No
2. Does your hospital have a written protocol or care pathway in place for the following? *(select 'yes' for all that apply)*

a. Emergency care of ischemic strokes (including diagnostic imaging and labs)

Yes *[[IF YES, GO TO 2ai]]*

No *[[IF NO, GO TO 2b]]*

i. If yes to (2a), does it include (*select all that apply*):

- Initial stabilization
- Diagnostic imaging
- Treatment
- Labs

b. Emergency care of subarachnoid hemorrhagic strokes (SAH) (including diagnostic imaging and labs)

Yes *[[IF YES, GO TO 2bi]]*

No *[[IF NO, GO TO 2bii]]*

i. If yes to (2b), does it include (*select all that apply*):

- Initial stabilization
- Diagnostic imaging
- Treatment
- Labs

ii. Does your hospital admit most subarachnoid hemorrhagic (SAH) stroke patients?

We typically transfer SAH patients

We typically admit these patients

We admit or transfer depending on staff availability or other factors (please describe): \_\_\_\_\_

c. Emergency care of intracerebral hemorrhagic (ICH) strokes (including diagnostic imaging and labs)

Yes *[[IF YES, GO TO 2ci]]*

No *[[IF NO, GO TO 2cii]]*

i. If yes to (2c), does it include (*select all that apply*):

- Initial stabilization
- Diagnostic imaging
- Treatment
- Labs

ii. Does your hospital admit most intracerebral hemorrhagic (ICH) stroke patients?

- We typically transfer ICH patients
- We typically admit these patients
- We admit or transfer depending on staff availability or other factors (please describe): \_\_\_\_\_

d. IV tPA (alteplase)

- Yes
- No

e. Endovascular therapy

- Yes
- No

f. Admission orders

- Yes
- No

g. Dysphagia screening

- Yes
- No

h. Discharge planning protocols

- Yes
- No

i. Post-discharge follow-up care protocols

- Yes
- No

3. Does your hospital have a neuro- intensive care unit?

- Yes *[[IF YES, GO TO 3a]]*
- No *[[IF NO, GO TO 4]]*

a. If yes to (3), does your hospital have a neurointensivist to manage care for stroke patients?

- Yes
- No

4. Do all stroke patients receive continuous ECG monitoring for at least 24 hours during admission?

- Yes
- No

5. Does your hospital have neurosurgical services on-staff?
- Yes *[[IF YES, GO TO 5a]]*
  - No *[[IF NO, GO TO 6]]*
- a. If yes to (5), does your hospital have neurosurgical services available 24/7 (may be on-site or at a remote location)?
- Always *[[IF ALWAYS, GO TO 6]]*
  - Sometimes *[[IF SOMETIMES, GO TO 6]]*
  - Never *[[IF NEVER, GO TO 5b]]*
- b. If never to (5a), does your hospital have neurosurgical services available within 2 hours of patient arrival (may be on-site or at a remote location)?
- Always
  - Sometimes
  - Never
6. Does your hospital have stroke neurointerventional capabilities?
- Yes
  - No
7. Does your hospital provide neurointerventional treatment for *(select all that apply)*:
- Intra-arterial alteplase
  - Catheter-based reperfusion/mechanical thrombectomy

**C. Emergency Medical Services (EMS) Integration**

1. Is there a written plan for receiving patients with suspected stroke via EMS (*This should include how the ED receives a call in advance of arrival and may include other information on assigning high priority code to ensure rapid evaluation and transport.*)?
- Yes
  - No
2. Does pre-notification by EMS regarding a suspected stroke case lead to activation of the stroke team?
- Always
  - Sometimes
  - Never
  - No pre-notification
3. Does pre-notification lead to activation of written stroke care protocols (e.g. notification to pharmacy, “clearing” of CT scanner)?
- Always

- Sometimes
- Never
- No pre-notification

4. Does your hospital enter EMS run sheets into a Coverdell-specific in-hospital data collection tool (e.g., GWTG, state-based system)?

- Always
- Sometimes
- Rarely
- Never

5. Do you have a formal process for data feedback to EMS agencies?

- Yes *[[IF YES, GO TO 5a and 5b]]*
- No *[[IF NO, GO TO 6]]*

a. If yes to (5), how is the feedback provided to EMS agencies? *(select all that apply)*

- Fax
- Email
- Phone
- In-person (for example, at a meeting or during a case review)
- Other (please specify): \_\_\_\_\_

b. If yes to (5), for what patient population is feedback provided? *(select all that apply)*

- Patients transported by EMS with a final diagnosis of stroke with pre-notification of possible stroke
- Patients transported by EMS with a final diagnosis of stroke without pre-notification of possible stroke
- Possible stroke patients for whom EMS pre-notified the hospital, regardless of the final diagnosis
- Unknown
- Other (please specify): \_\_\_\_\_

6. Does your hospital have an EMS coordinator?

- Yes
- No

7. [Optional] To what extent has the interaction between the ED and EMS providers changed during the past calendar year, compared to the prior calendar year, with respect to the following:

a. Communication

- Substantial improvement

- Minimal improvements
- No improvement
- Minimal decline
- Substantial decline

b. Data exchange

- Substantial improvement
- Minimal improvements
- No improvement
- Minimal decline
- Substantial decline

**D. Transitions of Care**

1. Do you utilize a transition of care summary with stroke patients during discharge? (*The National Transitions of Care Coalition (NTOCC) defines a transition of care summary as a method of communication between sending and receiving providers and patient/family/caregivers. Use of a transition of care summary has been proven to reduce readmission rates and decrease medical errors.*)

- Always
- Sometimes
- Rarely
- Never

2. Does your hospital conduct post-discharge follow-up on patients discharged to home?

- Yes *[[IF YES, GO TO 2a]]*
- No *[[IF NO, GO TO NEXT SECTION]]*

a. If yes to (2), how long after discharge does this follow-up typically take place?

- 1-7 days
- 8-14 days
- 15-21 days
- 22-30 days
- >30 days

b. Do you follow-up with (select all that apply):

- All patients discharged home
- A sample of patients discharged home
- Only cases that were treated with IV alteplase
- Only cases that were treated with IV alteplase and/or thrombectomy
- Other: (text)

3. Does your hospital utilize an inventory of community resources to make referrals for post-stroke needs?

- Yes

No

**E. Certification and Education**

1. Does your hospital have the following residency or fellowship programs?

a. Neurology

Yes

No

b. Other residency/ fellowship program

Yes

No

2. Is your hospital currently certified as a Joint Commission Acute Stroke Ready Hospital (JC ASRH), Joint Commission Primary Stroke Center (JC PSC), Joint Commission Comprehensive Stroke Center (JC CSC), Joint Commission thrombectomy capable stroke center (TSC) or other similar organization such as Det Norske Veritas (DNV) or Healthcare Facilities Accreditation Program (HFAP)? *(select all that apply)*

JC ASRH

JC PSC

DNV PSC

HFAP PSC

JC CSC

DNV CSC

JC thrombectomy-capable stroke center (TSC)

3. Does your state/county/region/locality have a stroke designation program? *(select all that apply)*

Yes, state stroke designation program *[[IF YES, GO TO 3a]]*

Yes, county/regional/local-level stroke designation *[[IF YES, GO TO 3a]]*

No, there is no state/county/regional/local-level designation program *[[IF NO, GO TO 4]]*

a. If yes to (3), is your hospital currently designated by that entity as a stroke center or stroke capable/ready hospital? *(select all that apply)*

Stroke Center (State designation)

Stroke Capable/Ready (State designation)

Stroke Center (County/regional/local designation)

Stroke Capable/Ready (County/regional/local designation)

4. Does your hospital receive stroke consultation services from another hospital via telemedicine?

Yes, only when in-house neurology is not available *[[IF YES, GO TO 4a]]*

Yes, because we do not have in-house neurology *[[IF YES, GO TO 4a]]*

No, we have 24/7 in-house neurology coverage *[[IF NO, GO TO 5]]*



a. [Optional] If yes to (4), what mode does the telemedicine consult take place? (select all that apply)

- Telephone call
- Interactive video/videoconference
- Other (e.g., teleradiology), please specify: \_\_\_\_\_

5. Does your hospital provide stroke consultation services to other hospitals via telemedicine?

- Yes, we provide telestroke consultation services and can receive patients that we have provided consultations on [[IF YES, GO TO 5A]]
- Yes, we provide telestroke consultation services but cannot receive patients in any cases [[IF YES, GO TO 5A]]
- No, we do not provide telestroke consultation services [[IF NO, GO TO 6]]

a. [Optional] If yes to (5), what mode does the telemedicine consult take place? (select all that apply)

- Telephone call
- Interactive video/videoconference
- Other (e.g., teleradiology), please specify: \_\_\_\_\_

6. [Optional] Does your hospital provide community education on stroke signs and symptoms and importance of calling 911?

- Yes
- No

## F. Data Abstraction

1. What process is used for case identification? (select one best answer)

- Prospective only
- Retrospective only
- Combination

2. Who is responsible for data abstraction? (select all that apply)

- Physician
- Stroke nursing staff/stroke team member
- Medical records staff
- QI department staff
- Other hospital staff (please specify): \_\_\_\_\_
- Outsourced

3. What process is used for data abstraction? (select one best answer)

- Mostly or completely concurrent with care
- Mostly or completely retrospective

Roughly equal-- data collected concurrent with care and retrospective

4. Does your hospital sample cases to abstract for data that is submitted to Coverdell?

Yes *[[IF YES, GO TO 4a]]*

No *[[IF NO, GO TO 5]]*

a. If yes to (4), please briefly describe your sampling method (e.g. following The Joint Commission's requirements), including the percentage of cases that are sampled.

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5. What electronic health record system does your hospital use for stroke cases?

Allscripts

Centricity

Cerner

Computer Programs and Systems Inc (CPSI)

eClinicalWorks

Epic Systems

McKesson

Meditech

NextGen Healthcare

Other (please specify): \_\_\_\_\_

## G. Data Use

1. Who receives data reports on your stroke quality of care? *(select all that apply)*

Hospital CEO/ upper management

Hospital Board

Chief Nursing Officer (CNO)

Stroke Team

Physician Stroke Champion

Chief of Medicine

Other (please specify): \_\_\_\_\_

2. How many systematic quality improvement interventions were implemented by hospital staff as a result of quality of care data reports? *Please briefly describe each one (e.g. if there was one that was particularly successful, and if it addressed a specific problem).*

Number: \_\_\_\_\_

Description:

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3. *[Optional]* In the most recent calendar year, have you run additional analyses (beyond what was required for reporting) on your hospital's own stroke data?
- Yes *[[IF YES, GO TO 4]]*
  - No *[[IF NO, GO TO 5]]*

**H. Quality Improvement (QI) Participation**

1. Did you participate in any QI activities (e.g. QI training, networking meetings, learning collaboratives) offered through the State health department Coverdell program?
- Yes *[[IF YES, GO TO 1a]]*
  - No *[[IF NO, GO TO NEXT SECTION]]*

a. If yes to (1), how many? \_\_\_\_\_

2. *[Optional, but can be used for process and outcome performance measure (POPM) data collection]* Has your stroke team implemented structured quality improvement strategies (e.g. PDSA (Plan-Do-Study-Act) cycles, small tests of change, lean, six-sigma) to improve quality of care in the most recent calendar year?
- Yes *[[IF YES, GO TO 2a]]*
  - No *[[IF NO, GO TO 3]]*

a. If yes to (2),

i. Describe the problem(s) addressed

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ii. Briefly describe results

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iii. Was this a helpful way to address the problem?

- Yes
- No

iv. Why or why not?

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v. What challenges did you encounter?

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3. *[Optional, but can be used for process and outcome performance measure (POPM) data collection]* As a result of participating in the registry the most recent calendar year, what stroke policies or system changes has your hospital implemented?
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- a. Have you assessed the impact of any of these changes, for example, by examining changes in data/performance measures?
- Yes
  - No
4. *[Optional]* To what extent do you have buy-in from upper management (i.e. hospital CEO/board/upper management) to implement stroke QI initiatives? *(select one best answer)*
- A great deal of support
  - A fair amount of support
  - Little support
  - No support
5. *[Optional]* Do you have other QI initiatives that are not directly related to stroke care at your hospital?
- Yes *[[IF YES, GO TO 5a-5c]]*
  - No *[[IF NO, GO TO NEXT SECTION]]*
- a. If yes to (5), are your stroke QI initiatives integrated with other QI initiatives in your hospital?
- Yes
  - No
- b. If yes to (5), compared to other QI initiatives, how important/prioritized are QI initiatives around stroke?
- Much more important
  - A little more important
  - Equally important
  - A little less important
  - A lot less important
- c. If yes to (5), how do you think other hospital QI initiatives affect your stroke QI initiatives?
- Complement
  - Hinder
  - Do not affect

## I. Hospital Retention

1. What reasons or incentives are most important in your hospital's decision to participate in (if new) or continue to participate in the Coverdell Stroke Registry? *(select the three most important reasons)*

- Opportunities for professional development/learning (conference calls, journal articles, etc)
- Opportunities for networking/information sharing with other hospitals
- Desire/Need to enhance the quality of stroke care we provide
- Financial incentive / opportunity to compete for additional funds
- Allows/facilitates my hospital becoming/maintaining Stroke Center designation
- Access to and/or training on the GWTG tool
- Request/interest from upper management/administration
- Opportunity to benchmark my hospital against others in the state
- Hospital recognition
- Other: \_\_\_\_\_

**J. Contact Information**

*(This information is not forwarded beyond the State Health Department staff, is not entered into any database, and will only be used to contact you if we have questions about your inventory.)*

Name: \_\_\_\_\_

Position / Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

What is the best way to reach you?

- Phone
- Email

If by phone, when are the best days and times to reach you?

\_\_\_\_\_

