

NOTE: Do not transmit this data to CDC until OMB approval is obtained. 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 15 minutes/hours 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-xxxx)

A. Hospital Infrastructure

1. Hospital code (as assigned through the PCNASP): _____
2. Current hospital size (number of licensed beds): _____
3. Total number of inpatient discharges in the most recent calendar year: _____
4. Total number of acute stroke discharges (primary diagnosis only; see list of ICD-9 and ICD-10 codes in the 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 hemorrhagic strokes (including diagnostic imaging and labs)

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

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

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

- Initial stabilization
- Diagnostic imaging
- Treatment
- Labs

c. Alteplase (IV tPA)

Yes

No

d. Endovascular therapy

Yes

No

e. Admission orders

Yes

No

f. Dysphagia screening

Yes

No

g. Discharge planning protocols

Yes

No

h. Post-discharge follow-up care protocols

Yes

No

3. Does your hospital have a neuro- intensive care unit?
- Yes
 - No
4. Does your hospital have a neurointensivist to manage care for stroke patients?
- Yes
 - No
5. Do all stroke patients receive continuous ECG monitoring for at least 24 hours during admission?
- Yes
 - No
6. Does your hospital have neurosurgical services on-staff?
- Yes *[[IF YES, GO TO 6a]]*
 - No *[[IF NO, GO TO 7]]*
- a. If yes to (6), does your hospital have neurosurgical services available 24/7 (may be on-site or at a remote location)?
- Always *[[IF ALWAYS, GO TO 7]]*
 - Sometimes *[[IF SOMETIMES, GO TO 7]]*
 - Never *[[IF NEVER, GO TO 6b]]*
- b. If never to (6a), 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
7. Does your hospital have stroke neurointerventional capabilities?
- Yes
 - No
8. Does your hospital provide neurointerventional treatment for stroke (capability to give intra-arterial tPA or use of catheter-based neurointerventional reperfusion)?
- Yes
 - No

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 the Coverdell in-hospital record?
 - 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

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

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 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), 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

a. If your hospital is certified by any one of the organizations above, what is the year of your most recent certification? _____

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 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)

b. If designated in 3a, what is the date of the most recent certification(s)?: _____

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
 - Videoconference
 - Other (please specify): _____
5. *[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 (e.g. outsourced, other staff)
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.
- _____
- _____

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:

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]]*

4. *[Optional]* If yes to (3),
- a. In the most recent calendar year, how frequently have you run and used the analyses generated? (*select one best answer*)
 - Weekly
 - Monthly
 - Less than monthly but more than 1-2 times
 - 1-2 times
 - b. In the most recent calendar year, what reports did you run? (*select all that apply*)
 - Pre-programmed/automated reports in the data collection tool (e.g. GWTG)
 - Additional reports beyond pre-programmed reports from the tool
 - c. How do you use these analyses/ reports?
 - Inform quality improvement (QI) efforts and/or plan “action items”
If yes, what action items / QI efforts did you plan as a result of these reports? _____
 - Report to management/administration on our progress
 - Other (please describe): _____
5. *[Optional]* If no to (3),
- a. What is the main reason you do not run your own additional analyses? (*select one best answer*)
 - Not sure how to run analyses
 - Not sure what analyses are needed/would be helpful
 - Lack of time
 - Lack of interest from the stroke care team
 - All of the analyses we need are provided by the state
 - Other: _____
6. *[Optional]* In this past year, approximately how many presentations (either using state-provided reports or data reports you have run internally) were made?
- None
 - 1
 - 2-4
 - 5-12
 - More than 12
- a. What were the topics of the presentations?

b. To whom were presentations made (including abstracts presented at meetings)? *(select all that apply)*

- Stroke Team
- Grand Rounds
- CEO, CNO, Upper Management
- Hospital Board
- Local, State, or Regional Stroke Meeting or Quality Improvement Meeting
- National or International Stroke Meeting or Quality Improvement Meeting

7. *[Optional]* Are data presentations a standing agenda item during your “Stroke Team Meetings”?

- Yes
- No

8. *[Optional]* What other data or information do you need (that current data reports/queries are not providing) in order to help you plan QI efforts at your hospital?

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? _____

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?

Optional Modules These following modules are not required to be forwarded to CDC. States may elect to collect this information and can modify the questions to suit their program's needs

K. [Optional] Data Reports

1. To what extent are data reports provided by the state:

a. Understandable?

- Very
- Somewhat
- Not at all

b. Useful?

- Very
- Somewhat
- Not at all

c. Applicable / Relevant to the needs of your hospital?

- Very
- Somewhat
- Not at all

d. Timely/Provided at the right time interval?

- Very
- Somewhat
- Not at all

2. What could be done to make the reports more useful for your hospital? *(select all that apply)*

- Provide in a different format (specify format): _____
- Contain additional analyses (specify the analyses): _____
- Be provided more frequently (specify how frequently): _____
- Be provided less frequently (specify how frequently): _____
- Other: _____

3. What additional reports would you like to receive from the State that you do not already have or receive?

L. [Optional] Quality Improvement

1. 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 1a]]*
- No *[[IF NO, GO TO 2]]*

a. If yes to (1),

- i. Describe the problem(s) addressed _____
- ii. Briefly describe results _____
- iii. Was this a helpful way to address the problem?
 - Yes
 - No
- iv. Why or why not? _____
- v. What challenges did you encounter? _____

2. Has your stroke team used other types of quality improvement methods other than PDSA?

- Yes *[[IF YES, GO TO 2a]]*
- No *[[IF NO, GO TO 3]]*

a. If yes to (2), please name or describe:

3. As a result of participating in the registry the most recent calendar year, what policy or system changes has your hospital implemented?

a. Of those that were implemented, how many (or which) have been maintained?

b. Have you assessed the impact of any of these changes, for example, by examining changes in data/performance measures?

- Yes
- No

4. 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. Do you have other QI initiatives that are not directly related to stroke care at your hospital?
- Yes *[[IF YES, GO TO 6a-6c]]*
 - No *[[IF NO, GO TO NEXT SECTION]]*
- a. If yes to (6), are your stroke QI initiatives integrated with other QI initiatives in your hospital?
- Yes
 - No
- b. If yes to (6), 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 (6), how do you think other hospital QI initiatives affect your stroke QI initiatives?
- Complement
 - Hinder
 - Do not affect

M. [Optional] QI trainings

1. To what extent was the QI support offered by the State (e.g. in person training, conference calls/webinars, individual TA for your hospital)
- a. Understandable?
 - Very
 - Somewhat
 - Not at all
 - b. Applicable / Relevant to the needs of your hospital?
 - Very
 - Somewhat
 - Not at all

c. Provided at the right time interval?

- Very
- Somewhat
- Not at all

d. Additional comments

2. What topics or areas would you like to receive future training on? _____

3. What mediums (e.g., PowerPoint slides, videos, conference calls, face-to-face meetings) do you find most effective to receive trainings? _____

4. How could the QI support offered by the State be more beneficial? *(check all that apply)*

Contain additional topics (specify topics): _____

Be more tailored to my hospital's specific needs (specify needs):

Be provided more frequently (specify how often): _____

Be provided less frequently (specify how often): _____

Provide in a different format (specify format): _____

Other: _____

N. [Optional] EMS Interaction

1. To what extent has the interaction between the ED and EMS service 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

