

# JC Stroke Survey Questions

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**Please utilize the below talking points as a study guide for a stroke survey. Please study all sections, even if the section title does not pertain to your current role/unit. Surveyors may ask any questions related to stroke in any area.**

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## **What is goal of JC?**

To increase Patient Safety, quality and care

### **EMS**

- **Does EMS call from the field?**  
Yes
- **Does EMS Bring patient to CT scan?**  
Sometimes
- **How many EMS/paramedic crews in area?**
- **Does EMS give us Pre-notification?**  
Yes.
- **Does AWH have an ambulance service?**  
Not a 911 service.  
Medevac air and ground for intercepts and transfers.
- **Does EMS use FAST?**  
Yes, their stroke pre-assessment is the “Cincinnati Stroke Scale” which includes FAST
- **Do they give symptom onset time?**  
Yes
- **Do you give Feedback to EMS?**  
Yes
- **When EMS calls ahead of time do you activate your stroke team?**  
Sometimes
- **Do you admit or transfer bleeds?**  
AWH admits ICH and transfers out SAH patients who need Clips and Coils.
- **Who admits patients?**  
Hospitalist, Intensivist, and some Family Practice (mostly Hospitalist)
- **What are your stroke units?**  
MSICU, IMC, MAP
- **Does every TIA/CVA have a neuro consult?**  
Yes

### **ED**

- **What do you do if you see a pt. with a stroke?**  
Activate Code Stroke
- **When do you call an ED stroke response?**  
When the symptoms include, but are not limited to:  
Sudden confusion, trouble speaking or understanding speech.  
Sudden numbness or weakness of face, arm, or leg especially on one side of body.  
Sudden trouble seeing in one of both eyes.  
Sudden trouble walking, dizziness, loss of balance or coordination.  
BEFAST
- **How does Lab know bloods are stroke?**  
Lab is part of the Code Stroke page
- **How does CT result get to you?**  
Radiologist calls ED MD / Neurologist for ER.  
Radiologist calls Hospitalist for Inpatient Code Stroke.
- **Is CT Test result considered “critical”?**  
Yes the physician needs to know the results
- **What is compliance with dysphagia screen?**  
Refer to dysphagia data on stroke board
- **Show me stroke packet?**  
Green folder
- **How do you know CT is ready?**  
Call
- **Does Neurology come to bedside?**  
Yes
- **How do you facilitate getting patient out of ED to stroke designated unit?**  
Hospital Supervisor gets a bed on Stroke Units
- **Do you use MRI in stroke?**  
Yes, not first line
- **Who brings patient. to CT?**

# JC Stroke Survey Questions

Nurse, EMT

- **Do you draw bloods prior to CT?**  
Usually but don't delay CT for lab draw
- **If you could do one thing what would you do to improve stroke program?**  
Think of this ! ( Please pass your ideas to the Stroke Coordinator!!)
- **What is door to lab results?**  
30 minutes
- **What bloods are drawn during stroke activation?**  
Accucheck, CBC, COMP,PT/INR
- **Show me results of CT?**  
Under results tab
- **Do you use CTA?**  
yes
- **How many ED visits per year?**  
>34,000
- **Do you mix TPA or Pharmacy?**  
Pharmacy
- **If pt. needs coil or clipping do you do here?**  
No
- **Where do you send?**  
Usually UW-Madison
- **Do you have a transfer agreement?**  
Yes

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## Stroke Activation

- **Who can call a stroke activation?**  
ER – MD / RN
- **What is Door to MD time?**  
10 minutes
- **What is door to CT done time?**  
25 minutes
- **What is door to CT read time?**  
45 minutes
- **Do you wait for Radiologist read prior to tPA?**  
Radiologist or Neurologist can read
- **How do you activate a stroke response?**  
Tell Unit Clerk / Patient Access staff to page "Code Stroke"
- **When do we call an Acute Stroke Response?**  
When onset of symptoms occur within 24 hours
- **Who respond to a stroke response?**

ED- ED Physician, Primary RN, EMT / Paramedic, CT, Lab, Pharmacy, Nursing Supervisor, Stroke Coordinator, Neuro NP, Neurologist (if LKWT <4.5 hours)

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## NIHSS

- **Who can perform the NIHSS during a stroke activation in ED?**  
ED Physician, ED APP, Neurologist, Neuro NP
- **Is RN Staff NIHSS Certified?**  
Not yet but education is planned
- **If you are not certified can you perform NIHSS?**  
NO
- **What does your neuro assessment consist of?**  
Stroke neuro assessment in EPIC

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## CT SCAN

- **How do we monitor cumulative dosing?**  
CT Dept. monitors
- **What if another patient is on table?**  
Have second scanner
- **What if emergency occur while you are scanning pt.?**  
Stroke activation takes precedence, have another scanner
- **What kind of education did you get on stroke?**  
Dept meetings
- **Who reads films?**  
Days: Radiologists  
Nights: VRAD
- **Do you monitor over reads?**  
Yes

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## Labs/Tests

- **What is goal for lab results?**  
Door to result <=30 minutes. Glucose is POC testing. If pt is on Coumadin we wait for INR

# JC Stroke Survey Questions

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results otherwise do not wait for other labs prior to administering tPA.

- **When should CT be completed? /Read?**  
Door to CT  $\leq$ 25 minutes from Ed arrival or 25 minutes from symptom onset if inpatient.  
Door to CT resulted  $\leq$ 45 Minutes from Ed arrival
- **How does lab know it is a Stroke activation?**  
Code Stroke page
- **What labs do we perform?**  
POC Glucose, CBC, COMP, PT/INR/PTT,

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## **BP Management**

- **What are BP Guidelines for CVA/TIA?**  
220/120
- **What are BP guidelines for ICH?**  
Keep SBP less than 140- 160
- **What are BP guideline prior to TPA?**  
185/110
- **What are BP guideline during and 24 hours after TPA?**  
180/105
- **What antihypertensive are recommended to control HTN in stroke patients?**  
Labetalol, Hydralazine, Nicardipine

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## **tPA = Activase (Alteplase)**

- **Who can administer tPA?**  
RN from ED or MSICU
- **What solution do we use to mix tPA?**  
Reconstitute with Sterile Water. (Dextrose containing solutions, such as D5W, are contraindicated for stroke patients due to poorer outcomes.)  
Pharmacy mixes tPA.
- **What is the bolus dose?**  
Bolus Dose = 10% of the Total Dose
- **What is the IV Infusion Dose?**  
90% of the Total Dose
- **How long is tPA good for after mixed?**  
8 hours
- **What is the max dose of tPA?**
- 90 mg

- **Where is tPA kept?**  
Pharmacy
- **Does tPA need dual verification?**  
No
- **The time frame between tPA bolus and infusion cannot exceed?**  
4 minutes
- **What rate does the NS infuse at after tPA?**  
Same as infusion rate
- **What are VS /Neuro checks post tPA?**  
Every 15 minutes x 2 hours, then  
Every 30 minutes x 6 hours, then  
Every one hour x 16 hours
- **What are the BP parameters to initiate of tPA?**  
Cannot be greater than 185/110
- **What are BP parameters during and post tPA?**  
Cannot be greater than 180/105
- **How do you receive TPA education?**  
Orientation, Dept meetings, Skills Days
- **What is the inclusion criteria for tPA?**  
Must have stroke symptoms  
Must be 18 years of age or greater  
Must be within 4.5 hours of Last Known Well  
See Exclusion / Inclusion criteria in Green Folder
- **What does "Last Known Well" mean?**  
The time at which the patient was last known to be without the signs/symptoms of the current stroke or at his/her prior baseline.
- **What is "Onset of Symptoms" mean?**  
When the symptoms first became apparent (first started)
- **What does "Discovery of Symptoms" mean?**  
When someone first noted the symptoms. May be the same as Onset of symptoms. (May know the Discovery of Symptoms time and not the true Onset of symptoms time.)
- **What is rate of bleeding with tPA?**  
6.4%
- **What are risks of tPA?**  
Bleeding, Angioedema, worsening symptoms
- **Do you check for angioedema?**  
Yes, during Neuro assessments,  
Increased risk of angioedema when taking an ACE inhibitor

## JC Stroke Survey Questions

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- **What are contraindications for tPA?**

**Stroke onset from Last Known Well between 0 – 4.5 hours**

- Onset of symptoms > 4.5 hours
- Previous stroke in the past 3 months
- Intracranial Hemorrhage (ICH)
- MI in the past 3 months
- Major surgery in the past 14 days
- Arterial puncture in a non-compressible site in the last 7 days
- No evidence of acute trauma or bleeding
- On Coumadin therapy with an elevated INR > 1.7

**In addition for Stroke onset from Last Known Well between 3 and 4.5 hours:**

- Patient cannot be greater than age 80
- On oral anticoagulation therapy regardless of INR
- Baseline NIH score > 25
- History of stroke and Diabetes

- **How soon after tPA do you repeat head CT?**

Within 24 hours, sooner if have S/S of bleeding or headache or change in neuro status

- **Who prepares TPA?**

Pharmacy

- **Show me TPA orders?**

EPIC

- **Do you do actual or estimated weights prior to tPA?**

Actual, have stretchers in ED with scales  
On Floor, all patients have actual weights on Admission

- **Do you obtain written consent for tPA?**

No.

- **Can you transport pt. with TPA infusing?**

Yes

- **If TPA candidate where does patient go?**

MSICU for at least 24 hours

- **How long does pt. stay in MSICU post tPA?**

24 hours

- **Do you have resources for TPA in ED/MSICU?**

Unit based Pharmacist, In-house Pharmacist, Neurologist, Neuro NP, Stroke Coordinator, IV pump tPA programming reference

- **Do you wait for lab results prior to tPA administration?**

Need glucose POC result and INR if on coumadin

- **What is DTN?**

60 minutes or less, like to shoot for 45 min or less at least 50% of the time.

- **What is best DTN?**

27 minutes

- **Walk me thru process of mixing tPA**

RECONSTITUTING, DOSING AND ADMINISTRATING:

Alteplase is intended for administration by IV infusion after a bolus is given

1. Add contents of accompanying vial of sterile H<sub>2</sub>O diluent for reconstitution of alteplase (activase) using spike which accompanies dose (do not use bacteriostatic H<sub>2</sub>O).
2. Allow H<sub>2</sub>O to passively flow into activase vial. Do not agitate or shake vial.
3. Roll the vial gently in roll hands to dissolve Medication may foam, this is common. Dilution is now 1mg alteplase/1cc sterile water.
4. Pharmacy will put required bolus and infusion dose of alteplase (asctivase) in bag and hand carry to ED RN.
5. Bolus is given from bag via pump immediately followed by infusion.

- **Can you shake vial of TPA?**

NO swirl only

- **Do you flush with NS?**

Yes, same rate as infusion

- **What are the stroke designated Units?**

ED, MSICU, IMC, MAP

- **If pt. not a candidate for tPA and come within TPA time frame what do you do?**

Consider Neurointervention

- **Are Staff and Pharmacy required to do TPA competency?**

- **Need 50% DTN to be 60 min or less**

Keep this in mind

- **What is National Average for TPA utilization?**

6 %

## JC Stroke Survey Questions

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- **After Alteplase (Activase) is mixed, what is the final concentration?**  
Dilution is 1:1 (1 mg Alteplase for 1 cc Sterile Water)
- **Do you withdraw the amount of Alteplase (Activase) that is not required for infusion?**  
Yes (only the recommended dose should remain in the bag)
- **Over what duration Alteplase (Activase) should be infused?**  
1 hour
- **How long should patient be on bedrest following tPA administration?**  
24 hours
- **How long after tPA infusion is completed can a patient receive anticoagulation?**  
24 hours after completion
- **Can a patients who receive tPA receive endovascular interventions?**  
Yes
- **Can you tell if stroke order set was used?**  
Yes

### **General Questions**

- **Tell me about you?**
- **How are you competent to take care of this pt.?**  
Stroke Education
- **Is Aspirin considered an anticoagulant?**  
No, Antithrombotic
- **What is permissive HTN?**  
Allowing for high blood pressure in stroke population so do not extend infarct.
- **Why is the physician allowing the bp parameters to be so high?**  
Higher parameters are sometimes used for stroke patients when physicians are allowing for “Permissive Hypertension” in the Acute Ischemic Stroke Population.
- **What meds is patient on?**
- **Was dysphagia screen done?**
- **Can a float take care of stroke patient on your unit?**  
No
- **What do you do if you have a float?**  
They do not take a team assignment

- **What are you proud of on this unit?**  
Need to think of something!
  - **Tell me about your role in a stroke activation?**  
Part of stroke activation team for inpatients
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### **Patient Education**

- **Show me stroke education**
  - **What goes on white boards?**  
Care team, diagnostic tests, patient name
  - **Do you teach patient about their individuated risk factors for stroke?**  
Yes
  - **What method do we use to teach?**  
TEACH BACK Method
  - **Will interview patient**  
See possible interview questions in other section.
  - **What is your patient’s personal risk factors?**  
Examples: Diabetes (know the A1C), HTN (know bp), Hyperlipidemia (know cholesterol levels), etc
  - **Does you patient know their personal risk factors?**  
Teach them and document!
  - **Does AWH have their own Stroke Support Group?**
  - Yes – for patients and families/caregivers. The group meets every other month
  - **How do patients/families receive this information?**  
We speak to the patient about the support group. We also add a phrase to the AVS. The AVS is a standard, generic document that then gets customized by the care team to make it patient-specific. Physicians/MLPs, Nurses, Care Managers, etc enter the instructions, meds, and follow-up information. The Patient Instructions and Follow-Up Information are 2 separate sections, but both are part of the discharge workflow.
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# JC Stroke Survey Questions

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## Patient Interview

- Tell me your experience here?
- Can you tell me your risk factors?
- What are S/S of stroke?
- What will you do if you have S/S of stroke again?

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## Committees and Teams

- Do you have a stroke committee?  
Yes
- When does it meet?  
Once a month
- Who attends from your department?  
ER – Dr Weddle Medical Director,  
Robin ED Director, Lisa Stroke Coordinator  
CT – Dr Stanley, Seth Pajtash

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- What month is Stroke Awareness Month?  
May
- When is World Stroke Day?  
Observed on October 29<sup>th</sup> each year. Its function is to raise awareness of the prevention and treatment of stroke, as well as to ensure better care and support for survivors.

### ADDITIONAL QUESTIONS

- What is process for implementation of down time orders and protocols
- What are 5 elements that must be addressed during patient / family education
  1. Personal risk factors
  2. Warning sings
  3. How to activate ems
  4. Follow up
  5. Meds at dc
- Do your stroke patients fall?
- How do you prevent falls and any programs you have?
- How do you identify patients who may have a stroke while an inpatient,
- What has been learned and changed based on feedback

- What stroke quality measure do you have the most impact on
- What have you done to m improve the care and outcomes of your stroke patients in the past two years
- How do you mobilize your patients with weakens or paralysis
- Is your staffing adequate to manage the stroke patients care