Preparing Your Hospitals for Acute Stroke Ready Hospital Certification

Disclosures

• none
Objectives

• Describe the role of the ASRH in the management of the acute stroke patient.
• Review stroke protocol as it applies to the ASRH designation.
• Explore desired performance elements utilized for process improvement and effectiveness of the stroke program.
>50% of stroke patients live outside a 60 minute travel time to closet Primary Stroke Center (PSC) or Comprehensive Stroke Center (CSC)

Evidence proves that certified stroke and heart centers improve patient outcomes and provide better care.
Why go to an Acute Stroke Ready Hospital?

• Fundamental Goals of ASRH’s
  • Provide rapid diagnostics (NC-CT Scan of Head, Labs, EKG)
  • Stabilization
  • Emergency Treatment
  • Improve access to additional care
  • Streamlining process and transfer to appropriate close PSC or CSC

Core Team

• Nurse and physician
  • ED physician
  • Provider appointment letter
  • Must have ≥ 4 stroke education

• Desired attributes
  • Attend neuro-related conferences
  • Evidence of CE in stroke
  • Demonstrated engagement
    • Present for meetings
    • Leadership example for peers
  • Emphasis on acute stroke care strategies
Stroke Protocol

Purpose - Ensure all elements of care are:
- Addressed
- Organized
- Safe

Flowcharts are NICE
- Have flowchart/algorithm for ED process as well as inpatients if you have inpatient areas

Stroke Protocols, cont’d

- Ensure protocols address:
  AIS
  ICH
  SAH
- Protocols and order sets should match Clinical Practice Guidelines
- Protocols should address benchmark times
Don’t Forget!

- NIHSS requirements (expectations) should be in protocol
  - Responsible staff member (Doc, ED Nurse, ACT team?)
  - Evidence of competency (HealthStream, employee file)
  - Expectation for frequency of NIHSS (yearly, every two)

Order Set Content

tPA administration

Documentation requirements:
- Discussion
- Consent (if policy mentions)
- Documentation of inclusion/exclusion

Build into smart phrases, EMR whenever possible in abstract-able fields
Order Set Content, cont’d

- Reversal of anticoagulants
  - Warfarin, Apixaban, Rivaroxaban
    - Vitamin K, PCC, FFP?
  - Dabigatran
    - Praxbind
  - Appropriate labs to monitor reversal

- Elevated ICP
  - Recognition first (education only)
  - Interventions (order and/or education)
  - Management (order)

- Seizure control
  - First line drug choices
  - Intubation necessity

Order Set Content, cont’d

Blood Pressure Management

- MUST have order sets to reflect different populations
  - s/p tPA
  - No tPA but confirmed/suspected AIS
    - Permissive hypertension?
    - Guidelines
  - Hemorrhage
  - First line drugs
    - Ensure Cardene is on formulary
Order Set Content, cont’d

- Laboratory Testing
  - BMP, CBC, Coags, Troponin, ECG, Evidence of Tracked times (TAT)

  **TAT of 45 minutes but should not delay IV tPA administration**

Order Set Content, cont’d

**Imaging**

- NCCT
  - Available 24/7 with TAT of reading <45 minutes
  - On-site or off site read (Remote or TeleStroke)
  - Evidence of tracked times
Order Set Content, cont’d

- Tele-Medicine
  - Connection made <20 minutes from arrival
  - Consult report available
  - Image (PACS) connectivity with host health care system
  - Contract
    - Time performance measures
    - Response times
    - Evidence of use for all strokes or potential strokes
    - Complications
    - Reimbursements
    - Credentialing and privileging

Stroke Unit...

- Do you or don’t you?
- If tPA patients remain at your site...
  - Ensure order sets in place- in use- according to CPG’s
  - NIHSS competent staff (certified?)
  - In-house stroke alert process
    - Criteria for use
    - Telehealth used?
  - Demonstrate role/use of
    - PT
    - OT
    - ST
Transfer

- Target < 120 min from ED arrival (shorter preferred)
- Transfer agreements with at least one PSC and CSC or CSC alone
  - Contact personnel
  - Phone numbers
  - Hours of operation
  - Transport options
- Flowchart expected process, make visible in the ED
- Transfer agreement or written document with EMS agency for ground and air transports
- Staff awareness of process (Providers, Nurses, Unit Clerks, Telecommunications, etc)

Performance Metrics

- Expectations of the ASRH
  - Performance improvement
  - Provide a data collection tool
    - Used to evaluate process
    - Maintains quality and integrity
    - Evidence of data analyzation in accordance with CPG’s (variances addressed)
- Patient satisfaction
- Sentinel event process
Elements of Performance

- DT provider < 15 min
- NIHSS < 15 min
- DT telemedicine link < 20 min
- DT CT read < 45 min
- DT lab result < 45 min
- DTN < 60 min
- DT transfer < 120 min

- Other things to keep an eye on:
  - Inpatient tPA use
  - Stroke alert volume
  - Antithrombotic therapy by end of day 2
  - tPA treatment rate
  - tPA by provider
  - Order set use

DT = Door To

Opening presentation

Multiple presenters (Stroke Coordinator, Stroke Medical Director, ? other member of core team or Admin type person)

Administration should be present

Clearly describe community, demographics, population served, EMS routing

The opening conference sets the tone for the entire survey
Intra-cycle Call

• Talk about lessons learned in past year
• Have key members available for call (regulatory, ED educator, Stroke MD, etc)
• Have all data available
• Recent PI projects
  • Can discuss successes or challenges

Focus Summary

• “Door to”... benchmarks
• Turn Around Times
• Local EMS Protocols
  • RACE
  • ASA/AHA bypass algorithm
• Scheduled Stroke Team Communication and Meeting
  • Medical Director
  • Coordinator
• In Doubt? Announce Stroke Alert!!