

ND Stroke and Cardiac System Conference

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& Health Sciences





What does the Stroke System do?

- Provides a platform for statewide work that can get the patient to definitive care as soon as possible.



Statewide Stroke Accomplishments

- Eligible stroke victims receiving clot busting drugs increased from 30.9% in 2010 to 80.9% in 2013
- 5 of 6 tertiary hospitals have achieved Primary Stroke Center status
- Consensus acute stroke treatment guidelines
- Training for EMS, CAH, and tertiary hospitals on stroke care
- EMS and tertiary partners on stroke care

Stroke Accomplishments Continued

- Statewide Stroke Registry
- Care delivered in ND compared to national standards, & nationwide performance data
- Public education campaign
 - Encourage activating emergency stroke care by dialing 9-1-1

Participating Hospital Advisory Council (PHAC)

Members

- Molly Byrne – Sanford Fargo
- Ahren Dosch – Essentia Fargo
- Brandi Ellison-Sanford Bismarck
- JuLann Wiseman– CHI St. Alexius – Bismarck
- Jerilyn Alexander – Trinity Minot
- Sandy Kovar – Altru Grand Forks
- Nikki Johnson – Cooperstown
- Nikki Mack – Jamestown
- Jamie Nienhuis – Langdon
- Mary Miller– Rugby
- Shawn Smothers – Kenmare
- Doris Vigen – Mayville
- June Herman – AHA Midwest Affiliate
- Pam Moe – AHA
- Shila Thorson – NDDoH
- Tom Nehring – NDDoH
- Jody Ward and Julie Frankl – Center for Rural Health

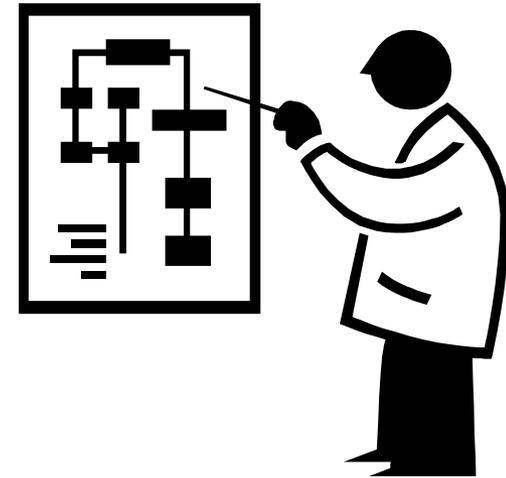
Participating Hospital Advisory Council (PHAC) Activity

- Meets monthly
 - Serve as a liaison for CAHs (Regionally, SSCTF and other Stakeholders).
 - Goal of the council is to carry out specific tasks as directed by the SSCTF.
- CAH Stroke Banners
- Acute Stroke Treatment Guidelines
- Stroke Algorithm Poster
- Stroke Toolkit – Education Modules
- Stroke Folders
- Quality Focus on GWTG Data



Acute Stroke Treatment Guidelines Algorithm

Acute Stroke Transfer Protocol		Pt Name: _____ DOB: ____/____/____	
AS S E S S M E N T	<input type="checkbox"/> BP <input type="checkbox"/> Pulse <input type="checkbox"/> V/S q 15 min with neuro checks <input type="checkbox"/> Continuous Cardiac Monitoring <input type="checkbox"/> Weight _____ kg <input type="checkbox"/> NIHSS on arrival _____ (If Performed) <input type="checkbox"/> Keep NPO (including meds)	Acute Stroke Intervention Algorithm <pre> graph TD Start[Pt with signs/symptoms of stroke and symptom onset < 8 hrs] --> CT[Does the facility have CT scan capabilities?] CT -- No --> Transfer[Arrange for rapid transfer One-call numbers on cover sheet] CT -- Yes --> tPA[Is facility able to give tPA?] tPA -- No --> Transfer tPA -- Yes --> Assess[0 - 10 min Complete Assessment and Time Sections] Assess --> CT_Scan[10 - 25 min Completed diagnostic Section 45 min Interpretation of CT] CT_Scan --> Hemorrhage[If CT negative for hemorrhage, refer to Inclusion/Exclusion Criteria] Hemorrhage --> Hemorrhage_Pos[If CT positive for hemorrhage, transfer] Hemorrhage --> Hemorrhage_Neg[If no exclusions, consider IV tPA. May consult with neurologist on call (numbers front page)] Hemorrhage_Neg --> tPA_60[60 min If tPA ordered, refer to tPA Administration Order set and Treatment Section. Transfer to Tertiary Care Center] Hemorrhage_Neg --> tPA_36[3.6 to 4.5 hr For select patients (see additional exclusion criteria) If tPA ordered, refer to tPA Administration Order set and Treatment Section. Transfer to Tertiary Care Center] Hemorrhage_Neg --> Disposition[Complete Disposition Section and prepare to transfer to Tertiary Care Center (send copy of this form and pertinent records)] Hemorrhage_Pos --> Disposition Hemorrhage_Pos --> tPA_Consider[Pt's with ischemic stroke and out of window for IV tPA may be candidates for IA tPA or mechanical embolectomy. Contact appropriate tertiary facility for consideration.] </pre>	
	Date: _____ : _____ ED TRIAGE TIME Date: _____ : _____ TIME LAST SEEN WELL _____ : _____		
D I A G N O S T I C S	<input type="checkbox"/> CT Head w/o contrast CT Results: <input type="checkbox"/> No acute findings <input type="checkbox"/> Hemorrhage <input type="checkbox"/> New Ischemic Stroke <input type="checkbox"/> Other: _____ <input type="checkbox"/> Stroke Panel - CBC, Platelets, PT-INR / PTT, Chem 8 / BMP, cardiac enzymes, glucose (bedside an option), Creat, Preg test (optional) <input type="checkbox"/> 12-Lead EKG		
	<input type="checkbox"/> If tPA candidate, institute tPA Administration Orders <input type="checkbox"/> NPO (including meds) until Dysphagia Screen <input type="checkbox"/> BP Protocol <ul style="list-style-type: none"> • Ischemic: target 185/110 • Hemorrhagic: target 140/80 • No sublingual Nifedipine <input type="checkbox"/> Baseline O2 sat _____ % <ul style="list-style-type: none"> • O2 to keep SATs >94% <input type="checkbox"/> Acetaminophen pr for temp >100.4 F * <input type="checkbox"/> Two Large-bore IV sites * <input type="checkbox"/> Normal Saline 0.9% TKO * If time allows but do not hold up transfer		
T R E A T M E N T	<input type="checkbox"/> Transfer to Tertiary Care Facility <input type="checkbox"/> Activate EMS transfer Family / Contact Name & Cell: _____ ED or Primary Physician Name & Number: _____		
	tPA Checklist <input type="checkbox"/> Onset Sx to tPA bolus <3 hrs. <input type="checkbox"/> Onset Sx to tPA bolus up to 4.5 hrs in select patients (see additional criteria) <input type="checkbox"/> No hemorrhage on CT scan <input type="checkbox"/> Thrombolytic Inclusion / Exclusion checklist completed. No exclusions for administering tPA <input type="checkbox"/> Discussion with patient / family regarding risks/benefits/alternatives <input type="checkbox"/> Consent obtained from patient / family who are eligible in the 3.0 to 4.5 hr window <input type="checkbox"/> If Foley needed, insert before tPA given	IV tPA <input type="checkbox"/> 0.9 mg/Kg (max does 90 mg) <input type="checkbox"/> 10% total dose as bolus over one minute <input type="checkbox"/> Remainder over 60 minutes <input type="checkbox"/> V/S + neuro checks q 15 min during infusion, then q 15 min x 2 hr, q 30 min x 6 hr, then hourly until 24 hours after treatment <input type="checkbox"/> Maintain BP <185/110 <input type="checkbox"/> Repeat CT head if neuro status declines <input type="checkbox"/> No anticoag/antiplatelet for 24 hr	
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5 Modules for Stroke Toolkit

- Module 1 – Basics of Stroke
- Module 2 – Stroke Awareness and the EMS Provider
- Module 3 – Neuro Assessment/Checks
- Module 4 – Inclusion/Exclusion Criteria for Thrombolytic (tPA) Therapy
- Module 5 – Stroke, Guide to Care of the Hospitalized Patient with Ischemic Stroke

Contact Information

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