


Putting the Pieces
Together:
Stroke Education at
Luther Midelfort



Luther Midelfort
Mayo Health System



*Stroke Expert Team
Workgroup*

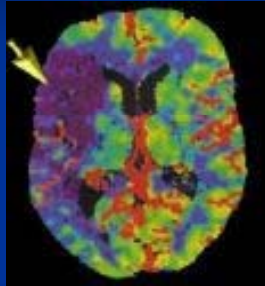
Multidisciplinary group led by Champion-
Felix Chukwudelunzu, MD

Responsibilities

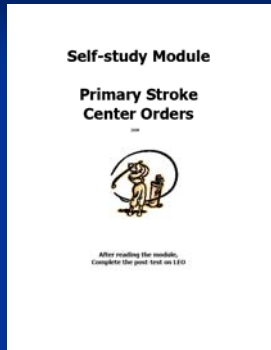
- Responsible for the overall running of the program
- Meets at a minimum of once q2-3 months
- Working groups meets more frequently

Long Term Goal

- Improve patients care and outcome by:
 - Reducing Stroke Mortality
 - Increase # of Patients receiving t-PA
 - Reduce hospital LOS



Staff Education-RNs



Content includes:

- Stroke Order Sets
- Stroke Measures
- Stroke Guidelines
- Frequently Asked Questions and Answers
- Patient/Family Education
- Stroke Clinic
- Stroke Management Zones
- Audit Tools
- Roles and Responsibilities
- Stroke Integrated Flowsheet

Yearly Computer Based Training- CBTs

- “Use of Alteplase in Acute Ischemic Stroke”
 - Identify common symptoms of ischemic stroke
 - Identify rationale for t-PA with indications/contraindications
 - Dosing and mixing
 - Post t-PA monitoring
- “Dysphasia Screening 2009”
 - Sequence of normal swallow
 - Common signs/symptoms of dysphasia
 - How to administer bedside swallow screen

BEDSIDE SWALLOW SCREEN		
Assess-if “no” stop test, document, and consult ST		
Yes	No	Able to follow commands?
Assess-if “no” stop test, document, and consult ST		
Yes	No	Speech clear?
Yes	No	Able to speak or understand words?
Yes	No	Able to clench teeth?
Yes	No	Able to close lips?
Yes	No	Face symmetrical with movement?
Yes	No	Tongue midline? COMPLETED ON ALL
Yes	No	Uvula midline? STROKE/TIA PATIENTS
Yes	No	Gag reflex present? INCLUDING EB PRIOR TO
Yes	No	Able to cough with command x2? RECEIVING ANYTHING PO
Yes	No	Swallows own secretions?
Water Test: Give 5 ML (tsp) water via spoon		
Assess-if “no” stop test, document, and consult ST		
Yes	No	Swallows without choking?
Yes	No	Voice sounds clear?
Yes	No	Swallows without coughing?
Yes	No	Swallows without water dribbling out of mouth?
Water Test: Give 60 ML water via cup		
Assess-if “no” stop test, document, and consult ST		
Yes	No	Swallows without choking?
Yes	No	Voice sounds clear?
Yes	No	Swallows without coughing?
Yes	No	Swallows with out water dribbling out of mouth?

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Nurse Educators

- Evaluates educational needs of staff
- Develops/presents educational programs.
- Facilitates organizational quality improvement activities



Staff Education-Providers

- CME for acute stroke team
- Presentations and discussions
- CBT-Stroke t-PA
- Staff meetings updates-Ed Multidisciplinary Meeting



Aid to Provider Management

- Anticoagulation Clinic-standardized coumadin management using predetermined protocols.
- Stroke Clinic-evaluates and consults with patients who have had a stroke or are at risk.



EMS

- ESIC (Emergency Services Integration Committee) with members from each regional site and Luther Hospital. Meets monthly.
 - Develop/Implement a plan for integrated emergency services in Eau Claire region.
 - Develop/Implement a structure for responding to changes in emergency service environment.
 - Develop/Implement a system for measurement of emergency services success & failures



ESIC

- Treatment/Evaluation Protocols
- Transfer guidelines
- CQI Evaluation tools

- Mayo One (Air)
- Gold Cross (Ground)
- Others (Local ambulances)

General Staff Education

- Facility Newsletters

- LEO

- Skills Fairs



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Patient Education

- Stroke binders for Hemorrhagic Stroke and Ischemic Stroke
 - RNs (hospital)

- ASA/AHA
 - Pamphlets

- Stroke Clinic
 - Staff



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Stroke Guidelines

Target Population: All patients ≥ 18 years-old presenting with neurological symptoms suggestive of:

- Spontaneous Intracerebral Hemorrhage (ICH)
 - Clinical guidelines for Airway and Oxygenation, Imaging Studies, Hypertension, Stroke/Audit Forms/Fluid Management, DVT Prophylaxis, Other Medical Issues such as Body Temp and Agitation
- Ischemic Stroke
 - Clinical guidelines for Imaging Studies, Thrombolysis, Stroke Order/Audit Forms, Hypertension, Anti-Platelet Therapy, Nutrition and Hydration, DVT Prophylaxis and Education

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Protocols and Order Sets

- Administration of t-PA for Non-Hemorrhagic Stroke Order Set RO-2120A
- Admission Order Set for Acute Ischemic Stroke RO-2120E
- Admission Order Set for Intracranial Hemorrhage NS-2120F
- Admission Order Set for Subarachnoid Hemorrhage NS-2120G
- Emergency Dept Order Set NS-2120
- Emergent Reversal of Warfarin Order Set NS-2120C

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Stroke Trigger Tool

Stroke Trigger Tool Patient Stroke goes on the **BACK** of this form.

This is not part of the permanent record

Standard	Met (per met)	N/A	Not Met (per patient met)
1. Bedside swallow screen by RN documented in clinical notes-Bedside swallow screen, before or after swallowing			
2. DVT Prophylaxis ordered			
3. Patient and/or family was given a Stroke Binder. It was reviewed and it was so documented under the Stroke Education Tab in EMS, as follows:			
3a. Stroke binder given to pt			
3b. Nursing notes and symptoms for stroke ("Risk Factors" tab)			
3c. Medication Prescribed ("Medication" tab and Discharge medications)			
3d. Discharge Instructions ("Discharge" tab)			
4. Activation of EMS if experiencing signs and symptoms of stroke.			
5. Importance of follow-up visits			

Comments:

1-5 Click on tab 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

- Document the following:
a) Stroke binder given
b) Risk factors
c) Medications Prescribed
d) Signs and symptoms
e) Activating EMS and
f) Follow-up.

These are NCSEA requirements!

Return this form to the Unit Director

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