Southern Health Santé Sud

Acute Stroke Care Map for Emergency Departments at Non- Stroke Centres

Goal: Disposition decision within 15 minutes (THAT IS: from patient Arrival → decision if Transferable = 15 minutes)

Immediate Assessment and Actions	Time	Initials
■ **Complete Primary Survey/Assessment:** Document on *Triage and Emergency Department Record* (CLI.5110.PL.005.FORM.01)		
■ Check Blood Glucose (if blood glucose [BG] is low, treat and assess patient for stroke once the blood glucose level is back within an acceptable range). *** Low normal BG = 3.3 mmol/L and high normal = 12 mmol/L. ■ Check for Health Care Directive (HCD) / Advanced Care Plan (ACP)		

Screening for Hyperacute Stroke Interventions

Determine when Last Seen Normal (LSN); complete Cincinnati Stroke Scale (CSS) and Los Angeles Motor Scale (LAMS); and determine if patient is taking Non-Vitamin K or Direct Oral Anticoagulant (NOAC/DOAC).

- ■ **Date and Time of onset of symptoms or last seen normal (LSN)**________________________
- ■ **Does patient meet treatment time line of 6 hours?** ☐ Yes ☐ No
- ■ **Cincinnati Stroke Scale (CSS):** assess facial droop, arm drift, and impaired speech. If any one of these signs are present, the patient is positive for the implementation of the stroke protocol defined below.
- ■ **Los Angeles Motor Scale (LAMS):** assess facial droop, arm drift, and grip strength. Generate a score for each sign, as indicated next to each qualifier. Enter the score from each item in the score column. Add the scores and enter the total LAMS score (which can range from 0 to 5). LAMS is used by neurologists to determine the severity of the stroke and the most appropriate stroke intervention.

Assess	Absent/Negative	Present/Positive	Score	Time	Initials
Facial Smile/Droop: Have the patient show their teeth or smile	☐ Both sides of face move easily = 0 LAMS	☐ One side of face does not move at all = 1 LAMS	____		
Arm Drift: Have the patient close their eyes and hold their arms straight out in front of them for 10 seconds. Compare arm movement.	☐ Both arms move equally or not at all = 0 LAMS	☐ One arm drifts down slowly = 1 LAMS ☐ One arm falls down rapidly = 2 LAMS	____		
Speech (only for CSS): Have the patient say **"You cannot teach an old dog new tricks"**	☐ Client uses correct words with no slurring	☐ Slurred or inappropriate words or mute	NA		
Grip Strength (only for LAMS): Have the patient squeeze examiner's index and middle fingers	☐ Normal and equal = 0 LAMS	☐ Weak grip = 1 LAMS ☐ No grip = 2 LAMS	____		
If any of these signs are positive, **Triage CTAS level 1**		**Total LAMS Score**			
■ **Is patient on Rivaroxaban (Xarelto), Apixaban (Eliquis), Dabigatran (Pradaxa), or Edoxaban (Lixiana)?** These are referred to as non-vitamin K or direct oral anticoagulant (NOAC or DOAC). ☐ Yes ☐ No					

A. Evaluate if patient meets time line of 6 hours or less from onset of symptoms/LSN

☐ **If yes, follow nursing actions in sections C and D**

☐ **If no, follow nursing actions in section E**

B. PHYSICIAN ON-SITE:

- ■ Call "Code 25 Stroke" if physician is not within hearing distance.
- ■ **Physician to contact on call Neurologist by calling HSC Priority Paging at 1-204-787-7555**
- ■ Call MTCC (1-800-689-6559) and request transfer to stroke centre as directed by Neurologist.

Southern Health Santé Sud

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C. NURSING ACTIONS: PRIORITY of CARE of PATIENT WHO MEETS 6 HOUR CRITERION for HYPERACUTE STROKE INTERVENTIONS is PROMPT PATIENT TRANSFER	Time	Initial
■ Call MTCC (1-800-689-6559) and request transfer as per Stroke Protocol.		
■ **If the physician is NOT on site:** After transfer arrangements and patient care completed, Contact on-call Physician to inform of events and provide report.		
■ Find out from EMS or Physician if on site which stroke centre patient is being transported to. Contact that Stroke Centre and provide verbal report. ☐ BRHC ☐ BTHC ☐ PDGH ☐ HSC ☐ SBH ☐ Other ________________________________		
Do not delay transfer waiting on paper work, lab results or to perform any task. ☐ Send any lab samples with patient (see directions in section D). ☐ Copy and send with patient <u>or</u> fax the *Manitoba Transfer Referral Form* and other applicable records to: ☐ BRHC ☐ BTHC ☐ PDGH ☐ HSC ☐ SBH Bethesda Regional Health Centre Emergency PH: (204) 326-6411 Fax: (204) 346-3767 Boundary Trails Health Centre Emergency: PH: (204) 331-8800 Fax: (204) 331-8874 Portage District General Hospital Emergency PH: (204) 239-2211 Fax: (204) 856-7028 Health Science Centre Emergency: PH: (204) 787-3160 Fax: (204) 787-5134 St. Boniface Hospital Emergency: PH: (204) 237-2260 Fax: (204) 237-2268 ■ Ensure that the witness to the patient's onset of symptoms and/or last time seen normal is available for the emergency physician to contact. If possible, the witness should go to the stroke centre. Witness name:______________________________Phone number: __________________ Next of Kin name:____________________________Phone number: __________________		

D. NURSING ACTIONS: CARE OF PATIENT WHO MEETS 6 HOUR CRITERION FOR HYPERACUTE STROKE INTERVENTIONS WHILE AWAITING EMS TRANSFER	Time	Initial
■ Neurovitals every 15 minutes.		
■ Continuous cardiac monitoring.		
Do not delay transfer waiting for paper work or to complete tasks		
If time permits: ■ Establish IV ■ 12 lead EKG ■ Draw blood samples <u>If able to draw blood, obtain samples for:</u> CBC, CK, Troponin, aPTT, INR, Glucose, Urea, K, Na, Creatinine, Chloride, AST, ALT; Type & Screen; Pregnancy screen for females under 50 years of age (blood). NB: <u>Tubes</u> to be used for blood samples are: tall lavender; lavender; light green; blue; red tops ■ **Ensure that each tube is labelled with: Patient's first and last name, PHIN #, and time sample collected or it will not be processed**.		
■ Oxygen Therapy: O2 at____________L/min to keep saturation levels between 94% and 98%.		
■ For patient who is conscious and has no injuries, elevate the head of bed 30 degrees.		
■ For patient who is unconscious and has no injuries- place in lateral recumbent position towards paralyzed side with head and shoulders slightly elevated.		
■ Keep patient NPO.		
■ Keep patient on bed rest.		

Southern Health Santé Sud

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E. NURSING ACTIONS: CARE OF PATIENT WHO DID *NOT* MEET 6 HOUR CRITERION FOR HYPERACUTE STROKE INTERVENTIONS			Time	Initial
■ Have physician assess and contact on-call neurologist at **1-204-787-7555** (neurologist may still decide that the patient can be treated).				
■ Arrange for CT as soon as possible but within 24 hours of symptoms onset.				
■ Monitor Vital Signs and Neurological Assessment as per physician orders.				
■ Establish continuous cardiac monitoring.				
■ Establish IV	■ 12 lead EKG	■ Draw blood samples		
Draw blood samples for: CBC, CK, Troponin, aPTT, INR, Glucose, Urea, K, Na, Creatinine, Cl, AST, ALT; Type & Screen; TSH, LDL, HDL, Triglycerides, Total cholesterol; Pregnancy screen for females under 50 years of age (urine and blood). NB: Tubes to be used for blood samples are: tall lavender; lavender; light green; blue; red tops ■ **Ensure that each tube is labelled with:** **Patient's first and last name, PHIN #, and time sample collected or it will not be processed**.				
■ Establish Oxygen Therapy: Keep saturation levels between 94% to 98%; or For patients with COPD, maintain O_2 therapy as per physician orders.				
■ Elevate the head of bed 30 degrees for patient who is conscious and has no injuries.				
■ For patient who is unconscious and has no injuries - place in lateral recumbent position towards paralyzed side with head and shoulders slightly elevated.				
■ Keep patient NPO pending the Toronto Bedside Swallowing Screening Test (TOR-BSST) results.				
■ Keep patient on bed rest.				
■ Post CT: Patient to return to presenting site post CT. Follow *Stroke Standard Orders: No Alteplase (tPA) / Post alteplase (tPA)* (CLI.4110.PL.013.FORM.02) or *Minor Stroke/Transient Ischemic Attack (TIA): Risk Assessment and Standard Orders* (CLI.4110.PL.013.FORM.03)				
■ Arrange for admission to a stroke centre as soon as bed available as per interfacility transfer processes.				