KHSC Local Telestroke Protocol- Draft 4 April 8 2020

For use when Neurologists capable of covering Stroke are not available to attend Acute Stroke Protocol in person due to requirements for self-isolation, quarantine or sickness.

The Regional Stroke Program will engage the following stakeholders in the development/review of this process and in any related communication:

- Regional Stroke Medical Director or delegate
    a. Local Telestroke Neurologists
    b. Residents on stroke service call.
    c. ED Physician lead, Dr. Terry O'Brien
    d. Head of Radiology, Dr. Omar Islam
- Regional Stroke Director or delegate
    e. ED Manager, Jackie Kehoe-Donaldson who will engage charge/others as needed
    f. CLS covering ED, Laura McDonough
    g. DI Manager Kelly Hubbard and Senior CT technologist Barb Delaney

Scenario involves Telestroke with Stroke Neurologist and Resident on-call representing Neurology; used when only 2 stroke neurologists remain available. Off service/call residents would be expected to go through this document at the beginning of their rotation and be familiar with the protocol including Appendix A.
The attending physician on stroke service is responsible for ensuring that all off service residents rotating through the stroke service BE OBSERVED performing the modified NIHSS within 48 hours of start on the Stroke Service.

Telestroke: main telestroke workflow change is tPA is administered in ED vs CT

Scenario A: Telestroke with Resident on-call

1. EMS Pre-notification provided to Resident on call AND Stroke neurologist on call.
2. ED Nurse or delegate turns on the telestroke workstation and places it in position in area A
3. On patient arrival, ED nurse follows usual protocol while resident gets the brief story from EMS, assesses the patient and takes the patient to CT Scan with the nurse and EMS.
4. The resident and neurologist discuss the case over the phone during the CT scan. Option for the neurologist to talk to EMS if needed to clarify history.
5. Neurologist calls ER to ensure Telestroke system is on/ready
6. The neurologist reviews the image live during this process using RAPID app
7. The resident is present with the patient at bedside all along and upon return from CT, signs into REACTs telemedicine platform.
8. The neurologist comes live on Telestroke when the patient is back from the CT.
9. All information regarding the CT Scan, Treatment decision, options available will be discussed with the patient by the resident and telestroke neurologist.
10. If decision made to deliver tPA → resident administers
11. If EVT proceeds AND no Neurologist capable of covering stroke available in person → Telestroke neurologist discusses imaging/case with IVR and resident; patient taken to IVR; resident supports IVR in ongoing neuro assessment as required

Appendix 1- Simplified Stroke Examination

1. Impaired level of consciousness? Yes or No.
2. Gaze towards one side? Yes or No.
3. Sees hand waving on both the left and right side? Yes or No.
4. Able to raise arm to 45 degrees for 10 seconds without drift? Yes or No.
5. Able to straight leg raise with heel 6 to 12 inches off bed? Yes or No.
6. Speech impaired? Yes or No.
7. Feels tap on left shoulder? Yes or No.

Still to be determined: Telestroke unit storage location & charging process; resident signing into REACTs