Transfers from an ASRH to CSC

Aurora St. Luke's Medical Center

March 4th, 2021 Suzy Lesser MSN, RN, SCRN Stroke Program Manager

Aurora St. Luke's Medical Center

- **Licensed Beds: 938**
  - General Beds: 465
  - ICU Beds: 126
  - Neuro-Surgical ICU Beds: 27
  - Stroke Unit Beds: 46
  - Rehab Beds: 36
- **Operational Beds: 636**
- **Medical Staff:**
  - Active and Associate: 1241
  - APPs: 419
- Accredited by DNV
- TJC Comprehensive Stroke Center
- Achieved Fifth Magnet Recertification in 2018
- State certified as a Level III Trauma Center
- Rehab: CARF Accredited
- Chest Pain Center Accreditation, Society for Cardiovascular Patient Care
- Mechanical Circulatory Support Device (VAD) Program: Joint Commission
- PCI Designation Level III
- Transplant Program: United Network for Organ Sharing (UNOS) Designated Transplant Center - Solid Organ
- AHA GWTG Gold Plus Target HF Honor Roll

The Joint Commission

American Heart Association

American Stroke Association

CERTIFICATION

Meets standards for

Comprehensive Stroke Center

DNV·GL

Our Stroke Journey

2005 – Obtained TJC Primary Stroke Certification

2014 – Obtained TJC Comprehensive Stroke Certification

April 2021 – anticipated first DNV Comprehensive Stroke Certification Survey

Assessments

- LKWT
  - Consistent LKWT
  - Last Known Well vs Last Known Normal
- NIH
  - Mainly scores MCA region
  - Score can vary across practitioners
  - Ensure you are scoring the first response, do not coach the patient
  - Score what the patient does, not what you think the patient can do
  - https://www.youtube.com/watch?v=do2CbY_Nm5c
- Dysphagia
  - Fail if patient has a facial droop
  - Have plan for a swallow eval for those who fail

Why is the NIH so Important?

- Initial score of 7 was found to be important cut-off point
  - NIHSS >7 demonstrated a worsening rate of 65.9%
  - NIHSS <7 demonstrated a worsening rate of 14.8% and were almost twice (1.9x) as likely to be functionally normal at 48 hours (45%)
  - (DeGraba et al., 1999)

- NIHSS <5 most strongly associated with D/C home
- NIHSS 6-13 most strongly associated with D/C to rehab
- NIHSS >13 most strongly associated with D/C to nursing facility
  - (Schlegel et al., 2003)

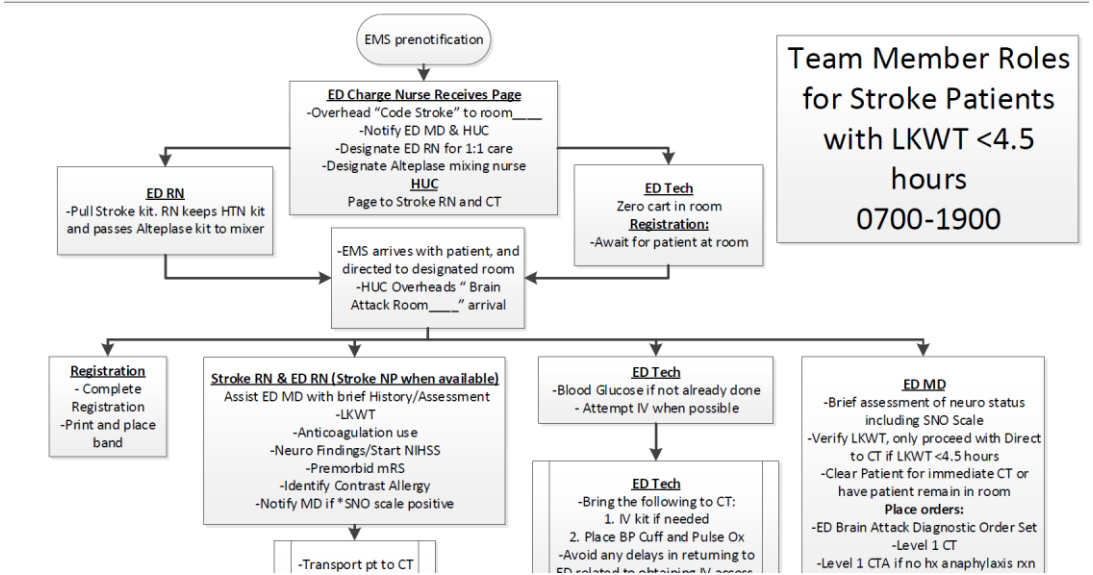
- A change from 2-4 may be a significant change that should be communicated to the provider if the patient has a in motor strength, sensory change, or visual field deficit

Diagnostics

- Labs
  - Glucose
  - If on Coumadin need INR ASAP
  - Draw rainbow
- Door to CT start < 25 minutes
- Door to CT result < 45 minutes
- Door to CTA result <60 minutes
- PT/PTT result median of 45 minutes

How do we achieve times?

- **Know your roles**
  - Have team members assigned to each task
- **Establish processes for speed and efficiency**
  - For ED staff
  - Neurology
  - Transfer



Thrombolytics < 45 minutes

- Direct to CT Process
  - Do not room your patients
- Team members each assigned a task
  - RPh/RN to mix alteplase
- Involving Teleneurolgy early
- Administer hypertensive medications early
  - Give 1 dose of labetalol, then move on to Cardene
- Staff follow up for all stroke patients
- COMMUNICATION

Door in, Door Out

- **Coordination with Tertiary Access Program**
  - Notify TAP ASAP to begin communication about need to move patient
  - Bed Constraints for non Alteplase and LVO patients
  - Teleneurology assisting with LVO coordination
- **EMS transport**
  - Let EMS know:
    - When flush will need to be started
    - Any HTN medication given
    - BP Parameters
    - Neuro check
    - Where they are going at sending facility – ICU vs IR
      - Do they need to call anyone upon arrival?

Door in, Door Out

- **Report to sending facility should include:**
  - Time bolus was given
  - Any HTN medications given
  - Any meds that were hung upon discharge
- **Feedback**
  - ASLMC sends feedback on any alteplase or LVO patient that is sent.
  - This helps us to communicate any care concerns as well as close the loop with the sending facility.

Metric	Result	IV Alteplase Goal	MER Goal
ED MD Eval	At arrival time	<5 minutes	<5 minutes
Notify Stroke Nurse	Pre-notification	Immediately after EMS pre-notification or arrival to triage	
Initiate CT Scan	1	<5 minutes	<15 minutes
Stroke MD Consult	2	<15 minutes	
Interpret CT	14	<25 minutes	
Initiate CTA Scan	45	<30 minutes	
Neuro IR Consult	15	<30 minutes	
Interpret CTA	1:23	<45 minutes	
Door to Needle (Alteplase)	40	Primary<45/Stretch<30	
ASLMC to Groin	9	NA	<60 minutes
ASLMC to first pass	20	NA	<90 minutes
ASLMC to Reperfusion	30		<120 minutes
TICI Score	2b		2B or 3
Door-In Door-Out	1:16		< 60 minutes

Patient Outcome:
Most Recent mRS: 5
Most Recent NIHSS: 17

Additional Timing Measures
LKWT-Reperfusion: 3:53
Initial ED Arrival-Reperfusion: 2:33

Recommendations for Improvement:
Really great times overall. Nice work by the Hartford team. The door-in door-out time and coordination of care appears to have gone well after initiating the CTA and getting the patient out.

Questions