

TeleStroke Consult Workflow guide

1. **Introduce yourself and role**, use “stroke specialist or stroke doctor from UW” in your intro; if appropriate, ask if OK to use this technology **document the time you joined consult...**
2. **Check audio/video** both ways, make sure patient can see you; for audio **use headphones** if needed, turn up volume on Teladoc screen
3. **Ask for a brief update** from remote provider team
 - a. LKW, NIHSS, antithrombotics, other obvious contraindications?
4. **KEY focus, make thrombolysis decision ASAP**
5. **As soon as you think thrombolytic is possible, suggest they mix, and mark the time**
 - a. Document the time lytic recommended (and time started if known) in the thrombolytic section of Teledoc note
6. **Data needed for thrombolytic decision** (incl/excl criteria)
 - a. Last known well, confirmed
 - b. NIHSS optimal to get at least some of your NIHSS done prior to starting lytic; complete ASAP post starting lytic (be sure to back date when you started your NIHSS)
 - c. BP < 185/110, POC Glucose \geq 50
 - d. **CT review:** No ICH/SAH, Hypodensity >1/3 hemisphere, Aneurysm >10mm, AVM; **note time reviewed**
 - e. Hx: Afib or DVT?
 - f. Meds: any blood thinners? (if warfarin need INR back, exclude if NOAC within the last 48h, or treatment dose heparin < 24h)
 - g. Other Exclusions:
 - i. Symptoms/Hx suggestive of SAH, Aortic dissection, Infective endocarditis, Active internal bleeding
 - ii. Hx of Stroke <90d, Any prior ICH, Head trauma <90d, Brain or spine surgery <90d, Intra-axial neoplasm, Arterial puncture non-compressible <7d
 - iii. Labs (if back, not barrier if not): PT>15, INR>1.7, PTT>40, Plts<100
 - iv. (Relative exclusions: GI/GU bleed <21d, MI <90d, Major surgery or trauma <14d, Acute pericarditis, Extra-axial neoplasm, Pregnancy)
7. **Thrombolysis Risk/Benefit discussion** key points (derived from our patient info sheet on web site)
 - a. ischemic stroke is a brain injury due to a blood vessel in brain being blocked by a blood clot
 - b. The clot busting medication dissolves blood clots, but can have bleeding as a side effect
 - c. if given w/in 4.5 hours of LKW, it increases the chances of a better outcome, but there is a smaller chance of a significant brain bleeding side effect
 - d. 1 out of every 3-4 patients will have an improved outcome over what would have been
 - e. 1 of 8 will have an excellent outcome where they would not have
 - f. 1 of 16 can have a brain hemorrhage as a complication
 - g. The sooner the clot buster medication is given, the greater the chances of benefit
 - h. Despite getting the clot buster, significant disability is still possible, a good outcome is not guaranteed
 - i. Alternative to the clot buster are standard treatments to try to optimize outcome from stroke, and though these may be safer, these treatments may not be as effective
 - j. if eligible, the clot buster treatment is recommended strongly by stroke experts around the world
 - k. **OR**
 - l. **GIST" version...** “Getting the clot busting medication after a stroke reduces your risk of disability. People who get the clot buster to treat their stroke have a better chance of recovering without disability and getting back to the activities they love compared to people who do not receive the treatment. All medicines have some risk. With the clot buster, there is a risk of serious bleeding. However, time is important as well. We have found the faster the clot buster is administered, the greater the chance that patients will have the best possible outcome. Do you have any questions?”
8. **Thrombolytic “Time Out”** with remote MD/nurse/others – once lytic has arrived (document this in your note)
 - a. Briefly review your dataset to date
 - b. Ensure risk/Benefit discussion occurred and consent provided

- c. Confirm last BP < 185/110
 - d. Confirm all providers agree with lytic decision, GIVE lytic
 - e. If gave lytic, when documenting (see below) you can choose appropriate lytic risk/benefit discussion...
 - f. **Record lytic recommendation and start times** in appropriate section of note if possible
9. **Thrombectomy decision is next**
- a. Last known well <~20 hours (depending on their location)
 - b. Large vessel occlusion on CTA?
 - c. Transfer and endovascular intervention within goals of care?
10. **If decide to transfer to HMC**
- a. Tell remote team you are stepping away from video to initiate transfer
 - b. Call Transfer Center internal line 206-520-7474, tell them who you are caring for and have them arrange transfer as quickly as possible (especially for possible thrombectomy candidates)
11. **Finishing Teladoc documentation**, gathering additional information with patient, family and remote providers after urgent decisions have been made. Documentation should be added to the following tabs (**tab name bolded**)
- a. **Patient Info:** make sure LKW is entered, they should have entered most of other info
 - b. **HPI:** Brief CC/HPI (can add text for PMH, meds here if rather than below)
 - c. **Labs:** no need to include details, can check box "Labs Unremarkable" if you confirmed
 - d. **Patient History:** option to add PMH, Meds including antithrombotics, FH, SH, ROS
 - e. **Imaging:** check appropriate boxes, add time reviewed, check off imaging types reviewed - then box appears for brief description (e.g. CT "no hemorrhage or extensive early ischemic changes", or CTA "No LVO"), then ASPECTS if LVO
 - f. **NIHSS:** Finish full NIHSS, even if some done post lytic start
 - g. **Calcs:** no need to use these (pre-mRS, GCS, ABCD2, ICH score)
 - h. **Clinical Impression:** fill out as appropriate (must select to open thrombolytic option on note)
 - i. **Thrombolytic:** add decision time, recommendation, lytic agent, document consent
 - j. **Endovascular:** can choose YES if you like, or just comment in below, if choose YES, can add time recommendation made
 - k. **Recommendations:** can add a summary in text box "Diagnosis Impressions" and separately recs in text box for "Recommendations"; **OPTIONAL:** can choose additional items as you like in drop downs for "Neurology Diagnosis", "Post-Lytic", "Diagnostic labs", "Diagnostic Work Up", "Therapy"; **MANDATORY:** add "x" to bottom text box to bring in disclaimer statement
12. **Think you are done?** hit the **"view unsigned PDF"** button or just scroll to the bottom.
- a. **Need to further edit note?** Select "Continue editing" button or scroll back up
 - b. **If fellow involved they sign note and log out then you add addendum with attestation & fax**
 - i. *Attestation: I was present throughout and viewed the entirety of the video TeleStroke consultation, and participated as needed. I have reviewed the Stroke Fellow's notes and agree with their findings and recommendations. (if you disagree or want to add to fellow note, that can be here in addendum as well).*
 - c. **Attending only?** "Sign" then "fax note" to that hospital
 - d. **Log out**

Concise version for quick reference

1. Introduce yourself and ask for permission to use the technology.
2. Check audio/video and make sure the patient can see you.
3. Ask for a brief update from the remote provider team.
4. Make a thrombolysis decision.

5. Document the thrombolysis decision and start time in the appropriate section of the note.
6. If the patient is eligible for thrombectomy, make a transfer decision.
7. Finish the Teladoc documentation.
8. Sign the note and fax it to the hospital.