

Beaumont Hospital, Grosse Pointe
Emergency Center and In-House Acute Stroke Algorithm

Timeframe		
5 minutes	<p align="center">EC RN or inpatient RN</p> <p>Rapid Neuro assessment for any Stroke S/S or NIHSS greater than 4 points from baseline EC unit secretary or inpatient RN calls "555" for Code Stroke Stroke Symptoms < 12 hours (last known well) Assesses ABC, VS, bedside accu-check, and monitor Has patient received any medications (sedatives, narcotics, or anticoagulants) PMH of ICH, GIB, AVM, Aneurysm, brain tumor?</p>	→ RO operator Sends out Code Stroke page
10 minutes (Door to Dr)	<p align="center">↓</p> <p align="center">EC Physician/H.O. Rapid H&P, NIHSS</p> <p>Lytic eligible? NIHSS Score? If greater than 10 or NIHSS 4-9 with significant deficits (i.e. aphasia)</p>	Do not wait for BUN, Creat/GFR Results
15 minutes Door to Code Stroke called	<p>Neurologist notified after patient assessed by ECP/HO. ECP/HO asks unit secretary to escalate by calling "555" for second code stroke page to notify the neurologist with call back number.</p> <p>Obtain HCT without contrast per Stroke Protocol and discuss further imaging plan with neurologist (CTP). Need 18 ga A/C IV for CTP or 20 ga if unsuccessful with 18 ga, or 18 ga. extended dwell catheter (or at least 6cc/sec for CTP); ECG</p>	MNA (MI Neurology Associates) 1-866-210-6246 MNI (MI Neurology Institute) 1-877-844-8999 Pager-Dr. Lumley 313-851-1110 Pager-Dr Moudgil 313-430-0011
25 minutes (Door to complete CT)	<p align="center">↓</p> <p align="center">EC RN/Critical Care RN</p> <p>Verbal communication from EC or Critical Care RN to CT to notify of impending patient arrival (ext 1995) Transport patient to CT as soon as CT available with monitor If TPA candidate, patient transferred back to EC or start arrangements to transfer to CCU if in-house.</p>	
45 minutes (Door to results)	<p align="center">↓</p> <p align="center">Radiologist will call ECP/H.O. with CT results.</p>	ECP 313-473-1605 H.O. 313-473-6207
	<p align="center">↓</p> <p>ECP/H.O. contacts Neurologist with CT results and NIHSS → If CT negative for bleed and within 0- 4.5 hour timeframe: ECP/H.O. discusses lytic with pt/family</p>	If positive for Bleed, contact Neurosurgery and admit to CCU
	<p align="center">↓</p> <p align="center">Accepts Lytic → No → ↓ YES</p>	Transfer to appropriate level of care
60 minutes (Door to needle)	<p>Obtain written consent from pt/family/next of kin if 3-4.5 hour window of LKW *Candidate for TPA-EC/CCU RN calls pharmacy with pt name, HAR, Wt to mix TPA ECP/H.O. orders Alteplase (TPA) Administer TPA. RN observes patient for S/S of bleeding Monitor vital signs and neuro checks per TPA Order Set</p> <p>If not tPA candidate and NIHSS > 10 or NIHSS 4-9 with significant deficits (i.e. aphasia) obtain CTP</p> <ul style="list-style-type: none"> CTP positive for treatable lesion – transfer to Royal Oak CTP negative for treatable lesion – no patient transfer 	*B/P < 185/110 before administering TPA
	<p>Keep patient NPO until patient passes swallow screen If NIHSS is greater than 10 or NIHSS 4-9 with significant deficits (i.e. aphasia) ECP/H.O. obtains CTP once TPA started & contacts RO Neuro Interventional Radiologist, confirms if IR candidate based on CTP. If RO accepts transfer, ECP makes arrangement for transfer → RO</p>	To transfer to RO, call RO-Access Center-248-898-0880 Transfer to SJH: Call 1-888-885-STAT, send NIHSS with patient