SUSPECTED ACUTE STROKE PATHWAY

Inclusion Criteria
- Children ≥ 1 month (corrected age)

Exclusions Criteria
- Children <1 month of age

Outside admissions/transfers to CHMC for suspected stroke
- Call physicians priority line
- Call Communication Center to page on-call neurologist

If tPA is indicated, administration is recommended within 3 hours

Patient presents with signs and symptoms of acute stroke:
- Focal neurologic deficits
- Sudden unexplained change in mental status

Did symptoms start <24 hours ago?

No → Manage off pathway Consult Neurology

Yes

Are symptoms completely resolved?

ΩAcute Stroke Risk Factors
- Sickle cell disease
- Congenital or acquired heart disease
- Head & neck infections
- Systemic conditions such as inflammatory bowel disease & autoimmune disorders
- Head trauma

No

- Assess for **Acute Stroke Risk Factors**Ω
- Call Communication Center (402-955-6911) to activate the Stroke Team - page includes MRI, pharmacist, and on-call neurologist
- Vital signs & neuro checks every 15 minutes for 3 hours
- Complete Pediatric NIH Stroke Scale (NIHSS) on first neuro assessment

Use Suspected Acute Stroke Pathway order set:
- Stroke Panel – MR Stroke Brain WO Contrast and MRA Head WO Contrast – STAT*
  see imaging notes
  - IV access NOT needed prior to MRI
  - Radiologist to read scan and call report to ordering provider then document in EMR using .strokeimgresults

***Imaging Notes**
- Stroke Panel MR Stroke Brain WO Contrast and MRA Head WO Contrast is preferred as first line imaging in suspected acute stroke
- If MRI will not be available within 1 HOUR of stroke activation, patient has contraindication to MRI, or patient would need sedation, then a CT Head WO Contrast should be ordered STAT
- Additional imaging such as neck MRA or CTA head or neck may be needed pending results of initial imaging study and will be decided on a case-by-case basis

Yes

Follow **Transient Ischemic Attack (TIA)** guidelines
- Consult neurologist on call
- Neuro checks every 2 hours for 3 hours, then every 4 hours for 24 hours

Order Stroke Panel – MR Stroke Brain WO Contrast and MRA Head WO Contrast - STAT include "TIA" on the order indication

Do not delay imaging for the following, obtain ASAP:
- Labs
  - PT, PTT, ESR, CRP, CMP, CBC
  - Serum pregnancy test, in post-menarchal females
  - EPOC panel, if clinically indicated
- 12-lead ECG

Additional Instructions
- Establish intravascular access (if not already in place)
- Head of bed flat
- Keep normo-thermic, normoglycemic, and blood pressure within normal limits for age
- Keep NPO
- Ensure nursing documentation of weight in Kg
- Provider documentation of time patient was last seen normal (if not already documented)
- If giving fluid, administer normal saline (**DO NOT give dextrose**)
- Review tissue plasminogen activator (tPA) contraindications & eligibility for endovascular therapy while waiting for imaging results

Was an intracranial hemorrhage present?

No → Was an ischemic stroke present?

No → **For TIA**
- Admit to Med/surg
- Start aspirin immediately 5mg/kg (max 81mg) every 24h
- Monitor clinically

Yes

- Manage as Hemorrhagic Stroke
- Consult Neurosurgery

Yes

- Manage as Ischemic Stroke
- tPA treatment protocol, if eligible
- Start aspirin 5 mg/kg (max 81 mg) every 24hr
  - Immediately if tPA protocol not activated
  - 24-48 hr after stroke onset if tPA given

Admit to PICU/CICU
**Congenital cardiac patients go to CICU*