Queensland Government

CLINICAL PATHWAY

Emergency Management of Suspected Paediatric Acute Arterial Ischaemic Stroke

(Affix patient identification label here)

URN:

Family Name:

Given Names:

Address:

Date of Birth: Sex: ☐ M ☐ F ☐ I

- This clinical pathway has been developed by a interdisciplinary team of health professionals based on best practice evidence and expert clinical consensus. It is intended to guide clinical decisions not to replace clinical judgement. It provides a legal record of the care provided, so must be fully completed.
- Overall Aim of Code Stroke: Identify patients that have signs/symptoms consistent with possible acute ischaemic stroke AND may be eligible for reperfusion therapies.
- When using the clinical pathway the practitioner should always refer to organisational guidelines, procedures, policies and nursing standards to support activities here within.

✓ INCLUSIONS

- Patients in the ward/presenting to ED who develop a **SUDDEN ONSET** of symptoms **WITHIN THE LAST 24 HRS** which are **ONGOING** and are consistent with suspected paediatric acute arterial ischaemic stroke including:
  - Focal weakness – limb/part of limb and/or facial droop
  - Visual disturbances – double vision, unequal pupils, loss of vision/change to normal vision
  - Speech/language disturbances – slurred speech/incomprehensible speech/inability to speak
  - Limb incoordination or ataxia – unsteady gait/increased frequent falling (not due to pain/trauma)
  - Altered mental status
  - Headache where the time to maximal symptoms occurs over seconds to minutes
  - Signs of raised intracranial pressure (ICP) – headache associated with nausea/vomiting/confusion/bradycardia
  - Seizures with additional neurological symptoms (any of the above)

✗ EXCLUSIONS

- Neurological compromise not consistent with acute arterial ischaemic stroke
- Neurologist deems that patient has an exclusion criteria causing cessation of clinical pathway

Date of admission:	**Expected date of discharge:**

Accompanying Documentation

- Patient medical record / ieMR
- *Ryan's Rule Parent Handout*

Signature Log

All staff providing care for this patient are to complete this log

Print name and designation	Signature	Initial	Print name and designation	Signature	Initial

Nursing Mandatory Care Requirements

Nursing staff are to initial below each shift to reflect that they have provided care in line with Clinical Pathway and have provided the following mandatory cares.

- Bedside safety checks & patient assessment
- Therapies in progress are confirmed against orders
- Identification band in place
- Complex care patients identified and all teams notified
- Falls Risk Assessment completed and strategies implemented to manage risk
- All documentation checked at handover
- *Ryan's Rule* and bedside handout provided and explained to family
- Daily plan of care discussed/negotiated with parent/carer
- Child and others protected from any infection risk
- Daily Glamorgan Score is completed and strategies in place to manage risk

Date	AM	PM	ND	Date	AM	PM	ND

Name:	DOB:	UR No:

Initial = care given; **rule out** ⟊ = not applicable; **X** = Variance (record detail on variance page)		**AM**	**PM**	**ND**
Triage	Triage patient as Australasian Triage Scale (ATS) 1 or 2			
Assessment and initial management	ABCD management as indicated			
	<u>IMMEDIATELY</u> – Initial Nursing Assessment • Perform a rapid and comprehensive patient assessment • Obtain a full CEWT (including temperature and blood pressure) and neurological observations • Check blood glucose level • Measure and record accurate patient weight • Patient to remain nil by mouth • Neuroprotective cares to be initiated (see below) • Check allergy status			
	<u>IMMEDIATELY</u> – Initial Medical Assessment – review by Consultant or Senior Registrar Perform a rapid, focused patient assessment, to determine if presenting symptoms consistent with suspected stroke. **Time of onset of acute neurological deficit:** DD / MM / YY , HH : MM **(24hr)** **If unknown date and time last seen well:** DD / MM / YY , HH : MM **(24hr)**			
Urgent communication	• If symptoms are consistent with suspected stroke, **contact the On-Call Consultant Neurologist's mobile via switchboard**. • Neurologist to assess presentation, inclusion/exclusion criteria by phone – will advise 'Activate the Code Stroke' • Phone QCH switch on 555 and activate the 'Code Stroke – Location, Bed XX'			
Post Stroke Code activation procedures	**Complete essential phone calls** **Medical Imaging** ☐ Radiologist - If "After Hours" contact via Switch (In hours M-F 0830-1630) ☐ MRI Radiographer - If "After Hours" contact via Switch (In hours M-F 0700-1800) **If Anaesthetic Required** ☐ In hours M-F (0800 - 2400) call duty anaesthetist and anaesthetic team leader ☐ After hours call duty anaesthetist			
	Order medical imaging ☐ MR Brain Angiogram – in special instructions field 'Code Stroke'			
	Intravenous access – **avoid IO wherever possible, do not wait for topical anaesthetic, use ultrasound as appropriate** ☐ Two intravenous cannulas – preferably size 22			
	Collect blood for testing – in special instructions field 'Code Stroke' ☐ FBC ☐ Chem20 ☐ Group and save ☐ Coagulation studies ☐ Clottable fibrinogen ☐ **Phone the laboratory on 3555 to advise urgent Paediatric Code Stoke bloods**			
	Complete essential paperwork ☐ MRI checklist child and parent (+/- staff if required) ☐ Anaesthetic booking form (if anaesthetic required) ☐ Social work or Nursing to provide parent handout and appropriate explanation			
	• Medical and Nursing staff to ensure all equipment necessary for immediate transfer to the MRI scanner is ready • Porter staff to ensure all standard checks are complete for immediate transfer to the MRI scanner			
Neuroprotective cares to maximise cerebral perfusion pressure and metabolic supply of the brain	• Observations: continuous ECG, heart rate, O_2 saturations, 15 minutely blood pressure and neurological observations • Head of bed flat if no signs of ICP and probably ischaemic stroke • Head of bed 30°C if signs of raised ICP or probable haemorrhagic stroke • Target BP within normal range for age – treat hypotension with fluids +/- inotropes, advise treating intensivist of hypertension • Measure BGL – treat hypoglycaemia as per local protocol, advise treating Intensivist of hyperglycaemia >12mmol/L • Treat temperatures of >37.5°C with antipyretics • Continually monitor patient for any signs of seizure activity and treat ▸ Medical staff to use usual status epilepticus protocols ▸ Consider early anticonvulsant loading ▸ **Any seizures require notification to the Neurologist on call ASAP**			

DO NOT WRITE IN THIS BINDING MARGIN ▸

Name:	DOB:	UR No:

Initial = care given; **rule out** ~~—~~ = not applicable; **X** = Variance (record detail on variance page)	**AM**	**PM**	**ND**
Checklist prior to IV alteplase administration **Two PICU Nurses <u>must</u> confirm with the Neurologist** ☐ MRI has confirmed arterial ischaemic stroke ☐ Eligibility criteria for IV Alteplase (tPA) are met ☐ There are no contraindications to IV Alteplase (tPA) ☐ A signed consent form for IV alteplase has been completed by the Neurologist or the Neurologist has confirmed that they have obtained verbal consent ☐ Blood results are available and have been reviewed by the Neurologist ☐ Full CEWT and neurological observations completed and documented ☐ **An instruction for IV Alteplase has been made by the Neurologist** (the PICU Registrar will chart the drug but a written or verbal instruction from the Neurologist must be obtained prior to administration) ☐ The IV Alteplase (tPA) drawn up as per the Protocol for giving IV Alteplase (tPA) – *CHQ-GDL-00733* Appendix 5			

EMERGENCY CARE PHASE OUTCOMES (inclusive of mandatory care requirements outlined on front page)
If achieved, initial. If not, document as (V)ariance.

Once a patient meets all outcomes they are to progress to the next phase. Outcomes **NOT MET** must be recorded as a (V)ariance with outcomes and actions outlined on variance summary sheet on the back of clinical pathway.	**Date achieved or (V) for variance**	**Time achieved**	**Sign** (initial)
Initial medical and nursing assessments performed within 10 minutes of ED presentation or MET/Code Blue activation			
On Call Consultant Neurologist reached on their personal mobile via switchboard within 15 minutes of ED presentation or MET/Code Blue activation			
Stroke Code activated via 555 within 20 minutes of ED presentation or MET/Code Blue activation			
Post Stroke Code activation procedures complete prior to transport to the MRI scanner			
Patient arrived at MRI Scanner within 45 minutes of ED presentation or MET/Code Blue activation			
IV Alteplase Checklist is completed prior to IV alteplase administration			

NOTES

DO NOT WRITE IN THIS BINDING MARGIN

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VARIANCE TRACKING RECORD

Guidelines

1. The purpose of the variance record is to track and document all variances from expected outcomes within each phase of care.
2. It should clearly describe the variance and then document actions taken to manage the variance(s) and outline the interventions and outcomes required to transition the patient along expected care outcome(s).
3. The patient may progress through other care elements and onto another phase of care despite not achieving all outcomes relevant to that phase. The actions and outcomes are to provide the ongoing plan of care for those outcomes NOT achieved. Once the patient has achieved the outcome the nurse will sign and date outcome under that phase of care.
4. The variance record should form part of the clinical handover process whenever a variance is recorded.

Instructions for use

- Each time an outcome is not met, the variance is recorded below and guideline above followed.
- All variances are to be reported to a **Registered Nurse** for planning and management of ongoing care.
- Notify treating team if clinical outcomes are not met.

Patients who demonstrate significant variances from the care pathway should be reviewed by the relevant team to determine if care pathway should be ceased and the patient commenced on an individualised plan.

Description of variance	Action taken	Interventions/outcome required for ongoing care	Date	Time	Initial

NB: This variance report should be photocopied and used for variance analysis.