NHS CATS
Children's Acute Transport Service

Clinical Guidelines

Time Critical Transport

Document Control Information

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Applicable to	All CATS employees		

Definition

Time critical patients are defined as patients who need to be transported to a tertiary centre to allow for a life or limb saving intervention that cannot be provided at the referring centre. Prompt transport is key.

Purpose of this guideline

This guideline aims to assist in the conduct of time critical transports. There are two sections.

1. **Guidance for the referring team**
2. **Communication principles for the time critical transport**

Referring team

The CATS consultant, responsible DGH consultant and accepting surgical/ medical team must perform an individual risk assessment to determine if the transport is time-critical (the benefits of a rapid transport by the local team outweigh the risks of non-specialist transport). In keeping with national guidance, time critical transport will usually be done by the local team.

Categories of patient that may require a time critical transport

Neurosurgical emergencies	A CT scan will usually help in identifying such situations. However, it is important to clinically consider the possibility of a neurosurgical emergency even before the CT scan is performed 1) Any CT or other imaging should be transferred immediately to the surgical centre by IEP 'Blue Light' transfer 2) If spontaneous (i.e. non-traumatic) intracranial haemorrhage is seen on the CT, a CT angiogram should be immediately performed before leaving the CT scanning suite, if possible. Aim for patient to be at a neurosurgical centre within four hours of injury.
Acute surgical abdomen	Requires specialist life-saving general surgical intervention
Ischaemic limb	Requires specialist limb saving vascular surgery

Initial stabilisation

Initial stabilisation must be done by the referring hospital prior to transport. A team competent to manage the patient's airway and escalate care should be involved in the transport. This is usually a member of the local anaesthetic team in conjunction with the paediatric team. Refer to the STOPP tool for support with decision making STOPP-Tool-V16-Oct-2024-eversion.pdf. Referring centres should have a local policy for these transports.

Pre-transport considerations

A: Assessment has occurred and if intubation is necessary, the airway is secure and ETT well positioned on CXR
B: Ventilation is adequate as confirmed by blood gas and $ETCO_2$ monitoring is in place
C: Adequate fluid resuscitation and sufficient IV or IO access
D: Check blood glucose, pupils and/or other focal neurological signs

Transport considerations

Mode of transport: Decision regarding the most time effective method of transporting the patient to tertiary centre should be made in joint consultation with the CATS consultant and surgical team. National guidance suggests that for a neurosurgical emergency, transport by the referring hospital team is the most appropriate.
Staff: Staff most familiar with inter-hospital transport and capable of managing the airway should perform the transport. This will usually be a member of the anaesthetic team supported by the paediatric staff. Every case should be risk assessed using the STOPP tool for guidance.
Monitoring: Monitoring during transport should include:

- ECG,
- SpO_2,
- Blood pressure (non-invasive or invasive)
- If intubated, continuous end tidal CO_2.

Drugs: If the child is intubated and ventilated, they require sedation (fentanyl/morphine +/- midazolam infusion) and neuromuscular blockade (rocuronium or vecuronium) for transport. Emergency fluid and vasoactive drugs should be available. For neurosurgical cases, 2.7% sodium chloride and/or mannitol should be available during transport for rapid changes in ICP.

Communication principles

Prompt communication with all relevant teams is vital.

- An urgent conference call between the relevant teams is required (see time critical communication process map below).
- The decision to transport and accept a patient must be supported by a consultant in both the referring and receiving hospitals.
- Transport for immediate lifesaving interventions must not be delayed by lack of a critical care bed.

STOPP-Tool-V16-Oct-2024-eversion.pdf (cas.nhs.uk)

References

1. Rollin, A M., (2006). Working together for the sick of injured child: The Tanner Report. *Anaesthesia*. 61 (12) pp 1135-1137. Available at: **https://doi.org/10.1111/j.1365-2044.2006.04876.x**
2. STOPP Tool (2017). Safe Transfer of the Paediatric Patient Tool. Thames Valley & Wessex Paediatric Critical Care Operational Delivery Network.

Time Critical Communication Process Map

Patient referred to specialty team and Time Critical Transport agreed

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Contact local ambulance service (999)

State 'time critical emergency transport'

Time called:

Patient location:

Expected time of ambulance arrival:

Reference number:

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Call CATS 0800 085 0003

State 'time-critical referral'

CATS to co-ordinate conference call between clinical teams

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CATS administrator to generate encounter and MRN number on EPIC (if not already complete)

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Has all relevant clinical information been exchanged?

Is the destination confirmed?

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Prepare for transport

Use the transport documentation checklist and STOPP Tool STOPP-Tool-V16-Oct-2024-eversion.pdf

CATS to coordinate a conference call between:

1. Referring Consultant
2. CATS Consultant
3. Accepting speciality team Consultant

Information to be exchanged:

- Clinical details
- MRN number
- LAS or CATS transport?
- Estimated time of arrival?
- Confirmation of bed/theatre location?
- Expected destination post-op? (if not-known should not delay transport)

Following people to be made aware of plans:

1. Anaesthetics Registrar/Consultant
2. Clinical Site Practitioner (CSP)
3. PICU consultant

Useful numbers:

- **CATS – 0800 085 0003**
- **GOSH Switchboard – 0207 405 9200**
- **RLH Switchboard – 0207 377 7000**
- **SMH Switchboard – 0203 312 6666**

TRANSFER DOCUMENTATION CHECKLIST: (please detail/tick as necessary)

Personnel:

- ☐ Doctor 1 (name, speciality & grade)
- ☐ Doctor 2 (name, speciality & grade)
- ☐ Nurse/ODP (name, speciality & grade)
- ☐ Parent/guardian details (if accompanying)

Communication:

- ☐ Bed in destination hospital identified and availability confirmed
- ☐ Consultant in destination hospital has agreed transfer
- ☐ Parents/Carers informed of transfer and any parental concerns discussed
- ☐ Parents/Carers invited to accompany child

Equipment:

- ☐ Appropriate drugs & Grab bag available
- ☐ Suction unit available and batteries fully charged
- ☐ Sufficient oxygen in portable cylinder available
- ☐ Appropriate restraint device available
- ☐ Batteries on monitor and/or infusion pumps fully charged
- ☐ Infusion devices rationalised and secured

Drugs/Fluids:

- ☐ Analgesia
- ☐ Intubation drugs
- ☐ Emergency drugs
- ☐ IV Fluids
- ☐ Blood

Transport:

- ☐ Time ambulance service called:
- ☐ Ambulance reference no:
- ☐ Ambulance arrival time at referring hospital:
- ☐ Transfer staff have a mobile phone available
- ☐ Money/cards available for emergencies
- ☐ Return travel arrangements confirmed & Team have contact details e.g.: taxi/ward numbers

Patient Specific Instructions for transfer (tailor to needs): (please tick)

- ☐ Temperature monitoring
- ☐ Nil by Mouth/consider NG tube for surgical patients
- ☐ Blood glucose monitoring
- ☐ Maintenance IV fluids
- ☐ Well-secured IV access (x 2 if required)
- ☐ ID bracelet x2

Other:

Paperwork for transfer (photocopy the following): (please tick)

- ☐ Referral letter
- ☐ Copy of Current medical, nursing notes and investigations (recent clinic letter for long-term patients)
- ☐ Copy of Current drugs chart, PEWs chart and fluid charts
- ☐ Upload/transfer radiology onto relevant IT system
- ☐ 3 Copies STOPP Tool (for patient notes in referring and receiving hospitals and audit)
- ☐ TRANSFER DATIX Completed as per specific Trust policy