



Clinical Guidelines

Transport considerations when transfer undertaken by local team

Document Control Information

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Assessment

The CATS consultant and the responsible DGH consultant must perform an individual risk assessment to determine if the transfer is time-critical (i.e. the benefits of a rapid transfer by the local team outweigh the risks of non-specialist transfer) or not.

CATS will not normally transfer neurosurgical emergencies, any time critical surgical abdomen or neonatal patients. Penetrating trauma should be referred to the local major trauma centre.

Staff most familiar with inter-hospital transfer and capable of managing the airway should perform the transfer. This will usually be a member of the anaesthetic team from the referring hospital. Consider referring to STOPP tool for support with decision making (see appendix).

Initial stabilisation

Initial stabilisation must be undertaken at the local DGH prior to transfer.

Pre transport considerations;

1. Airway is secure, ETT well positioned on CXR
2. Breathing: ventilation is adequate as confirmed by blood gas and ETCO₂ monitoring is in place
3. Circulation: adequate fluid resuscitation has been given and there is sufficient, working IV or IO access
4. Disability: check blood glucose, pupils and/or other focal neurological signs.
5. Family needs to be updated
6. Communication with the receiving PICU via CATS regarding the estimated time of arrival and initial requirements

Transport considerations

Mandatory monitoring during transfer should include: ECG, SpO₂, blood pressure (non invasive or invasive) and end tidal CO₂.

Child should be sedated (morphine and midazolam infusions) and muscle relaxed for the transfer. Emergency fluid and vasoactive drugs should be available.

CHECKLIST FOR TRANSFER OF CHILDREN BY THE LOCAL DGH TEAM

Please Print

Appropriate staff identified

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Local ambulance service notified

--

State 'Time Critical Emergency Patient Transfer'

Expect ASAP response time

Essential equipment

Ensure ETT well secured/good position/no leak

Airway bag (tape, face mask, T piece, ambubag, ETT, laryngoscopes, scissors)

Drug bag (Fluid boluses, resuscitation drugs, osmotherapy)

Ventilator and sufficient oxygen

Infusion pumps (sedation, muscle relaxant, vasoactive infusions)

Run continuous infusions of sedation and muscle relaxant

Ensure adequate venous +/- arterial access

Prepare and connect inotropes ready to commence if required

Adequate monitoring

ECG

SpO₂

Blood pressure (NIBP cuff **or** arterial)

End tidal CO₂

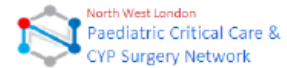
Physiological targets

SpO₂ >95%

Mean BP = age appropriate target

End tidal CO₂: 4-5 kPa

Sedation and paralysis



STOPP! Safe Transfer of the Paediatric Patient Tool

For use on ALL transfers of children BETWEEN Hospitals. The referring Hospital is responsible for the completion of this form prior to and during transfer. It is recommended that on arrival at the receiving Hospital, a copy is made, the original returned to the local hospital for audit purposes and filed in the patient notes.

PATIENT DETAILS First name Surname Address Hospital number NHS number		Weight (Kg) True/Est Date of birth Age ALLERGIES GP Details
Date & Time of referral		Call made by
REFERRING Team Contact Details Consultant Hospital Ward/Location Contact no		RECEIVING Team Contact Details Consultant Hospital Ward/Location Contact no
SUMMARISED CLINICAL DETAILS Presenting Complaint Current problem + Reason for Transfer Organ support required Past Medical History Drug History DISCUSSION/ADVICE FROM RETRIEVAL TEAM TRANSFER INDICATION: Escalation of treatment <input type="checkbox"/> Investigations <input type="checkbox"/> Repatriation <input type="checkbox"/> Palliation <input type="checkbox"/> Bed Status <input type="checkbox"/>		
RISK ASSESSMENT RESULTS: PERFORM RISK ASSESSMENT ON PAGE 2 THEN TICK & SIGN RESULTS CATEGORY IN TABLE BELOW. If Paediatric Consultant not aware: STOP AND INFORM NOW		
Transfer Category <input type="checkbox"/> Transfer no longer required <input type="checkbox"/> Ward level (level 0) <input type="checkbox"/> Basic critical care (HDU, level 1) <input type="checkbox"/> Intermediate critical care (level 2) <input type="checkbox"/> Advanced critical care (level 3) <input type="checkbox"/> AND/OR Time critical		Recommended Transfer Team Referring Hospital Personnel: <input type="checkbox"/> Parents <input type="checkbox"/> Nurse/ODP <input type="checkbox"/> Anaesthetist/Paediatrician Ambulance Crew Requested: <input type="checkbox"/> Patient Transport Service <input type="checkbox"/> LAS/East of England Ambulance – standard crew <input type="checkbox"/> LAS/East of England Ambulance – paramedic crew PICU Trained: <input type="checkbox"/> CATS <input type="checkbox"/> Other retrieval team
ASSESSMENT COMPLETED BY: Nurse: (Name, Role, Signature) Doctor: (Name, Role, Signature)		



RISK ASSESSMENT PRIOR TO TRANSFER:			
Category	Assessment		Trigger
A		Is there any risk of Airway Compromise? (e.g. stridor, foreign body, burns)	YES/NO
B	RR =	Is the RR outside the normal age-adjusted range?	YES/NO
		Any evidence of respiratory distress/increased work of breathing/prolonged apnoea's/exhaustion	YES/NO
	Sats =	> 2L/min O2 to maintain sats > 94%, Presence of Emyema, Use of High Flow Oxygen/CPAP/BIPAP	YES/NO
		Intubated and Ventilated?	YES/NO
C	BP =	Is the systolic BP or HR outside the normal age-adjusted range?	YES/NO
		Are there signs of poor peripheral perfusion, e.g. CRT > 2 secs?	YES/NO
	HR =	ABG: Lactate > 2 or BE > -2	YES/NO
		Fluid boluses: > 40mls/kg within 6 hours	YES/NO
D		GCS low <8/fluctuating or AVPU (P or U)	YES/NO
		Risk of progressive intracranial event or signs of raised ICP?	YES/NO
		Newly-diagnosed Inborn Error of Metabolism	YES/NO
ARE ANY OF A B C D TRIGGERS YES? 1. ENSURE PAEDIATRIC CONSULTANT IS AWARE AND HAS AGREED THE TRANSFER 2. COMPLETE TRANSFER RISK ASSESSMENT BELOW 3. <u>IF INDICATED</u> CONTACT CATS (Tel: 0800 0850003) FOR ADVICE BEFORE PROCEEDING			
TRANSFER CATEGORY	ANY TRIGGERS	STAFF REQUIRED	DISCUSS WITH CATS?
Level 0 (ward Level) Children not requiring continuous monitoring	NO	Parent/carer + Nurse Ambulance: Standard crew/transport	NO
Level 1 (Basic critical care) Children needing continuous monitoring or iv therapy Or any PCC Level 1 Care	NO	Competent Nurse or Doctor OR Appropriately trained ambulance crew	NO
	YES	Nurse/ ODP <u>AND</u> Senior Doctor (paeds resus-trained) AND Appropriately trained ambulance crew OR CATS Transfer (if agreed jointly)	Discuss with your Consultant
Level 2 (Intermediate critical care) Level 1 + single system support requirements (e.g. CPAP, NIV)	YES	Nurse/ ODP <u>AND</u> Senior Doctor (airway + paed resus-trained) AND Appropriately trained ambulance crew OR CATS Transfer (if agreed jointly)	YES
Level 3 (Advanced critical care) Intubated and Ventilated	YES	CATS Transfer - UNLESS time critical (SEE BELOW)	YES
Time Critical (Level 1-3) e.g. ACUTE NEUROSURGICAL EMERGENCY, LIFE/LIMB-THREATENING PROBLEM, ACUTE ABDOMEN REQUIRING SURGERY, TESTICULAR TORSION	YES	Local Team: Nurse/ODP + Senior Doctor (airway + paed resus-trained) AND Appropriately trained ambulance crew Tell Ambulance operator: "this is a paediatric time critical transfer"	YES

TRANSFER DOCUMENTATION CHECKLIST: (please detail/tick as necessary)	
Personnel:	
<input type="checkbox"/> Doctor 1 (name, speciality & grade) <input type="checkbox"/> Doctor 2 (name, speciality & grade) <input type="checkbox"/> Nurse/ODP (name, speciality & grade) <input type="checkbox"/> Parent/guardian details (if accompanying)	
Communication:	
<input type="checkbox"/> Bed in destination hospital identified and availability confirmed <input type="checkbox"/> Consultant in destination hospital has agreed transfer <input type="checkbox"/> Parents/Carers informed of transfer and any parental concerns discussed <input type="checkbox"/> Parents/Carers invited to accompany child	
Equipment:	Drugs/Fluids:
<input type="checkbox"/> Appropriate drugs & Grab bag available <input type="checkbox"/> Suction unit available and batteries fully charged <input type="checkbox"/> Sufficient oxygen in portable cylinder available <input type="checkbox"/> Appropriate restraint device available <input type="checkbox"/> Batteries on monitor and/or infusion pumps fully charged <input type="checkbox"/> Infusion devices rationalised and secured	<input type="checkbox"/> Analgesia <input type="checkbox"/> Intubation drugs <input type="checkbox"/> Emergency drugs <input type="checkbox"/> IV Fluids <input type="checkbox"/> Blood
Transport:	
<input type="checkbox"/> Time ambulance service called: <input type="checkbox"/> Ambulance reference no: <input type="checkbox"/> Ambulance arrival time at referring hospital: <input type="checkbox"/> Transfer staff have a mobile phone available <input type="checkbox"/> Money/cards available for emergencies <input type="checkbox"/> Return travel arrangements confirmed & Team have contact details e.g.: taxi/ward numbers	
Patient Specific Instructions for transfer (tailor to needs): (please tick)	Other:
<input type="checkbox"/> Temperature monitoring <input type="checkbox"/> Nil by Mouth/consider NG tube for surgical patients <input type="checkbox"/> Blood glucose monitoring <input type="checkbox"/> Maintenance IV fluids <input type="checkbox"/> Well-secured IV access (x 2 if required) <input type="checkbox"/> ID bracelet x2	
Paperwork for transfer (photocopy the following): (please tick)	
<input type="checkbox"/> Referral letter <input type="checkbox"/> Copy of Current medical, nursing notes and investigations (recent clinic letter for long-term patients) <input type="checkbox"/> Copy of Current drugs chart, PEWs chart and fluid charts <input type="checkbox"/> Upload/transfer radiology onto relevant IT system <input type="checkbox"/> 3 Copies STOPP Tool (for patient notes in referring and receiving hospitals and audit) <input type="checkbox"/> TRANSFER DATIX Completed as per specific Trust policy	

TRANSFER OBSERVATIONS RECORD: (Prior to departure, during transfer: (circle) continuous/15m/30m, and on arrival)		NORMAL AGE-ADJUSTED PHYSIOLOGICAL PARAMETERS (as per APLS)														
		AGE	<1 yr	1-2	2-5	5-12	>12									
		RR	30-40	25-35	25-30	20-25	15-20									
		HR	110-160	100-150	95-140	80-120	60-100									
Sys BP	80-90	85-95	85-100	90-110	100-120											
Temperature °C	39															39
	38															38
	37															37
	36															36
	35															35
Heart Rate & Blood Pressure	240															240
	230															230
	220															220
	210															210
	200															200
	190															190
	180															180
	170															170
	160															160
	150															150
	140															140
	130															130
	120															120
	110															110
100															100	
90															90	
80															80	
70															70	
Respiratory Rate	60															60
	50															50
	40															40
	30															30
	20															20
	15															15
	10															10
	5															5
0															0	
O ₂ Sats																
FiO ₂																
Neurological Assessment	AVPU															
	Pupil R															
	Pupil L															
BM / glu																
Vent. Settings																
	Pre departure					Transfer										
Date																
Time																
Pain assessment:							Time departed base:				Time handed over:					
Details of any treatments given:							Date:									
Details of incidents (Please also complete Trust report):							Signed:									

