Title:	Stabilisation and Preparation for Transfer		
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Scope	For use within London Neonatal Transfer Service		
Applies to	*All London NTS staff, All London NTS middle grade doctors, All London NTS Nursing staff, All Neonates transferred by NTS, London Ambulance Vehicles*, St John's Vehicles		

1. INTRODUCTION/PURPOSE OF THE GUIDELINE

Unwell infants can easily deteriorate during transfer. Infants who have been stabilised before departure complete the transfer in a better condition and adverse events are minimised by good stabilisation practice. All procedures are harder in the back of an ambulance compared with a neonatal unit.

Interventions required for a transfer will vary and depend on the clinical condition of the baby and the location of the baby. The aim is to stabilise the baby and achieve the optimal condition whilst recognising the time limitations of the transport setting and the underlying condition(s).

The choice of interventions pre-transfer require an assessment of the risks of delay vs the benefits of the procedure e.g. central line insertion, waiting for blood products, repeating x-rays etc.

2. GUIDELINE

Initial assessment	Take detailed handover from local team Perform thorough clinical examination the baby Ensure copies of drug / fluid / observation charts, copies of results ect. are photocopied and provided for receiving hospital.
A	Check and secure airway: Size / length of ETT – in appropriate position on CXR T1-T2. Leak audible / recorded on ventilator Fixation secure Appropriate size and fit of CPAP/High Flow prongs/mask
B	Review ventilation (see ventilation/surfactant guideline) & FiO2 requirement Appropriate mode for stabilisation and transfer Review set pressure and tidal volumes generated Review gases with recent changes and trends Review latest CXRs. Set up transport ventilator bearing in mind referral unit's settings Once transferred to transport ventilator reassess and perform gas prior to departure.
C	Review the hemodynamic stability: HR, BP, Cap refill. Establish 2 points of venous access and a point of arterial access only if needed. **UVC/central access indicated:** multiple inotropes or infusions requiring central delivery. Otherwise consider and discuss if a short transfer can be undertaken with peripheral venous access and peripheral inotropes (e.g. Dopamine). **Arterial access indicated**: unstable BP, multiple inotropes, PPHN. Leave some length of the umbilical cord if unsuccessful at siting umbilical lines. Review and prioritise the drugs and fluid prescriptions Review and prioritise the blood product transfusions early – will take time to arrive.
D	Achieve and maintain normothermia (see thermoregulation guidelines) Consider pain relief and comfort Maintain normoglycaemia
E	NG tube if needed on free drainage, check its position on the latest CXR **Monitoring:** ECG leads SaO_2 probe (pre- and post-ductal if PPHN) BP cuff/ BP transducer if arterial line Skin temperature probe Rectal temperature probe if therapeutic hypothermia End Tidal CO_2 if ventilated

Practical considerations	
Equipment	Plug transport incubator into mains power and gas supply on arrival Conserve transport rig gas and power supplies where possible Check battery supply Check oxygen and air supply before leaving the unit
Before moving baby into transport incubator	Confirm the baby is safe to transfer Calculate likely gas consumption incorporating potential delays Check ventilator functioning and required settings programmed Check baby again after transfer into transport incubator
Ready to leave?	Complete pre-departure checklist Ensure team are in possession of all documentation (see pre-departure checklist) Update parents or plan to go via mother if she is unable to be present at the cot side (and clinical conditions allow) Update on-call NTS Consultant Update EBS + Admin mobile + On Call consultant via text Call receiving hospital on departure providing ETA and any important clinical information or preparation to enable efficient handover.
Parents	Try to utilise local team in communicating and updating parents. Ideally we will endeavour to update them at the cot side prior to departure. It may be required to do so via telephone if baby very unwell and parents unable to be present. Provide hospital information for receiving unit
Don't prolong your stay unnecessarily	Try to work within the time frame established with the team on arrival Set a provisional time for departure For any unforeseen delays review the situation and the priorities and reset the clock

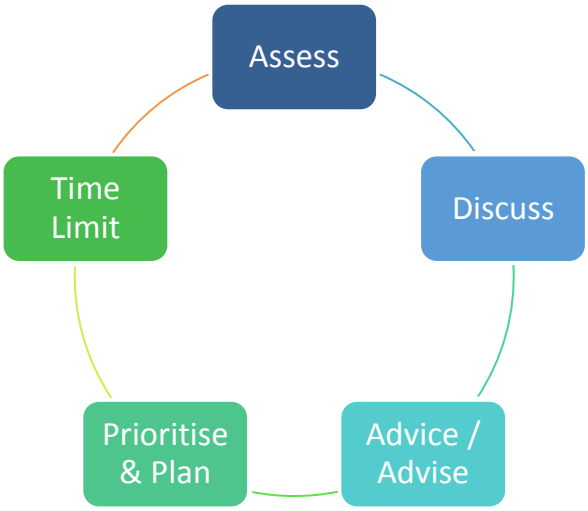
3. BREACH OF GUIDELINES

This is intended for use as a guideline to structure assessment and stabilisation of a baby prior to transfer. Alternative treatments may be appropriate in the patient's best interest and on consultation with the on-call NTS Consultant.

4. MONITORING COMPLIANCE

Compliance will be monitored during case discussions, team meetings and morning briefings. NTS consultants and senior NTS nursing staff will be responsible for undertaking this.
Ensure record of reviews are kept.

Appendix 1. The ADAPT Framework for Neonatal transfer.



For any unforeseen delays, utilise the ADAPT cycle, review the situation, prioritise, and reset the clock.

Assess	• Take a thorough handover from the local team, it can help to include them in the assessment process • Thorough clinical assessment and examination - ABCDE • Review ventilation • Review medication / infusions, need for haemodynamic support • Review results + X-rays / imaging
Discuss	• Step back as a team and discuss findings • Verbalize thoughts and concerns • Document all findings and interventions
Advice/ Advise	• Call consultant on-call if any immediate clinical concerns or questions • Update parents if present in referring unit; explain the transport process, the interventions required and provide information of the receiving hospital • Consider updating receiving unit if emergency procedures will be needed soon after arrival
Prioritise & Plan	• Make a plan of action with the team and allocate tasks, focus on ABCDE approach including, but not limited to: • Achieve and maintain normothermia (see thermoregulation guidelines) • Check ETT and secure airway • Optimise ventilation. Check equipment set up as required. • Establish 2 points of venous access • Prioritise medication, fluid and blood product prescription and preparation • Consider pain relief and comfort • Monitoring: Do you need pre & post ductal saturations, ETCO2, rectal probe, arterial BP transducer? • **Team discussion with on-call NTS Consultant; update clinical finding, plan for stabilisation and time limit agreed.**
Time limit	• Don't prolong your stay unnecessarily • Try to work within the time frame established with the team on arrival • Set a provisional time for departure