Standard Operating Procedure

for the Retrieval Nurse
1. Introduction
The Southampton PICU retrieval service performs approximately 250 retrievals per year within the Wessex region. It covers a population of approximately 3 million people, and services 10 District General Hospitals within the region. This includes the Isle of Wight (see Guideline for the Retrieval of critically ill children from the IOW by Ferry), and the Channel Islands (see Guideline for Arranging an Air Retrieval and Performing an Air Retrieval). The retrieval team consists of a Doctor, a Nurse and a Technician/Driver.

1.1 Retrieval Nurse Qualifications
Each Retrieval Nurse will be a Paediatric trained nurse on Part 8 or 15 of the Nursing and Midwifery Council Register.
Each Retrieval Nurse will also have a recognised Intensive Care qualification such as: ENB 415, ENB 100, ENB 405, or the Paediatric Critical Care Course.
Each Retrieval Nurse should have an up to date Paediatric Intensive Care Life Support (PICLS) Course certificate, as a minimum requirement.
Each Retrieval Nurse should hold an advanced resuscitation certificate such as EPLS or APLS within 2 years of joining the retrieval team.

1.2 Retrieval Nurse Training
Before performing retrievals independently they will:
Attend the PICU retrieval induction study day
Perform at least 3 supervised retrievals with an experienced retrieval nurse
Complete the retrieval competency document and have the assessment document signed off.

1.3 Retrieval nurse update
Each retrieval nurse will attend a yearly update study day
Complete the retrieval competency document and assessment every 3 years
Conduct at least 6 retrievals per year

1.4 Nurse allocation
The retrieval service is staffed by suitably qualified nurses (see above), 24 hours a day, 7 days a week.
The retrieval nurse for each shift will be allocated in advance and will be identified on the paper copy of the rota with a green dot.
The nurse should also identify the other members of the retrieval team for that shift, i.e. the doctor and technician.

2. Responsibilities at the commencement of the shift
The Retrieval nurse should ensure the following checks are carried out at the beginning of each shift:

2.1 The Transfer Trolley
Ensure the retrieval trolley is plugged in and all the equipment is charging
Braun pumps - Six Braun pumps secured on the transfer trolley – switch on, check audible and visual alarms during self test. Check pump for any obvious signs of damage. Check the battery life indicator of each pump, change batteries if necessary (Spare batteries stored in technicians workshop).
Propaq - Check the Propaq is plugged in and the green light is on, indicating that it is charging. Check Propaq for any obvious signs of damage, and that it is secured to the trolley safely. Ensure that the Propaq cable pack is present.
Laerdal suction unit – ensure that the suction unit is plugged in, the green light is on indicating that it is charging, and is in working order. Check for any obvious signs of damage.

Ensure there is sealed suction tubing and a yankuer sucker secured to the suction unit.

Defibrillator Phillips Heartstart MRX – Ensure that the “X” light is flashing, in the top right hand corner, to indicate charging. Perform a shock test once per shift. Perform a battery status check. Check that disposable Paediatric and adult pads are present on the trolley.

ISTAT blood gas analyser – Check that pouch contains the Istat machine, two CG4+ and two CG8+ cartridges.

Glucometer – Ensure that the Glucometer is present in the Istat carrying pouch, with a pot of the glucose testing strips. Perform and record the QC test daily.

End tidal Co2 cable in black box – Ensure this is present and that the cable is intact with spare adapters both normal size and low dead space (for neonates)

Baby POD – Ensure that the three straps are available for anchoring the Pod to the trolley, and are stored with the PoD. Ensure that the PoD vacumatress, internal velcro securing straps (once only use) and Transwarmer pad present.

Ferno Stretcher Patient Harness – Ensure this is secured to the trolley and in good condition.

Pedimate Harness – Ensure that this is present on the trolley, and in good condition.

Safety belts – check that these are secure on the trolley, and in working order.

Trolley sides – ensure that the sides lift up and lock into position.

Trolley brakes – ensure that wheel brakes are in working order.

2.2 Ventilators

Drager Oxylog 3000 Transport Ventilator – Check that this is plugged in and green light is on. Check the ventilator is secured on the transfer trolley. Check that there are no obvious signs of damage. Ensure pack of disposable tubing and medium HME filter are present.

Babypac – Check that the ventilator is secured on the transfer trolley. Check that there are no obvious signs of damage. Ensure that there is a pack of disposable tubing and and small HME filter present.

2.3 Oxygen Cylinders

One E size cylinder (680 litres) in metal casement. Turn the cylinder on using key provided to ensure that the cylinder is at least half full on the pressure gauge. Then turn the cylinder off.

One CD Oxygen Cylinder (460 litres). Ensure a full cylinder is secured in the upright carrying casing on the trolley, and is turned off.

2.4 Air Cylinder

One E size cylinder (640 litres) in metal casement. Turn the cylinder on using key provided to ensure that the cylinder is at least half full on the pressure gauge. Then turn the cylinder off.

2.5 The Retrieval Bags – Set One and Set Two.

Check that Bag one, bag two and the yellow bag (both sets) are sealed and stored in the cupboard behind bed seven.

If a bag or section of a bag is found unsealed then it must be rechecked before being sealed and used for a retrieval.

Check that the two black retrieval document folders are stocked with appropriate paperwork and relevant PICU Drug protocols. These should be stored in the cupboard behind bed seven.
2.6 **The Fridge Drug pouches.**
Ensure that two pouches containing the transport fridge drugs, are complete, sealed and stored in the fridge.

2.7 **The CD pouches.**
Ensure that two CD pouches are sealed and stored in the CD cupboard.

2.8 **The Bag Transport Trolley**
Check that the trolley is present in the cupboard behind bed seven, and the elasticated straps are present and in good order.

3. **Nurse Responsibilities On a Retrieval**

3.1 **Before departure from PICU.**
   3.1.1 Identify the other members of the retrieval team.
   3.1.2 Obtain the information about the accepted retrieval and identify any specific equipment needed.
   3.1.3 Establish a realistic time for team departure. The Gold Standard is to depart within thirty minutes from the time that the retrieval is accepted.
   3.1.4 Establish whether the Technician/driver has been informed of the retrieval time and details.
   3.1.5 Put the retrieval bags together ready to take, with portable trolley (see guideline for stacking retrieval bags)
      Record the serial numbers on the security tags on the retrieval form.
   3.1.6 Remove one set of fridge drugs from the fridge, place in the Yellow Bag
   3.1.7 Remove one CD pack from the CD cupboard and sign out with the Nurse in Charge, place in the yellow bag (refer to the Trust CD Drug Policy).
   3.1.8 Secure POD onto trolley if required, or the appropriate sized harness
   3.1.9 To ensure you have everything you need, the pre-departure check list must be complete with all the team members.
   3.1.10 Ensure the nurse in charge has all the up to date information about the retrieval, including direct dial contact telephone numbers.
   3.1.11 Identify the bed space to be used for this new admission, and commence setting this bed area up prior to leaving. If the retrieval team are ready to leave PICU prior to the completion of the bed area this must be handed over to the nurse in charge.
   3.1.12 Ensure referral hospital is telephoned with the retrieval team’s estimated arrival time prior to leaving PICU.

3.2 **In the Ambulance.**
   3.2.1 Secure retrieval Bags One, Two and the yellow bag in the large storage cupboard.
   3.2.2 Secure the portable bag transport trolley in the outside compartment of the vehicle.
   3.2.3 Ensure Patient transport trolley is secured in the floor locks.
   3.2.4 Ensure adequate supply of oxygen (three HX cylinders at 2300 litres each) and air (one F cylinder 1280 litres) in the vehicle.
   3.2.5 Ensure fluorescent yellow jackets available for each team member available in the ambulance.
   3.2.6 Ensure that all team members have their seatbelts fastened before leaving.

3.3 **At the Referral Hospital.**
   3.3.1 Obtain Multidisciplinary handover from the team caring for the patient.
   3.3.2 Carry out an initial assessment as per retrieval document, eg Respiratory, Cardio vascular, Neurological and ventilation parameters if ventilated.
3.3.3 Document first set of patient observations on PICU documentation.
3.3.4 Obtain information about the family; ascertain what information the family have been given by the referring hospital concerning their child’s condition.
3.3.5 Check that the family have been given the PICU retrieval information leaflet prior to our arrival.
3.3.6 Introduce yourself and the team, to the family and explain the plan of action.
3.3.7 If the child’s condition requires immediate attention, then the family can be spoken to as soon as the child is stabilised.
3.3.8 Ensure that discussions with the family have included the reasons for the transfer, the mechanisms of the transfer and the risks associated with the transfer. Establish that the family are in agreement with the transfer of their child (this is implied consent)
3.3.9 Establish if one parent would like to travel with their child in the ambulance (space permitting) and if so give them an information leaflet detailing the conditions of transfer. A member of the team must ensure this has been read and accepted by the parent pre transfer.
3.3.10 Ensure endotracheal / nasotracheal tubes are secured with the Melbourne Strapping Technique.
3.3.11 All children should have a minimum of two patent peripheral lines or one central venous line. Ventilated children must have an oro / nasogastric tube.
3.3.12 Intravenous drug infusions where possible should be made up according to the Southampton PICU IV drug protocol.
3.3.13 The Transport Trolley must be plugged into the electricity supply wherever possible to conserve battery life of the equipment.
3.3.14 The ventilator should be plugged into wall oxygen to conserve cylinder oxygen. Cylinder Oxygen and Air should only be used for the actual transfer to the ambulance, and from the ambulance to PICU.
3.3.15 Once the child has been transferred onto the transport trolley and stabilised on the transport equipment, document a set of cardiovascular and ventilation observations on the PICU documentation.
3.3.16 Ventilated children should have a chest X-ray, blood gas and a complete set of observations prior to departure.
3.3.17 The pre transfer check on the retrieval form must be carried out before departure.
3.3.18 All tags removed from the bags should be written down on the retrieval checklist.
3.3.19 Parents must be updated on their child’s condition prior to departure.
3.3.20 Parents and family members not travelling with the team must be instructed on the dangers of following the ambulance and encouraged to travel with care.
3.3.21 Ensure that parents have specific directions to enable them to get to Southampton General Hospital and PICU.

3.4 Prior to Departing Referring Hospital
3.4.1 Prior to leaving the Referral Hospital, telephone the PICU and speak to the Nurse in Charge. Liaise patient demographic details and offer a clinical update.
3.4.2 Request any specific equipment likely to be needed on return. Give an estimated time of arrival back on PICU.
3.4.3 Once back in the ambulance (refer to points 3.2.1– 3.2.6).
3.4.4 Document a set of patient observations once the patient is secured in the Ambulance and prior to setting off.
3.4.5 Document patient observations every 10 – 15 minutes throughout the duration of the retrieval.
3.4.6 Ensure all members of the team are ready, seated and belted before commencing the journey back to PICU.

3.4.7 Ensure that the team is clear which “Category Level” is identified for this journey (see Protocol for the Activation of Blue Lights when Retrieving Critically Ill Children).

3.5 **During the Ambulance Journey**

3.5.1 If any patient intervention is required during the journey, which involves a member of the team removing their seatbelt, the Driver must be made aware immediately. The Driver should then ensure that the vehicle is slowed down and a safe place found to stop the vehicle, until further instruction.

3.6 **Responsibilities Following the Retrieval.**

3.6.1 Ensure CD pack is restocked and sealed if used, and locked into the CD cupboard on PICU with the Nurse in Charge (refer to the Trust CD Drug Policy).

3.6.2 Ensure that any drugs or fluids, used throughout the retrieval have been prescribed on the patient prescription chart. Any CD drugs or recordable drugs from the CD pack must also have the amount discarded documented on the prescription chart.

3.6.3 Restock the fridge pack if used, seal and return to the fridge.

3.6.4 In conjunction with the other retrieval team members, restock and reseal, Retrieval Bags One and Two. Restock the Retrieval Yellow Bag, check all drug expiry dates and reseal. Document the newly replaced serial numbers from the tags, on the retrieval paperwork. Replace all Retrieval kit back in the cupboard behind bed seven.

3.6.5 Ensure the retrieval paperwork is complete. Photocopy the Retrieval form, file the original copy as the first page of the PICU medical notes in the Patients blue folder, then file the photocopy of the retrieval form in the retrieval folder (behind the desk). File completed checklist document in the Retrieval folder.

3.6.6 Ensure the Transport Trolley is plugged in to the electricity supply and ensure all the charging lights on the equipment are lit.

3.6.7 Ensure all transport equipment is cleaned and prepared for use again.

3.6.8 If any critical incidents have been identified during this retrieval, details of the incident need to be recorded in the Trust Critical Incident Book.

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