Transfer of the critically ill patient

Standards and guidance for intra and inter hospital transfer
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1. Summary

Patients who are critically ill in hospital may, during the course of their stay, require transfer to another hospital or to another department within the same hospital. Indications for transfer include specialist investigation or treatment; lack of availability of a staffed critical care bed and repatriation.

Transferring a critically ill patient evokes risks. By having a clear pathway of referral, risk assessment and clinical protocol the risk is minimised.

This guidance sets out the operational framework for the transfer of critically ill patients within the South East Coast Operational Delivery Network (SEC ODN). The intention is to promote high standards of care during the transfer of critically ill patients both between hospitals and between departments within hospitals. The Intensive Care Society (ICS) published updated guidelines on the transport of the critically ill adult in 2011. Kent and Medway; Surrey and Sussex Clinical Forums have all, previously, produced guidelines and standard documents. The content of these documents form the basis of this guidance.
2. Purpose and scope

The purpose of this guidance is to provide all users and providers of the transfer service a clear understanding of the duties and responsibilities of those involved in transferring critically ill patients. It provides operational guidance on the process to be followed and standards to be achieved throughout the transfer pathway. Specific detail is given, where relevant, for inter hospital transfer. All other guidance underpins transfer of the critically ill both within and between hospitals.

Safe inter-hospital transfer is reliant upon the provision and safe operation of an appropriate ambulance. An agreed framework for prioritisation of transfers and appropriate response times can be found in the Operational Flowchart/Operating Procedure in Appendix 1.

The principles of safe transfer are summarised in the SEC pre transfer pathway (Appendix 2).

For specialist transfer pathways use the following links:
Major trauma Surrey – www.swlandstn.com
Major trauma Kent & Medway – website in development
Burns – www.lsebn.nhs.uk
ECMO – www.guysandstthomas.nhs.uk (search ECMO)
Aortic balloon pump & Independent Sector Pathway – Appendix 3 & 4

Training staff in the safe transfer of critically ill patients is essential to minimise risk. The physiological affects of transfer and an overview of common problems and their solutions will not be detailed here but should be incorporated into locally provided training programmes.

For the purpose of this document, critically ill patients are defined as those patients requiring a level of care greater than that normally provided on a standard hospital ward. The majority of critically ill patients will be classified as level 2 or 3 (ICS 2009, Appendix 5). Level 3 patients may be at significant risk of deterioration during transfer. Whilst some level 2 patients will be reasonably stable, others will be less so and their risk of deterioration no less significant.

The South Thames Retrieval service (STRS) takes responsibility for and undertakes most paediatric transfers. However, under certain circumstances (e.g. urgent neurosurgical transfer) it will be necessary for the referring hospital to undertake transfer of a critically ill child. Comprehensive guidance on stabilisation of the child prior to transfer is beyond the scope of this document. The STRS operates a website which gives access to useful guidelines on paediatric resuscitation, sedation and the treatment of specific conditions (www.strs.nhs.uk).
3. Definitions

**Critically ill** – patients requiring a level of care greater than that provided on a standard hospital ward

**Unstable patient** – a patient with an immediate life threatening condition/injuries; who cannot be stabilised in the referring hospital and, at the discretion of the senior clinician, should be transferred without delay for extensive resuscitation and stabilisation

**Clinical transfer** – a transfer for specialist treatment or investigation

**Capacity transfer** – a transfer carried out for the purpose of receiving treatment or investigation normally carried out at the referring hospital but not available at the time (e.g. lack of staffed critical care bed). Such transfers may be carried out due to lack of capacity yet remain clinically necessary and time critical

**Repatriation** – the transfer of a patient back to the referring hospital or to a hospital nearer home

**Primary transfer** – the transfer of a patient from the scene of injury or illness to the nearest receiving hospital

**Extended primary transfer** – the transfer of a patient from the scene of injury or illness to a centre most appropriate to the needs of the patient (by-passing the nearest hospital)

**Secondary transfer** – the transfer of a patient from a location within a hospital to another hospital or treatment centre

**Inter-hospital transfer** – the transfer of a patient between hospitals

**Intra-hospital transfer** – the transfer of a patient between locations within the same hospital
4. Roles

4.1. South East Coast Operational Delivery Network
- To ensure up to date SEC ODN transfer protocols and referral pathways are in place and accessible
- To liaise with ambulance providers to ensure pathways and communication links are in place and to disseminate to all users
- To audit the number of transfers, indications, incidents and outcomes
- To audit transfers within agreed pathways/hospital transfer groups

4.2. Acute NHS Trusts
- To nominate a lead consultant for critical care transfer with responsibility for guidelines, training and equipment provision
- To develop and review local transfer policies
- To ensure systems and resources are in place to resuscitate, stabilise and transfer the critically ill
- To undertake a detailed assessment of risk at organisational level
- To have a dedicated policy for the management of paediatric admission, stabilisation of the paediatric patient and paediatric transfer
- To update the electronic bed management system (Pathways DoS) every 12 hours to facilitate identification of bed availability
- To ensure all staff involved in the transfer of the critically ill receive appropriate training in line with ICS guidance (ICS 2011)
- To report the number of transfers, indications, incidents and outcomes

4.3. Referring Consultant/Intensivist/Anaesthetist
- Responsible for the patient and the decision to transfer
- Responsible for referral to and communication with the receiving hospital or department and colleagues from relevant specialties
- Responsible for ensuring that the patient is accepted by an appropriate parent team
- Responsible for undertaking an assessment to determine the anticipated risk during transfer
- Responsible for selection and competence of accompanying medical personnel

4.4. Referring Matron, Lead Nurse, Critical Care shift leader
- Responsible for ensuring that the patient is accompanied by appropriately trained nursing staff/ODP/technician
- Responsible for ensuring the availability of correct and maintained equipment
4.5. **Escorting personnel**
- Responsible for the patient during transfer until formal handover to receiving personnel
- Responsible for personal clinical competence appropriate to role
- Responsible for checking that all necessary equipment and drugs are taken
- Responsible for completion of transfer care record

4.6. **Ambulance provider**
- To ensure all transferring vehicles comply with standards stipulated by:
  - Road ambulance - CEN regulations
  - Air ambulance – Civil Aviation Authority
- To ensure transfer pathway arrangements are in place, detailing the prioritisation of secondary transfers and appropriate response times
- To ensure that all accompanying ambulance personnel are trained in transfer care

4.7. **Receiving hospital**
- To endeavour to maintain bed availability once an admission has been agreed and a bed promised
- To inform the transferring hospital and ambulance provider immediately should exceptional circumstances dictate that the bed is no longer available
- In the event of the above, to help facilitate an alternative bed at the nearest suitable critical care unit
5. Organisation and Planning

**Appropriate receiving location**
Clinical transfer – a specialist bed in the appropriate tertiary centre
Repatriation – the appropriate critical care facility closest to the patient’s home
Capacity transfer – the closest appropriate critical care facility. The capacity management system, [www.pathwaysdos.nhs.uk](http://www.pathwaysdos.nhs.uk), should be utilised to ascertain local bed availability.

**Selection of transport mode**
In most cases secondary transfer by road is appropriate. It has the advantages of rapid availability, familiarity and minimal disruption of patient physiology.

Most transfers do not require high speed travel, which may endanger patients and medical personnel. Blue lights and sirens may be used to aid passage through traffic.

Transfer by air is considerably more expensive than road travel, takes longer to organise and adversely affects patient haemodynamics and monitoring; however, may be appropriate for longer journeys or when road access is slow or difficult.

**Training**
All staff potentially involved in the transfer of a critically ill patient should receive appropriate training and experience in a supernumerary capacity when possible. Competencies for accompanying personnel can be found in the ICS Guidelines (ICS 2011).

Standardisation and regular use of the transfer protocol for both intra and inter hospital transfer will boost opportunity and familiarity.

**Equipment**
Equipment must be suitable for use in the transport environment and capable of being secured to withstand acceleration and deceleration forces, as governed by CEN regulations.

A dedicated transfer trolley must be used if available.

All equipment should be mounted below the level of the patient to improve stability and access.

Portable monitors should have a clear illuminated display and include ECG; oxygen saturation; non invasive blood pressure; two invasive pressures; capnography and temperature.

Portable ventilators should be able to provide PEEP; variable oxygen concentration (between 21-100%); I/E ratio and tidal volume. A choice of ventilator modes is desirable.
An infusion device should be used for all infusions where accuracy of delivery is essential.

Additional equipment for airway management and intravenous access should be available. Transfer bags and additional equipment should be securely stowed.

**Safety**

Patients should be secured to the transfer trolley by an appropriate restraint. Blankets should be used to keep the patient warm (unless contraindicated) and pressure areas protected. Indwelling lines and tubes should be visible.

Staff should have access to personal protective equipment, warm clothing and high visibility jackets and have a means of contacting the base and/or receiving unit.

Staff should remain seated, facing forwards or backwards, at all times wearing the seat belts provided. If the patient requires intervention the ambulance must be stopped in a safe place before treatment is administered.

In the event that an ambulance cannot return the transfer team to their base hospital, arrangements must be in place to ensure personnel and equipment can be returned safely and promptly.

**Governance**

The movement of critically ill patients within hospitals should be subject to the same organisation, planning and reporting as patients transferred between hospitals.

All incidents occurring during transfer should be reported through Datix at the referring unit after completion of the transfer and reported to SEC ODN by completion of the SEC transfer form audit proforma.

Contracts must be in place between CCGs and SECAMB to ensure that Critical Care transfer agreements are in place for the SEC population.

**SEC Transfer forms**

All units will use the SEC Transfer form: copies will be retained by the referring and receiving unit, this is the transfer record (Appendix 6).

All units will complete a transfer checklist prior to departure. (SEC Checklist - Appendix 7; alternatively a local checklist may be used).

All units will log transfers onto the SEC Database and report to the SEC ODN on a quarterly basis. The SEC ODN will produce an annual report of transfers.
6. Service Pathway

Decision to Transfer
The decision to transfer must be made by the responsible consultant intensivist/anaesthetist caring for the patient, in conjunction with consultant colleagues from relevant specialities.

The decision to accept the patient must be made by the consultant intensivist in the receiving Critical Care Unit and by the consultant of the receiving specialty team.

Transfer for capacity reasons should be avoided whenever possible. Capacity transfers should take place during normal working hours and the most appropriate patient should be determined by clinical stability and clinical specialty. It is not considered safe or acceptable to transfer critically ill patients between Trust hospital sites in order to maintain operational function at the transferring site.

Risk assessment
A detailed risk assessment should be performed by an experienced clinician to determine the potential risk during transfer. Risk assessment should include:

- Patient’s presenting clinical condition, specific risks and level of dependency
- Risks related to transfer/movement of patient
- Likelihood of deterioration and need for additional intervention
- Duration and mode of transfer

Accompanying personnel
The precise requirement for accompanying personnel will depend upon the clinical circumstances in each case and the skills and experience of escorting staff.

As a rule, a critically ill patient should be accompanied by two staff, a nurse and a doctor with an anaesthetic or critical care background. There are some exceptions:

For most level 1 and some level 2 patients a nurse escort supported by a paramedic or ambulance technician may be sufficient.

Some level 2 patients will require both a nurse and a medical escort, although the medical practitioner may be from the patient’s parent team. This applies to patients being transferred for acute definitive management for whom anaesthesia support will not affect their outcome.

During urgent transfer the ambulance provider may send, if available, a critical care paramedic crew which negates the need to send a nurse.

Ambulance personnel must be trained in transfer care and be fully briefed about the patient prior to transfer.
Patient and relatives
Patients and relatives should be informed of the decision to transfer, travel arrangements and any relevant information as soon as possible.

Preparation for transfer
Patients should be appropriately resuscitated and stabilised prior to transfer to reduce the risk of physiological disturbance and deterioration during transfer. The time taken to stabilise the patient should be balanced against the need for immediate life saving intervention.

Accompanying personnel should take time to familiarise themselves with the patient’s history and treatment. A full clinical assessment should be performed.

A checklist should be used to ensure that all necessary preparations have been completed underpinned by the following principles:

✓ The airway should be secured and protected if necessary
✓ Intubated patients should normally be sedated, paralysed and mechanically ventilated
✓ At least one arterial blood gas should be performed following stabilisation on a transport ventilator to ensure adequate gas exchange
✓ If a pneumothorax is present a chest drain should be inserted prior to transfer
✓ Secure venous access is essential with a minimum of two intravenous cannulae
✓ An indwelling arterial cannula is preferred for blood pressure monitoring
✓ Continuing sources of blood loss should be identified and controlled if possible. Effort should be made to restore circulating volume but should not delay transfer in cases of aortic aneurysm & penetrating injury where damage limitation surgery is not available
✓ If inotropes are required the patient should be stabilised on these prior to transfer
✓ A nasogastric tube and urinary catheter should be inserted unless there is a clear indication not to do so
✓ Where a spinal injury is known or suspected, full spinal immobilisation must be implemented

Named medical and nursing personnel at the receiving unit should be contacted before departure and given an estimated arrival time and update on patient condition.

Trauma
Trauma networks have meant that critically injured patients will often bypass local hospitals and be taken direct to the Major Trauma Centre. However, in some cases such as catastrophic airway problems the patient may be taken to a Trauma Unit for limited resuscitation pending emergency transfer to the MTC.
These patients are inherently unstable. They may be being transferred for Damage Control Surgery, control of haemorrhage or other time critical intervention. With that in mind they will never reach stability in the Trauma Unit and must be transferred without delay.

Packaging should include - catastrophic external haemorrhage control, airway control and ventilation, spinal care, splintage of fractures. Blood transfusion may be in progress with on-going resuscitation during the journey. A senior clinician should accompany these patients.

Good peripheral vascular access is essential. Central venous access adds little to these patients and takes up time pre transfer. Consideration of an arterial line may be given but time should not be wasted in inserting it if it proves difficult.

**Request for ambulance**

Unstable patients should be transferred without delay following limited resuscitation. Call 999 or the ambulance Emergency Operations Centre and request a “Red 2 transfer” (eight minute response time).

If the transfer is time critical the patient should be moved to the transfer trolley if available. Once the patient is fully prepared for transfer the ambulance provider should be contacted and a request made for a critical care transfer. The call handler will ask a number of questions to ascertain the urgency and appropriate response time (within 30 minutes – immediate clinical need or within 2 hours – not in immediate danger).

In the event of a booked investigation the ambulance provider should be contacted to book a transfer time. Preparation for transfer should ensure that the patient is fully ready for the allotted transfer time.

In the event of a repatriation of a patient resident within the South East Coast region, the ambulance provider should be contacted to book a transfer date and time. Preparation should ensure that the patient is fully ready for transfer at the allotted time.

In the event of a repatriation of a patient resident outside the South East Coast region there should be a discussion with the receiving hospital; the most likely option will be a private ambulance transfer on a suitable date and time. This will require discussion with the patient’s CCG commissioner.

**Monitoring during transfer**
Monitoring must be continuous throughout the transfer.
All displays (monitor, ventilator, infusion devices) should be visible.
Alarm limits should be set for all parameters.
Minimum standards of monitoring include:
ECG
Non invasive blood pressure (invasive arterial monitoring if in situ)
Oxygen saturation
End tidal carbon dioxide
Airway pressure and disconnect alarms (ventilated patients)
Temperature – a minimum of prior to and post transfer

**Documentation**
Clear records should be made at all stages including the decision to transfer; risk assessment; patient assessment; monitoring during transfer; any clinical events during transfer.

All teams must use the SEC Transfer form.

**Handover**
On arrival at the receiving hospital there should be a formal, structured, handover between the transferring team and the receiving team who will then assume responsibility for the patient’s care.
7. Reference


8. Acknowledgements

D. Higgs: Kent & Medway Guidance for the Transfer of Critically Ill Patients

J. Huddleston: Surrey Critical Care Transfer Policy

Sussex Managed Clinical Networks: Guidelines for Interhospital Transfer of Critically Ill Patients
Appendix 1 - Operational Flowchart/Operating Procedure

Unstable patient with immediate life threatening condition/injury:
Dial 999 or SECAMB Emergency Operations Centre: RED 2 RESPONSE - 8 minute response time

SECAMB Emergency Operations Centre (EOC):
Kent and Medway - 01622 747464
Surrey – 0208 786 8874
Sussex – 01273 486465

Critical Care transfer required – all via SECAMB EOC
You will be asked a set of questions by the call handler to determine the appropriate response time:

- Escalation of care to tertiary centre
  - GREEN 2 Emergency transfer (immediate clinical need) – within 30 minutes
  - OR
  - Urgent transfer (not in immediate danger) - within 2 hours

- Transfer for investigation not available within referring unit
  - Within 4 hours

- Capacity transfer – no beds
  - Within 4 hours

- Repatriation - to another hospital/hospice/home within SEC
  - Within 24 hours
  - Requires discussion with the EOC manager on duty & patient’s CCG commissioner

All patients should be on a FERNO critical care trolley (if available)
South East Coast Critical Care Operational Delivery Network
Transfer Protocol

Appendix 2

Pre Transfer Stage

Decision to transfer
(Consultant decision)

Reason for Transfer

Clinical/specialist transfer
Contact designated referral centre

Capacity Transfer
Use NHS Pathways DoS to identify nearest available bed

Repatriation
Contact ICU nearest patient’s residence

If bed not available referring hospital to find alternative bed via EBS

Bed available or Investigation time confirmed

Consultant to Consultant Referral

Time Critical Transfer
Transfer patient to transfer trolley and prepare for departure
Checklist for transfer completed
Contact EOC and state Critical Care transfer for “Immediate Clinical Need” emergency response needed

Non Urgent
Contact EOC and agree time and date for transfer: 2 or 4 hours or other timeframe up to 24 hours
A transfer for capacity reasons or investigation may still be time critical
Ensure that patient is ready for departure by the agreed pick up time
Checklist for transfer completed

EOC Checklist
- Urgency and pick up time
- Referring doctor
- Confirm destination
  - Hospital & location
- Name & DOB of patient
- Stability of patient
- Fully prepared/ready to travel?
- Intubated/ventilated?
- Weight of patient
- Special equipment or requirements of patient
  - Intra-aortic balloon pump in situ
- Details of escorting team
- Details of accompanying relatives
- Confirm ETA

Recommended equipment for transfer
- Portable ventilator
- Portable monitor
- Electrical inverter/spare batteries
- Portable suction
- Transfer bags, drugs
- Vacuum mattress (if available)
- Spare oxygen cylinder

Glossary & Phone

EOC Emergency Operations Centre at SECamb
EOCM EOC Manager
Kent & Medway
01622 747464
Surrey
0208 786 8874
Sussex
01273 486465
EBS Emergency Bed Service
0207 407 718
NHS Pathways Directory of Services
www.pathwaysdos.nhs.uk
Appendix 3

Contact SECamb Emergency Operations Centre
Kent & Medway – 01622 747464
Surrey – 0208 786 8874
Sussex – 01273 486465
And state:

- Emergency Balloon Pump Transfer (patient immediately life threatening)
- Patient with IABP in situ
- Patient will travel on Critical Care trolley

SECamb source appropriate vehicle and crew
(19 minute response time)

Ambulance stretcher to transferring unit for safekeeping

Patient on IABP stretcher taken to and loaded on to ambulance

SECamb crew responsible for securing IABP to tracking system in vehicle

Tertiary provider
Kent & Medway: William Harvey Hospital
Surrey: St George’s Hospital
Sussex: Royal Sussex County Hospital

Recommended Equipment for Transfer

Patient on IABP

Identified need for transfer

Patient packaged and Placed on Ferno IABP Stretcher so ready for transfer

Source CCU ICU Angio Suite

Acute Trust responsible for ensuring appropriate crew (Paramedic crew not guaranteed)

Remain on mains supply for all equipment until ambulance crew ready

Notes
IABP is helicopter compatible
Weighs 65kg

Glossary
CCU Coronary Care Unit
ICU Intensive Care Unit
IABP Intra Aortic Balloon Pump
SECamb South East Coast Ambulance Service
EOC Emergency Operations Centre

IABP swapped at tertiary centre

SECamb to return IABP stretcher and escort to local Trust and ambulance crew to collect own stretcher
South East Coast Critical Care Operational Delivery Network
Joint Transfer Protocol with Independent Sector Hospitals

Patient in Theatre
Consultant Anaesthetist responsible for patient
Consultant decision to transfer patient
RMO Review - alerts relevant Consultant and Consultant Anaesthetist if appropriate
Patient in Ward

Consultant/RMO referral to local hospital accepting team
Referring hospital to coordinate transfer
Patient stabilised and equipment organised for transfer
Commence Critical Care Network transfer form

Patient ready for transfer

If patient is unstable and condition is life threatening, dial 999 for ambulance
Patients with suspected stroke must be prioritised and transferred to allow for thrombolysis within 3 hours of onset of symptoms

Staff at referring hospital to contact relevant department at receiving hospital after the patient has left to provide an estimated time (ETA) of arrival

Patient transferred with two accompanying personnel if clinically unstable and/or ventilated:
1 consultant and 1 appropriately trained nurse or ODP (according to ICS guidelines)
If assessed as clinically stable then transfer can be undertaken with a nurse/ODP escort only

Arrive at receiving hospital
Go direct to ICU or other specified area
Medical and nursing handover of patient

If no bed available at local hospital access NHS Pathways DoS or contact EBS

Recommended Equipment for Transfer
- Portable ventilator
- Portable monitor
- Electrical inverter/spare batteries
- Portable suction
- Transfer bag, drugs
- Vacuum mattress
- Spare oxygen cylinder

Glossary & Phone
EOC Emergency Operations Centre at SECamb
Kent & Medway - 016220747464
Surrey - 0208 786 8874
Sussex – 01273 486465
NHS Pathways Directory of Services www.pathwaysdos.nhs.uk
EBS Emergency Bed Service 0207 407718
ICS Intensive Care Society

Appendix 4
## Appendix 5 - Levels of Critical Care for Adult Patients (ICS 2009)

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<th>Level</th>
<th>Description</th>
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<td><strong>Level 0</strong></td>
<td>Patients whose needs can be met through normal ward care in an acute hospital.</td>
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<tr>
<td><strong>Level 1</strong></td>
<td>Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional advice and support from the critical care team.</td>
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<tr>
<td><strong>Level 2</strong></td>
<td>Patients requiring more detailed observation or intervention including support for a single failing organ, post operative care and those 'stepping down' form higher levels of care.</td>
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<tr>
<td><strong>Level 3</strong></td>
<td>Patients requiring advanced respiratory support alone or basic respiratory support together with support for at least two organ systems. This level includes all complex patients requiring support for multi-organ failure.</td>
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### South East Coast Critical Care Network

**Critical Care Transfer Form**

#### Patient Details
- **Name:**
- **Date of Birth:**
- **Gender:** Male □ Female □
- **Hospital Number:**
- **Postcode:**
- **NHS Number:**

#### Transfer Details
- **Date of Transfer:**
- **Receiving Hospital:**
- **Exact Location:**
- **Time Patient Ready for Transfer:**
- **Time Receiving Hospital Accepted Patient:**
- **Reason for Delay:**

#### Reason for Transfer
- **Categoric:**
- **Clinical Indication/Investigation & Return:**
- **Clinical/Neonatal Treatment (Specify):**
- **General:**
- **Cardiac:**
- **Thoracic:**
- **Liver:**
- **Renal:**
- **Spinal Injuries:**
- **Burns and Plastics:**
- **Neurosciences:**
- **Other:**
- **Level of Care:**
  - Level 3 □ Level 2 □ Level 1 □ Level 0 □

#### Staff Details
- **Referring Consultant:**
- **Contact Telephone Number:**
- **Receiving Consultant:**
- **Contact Telephone Number:**
- **Consultant of Receiving Specialty Team:**
- **Escorting Personnel:**
- **Doctor:**
  - **Name:**
  - **Grade:**
  - **Transferred Training Certificate Y □ N □
- **Nurse/ODP/CCP:**
  - **Name:**
  - **Grade:**
  - **Transferred Training Certificate Y □ N □

#### Ambulance Details
- **Time Ambulance Control Contacted:**
- **Referring Hospital:**
- **Ambulance Time of Arrival:**
- **Ambulance Time of Departure:**

#### Details of Events During Transfer
- **Clinical □ Equipment □ Organisational □

#### Signatures
- **Referring Doctor Name:**
- **Receiving Doctor Name:**
- **Signature:**

#### Form Destinations:
- **Top Copy (White):** Receiving Hospital Patient Notes
- **Bottom Copy (Blue):** Referring Hospital Critical Care Transfer Audit Lead For Audit and Filing

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**Time (24 hour) 10-15 minute time intervals suggested**

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**Rhythm**

- **Left:**
- **Right:**

**Respiratory Rate**

- **SpO2:**
- **FiO2:**
- **ETCO2:**
- **Tidal Volume:**
- **Peak Imp. Pressure:**
- **PEEP:**

**Diastolic:**

**Systolic:**

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**Note:**
- Please note section is not completed.

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21
South East Coast Critical Care Network
Critical Care Transfer Checklist

Tick each checkbox or write ‘N’ if not applicable

**CHECKLIST 1**
**Is the patient stable for transport?**

**AIRWAY**
Airway safe or secured by intubation
Tracheal tube position confirmed on X-ray

**VENTILATION**
Paralysed and sedated and ventilated
Ventilation established on transport ventilator
Adequate gas exchange confirmed by arterial blood gas

**CIRCULATION**
Heart rate, BP stable
Tissue and organ perfusion adequate
Any obvious blood loss controlled
Circulating blood volume restored
Haemoglobin adequate
Minimum of two sets of venous access
Arterial line and central venous access if appropriate

**NEUROLOGY**
Seizures controlled, metabolic causes excluded
ICP control measures in place

**TRAUMA**
Cervical spine protected
Pneumothorax drained
Intra-abdominal injuries adequately investigated and appropriately managed
Long bone/pelvic fractures stabilised

**METABOLIC**
Blood glucose >4 mmol/L
Potassium <6 mmol/L
Temperature maintained

**MONITORING**
ECG
Blood pressure
Oxygen saturation
End tidal carbon dioxide
Temperature

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**CHECKLIST 2**
**Are you ready for departure?**

**PATIENT**
Secured safely to trolley
Wrapped to prevent heat loss
Vacumattress if available and appropriate
Infusions running and lines secure

**STAFF**
Received appropriate handover
Adequately clothed (including Hi-Vis jacket)
Money for emergencies
Portable phone charged

**EQUIPMENT**
Check transfer bag complete (airway & ventilation, vascular access, fluids, drugs)
Bag valve mask
Batteries and spares
Sufficient oxygen supply
Portable suction

**ORGANISATION**
Case notes photocopied
Radiology sent/copied
Property book, valuables, patient’s drugs
Transfer documentation prepared (nursing, medical referral)
Exact location known (eg which ICU)
Relatives informed
Speciality team handover
Advise receiving unit of departure time and expected arrival