

**CSOP 006- Interfacility Transfer****- Incorporating TAAS assistance in TU/LEH to MTC transfer for CETN**

Version No: 3.1

Effective date: 13/02/15

**APPROVALS**

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Feb 2010	1.0	Creation of document
Oct 2012	2.0	Review and update to TAAS
13/02/15	3.0	Review of document
16/05/2015	3.1	Addition to title for Trauma network clarity.

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**REFERENCES**

Document Reference Number	Document Title
Appendix A	CETN hyper acute transfer guidance

**1. Purpose**

Air ambulances may be asked to carry out transfer work during a HEMS shift.

This document serves as a guide to:

1. Ensuring a uniform approach to requests for air transfer
2. Identifying those patients where air transfer is appropriate
3. Ensuring appropriate utilisation of the aircraft and minimising disruption of HEMS cover
4. Maximising the safety and minimising the risks associated with complex interfacility transfers

**2. Definitions/Acronyms:**

Abbreviations/Acronym	Definitions
ECMO	Extra Corporeal Membrane Oxygenation
TU	Trauma Unit
HEMS	Helicopter Emergency Medical Service
LEH	Local Emergency Hospital
NHS	National Health Service
TAAS	The Air Ambulance Service
ITU	Intensive Therapy Unit
MTC	Major Trauma Centre
SCIC	Spinal Cord Injury Centre
ED	Emergency Department
STEMI	ST Segment Elevation Myocardial Infarction



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PCI	Percutaneous Coronary Intervention
PPCI	Primary Percutaneous Coronary Intervention
DGH	District General Hospital
EOC	Emergency Operations Centre

### 3. Scope

For a small group of patients, transportation between hospitals by air has definite benefits. Where appropriate and feasible requests for transfers of these patients should be accommodated. The introduction of Trauma Networks has generated a clear need for immediate transfers from Trauma Units and Local Emergency Hospitals to Major Trauma Centres. In the Central England Trauma Network these are referred to as “hyper acute transfers”, an alternative description is “extended primary transfer”, both terminologies reflecting the need to move the patient as quickly as safely possible with only the unequivocal needed interventions happening at the referring hospital.

This document serves to act as a guide to identifying these patients and carrying out safe and efficient conveyance of these patients between hospitals.

It should be remembered that there are risks associated with the movement of the critically ill or injured from one safe environment to another by any means. These risks may be amplified when the patient is placed in a helicopter and a greater potential risk exists when secondary sites are used. For each request, the patient's clinical condition and potential for deterioration needs to be assessed against the benefits of rapid transport.

Air ambulances are not NHS resources and should not be used as an alternative mode of transport due to non-availability of land ambulances or for the purposes of achieving targets.

TAAS should only undertake inter facility transfers that can be managed by the HEMS team. If there is a need for personnel from the referring hospital to travel with the patient an alternative means of transport should be used.



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The experience and skills of the crew should be considered when deciding whether to perform a transfer, most of the HEMS doctors are not involved in regular intensive care management of patients and thus it would be rare to use a TAAS aircraft for an ITU transfer.

Typical scenarios for transfer:

- Patient with unstable spinal fractures moving to MTC or SCIC.
- Hyper-acute transfer from a trauma unit ED to MTC ED
- Transfer of STEMI patient to PCI centre.

Patients with multi-organ failure, with complex ventilator needs on multiple inotropes are not suitable for TAAS.

Note that the final go/no go decision rests with the duty crew (including the pilot) and the on-call clinical supervisor and not with either the ambulance services or the referring and receiving hospitals.

**Even in a time critical transfer, time spent planning the transfer is not time wasted; rather, it will probably reduce the time to definitive care.**

## 4. Classification of Transfers

For the purposes of this document transfers will be classified as:

### 4.1 Immediate / Primary

These are patients in centers with grossly inadequate facilities, without the ability to stabilise or optimise the patient for transfer. These retrievals will be done as part of a coordinated trauma network and should for all intents and purposes be treated as a primary HEMS mission. The HEMS crew will be expected to stabilise the patient in the same way that they would approach the patient were he or she outside the hospital. Patients will always be taken directly to the Emergency Department of the designated receiving hospital



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- An example would be a multiply injured patient taken to a small DGH with little or no facilities to manage the patient.

#### 4.2 Emergency

This applies to patients where a diagnosis has been reached and the patient has been referred and accepted for immediate, life- or limb-saving surgery, or specialist intervention. The intervention has to be planned for the next few hours.

Examples include:

- Confirmed STEMI for PPCI
- Leaking Aortic Aneurysm
- Closed Head Injury for Evacuation of haematoma  
A patient with a closed head injury *not* requiring surgery, but going to a neurosurgical ITU would fall into this category
- Unstable spinal column injury for surgery
- Early Pre-term labour (birth not imminent) being transferred to a centre with NICU facilities

#### 4.3 Scheduled

This applies to patients who need to be conveyed to a specialist centre for a definitive intervention, but where there are no time-critical features. The patient is stable, but there are some good reasons why air transfer would be better than road transfer.

Examples include:

- Unstable spinal injury needing further assessment and rehabilitation at a spinal centre where a prolonged transfer could compromise healing
- Moving a ventilated patient from one ITU to create space at the referring centre

#### 4.4 Repatriation



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Patient being taken to a hospital nearer their home, for long-term care or rehabilitation.

Examples include:

- A patient on long-term ventilatory support or weaning needing some ITU monitoring, where the road journey time would be in excess of five hours.

Scheduled and Repatriation moves are not part of the core HEMS service and will only be undertaken in exceptional circumstances as agreed by one of the Base Managers or by The Head of Operations.

## **5. Secondary Sites**

If one or both of the hospitals involved have secondary landing sites requiring ambulance transfer at the start and / or end of the transfer, it is very likely that road transfer will be more appropriate, unless the road transfer time exceeds two hours. If this is the case, the HEMS doctor should ensure that EOC and the referring hospital understand the reasons for turning down the request and that suitable alternative arrangements can be made.

## **6. Procedures**

**6.1** All requests for transfer of patients between one facility and another (referred to as secondary transfer, primary transfer being the movement of the patient between the site of illness or injury and the hospital) should be forwarded to the duty HEMS doctor for the day. In his or her absence or unavailability, the request may be passed to the clinical supervisor on-call.

**6.1.1** The following minimum information needs to be collected by control / EOC when the first contact is made: connecting the referring doctor to the HEMS doctor on a three- way conference call will improve efficiency and save time.



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- Patient's name, age, date of birth & weight
- Ward and Hospital referring the patient
- Any known infectious diseases
- Consultant or senior doctor looking after the patient, his or her telephone and extension or bleep number, or mobile phone number
- Ward and hospital that the patient is going to
- Name and contact details of the doctor who has accepted the patient. (For ITU transfers this includes the ITU consultant as well as the specialty consultant at the receiving hospital)

6.1.2 EOC must also contact the receiving hospital and ward and confirm that they have indeed accepted the patient and are ready for them.

**6.2** On receipt of this information, the duty HEMS doctor should immediately contact the referring doctor, ascertain the patient's condition and reasons for transfer. The attached transfer request form indicates the information that is required and should be completed.

**6.3** In discussion with Aircrew Paramedics<sup>1</sup> and Pilots, the duty HEMS Doctor will make a decision on the most suitable form of transport and crew and inform the referring Doctor and EOC of their decision. This must be documented, even if the request for air transfer is deemed inappropriate and declined.

**6.4** If the Duty HEMS Doctor decides that another aircraft (either Doctor-Paramedic or double Paramedic crew) is more appropriate for the task, it is his or her responsibility to liaise with the crew of that aircraft (or ambulance service<sup>2</sup> if applicable) and pass on the clinical details and to ensure that the transfer is arranged.

<sup>1</sup> Weather conditions, aircraft performance and flight / duty time limitations may have significant influence on the ability of a unit to carry out a transfer safely and within an appropriate time frame.

<sup>2</sup> It may often be quicker or safer to transfer the patient by road – especially if the referring and / or receiving hospitals do not have a primary helipad



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## 7. Authority

Authority to carry out a scheduled or repatriation transfer (Category 3 or 4) is to be gained from one of the Base Managers or The Head of Operations. Immediate/ Primary and Emergency transfers are authorized by the duty HEMS Doctor or Clinical Supervisor.

Receiving and handing over patients.

- 7.1. The HEMS crew must only take handover and receipt of the patient at the referring hospital
- 7.2. Under no circumstances should the patient be brought to the helicopter by referring hospital staff
- 7.3. It is vital that the HEMS crew make a final assessment at handover that the patient is suitable to fly including:
  - 7.3.1. Clinically safe
  - 7.3.2. No risks to aircrew
  - 7.3.3. All lines, tubes and monitoring secured
  - 7.3.4. No need for additional equipment.
  - 7.3.5. All documentation, images and if necessary blood products ready and labeled to go with patient.
  - 7.3.6. There is adequate oxygen available on the aircraft for the duration of transfer
- 7.4. Handover of the patient should only take place in the receiving unit with a member of the receiving team present; it is not acceptable to handover to another ambulance crew.
- 7.5. Documentation should be completed including a Midland Critical Care Network transfer form, a copy of which must be left with patient's notes.

## 8. Crew Competence

The HEMS crew must only accept a patient transfer for a patient that they have the knowledge, skills and experience to support. HEMS paramedics are **not** allowed to transfer patient on medications or infusions of drugs which are not on the JRCALC / POMS Exemptions list, or for which they do not hold a patient group direction.



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If the crew members are not confident that they can look after the patient, then an alternative means must be arranged.

## 9. Equipment

Other than with the express permission of the pilot, no non-unit equipment is to be used in flight. Both bases have invasive monitoring equipment, transport ventilators and battery-operated infusion pumps. All Doctors and Paramedics are expected to be familiar with this equipment. Baby capsules are available at each base.

### 9.1 Aortic Balloon Pumps

Patients with aortic balloon pumps are **not** to be flown. There is not enough space for the equipment and the physiologist to operate it and the risks of failure / dislodgment are very high.

### 9.2 ECMO

As with Aortic balloon pumps there is not enough space for current ECMO equipment to be transferred. The RAF are able to do this and it is coordinated through the ECMO unit at Leicester Glenfield Hospital.

### 9.3 Baby Capsules

In general, the unit does not retrieve neonates or sick children alone. Requests of this nature should be forwarded to or discussed with the receiving neonatal or paediatric intensive care facility. It is possible to facilitate a transfer of a neonate by a dedicated retrieval team. This can be coordinated by the Retrieval team at Birmingham Children's Hospital. The Childrens Air Ambulance is now the dedicated service for this and where possible requests should be passed to their dispatch team.



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#### 9.4 Vacuum Mattresses

This is the preferred means of transport for all trauma patients who are not time-critical. It must be used for all spinal transfers and transfers of immobilised patients where the **total** time of the patient journey exceeds one hour. A clean sheet must be placed inside the mattress and checked to see that there are no creases or folds that could act as pressure points. The patient is to be placed in the mattress using a scoop stretcher, the scoop removed and the mattress deflated and secured around the patient.

#### 10. HEMS Car shifts

HEMS 53 & 54 shifts explicitly include transfer from TU/ LEH to MTC in the dispatch criteria. Whilst the aviation considerations are no longer relevant, the medical standards relating to the competence of crews, equipment usage, documentation and safe handover still exist and should be followed.

**End of Document**