WYMTN - Paediatric Transfer guidance

November 2020

Note: This document should be read in conjunction with the Y&H Paediatric Major Trauma Guidelines (see wymtn.com)

Leeds General Infirmary is the paediatric Major Trauma Centre for West Yorkshire, North Yorkshire and Humberside. In addition it provides specialist vascular (surgical and IR), cardio/thoracic surgical and plastic surgical input for South Yorkshire.

Patients within the West Yorkshire Major Trauma Network who fulfill the triage tool criteria should be brought directly to the LGI MTC bypassing closer Trauma Units.

Patients within the North Yorks and Humber Major Trauma Network who fulfill the triage tool criteria should be brought directly to the LGI MTC bypassing closer Trauma Units *and* the Hull Adult MTC unless they are within a certain geographically defined area close to Hull Adult MTC or more than one hour from a Paeds MTC (eg Scarborough) or are within the North Lincolnshire and Goole region (in which case they will be taken to Sheffield).

Paediatric patients who present to Trauma Units who, following assessment, require MTC care will be transferred to the MTC.

Purpose of document & Philosophy

This guideline describes the pathway for the safe and efficient emergency transfer of paediatric patients from a Trauma Unit (TU) or Local Emergency Hospital (LEH) to the Major Trauma Centre (MTC). Children with major trauma need to be stabilised appropriately and to get to the right Major Trauma Centre quickly for definitive care. Where there is doubt about the need for transfer to the MTC **senior** decision makers should rapidly reach agreement and should err on the side of transfer to the MTC. Such transfers are not dependent on critical care resource at the MTC.

TRANSFER CATEGORIES:

Life / Limb / Organ saving

These patients require transfer to the MTC for immediate life / limb / organ saving treatment. This is an ED to ED transfer. If the TU / LEH consultant believes a patient has immediately life / limb /organ threatening injuries that cannot be managed at their hospital then the patient will be automatically accepted at the MTC and a 'send and call' approach should be followed.

Inform the LGI PEM Consultant and, if time allows, the LGI Major Trauma Specialist Nurse (MTSN)

Stop / Sort / Go

These patients will have undergone a 'pitstop' at the Trauma Unit and require immediate onward conveyance to the MTC for full investigation and treatment. This is an ED to ED transfer. Inform the LGI PEM Consultant and, if time allows, the LGI Major Trauma Specialist Nurse (MTSN). More information on the stop, sort & go process can be found here https://www.wymtn.com/stop-sort--go.html.

Combination of injuries requiring MTC care

These patients have a range of injuries that will require observation or management at the MTC and may require specialist input at short notice (e.g. multiple rib fractures and splenic laceration). This is an ED to ED transfer.

The decision to refer such a patient should be a senior clinical decision involving the relevant TU specialties.

Contact the MTC PEM Consultant in Charge on 0113 3920902 or PEM NIC on 0113 3920909 to arrange ED to ED transfer. The decision to accept a patient currently in a TU ED will be made by the **LGI PEM Consultant or**, **LGI ED Consultant in Charge** (when no PEM consultant on duty) on 0113 3920901 or NIC on 0113 3920904. Acceptance of such a patient by an inpatient specialty consultant is not required prior to transfer.

Specific single system injury potentially requiring MTC care (including open fractures¹)

The decision that a single system injury exceeds TU specialist management capability should be made by a senior clinician of the relevant specialty. They should then contact the Paediatric Surgery on-call consultant or relevant specialty consultant via switchboard (or online for neurosurgery) and / or the Major Trauma Specialist Nurse on 07920 757 283 to discuss the case and decide if the patient would be for ED to ED transfer or for local admission initially and secondary transfer TU to MTC within 48 hours. If an admitted trauma patient becomes unstable and requires immediate MTC care then they should be transferred to the MTC ED following the 'send and call' approach.

¹ Note that transfer of isolated open limb fracture patients should generally not occur after 10pm. Please see https://www.wymtn.com/open-fractures.html for further information

THE ROLE OF EMBRACE:

Embrace, the Yorkshire & Humber Infant & Children's Transport Service, is not used to deliver time critical emergency trauma transfers; this is the responsibility of the TU / LEH. Embrace does manage the trauma calls for South Yorkshire and North Yorkshire / Humberside so that the calls can be recorded. The Embrace service can also be used anywhere and anytime to facilitate referral of patients who do not require immediate transfer or in whom the requirement for transfer is unclear. They can be contacted on 0114 268 8180.

Leeds MTC Clinicians need to be aware that they may be contacted by Embrace on the ED DECT phones to discuss major trauma cases. Embrace call handlers will follow a script included in APPENDIX TWO.

REFERRAL GUIDANCE:

A **consultant must be involved in all transfer decisions.** Referral should start with a clear statement of the reason for referral and then utilise an ATMIST structure:

- A Age / Gender / name & number
- T Time of incident
- M- Mechanism of Injury
- I Injuries found
- S Signs and symptoms including most recent observations
- T Treatment given

"I am transferring a patient with multiple injuries including a life-threatening head injury. He is a 43 year old male, Michael Thompson, NHS number 123 456 7899. At 12:20 he fell 30' from a ladder landing on concrete. He has had a polytrauma CT scan and has a large extradural, multiple left sided rib fractures and a splenic laceration. He is intubated and ventilated. His heart rate is 85, blood pressure 120/76, sats 100%, respiratory rate 14 and GCS 3 (intubated and ventilated)."

The MTC PEM Consultant can be reached on 0113 3920902 (3920901 for LGI ED CIC if no response from PEM Consultant)

The MTC PEM Nurse in Charge can be reached on 0113 3920909 (3920904 for LGI ED NIC).

For multiply injured patients who you feel would benefit from MTC care but who have no immediately life or limb threatening injuries contact the MTC PEM or ED Consultant to discuss referral.

For advice on specific injuries:

For neurosurgical advice use the online referral system https://patientpass.leedsth.nhs.uk/

T & L Spinal Injury - Spinal surgery on call

Thoracic Injury - Paediatric Surgery

Cardiac injury - Cardiac Surgery on call

Intra-abdominal injury - Paediatric surgery on call

Vascular Injury - Vascular surgery on call Pelvic injury - Major Trauma T&O

Extremity injury - Major Trauma T&O

A summary of this guidance is included in APPENDIX ONE.

HOW TO PREPARE THE PATIENT FOR TRANSFER:

Guidance on preparing a paediatric secondary trauma transfer can be found here:

https://www.wymtn.com/uploads/5/1/8/9/51899421/19. secondary trauma transfers.pdf. The guidance includes a minimum equipment list and a checklist to be completed prior to departure.

A risk assessment must be carried out to determine the level of support and personnel required. The assessment should take into account the following:

- Patient's current clinical condition
- Specific risk related to patient's condition
- Risks related to movement / transfer
- Likelihood of deterioration during transfer
- Potential for requiring additional monitoring / intervention
- Duration and mode of transfer

Level 2 and 3 patients should normally be accompanied by two suitably trained, experienced and competent attendants during transfer whose background and competencies will depend on the nature of the patient's injuries, co-morbidity, level of dependence and risk of deterioration.

Specific requirements

- All **intubated** patients must be accompanied by a suitably trained clinician able to manage an invasively ventilated patient
- All patients requiring ongoing **blood transfusion** or infusion of any drug must be accompanied by a suitably trained clinician able to manage the infusion device in use
- All patients with an **intercostal drain** must be accompanied by a suitably trained clinician familiar with the management of intercostal drains. Drains must not be clamped for transfer.

If blood products and / or components are being transferred with a patient to the LGI the TU team must liaise with the referring hospitals **own** Blood Bank as soon as possible. The Biomedical Scientist (BMS) will be aware of what documentation is required and the safest way to transfer the blood products / components. Blood products and components being transferred with a patient from another hospital out with LTHT must:

Be packaged appropriately

Have transit documentation completed which details the blood products and components and their storage conditions

Labelled with a transport label on the outside of the transfer box.

Upon arrival at the LGI any blood products / components that are not being transfused and are not immediately required must be **delivered to the LGI blood bank** as soon as possible. The BMS staff will re-issue the products / components once they are satisfied that they are safe to use. Please inform the Blood Bank BMS at the LGI if the patient has received any blood products / components prior to arrival at LTHT

IMAGING and NOTES:

Please ensure all images will be visible on Xero image view and that a copy of the TU radiology report accompanies the patient. Please ensure that all relevant electronic notes and prescriptions are printed and transferred with the patient. An alternative is to email a PDF of the notes to the ED Consultant with their prior agreement.

HOW TO LIAISE WITH YAS:

YAS should be contacted via 0300 330 0276 for all time critical transfers. The caller will be asked to press 1 for assistance in delivering an immediate life-saving intervention or to declare an obstetric emergency OR hold for an operator. *Trauma transfers would almost never come under this category*.

If there is a need for an immediate intervention that cannot be carried out at the current facility and the patient is at immediate risk of death or life changing loss of a limb or sight (eg immediate neurosurgery, thrombectomy, immediate life or limb saving surgery) a Category 2 response will be initiated. This involves dispatch of the closest emergency ambulance with a mean response time of 18 minutes.

SAFEGUARDING:

Consider the nature of the presentation. If an assault has led to serious injury the police must be informed at the earliest opportunity (by the TU team). Further guidance on safeguarding in major trauma can be found here:

https://www.wymtn.com/uploads/5/1/8/9/51899421/20. safeguarding and child protection.pdf

THE INTUBATED PATIENT WITH A NORMAL SCAN:

In some circumstances a child may be intubated to facilitate a head scan. Following imaging, if no significant injuries are found and there is no other reason to transfer the child, then an attempt should be made to wake and extubate at the TU. If the TU team do not feel it is appropriate to do this then use the Embrace referral system to discuss with PICU / PED and Neurosurgery at the MTC prior to transfer.

APPENDIX ONE - Transfer guidance summary

PAEDIATRIC TRAUMA TRANSFERS TO MTC-

A TU consultant must be involved in all decisions on transfer

<u>Problem</u>	<u>Transfer</u>	TU decision	MTC referral	<u>Telephone</u>
LIFE/LIMB/ORGAN SAVING	ED to ED	ED Senior	LGI PEM Consultant in charge +/-MTSN (Major Trauma Specialist Nurse) NO MTC ACCEPTANCE REQUIRED SEND & CALL	0113 3920902 [©] 07920 757 283
STOP/SORT/GO	ED to ED	ED Senior	LGI PEM Consultant in charge +/-MTSN (Major Trauma Specialist Nurse) NO MTC ACCEPTANCE REQUIRED SEND & CALL	0113 3920902 07920 757 283
MULTIPLY INJURED (eg/ rib fractures, splenic lac	ED to ED ceration)	TU Specialities	LGI PEM Consultant in charge or LGI ED Nurse in charge MTC ED ACCEPTANCE REQUIRED	0113 3920902 0113 3920909
SINGLE SYSTEM INJURY* (including open fractures)**		TU Specialities or or +/-		LGI switchboard LGI Switchboard PatientPass 07920 757 283

^{*}If the patient becomes unstable- becomes an ED to ED transfer via LGI ED Consultant in charge

Courtesy of Dr Jill Stewart, BTHFT

^{**} Note that transfer of open fracture patients should generally not occur after 10pm. Please see https://www.wymtn.com/open-fractures.html for further information

[®]After 23:00 - 09:00 please contact adult ED CIC on 0113 3920901 or NIC on 0113 3920904

APPENDIX TWO - EMBRACE CALL HANDLER SCRIPT

Major Trauma LGI

Confirm Major Trauma

Capture basic demographics

- Referring hospital
- Name of caller
- Speciality and grade
- Name of patient
- Age of patient

(To referring doctor) "I am connecting your call to LGI medical staff so you can pass on the details to them. Please hold the line."

<u>Call relevant LGI telephone number (see below) and ask for the Paediatric Emergency Consultant between the hours of 09:00-23:00. IF you cannot get in touch with the Consultant on this number, try the other numbers listed. Please note that between 23:00-09:00 you will need to ask for the <u>Emergency Medicine Consultant.</u></u>

(dial: * 9 tel no #)

(09:00 - 23:00)

Paediatric Emergency Consultant

0113 392 0902

(23:00-09.00)

Emergency Medicine Consultant

0113 392 0901

0113 392 0909

0113 392 0904

To the LGI medic "I have a Paediatric major trauma call from (Hospital). Please can I connect them to you"

Dial: ** (star star) to connect the referring Medic to the LGI medic

(To referring doctor) "Hello, I have Dr on the line, please go ahead".

Mute and take notes of the conversation

APPENDIX THREE -Leeds MTC Paediatric Trauma Geographical boundaries

