South East Coast Ambulance Service NHS
NHS Foundation Trust

Critical Care Desk Dispatch policy including Major Trauma (CCP,HART)

Contents

1 Statement of Aims and Objectives

1.1. South East Coast Ambulance NHS Foundation Trust (the Trust) is required to provide specialist/enhanced clinical support for twenty-four hours per day to all levels of clinical staff with the Trust.

1.2. For the purpose of this document any reference made to a Critical Care Paramedic (CCP) is to denote that they are a registered Paramedic, have undergone Post Graduate education and are qualified to provide clinical care, leadership and advice within their scope of practice.

1.3. The Critical Care Desk (CCD) primary service is to offer triage advice and interpretation of the Major Trauma Decision Tree (MTDT) (Appendix A) and for CCP resource management and deployment to scene. The CCD also offers a route to clinical advice and support to all operational road staff within the Trust.

1.4. The CCD works in close partnership with the HEMS dispatcher. The Kent Surrey & Sussex Air Ambulance Trust (KSSAAT) have agreed rapid dispatch criteria which the HEMS dispatcher uses to make their autonomous tasking decisions. These criteria mainly cover the evidenced mechanisms or reported conditions that indicate a major trauma candidate patient, or where there may be a location or access issue. The CCD can request the attendance of HEMS to any incident where the level of enhanced care provided by the HEMS team may be required. These cases will often fall outside of the criteria set for HEMS automatic launch and will be identified following call interrogation, detected with clinical acumen or following a crew request for specialist support.

1.5. The CCD is a 24hr a day operation covered by two 12hr shifts per day. The CCD can operate from either of the Emergency Operation Centres (EOC) based at Coxheath or Crawley. Only one location is operational at any given time.

1.6. The Trust continues to support the program for the development of Critical Care Paramedics. These staff are trained to Post Graduate level and exist to treat patients with the highest levels of immediate clinical need. This can be related to traumatic injuries or due to a medical cause. Examples of time critical medical incidents are myocardial infarction, acute asthma or sepsis

1.7. The CCD operators are all qualified CCPs and are experienced members of the CCP team.

1.8. This policy is designed to make the on-duty CCD operator the primary dispatcher and co-ordinator of all Trust wide CCP resources. CCP resources are finite across the Trust with a maximum of only 10 available per shift if all bases are fully covered with operational CCPs.

1.9. The CCD offers clinical advice and peer to peer review for all of the Trust's operational road staff. This will include advice regarding triage queries and advice surrounding use of the agreed MTDT Triage Tool, JRCALC references and peer to peer discussions around decision making and patient treatment. All advice is given to staff within their relevant scope of practice.

1.10. The CCD enables a platform of communication between the 24 hr on call Specialist Doctors (Top Cover), these are accessible to Trust wide operational CCPs and all members of Operational road staff.

1.11. The CCD enables Operational CCPs to make mandatory Top Cover contact for specific CCP skills and interventions, and the authorisation to administer some CCP only drugs. These are fully annotated and recorded for review and audit.

1.12. The CCD will assist the shift command structure with any Major/Complex Incidents when required to do so.

1.13. The CCD will continue to dispatch the Trust Hazardous Area Response Teams (HART) resources based at Ashford (East) and Gatwick (West), as per their own written tasking criteria. This will include meal breaks to follow current Trust procedures.

1.14. The Trust is fully committed to providing high quality patient care and offering 24hr access to clinical advice for all Operational staff.

1.15. This policy is applicable to all Critical Care Paramedics that work on the Critical Care Desk within either EOC. The policy sets out the scope of operational practice to which clinicians must adhere.

2 Principles

Management of the Major Trauma Candidate Patient (including CCP dispatch).

2.1. The CCD is funded by the regional trauma networks to offer support to the decision making by operational staff in relation to pathways within the Major Trauma Decision Tree (MTDT) and the effective management and utilisation of available Trust wide CCP resources. The CCD operator must maintain an overview of availability on a shift by shift basis and make locational changes to best suit the daily Trust operational demand. Maximisation of Trust wide CCP availability is a priority for the CCD operator.

2.2. The CCD operator is responsible for detailed annotation and clear reference to the MTDT when offering trauma triage advice.

2.3. The CCD operator must communicate resource availability at the start of each shift to the relevant area Dispatch Team Leader (DTL), Dispatchers and the Emergency Operations Centre Manager (EOCM). Should there be an extreme low level of CCP availability, early discussions could be had with the relevant EOCM regarding limiting CCP dispatch to C1 criteria only.

2.4. The CCD operator should ensure that the available CCP resources are booked on promptly at start of shifts and look to proactively reduce the loss of CCP resource availability.

2.5. CCP available resources will remain as a C1 Auto dispatch resource.

2.6. The CCD should have priority over dispatching of all CCP resources. CCP resources will remain on auto dispatch for C1 activations and the dispatcher may allocate the CCP resource to outstanding C1 incidents with the caveat that the CCD is informed of any non-auto dispatch allocations. The CCD operator retains primacy for the dispatch of any CCP resources to any other level of call. If dispatchers believe that a CCP may add clinical value, there must be a one to one direct discussion with the CCD operator prior to allocation.

2.7. The CCD operator must communicate with relevant area DTL, Dispatchers and the Emergency Operations Centre Manager (EOCM) should any locational changes be thought to offer improved Trust wide CCP cover. Priority should be given to high urban density (e.g. Brighton, Medway towns) and consideration should be also given so that large areas are not left with poor CCP cover. The CCD operator should annotate any changes of location onto CCPBase (CCP Database) as a record of decision making.

2.8. The CCD operator should ensure good communication between themselves and the HART team leaders (East and West). To confirm operational availability (Staffing & Equipment) and planned daily training.

2.9. The CCD operator should actively interrogate the CAD system for incidents deemed suitable for CCP tasking. (CLERIC is currently the chosen CAD system within the Trust). See Appendix B *CCP Tasking Guidelines* and *Appendix C Tasks following further interrogation.* The list is not intended to be exhaustive.

2.10. The CCD operator has responsibility for the suitability of CCP tasking and must always undertake a risk vs benefit analysis considering the incident location, a patient's clinical need and crew welfare. This is based on the clinical need of the patient. See Appendix A *CCP Tasking Guidelines* and *Appendix B Tasks following further interrogation.* The list is not intended to be exhaustive.

2.11. During assessment of CCD tasking, the CCD operator should assess and reflect on the safety and viability of extreme long-distance tasking,

considering driver fatigue, clinical value added and the associated risks of long times to scene driving under emergency conditions. This can be linked to, and encourage the use of, planned location rendezvous (RV) arrangements for CCP and HEMS resources

2.12. The CCD operator may clinically evaluate a crew request for CCP attendance at scene and may use annotated telephone advice to offer the best clinical care for the patient.

2.13. If after further clinical interrogation the incident is found to be a lower acuity call than originally categorised the CCD operator can, where appropriate, stand down CCP resources.

2.14. The CCD operator should try to ensure early clinical updates from any Trust resources once at scene requesting early update to “CCD via Channel 16”.

2.15. The CCD operator may continue CCP resources to scene if only a limited clinical update is received, and the CCD operator believes that the CCP resource will directly impact patient care. Considering the incident location, a patient’s clinical need and crew welfare. See Appendix A *CCP Tasking Guidelines* and Appendix B *Tasks following further interrogation.* The list is not intended to be exhaustive.

2.16. The CCD operator should whenever possible try to assist the EOC with lower acuity incidents during higher levels of Operational demand (levels 3 and 4). The CCD operator must retain the ability to re-allocate the CCP resource if required to a higher acuity incident requiring urgent CCP attendance. Good communication with relevant DTLs and dispatchers is essential for this to be successful. The CCD operator must try to ensure that from the available CCP resources the best CCP Trust wide cover is maintained.

2.17. All notations made to the CAD should be inputted as a matter of urgency by the CCD operator to ensure an accurate time line within the CAD. High quality notes must be maintained within the CAD system and the current associated CCP data base (CCPBase). The CCD operator must ensure the accuracy of describing decision making and any clinical advice given.

2.18. The CCD operator must silent monitor and transcribe any discussions made between CCPs or operational staff with the Top cover doctors. The CCD operator must ensure accuracy and depth within the notes added to the CAD, CCPBase, Top Cover audit documents. These are used for internal CCP governance.

2.19. Currently CCD operators are not trained in either Manchester Triage System (MTS) or NHS Pathways. CCD operators must not undertake direct call backs to given incident contact phone numbers.

2.20. Operational CCPs have remote access to the CAD system and monitor from stand by points across the Trust. An operational CCP may contact the CCD requesting allocation to an incident. The CCD operator remains the primary dispatcher for the Operational CCP units.

3 HART (Specialist Resource) Tasking and Oversight

3.1. The CCD needs to be aware as to which Tactical Officers are on duty each shift.

3.2. The CCD operator should ensure good direct communication between themselves and the duty HART team leaders (East and West), to confirm operational resource availability (Staffing & Equipment) and planned daily training.

3.3. The CCD operator can offer assistance to HART resources booking on, but this remains the primary responsibility of the HART team leaders at each designated HART base.

3.4. The CCD operator should actively interrogate the CAD system for incidents deemed suitable for HART attendance. Discussion should be had with the relevant HART Team leader prior to dispatch. CCD operators should have a low threshold for allocating HART units if deemed suitable criteria for attendance. As incident examples only: complex extrication, multi casualty incidents, fire, height, water, prolonged time to scene attendance.

3.5. HART teams have on station CAD access to monitor and interrogate for HART suitable incidents. The CCD will allocate any HART direct requests to attend HART suitable incidents. The CCD operator remains the primary dispatcher for the operational HART teams.

3.6. The CCD operator should continue to monitor CCP and HART tasked incidents whilst resources are on route to scene. The CCD operator should review CCP and HART suitability to continue to scene or stand down against direct new/relevant information from scene or via CAD updates.

3.7. The CCD operator should ensure that prior to any stand down of attending HART resources, the incident is discussed with the attending HART team leader.

3.8. The CCD operator should communicate CCP and HART stand downs to the relevant dispatch desk. This must not be undertaken by the CCD if the allocated CCP or HART resource is the only dedicated resource until after a discussion with relevant Dispatcher or Dispatch Team Leader (DTL). The CCD operator will not stand any CCP or HART resource down from C1 incidents unless an update from a clinician at scene has informed the CCD that no CCP or HART resources are required.

3.9. Incident Command Hub dispatcher should assist the CCD operator with HART related tasking and meal breaks for HART and CCP resources. This should be compliant with the current Trust meal break/staff welfare policy.

4 Further Role of the CCD – 24hr availability Clinical Advice

4.1. Section 1.1 of this document outlines the responsibility of the Trust to provide 24hr access for all staff to a dedicated Trauma/Critical Care advice service. The CCD offers this service.

4.2. The CCD has a dedicated telephone number 0300 123 1252 and a dedicated monitored Airwave channel (Channel 16). Both are available 24hrs a day.

4.3. The CCD operator is responsible for detailed annotation and clear reference to the MTDT when offering trauma triage advice.

4.4. The CCD operator can offer advice to any operational member of staff. The advice given should be that consummate with the member of staff's scope of practice and guided by use of JRCALC recommendations. The CCD operator must ensure accuracy and depth within the notes added to the CAD or CCPBase. The CCD operator must not offer advice outside of a clinician's, or their own, scope of practice.

4.5. The CCD operator enables Operational CCPs to make mandatory Top Cover contact for specific CCP only procedures and administration of some CCP only drugs. The CCD operator must ensure accuracy and depth within the notes added to the CAD or CCPBase and Top Cover audit documents. These are audited for PGD compliance and CCP peer to peer review.

4.6. The CCD operator can enable a Top Cover conference call between a member of staff at scene and one of the senior doctors working for the Trust. The CCD operator must ensure accuracy and depth within the notes added to the CAD or CCPBase and Top Cover audit documents.

4.7. The CCD operator can offer clinical advice to other clinicians within the EOC if clinical advice/input is requested. The CCD operator must ensure accuracy and depth within the notes added to the CAD or CCPBase. The CCD operator must not offer advice outside of a clinician's, or their own, scope of practice.

5 Further Role of the CCD - Major Incident

5.1. The CCD has a functional position within the designated Incident Command Hub. This is a dedicated team comprising a Silver Tactical officer, Incident Command Hub dispatcher, HEMS dispatch desk, and the CCD.

5.2. The CCD operator may be asked to provide specialist clinical support/advice to the Tactical officer but must follow the defined Major Incident reporting and communication lines. The CCD operators do not receive any specific Major Incident training or development.

5.3. The Incident Command Hub Dispatcher should be able to transcribe and manage the Major Incident log and be trained to understand Command structure, major incident decision making and any current JESIP Guidelines.

6 Further Role of the CCD – Mandatory reporting

6.1. During the period of their shift the CCD operator remains responsible for the addition of prompt, detailed, concise and accurate notes to the current CAD system, CCPBase and any further audits requested by the CCP management team.

6.2. The CCD operator should ensure that CCPBase indicates any incidents requiring follow up CCP welfare after complex / emotive incidents that CCP resources attend. Any particularly complex incident should also be directly reported to the CCP management team for review and debrief.

6.3. The CCD operator must promptly inform the senior medical directorate via email if any CCP undertakes a Front of Neck Surgical airway (FONA). Ref CMP Front of Neck Surgical airway (FONA) V5 (Subject to change of version).

6.4. The CCD operator must promptly inform the senior medical directorate via email if any CCP undertakes an open Thoracostomy procedure. Ref CMP Open Thoracostomy V5 (Subject to change of version).

6.5. For the reasons of reporting, all incident reporting will be undertaken through the DIF1 reporting system (DATIX). This is currently the Trust's approved reporting system.

6.6. The CCD operator has responsibility for submission of any DIF 1 (DATIX) if requested to do so by the CCP management team or members of the senior medical directorate.

7 Definitions

7.1. ***Datix*** is the Trust's incident management system.

7.2. ***Helicopter emergency medical service*** **(HEMS)**. HEMS is a doctor and paramedic team which can provided some enhanced care procedures above that of the current CCP scope and a rapid transport platform when the helicopter is operational. The service is a 24hr operational service.

7.3. ***JESIP Joint Emergency Services Interoperability Principles*** https://jesip.org.uk/home Collaborative working guidelines for emergency services.

7.4. ***Front of Neck Surgical Airway*** **(FONA)** is a surgical procedure using a scalpel to obtain a patent and secure patient airway. Within the Trust only qualified CCPs and HEMS are trained to perform this advanced skill.

7.5. ***Open Thoracostomy*** is a surgical procedure using a scalpel and is used to counter the effect of a ***Tension pneumothorax*** by allowing the release of unwanted air from the chest cavity. Within the Trust only qualified CCPs and HEMS are trained to perform this advanced skill.

7.6. ***Tension pneumothorax*** is a clinical condition usually associated with Chest Trauma, it is the progressive build-up of air within the pleural space, usually due to a lung laceration which allows air to escape into the pleural space but not to return. It is considered a time critical event. http://www.trauma.org/archive/thoracic/CHESTtension.html

7.7. ***Adult Major Trauma Decision Tree (AMTDT)*** is a Trust wide agreed algorithm associated with identifying patients with Major Trauma. This is a flow chart that has been agreed by the Trust's Medical Director and associated regional trauma networks. It is used as a tool to identify a patient's potential clinical need(s) and to signpost the patient to the most suitable receiving hospital, this may be a conveyance to a specialist hospital titled a Major Trauma centre (MTC).

7.8. ***Manchester Triage System (MTS)*** is a prescriptive system for the assessment and triage of a patient. It highlights critically ill patients and is used both within the ambulance sector and within hospital A&E.

7.9. ***NHS Pathways*** is a remote clinical tool used within the ambulance sector for the assessment and clinical triage of patients.

8 Responsibilities

8.1. The **Chief Executive Officer** is the accountable Executive Lead for the Trust.

8.2. The **Medical Director** has responsibility for clinical leadership for the Trust.

8.3. The **Consultant Paramedics** are responsible for the implementation of this policy.

8.4. The **Critical Care Paramedic management team** are responsible for the implementation and management of the procedure.

8.5. The **Emergency Operations Centre Manager** has responsibility for incorporating the day to day implementation of this policy into the EOC operational strategy.

8.6. All employees working as **CCD operators** are responsible for adhering to, and complying with, this policy.

9 Education and training

9.1. All CCD operators are trained to a minimum of Post Graduate Certificate Level 7 including modules surrounding clinical assessment and clinical decision making.

9.2. All CCD operators are experienced clinicians and also work as Operational CCPs.

9.3. All CCD operators have been trained to use the CLERIC CAD system, current telephone system and current radio operating system.

10 Monitoring compliance

10.1. The CCP manager (CCD Lead) is responsible for monitoring compliance with this policy. The individual CCD operator is responsible for their own compliance with the policy.

10.2. CCD operator compliance will be overseen by the CCP manager (CCD Lead). Periodic reviews will be based upon the individual CCD operator's need and competency within the role.

10.3. If non–compliance is identified the CCP manager (CCD Lead) will provide additional training and support to the individual CCD operator. This may include further training or direct mentorship.

11 Audit and Review (evaluating effectiveness)

11.1. The CCP management team will have overall responsibility for overview of the policy. The CCP management team will review the policy at regular intervals to ensure compliance and efficacy.

11.2. All policies have their effectiveness audited by the responsible Management Group at regular intervals, and initially six months after a new policy is approved and disseminated.

11.3. Effectiveness will be reviewed using the tools set out in the Trust's Policy and Procedure for the Development and Management of Trust Policies and Procedures (also known as the Policy on Policies).

11.4. This document will be reviewed in its entirety every three years or sooner if new legislation, codes of practice or national standards are introduced, or if feedback from employees indicates that the policy is not working effectively.

11.5. All changes made to this policy will go through the governance route for development and approval as set out in the Policy on Policies.

12 Associated Trust Documentation

12.1. This policy is a new policy that supersedes any previous reference to CCP dispatch or deployment.

12.2. This document replaces previous *Critical Care Desk tasking and procedures document V0.11* and Critical Care Desk 'stand-down' procedure (CCP resources only) V0.01

13 References

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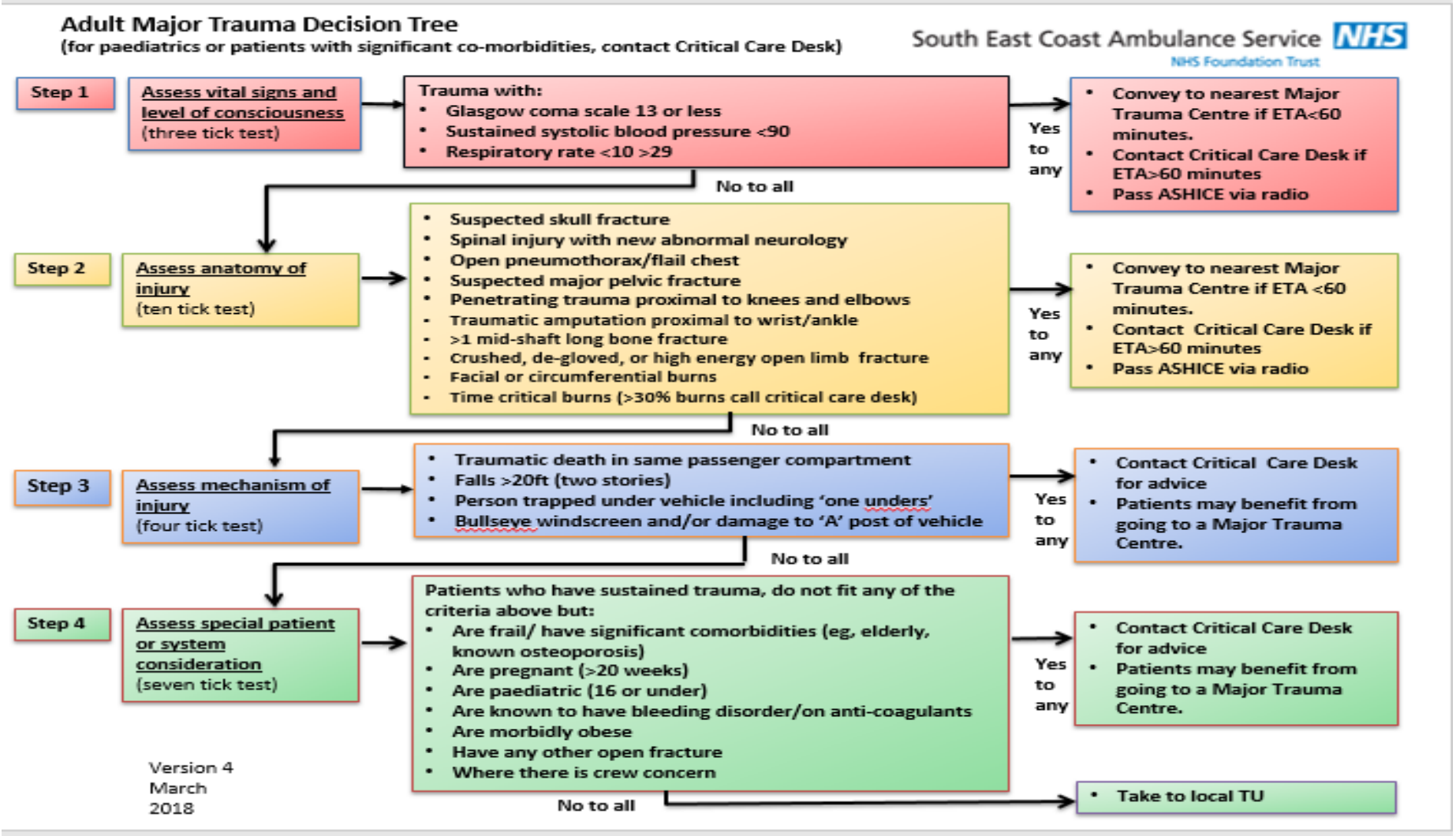
14 Equality Analysis

14.1. The Trust believes in fairness and equality, and values diversity in its role as both a provider of services and as an employer. The Trust aims to provide accessible services that respect the needs of each individual and exclude no-one. It is committed to comply with the Human Rights Act and

to meeting the Equality Act 2010, which identifies the following nine protected characteristics: Age, Disability, Race, Religion and Belief, Gender Reassignment, Sexual Orientation, Sex, Marriage and Civil Partnership and Pregnancy and Maternity.

14.2. Compliance with the Public Sector Equality Duty: If a contractor carries out functions of a public nature then for the duration of the contract, the contractor or supplier would itself be considered a public authority and have the duty to comply with the equalities duties when carrying out those functions.

Appendix A: Adult Major Trauma Decision Tree (MTDT)



Appendix Ai: MTDT Guidance

Step 1

- For audit and ease of communication ref each element (see KSS crib sheet and LAS Trauma tree, Paeds also available)
- Is this abnormal GCS for the patient? (Dementia, HI, Stroke, pre-existing disability etc)
- CCD input to review Primary survey and Steps 2 through 4 (Adverse findings noted?)
- Can A, B and C be managed by the crew for the journey time without any patient harm
- Consider specialist support (CCP HEMS) and RV on route to MTC

Step 2

- New ***Gross*** Abnormal neurology
- Open pneumothorax/flail if clinically indicated send HEMS CCP
- Penetrating trauma proximal to knees and elbows ensuring that the patient has been fully assessed for any further injuries. (Consider Respiratory rate and Work rate of breathing)
- Suspected major pelvic fracture Instigate straight leg raise. If +/-ve look to haemodynamic observations and any further injuries. If Major fracture believed to be present Stress importance of Pelvic binder. If patient is unstable (Hr, BP) consider specialist support primarily HEMS or CCP
- Traumatic amputation stress importance of tourniquet(s) and effective haemorrhage control
- Multiple Long bone fractures consider other injuries, haemodynamic overview, and consideration of mechanism of injury
- Crushed, de-gloved, high energy fractured limb consider severe contamination, large (Using the Open fracture scoring system)
- Facial or circumferential burns affecting A B or C to the closest TU for stabilising or HEMS. Reminder of importance of 20 minutes cooling and subsequent good

temperature management. Also consider mechanism e.g. Blast, extreme temperatures

- The burns team prefer healthcare professionals to contact them directly by telephone (01342 414440 for adults and 01342 414469 for children)

Appendix Aii: MTDT Guidance

Step 3 

- Passenger in same compartment as fatality. Discuss mechanism, energy transfer, age of vehicle and clinical observations.
- Falls>20 feet (6metres) or 2 storeys consider has patient mobilised, axial loading, broken fall, review clinical assessment by crew and any trending down vital signs.
  High risk with elderly, frail, anti-coagulated patients.
- Persons trapped under vehicle or by vehicle consideration should be made with regard to mechanism, duration, level of force involved, and overall clinical review
- Bullseye windscreen and/or damage to “A” post of vehicle consideration should be made around vehicle speed/velocity, other potential injuries and presenting clinical picture.

South West London & Surrey NHS
Trauma Network

OPEN FRACTURE SCORING SYSTEM

Injury Mechanism	Score	Soft Tissue Injury	Score	Fracture Pattern	Score
Low Energy	0	<2cm clean wound	0	Diaphyseal	0
High Energy	1	>2cm clean wound	1	Metaphyseal /Articular	1
Polytrauma	2	Degloved >2cm from wound edge	2		
		Vascular/nerve injury		Bone Loss	2

Total Score	Action
1	Manage locally
2	Manage locally if ready access to plastics or no need for plastics
3	Early transfer to Major Trauma Centre

If at time of primary debridement the injury is more significant than originally thought, apply ex-fix and transfer as soon as possible.

Do not definitively fix

The MTC is happy to accept any open fracture if the admitting team wish to transfer them

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Appendix Aiii: MTDT Guidance

Step 4

- Frail patients and those with multiple co-morbidities should be reviewed with consideration for the mechanism, forces involved, co-morbidities, current pharmacological regime (Beta blockers, anti-coagulants etc.). Relative distance of TU and MTC
- Also, consideration for “moderate” trauma e.g. falls of multiple steps
- Elderly patients must have full and comprehensive clinical assessment against their normal baseline

- Problematic Immobilisation of the patient must be considered. When immobilising place the patient in the most comfortable position. It is not necessary for the patient to be supine. (Hyper-Kyphosis)
- Pregnant patients >20/52 consideration primarily for mother, mechanism (Blunt trauma), be aware of presenting vital signs in the context of pregnancy, ensure Left lateral positioning. Potential risk of abnormal/excessive PV bleeding. In minor/moderate trauma with no triggers for MTC expedite transfer to TU with full obstetric facilities.
- Paediatrics (see Paediatric trauma tree currently in design stage)
- For patients under current Anti-coagulant therapy and any bleeding disorders consider HEMS intervention for reversal, Crew must inform receiving hospital of anticoagulation and or bleeding disorders especially in HI patients (NICE HI pathway) DO NOT administer TXA
- For morbidly obese patients Consideration should be given to the presenting condition compared to normal daily function, also the level of co- morbidities present. High BMI carries higher overall risk factors in major trauma. Problems can arise with regard to supine positioning and immobilisation. Transport the patient ramped up for ease of ventilation. Early Consideration should be given to HART to assist with extrication (Consider HART for safe off loading at A&E)
- Any other open fractures should be assessed against refer to the Open fracture scoring system. If open fracture consider HEMS or CCP for ABX.
- Crew concerns ICE (Ideas Concerns Expectations) direct discussion with the crew at scene, work through Primary and secondary surveys, listen to concerns of the crew, consider Location and logistics, shared decision making offering additional senior support to scene if needed.

Appendix B: CCP Tasking Guidelines

Critical Care Paramedic Tasking Criteria – Immediate Dispatch

- Life threatening anaphylaxsis (+/- airway compromise)
- Drowning or near drowning
- Burns greater than 20% TBSA (10% Paeds)
- RTC Ejection from vehicle
- RTC person (s) trapped under vehicle
- RTC with associated fatality
- Open Skull fracture
- Penetrating Trauma (Stabbing to neck, head, torso)
- Traumatic amputation above wrist or ankle
- Traumatic Cardiac arrest
- Gunshot injury reported (Consider MTFA, SORT and HART)
- Fall from height (Adult) >12ft (>4m) or 2nd storey
- Fall from height (Child) >10ft (>3m) or 1st storey
- Paediatric Cardiac arrest
- Obstetric Emergency/ Birth imminent (Any signs of complication?

Appendix C: CCP Tasking Guidelines

Critical Care Paramedic Tasking Criteria – Further Interrogation

- RTC entrapment
- High mechanism RTC
- Other transportation incidents (rail/air/maritime)
- Major Incidents/mass casualty/MERIT responses
- Industrial incident/entrapments
- Fire (persons reported)
- Explosion (s) /Electrocution
- Falls from height <12ft (<4m) or 2nd Storey
- Indications of Traumatic Brain injury (TBI)
- Facial, neck or circumferential burns
- Cardiac arrest in special circumstances. Prolonged resuscitation
- Post ROSC sedation/paralysis/inotropic support/LUCAS
- Unstable patients +brady or tachy (<50bpm >150bpm)
- Semi-conscious patients with respiratory compromise
- Status asthmaticus patients refractory to 1st line treatment
- Open fracture (s)
- Sporting injury – high speed/high impact
- Seizure(s) – noisy breathing – 1st seizure, repeated activity
- Procedural analgesia/sedation'
- High MEWS score Adverse NEWS2 score
- Crew request/MRT/Coast Guard/SAR/Police/Fire