Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Ambulance Operations
Procedure
Appropriate Hospital Access for Trauma Patients

National Ambulance Service (NAS)

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1.0 POLICY

1.1 Patients suffering Trauma may benefit from early and direct access to an "appropriate hospital" for the purposes of receiving definitive care.

1.2 Ambulance Control staff have an important role to play in ensuring that such patients are directed to an appropriate facility.

1.3 Following direct transfer of the patient with known or suspected trauma to a hospital capable of delivering definitive trauma care, these patients can be given **priority access to care,** assessment including imaging and treatment to optimise patient outcomes.

2.0 PURPOSE

2.1 The purpose of appropriate hospital access is for the efficient and effective care of the trauma patient who may require a specialized and/or multidisciplinary approach to care which is not available at the nearest hospital.

2.2 To provide direction to Control Supervisors and Staff on directing crews to the most appropriate facility.

2.3 To facilitate an improved clinical care pathway for patients suffering from known or suspected trauma.

3.0 SCOPE

3.1 This Procedure applies to high acuity trauma patients with a greater risk of poor outcomes that will benefit from specialised care at an appropriate trauma receiving hospital.

3.2 Identification of high acuity trauma patients is based on both physiological and anatomical criteria (these are referred to under Section 7.2).

3.3 Patients being cared for by a Paramedic crew in the absence of an Advanced Paramedic *and* with any of the following conditions - compromised airway, tension pneumothorax or life-threatening haemorrhage - must be transported to the nearest Emergency Dept. (not local injury unit - follow local protocol). The Paramedic crew must remain with the patient to allow prompt onward transfer to an appropriate Emergency Department once the immediate threat to life has been addressed.

4.0 LEGISLATION / OTHER RELATED POLICIES

A. PHECC 3rd Edition Clinical Practice Guidelines (CPG)

5.0 GLOSSARY OF TERMS AND DEFINITIONS

5.1 None applicable

6.0 ROLES AND RESPONSIBILITIES

6.1 The Control Manager is responsible for dissemination and clarification to all Control Supervisors and Staff
6.2 Control Supervisors are responsible for ensuring Control Staff compliance with this Procedure.
6.3 The Control Manager is responsible for ensuring Control Supervisor compliance with this Procedure
6.4 The lead Manager for Risk Management is responsible for reviewing any related Incident/Near Miss Report.
6.5 The responsibility for managing remedial training lies with the Education and Competency Assurance Team
6.6 Staff involved in the treatment and transport of trauma patients are responsible for the operation of this Procedure.
6.7 It is the responsibility of all staff involved in the care of trauma patients to provide and maintain care based on the best clinical evidence available.
6.8 It is the responsibility of all staff members to work within their own scope of practice.
6.9 It is the responsibility of the Paramedic/Advanced Paramedic activating "Appropriate Hospital Access" to notify Ambulance Control.
6.10 It is the responsibility of Ambulance Control to dynamically deploy available resources to facilitate "Appropriate Hospital Access"

7.0 PROCEDURE

7.1 Key Principles

7.1.1 The Paramedic/Advanced Paramedic assessing the patient must adhere to the appropriate Clinical Practice Guidelines.

7.1.2 In order for appropriate hospital access to be initiated, Paramedics/Advanced Paramedics must coherently assess the patient and relay pertinent information to the appropriate receiving hospital via Ambulance Control.

7.1.3 The trauma patient who meets the anatomical and/or physiological criteria outlined in Section 7.2, should be transported directly, subject to Section 3.3, to the appropriate Emergency Department - see local Trauma Access Protocol

7.1.4 Ambulance Control should establish and record the reason for initiating "Appropriate Hospital Access" in the Incident Note Pad.

7.1.5 Ambulance Control should tag the incident with the code "**AHA**" to facilitate future audit.

7.2 Appropriate Hospital Access Criteria

7.2.1 Anatomical Criteria

A. Penetrating trauma to the head, neck, trunk, and extremities proximal to elbow and knee (gunshot wounds, stabbings or impalement on a sharp object)
B. Flail Chest
C. Suspected pelvic fracture
D. Two or more proximal long bone fractures
E. Crush, degloved or mangled extremity
F. Paralysis
G. Amputation proximal to the wrist or ankle
H. Open or depressed skull fracture
I. Paralysis

7.2.2 Physiological Criteria

A. Systolic BP <90 mmHg or absence of radial pulse
B. GCS ≤ 13
C. Unassisted respiratory rate <10 or >29 breaths per minute (<20 in infant < one year)

Practitioner discretion: in addition to the above criteria, if the treating practitioner has a high index of clinical suspicion of significant occult injury, the patient may be transported to the appropriate trauma receiving Emergency Department at an acute hospital even if they do not *precisely* fit the criteria for trauma access.

7.2.3 Immediately Life Threatening Injuries

A. Airway Compromise (actual not potential)
B. Tension Pneumothorax (no air entry on affected side, hypotension, respiratory compromise and trachea deviated away from side of injury)
C. Life threatening haemorrhage - hypotension with absence of radial pulse

Patients with any of these criteria being cared for a Paramedic crew only (i.e. no Advanced Paramedic available) should be brought to the nearest Emergency Department. They should not be transported in any circumstances to a local Injury Unit. Refer to local Trauma Access Protocol for details.

8.0 IMPLEMENTATION PLAN

8.1 This Procedures will be circulated electronically to all Officers, all Supervisors and Staff
8.2 This Procedure will be available electronically in each Ambulance Station for ease of retrieval and reference
8.3 Each Operational Support and Resilience Manager will ensure that the Manager/Supervisor responsible for updating Policies and Procedures will return the Confirmation Form to NAS Headquarters to confirm document circulation to all staff.

9.0 REVISION AND AUDIT

9.1 This Procedure will remain under constant review and may be subject to change to facilitate any changes/developments in service requirements.
9.2 The Control Manager and relevant medical personnel will monitor compliance on an ongoing and informal basis through regular contact and will meet to identify and implement appropriate amendments or corrective measures where deemed necessary.

9.3 The Control Manager will monitor the number of direct access journeys and the impact of this Procedure on resource availability.

9.4 The Manager with lead responsibility for Risk Management will initiate a review any related Incident/Near Miss Report.

10.0 REFERENCES

None

11.0 APPENDICES

Appendix I - Procedure Acknowledgement Form
Appendix II – NAS Trauma Access Protocol

National Ambulance Service Trauma Access Protocol

In All Cases of Major Trauma

1. Ambulance Control must be notified that the trauma access protocol is being applied
2. Transporting crews should request ALS back up and immediately initiate transport
3. The receiving ED should be pre-alerted early for all cases of major trauma not less than 15 minutes prior to arrival. This will allow the timely notification of appropriate staff
4. Scene times should be kept to a minimum-attend to immediate threats to life as per PHECC Clinical Practice Guidelines and initiate transport as soon as is practicable

Criteria for Transport to Major Trauma Receiving Hospital

Patients with any of the following criteria secondary to injury **must** be transported directly from the scene of injury to an appropriate trauma receiving hospital (refer to local protocol).

Respiratory rate	<10 or >29 (<20 in infant < one year)
Systolic blood pressure	<90mmHg
GCS	13 or less
Penetrating Injury	All penetrating injuries to head, neck, torso, and extremities proximal to elbow and knee (gunshot wounds, stab wounds or impalement on a sharp object)
Flail chest	
Pelvic fractures	
Two or more proximal long-bone fractures	
Crush, degloved or mangled extremity	
Amputation proximal to wrist and ankle	
Open or depressed skull fracture	
Paralysis	
Paramedic discretion	In addition to the above criteria, if the treating Paramedic has a high index of clinical suspicion of significant occult injury, the patient may be transported to a trauma receiving hospital, even if they do not *precisely* fit the above criteria.

Advanced Paramedic unavailability

In the eventuality of unavailability of an Advanced Paramedic *and* the patient having any of the following **immediately** life threatening injuries, the patient should be brought to the nearest Emergency Department (not local Injury Unit - follow local protocol). The transporting crew should remain at the hospital to allow immediate transfer to a trauma receiving Emergency Department once the life-threatening problem has been addressed.

1. Airway Compromise (actual not potential)
2. Tension Pneumothorax (no air entry on affected side, hypotension, respiratory compromise and trachea deviated away from side of injury)
3. Life threatening Haemorrhage - hypotension with absence of radial pulse

Non-Major Trauma – Local Access Protocols

Patients who do not fulfil major trauma access criteria should be transported to the nearest appropriate hospital as per normal practice. Regional protocols may direct trauma access (e.g. isolated orthopaedic injuries) according to each hospital's capabilities. If a patient fits the major trauma criteria in this policy, then this policy overrides any other policy in operation at local level.

Medical Directorate
National Ambulance Service

Quality and Clinical Care Directorate
Emergency Medicine Programme