HEAD INJURY POLICY – MANAGEMENT OF PATIENTS FOLLOWING A HEAD INJURY ON HOSPITAL PREMISES

POLICY

Reference	CPG-TW-HIP		
Approving Body	Urgent & Emergency Care Joint Speciality Clinical Governance Meeting.		
Date Approved	15th December 2021		
For publication to external SFH website	**Positive confirmation received from the approving body that the content does not risk the safety of patients or the public:**		
	YES	**NO**	**N/A**
	X		
Issue Date	22nd April 2022		
Version	v5.0		
Summary of Changes from Previous Version	• *All anti-coagulated patients should have clotting checked.* • *Doctor to specify overall duration of neuro observations.* • *In case of intracranial haemorrhage evidenced on CT scan, Haematologist should be consulted for advice for anti-coagulated patients.*		
Supersedes	v4.0, CGFALL004, issued 30th July 2018 to Review Date May 2022 (ext4)		
Document Category	• Clinical		
Consultation Undertaken	• Joanne Lewis-Hodgkinson – Falls Lead Nurse • Dr Mark Roberts – Divisional Clinical Chair, Medicine • Meg Haselden – Head of Clinical Governance • Karen Robbins - Divisional Governance Lead – UEC • Dr Ben Owens – Clinical Director for UEC		
Date of Completion of Equality Impact Assessment	15th December 2021		
Date of Environmental Impact Assessment (if applicable)	Not Applicable		
Legal and/or Accreditation Implications	Compliance with NICE guidance		
Target Audience	All clinical staff caring for/ treating adult patients including maternity patients not classified as paediatrics (15 years and under) with a confirmed or suspected head injury across all clinical areas (including non-inpatient/ specialist areas) and across all hospital sites		
Review Date	January 2024 (ext1)		
Sponsor (Position)	Medical Director		
Author (Position & Name)	Consultant Emergency Medicine – Dr Umar Khan		
Lead Division/ Directorate	Urgent & Emergency Care		
Lead Specialty/ Service/ Department	Emergency Care		
Position of Person able to provide Further Guidance/Information	Divisional Clinical Chair, U&EC		

Associated Documents/ Information	**Date Associated Documents/ Information was reviewed**
Not Applicable	*Not Applicable*
Template control	June 2020

CONTENTS

1.0 INTRODUCTION

This policy is issued and maintained by The Executive Medical Director on behalf of Sherwood Forest Hospitals NHS Foundation Trust when issued; it supersedes and replaces all previous documents.

The National Institute for Health and Clinical Excellence (NICE) set out recommendations for NHS care of people who have suffered a head injury. This outlines best practice for healthcare professionals caring for individuals who have suffered a head injury. Each year, 1.4 million people attend emergency departments in England and Wales with a recent head injury. Between 33% and 50% of these are children aged less than 15 years. Annually, about 200,000 people are admitted to hospital with head injury. Of these, one-fifth have features suggesting skull fracture or have evidence of brain damage. Most patients recover without specific or specialist intervention, but others experience long-term disability or even die from the effects of complications that could potentially be minimised or avoided with early detection and appropriate treatment (NICE 2014).

2.0 POLICY STATEMENT

Sherwood Forest Hospitals NHS Foundation Trust (The Trust) is committed to ensuring that our healthcare professionals caring for patients with head injuries are working to high quality evidence based national standards.

3.0 DEFINITIONS/ ABBREVIATIONS

The Trust means:	Sherwood Forest Hospitals NHS Foundation Trust
GCS means:	Glasgow Coma Scale
PEWS means:	Paediatric Early Warning Score (modified Paediatric Glasgow coma scale is within this observation chart)
Fall means:	An unexpected event in which the participant comes to rest on the ground, floor or lower level
Hospital premises means:	All wards, departments and outpatient areas including corridors, facilities, toilets, car parks and outside spaces.

4.0 ROLES AND RESPONSIBILITIES

It is the responsibility of all members of staff involved in the care and treatment of patients who are suspected of or have a head injury whilst on hospital premises to follow and implement the guidance within this policy.

It is the responsibility of any member of staff who witnesses or is informed about a fall must escalate to Registered Nurses, Midwives and medical staff at Sherwood Forest Hospitals NHS Foundation Trust.

5.0 APPROVAL

The document has been approved at the Urgent and Emergency Care Divisional Governance meeting following consultation with the appropriate persons.

6.0 DOCUMENT REQUIREMENTS (POLICY NARRATIVE)

6.1 Any patient sustaining a head injury following any head trauma, a fall and any fall that is not witnessed must have neurological observations performed and a doctor must be informed. The doctor should review the patient as soon as possible.

6.2 The minimum acceptable documented neurological observations are:

- Glasgow Coma Scale (GCS)
- Pupil size and reactivity
- Limb movements
- Blood pressure
- Respiratory rate
- Temperature
- Heart rate
- Blood oxygen saturation
- All observations must be recorded on the patients NEWS Observation Chart/ or on Nerve Centre

6.3 Frequency of observations: observations should be performed and recorded on a half hourly basis until GCS equal to 15 has been achieved. The minimum frequency of observations for patients with GCS equal to 15 should be as follows, starting after the initial assessment:

- Half-hourly for 2 hours
- Then 1 hourly for 4 hours
- Then 2 hourly until a time stipulated by the doctor or following review and instruction from the doctor. This should be within 12 hours of the incident.
- Doctor to specify duration of observation required based on advice from specialist in case of a bleed.

Should a patient with GCS equal to 15 deteriorate at any time after the initial 2 hour period, observations should revert to half-hourly and follow the original frequency schedule. The Doctor should be informed and asked to review the patient.

Any of the following examples of neurological deterioration should prompt urgent review by the Doctor:

- Development of agitation or abnormal behaviour
- A sustained (for at least 30 minutes) drop of one point in GCS level
- Any drop of 3 or more points in the eye-opening or verbal response scores, or 2 or more points in the motor response score
- Development of severe or increasing headache or persistent vomiting.
- New or evolving neurological symptoms or signs, such as pupil inequality or asymmetry of limb or facial movement (see Appendix 1).

6.4 Patients who have sustained a head injury and present with one of the following Risk factors should have CT scanning of the head immediately requested and results analysed within one hour:

- GCS less than 13 on initial assessment (need CT cervical spine too)

- GCS less than 15 when assessed 2 hours after the injury.
- Suspected open or depressed skull fracture.
- Any sign of basal skull fracture e.g., Haemotympanum (blood in the tympanic cavity of the ear), 'Panda' eyes, cerebrospinal fluid leakage from ears or nose, Battle's sign (bruising behind the ears)
- Post-traumatic seizure.
- Focal neurological deficit.
- More than one episode of vomiting.
- On warfarin/other anticoagulant

6.5 Patients who present with any amnesia and loss of consciousness and have any of the following risk factors should have a CT scan of the head immediately requested and results analysed within one hour.

- Age greater than or equal to 65 years.
- Coagulopathy (history of bleeding, clotting disorder, current treatment with any anti-coagulant).
- If patient on warfarin ascertain reason for prescription, take blood for INR test and check individual target range
- Dangerous mechanisms of injury e.g., fall from height greater than 1 metre or five stairs.

6.6 In the case of a patient who has had a normal CT scan but who has not achieved GCS equal to 15 after 24 hours' observation, a further CT scan or MRI scanning should be considered and discussed with the radiology department.

6.7 Advice regarding any inpatient with a head injury can be obtained from the Emergency Department (ED) Consultant or middle grade.

6.8 If CT result shows intracranial bleed speak to neurosurgeons at QMC (Queens Medical Centre) in Nottingham for advice on further management. This is the closest neuroscience facility.

6.9 Confirmed intracranial bleeding in patients on anticoagulants is a medical emergency that should be discussed with Consultant Haematologist on call without delay. The registrar/consultant on-call should be made aware of this referral. Make sure the patient's clotting result, full blood count and medication list is available for the conversation.

6.10 In any patient who has sustained a significant head injury, consider the possibility of a cervical spine injury, immobilise the patient and do not move the patient without taking expert advice from the orthopaedic registrar on call. Canadian C-Spine rules must be followed and consideration for CT of head and neck for all patients with reduced GCS and neck pain/ neurology.

6.11 **Emergency Department**

- For patients attending the ED following a Head Injury-if the CT scan is normal and the INR is < 3 and the patient has someone to look after them, then they could be discharged with head injury advice for patients in Emergency Department.

7.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum Requirement to be Monitored (WHAT – element of compliance or effectiveness within the document will be monitored)	Responsible Individual (WHO – is going to monitor this element)	Process for Monitoring e.g., Audit (HOW – will this element be monitored (method used))	Frequency of Monitoring (WHEN – will this element be monitored (frequency/ how often))	Responsible Individual or Committee/ Group for Review of Results (WHERE – Which individual/ committee or group will this be reported to, in what format (e.g., verbal, formal report etc) and by who)
Mandatory falls Training	Falls lead nurse	Compliance rating	On going	Training and Development
Unwitnessed falls observations being recorded accurately	Ward Leaders	Data from Nerve Centre	Following each incident	Ward Leader meetings/Ward Meetings
Root Cause Analysis Reports	Falls lead nurse	Working with the Ward Sisters to identify any trends and opportunities for learning. Challenging practice.	Every Month if a Serious Fall has occurred	Falls team
Compliance on fully initiating Care Plans	Internal Auditors	Monthly Ward Sister review. Monthly Nursing Metrics	On going	Ward Assurance

8.0 TRAINING AND IMPLEMENTATION

This policy will be promoted via the registered nurse induction programme, falls Champion's meetings, study days and mandatory update training.

The Critical Care Skills Training and Acute Illness Management (AIM) courses teach neurological observations using the Glasgow Coma Scale.

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at Appendix 2.
- This document is not subject to an Environmental Impact Assessment

10.0 EVIDENCE BASE AND RELATED SFHFT DOCUMENTS

Evidence Base:

1. NICE (Jan 2014) Triage, assessment, investigation and early management of head injury in children, young people and adults. https://www.**nice**.org.uk/**guidance**/cg176

Related SFHFT Documents:

- Falls Policy
- Enhanced Patient Observation Guideline (for Adult Inpatients)

Other related Documents:

- QMC major trauma guidelines

11.0 KEYWORDS

- GCS; un-witness un-witnessed unwitness unwitnessed fall; falls.

12.0 APPENDICES

Appendix 1 – Quick reference flow chart following an injury on hospital premises
Appendix 2 – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

APPENDIX 1

Patient sustains a head injury or has an un-witnessed fall

Making observations

- Perform and record observations on a half-hourly basis until GCS = 15.
- When GCS = 15, minimum frequency of observations is:

– half-hourly for 2 hours
– then 1-hourly for 4 hours
– then 2-hourly thereafter until a time stipulated by the doctor or following review and instruction by the doctor. This should be within 12 hours of the incident.

If patient deteriorates to GCS < 15 after initial 2-hour period, revert to half-hourly observations and follow original schedule.

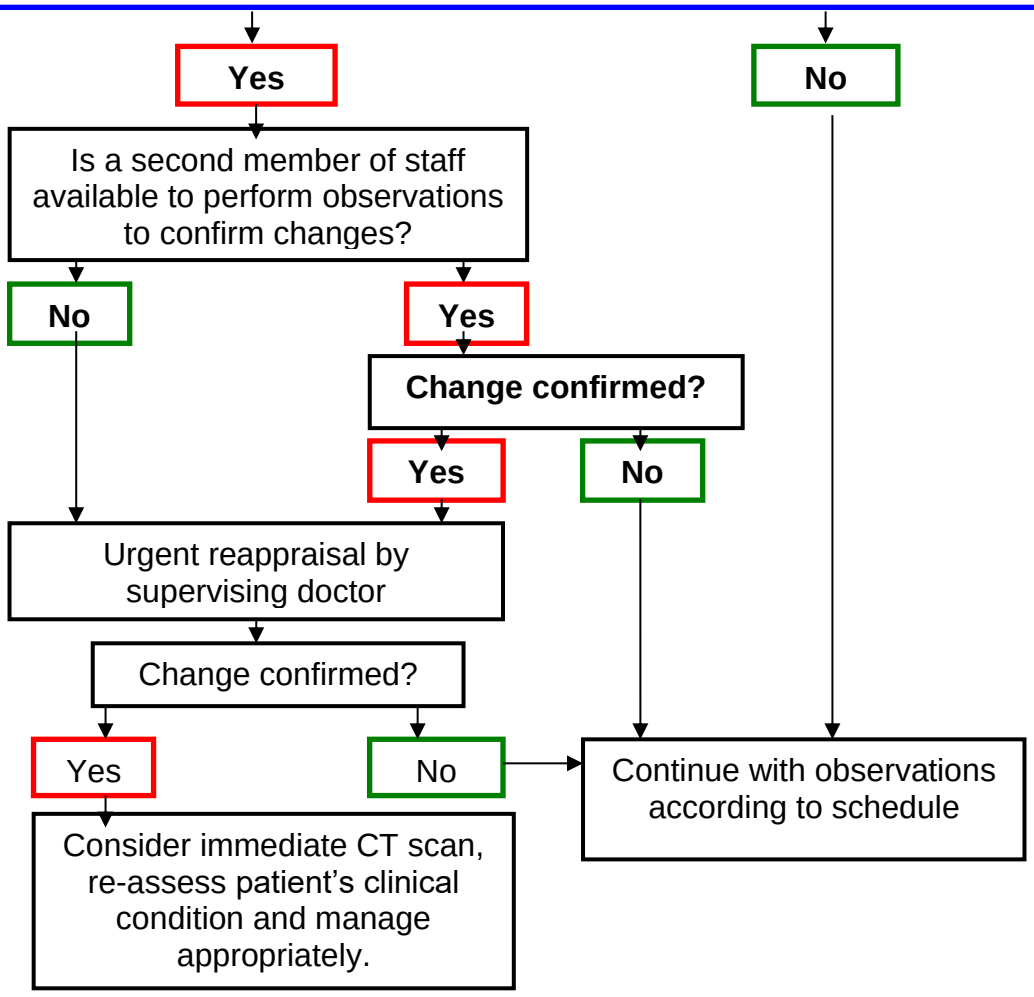
- Minimum acceptable documented neurological observations:

– GCS – limb movements – blood pressure – respiratory rate – temperature
– pupil size and reactivity – heart rate – blood oxygen saturation.

Patient changes requiring review

Have any of the following happened?

- Agitation or abnormal behaviour developed
- GCS dropped by 1 point and lasted for at least 30 minutes (give greater emphasis to a drop of 1 point in the motor response score)
- Any drop of 3 or more points in the eye-opening or verbal response scores, or 2 or more points in the motor response score
- Severe or increasing headache developed or persistent vomiting
- New or evolving neurological symptoms or signs, such as pupil inequality or asymmetry of limb or facial movement



APPENDIX 2 – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: HEAD INJURY POLICY – MANAGEMENT OF PATIENTS FOLLOWING A HEAD INJURY ON HOSPITAL PREMISES			
New or existing service/policy/procedure: EXISTING			
Date of Assessment: 15/12/2021			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	**a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?**	**b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?**	**c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality**
The area of policy or its implementation being assessed:			
Race and Ethnicity	None	None	None
Gender	None	None	None
Age	None	None	None
Religion	None	None	None
Disability	None	None	None
Sexuality	None	None	None
Pregnancy and Maternity	None	None	None
Gender Reassignment	None	None	None
Marriage and Civil Partnership	None	None	None

Socio-Economic Factors (i.e., living in a poorer neighbourhood / social deprivation)	None	None	None

What consultation with protected characteristic groups including patient groups have you carried out?

- **None**

What data or information did you use in support of this EqIA?

- **Information from within the policy**

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?

- **None known**

Level of impact

From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:

Low Level of Impact

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment: Dr Umar Khan - Consultant Emergency Medicine

Signature:

Date:
15/12/2021