Whittington Health NHS

Fracture of Neck of Femur
Management of Patients

Subject:	Orthopaedics
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Guideline Executive Owner:	Dr Nick Harper, Clinical Lead for Surgery Cancer and Diagnostics Dr Julie Andrews, Consultant Microbiologist Dr Rosaire Gray, Consultant Geriatrician Mr Adrian O'Gorman, Consultant Surgeon Orthopaedics Catherine McNally, Matron for Surgery Siobhan Mellett,
Designation of Author:	DIPC & Consultant Microbiologist Infection Prevention & Control Team
Name of Assurance Committee:	Infection Prevention & Control Committee
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Target Audience:	Orthopaedics, Medicine, Anaesthetics
Key Words:	Fractured neck of femur (#NOF), enhanced recovery, clerking checklist, Nottingham hip fracture score, warfarin, haemoglobin, pressure ulcer, surgical site infection, healthcare associated infection, hip fracture, DVT, trauma

Version Control Sheet

Version	Date	Author	Status	Comment
1	Sept 2009	Dr Julie Andrews	Superseded	Updated to include NPSA RRR001 February 2010.
2	April 2012	Dr D Allwood, Darzi Fellow/ Consultant Physician; Mr A O'Gorman, Consultant Orthopaedic Surgeon; C McNally, Acting Matron for Surgery; Dr C Shaw, Anaesthetist; Dr S Gillis, Anaesthetist; S Mellett, Enhanced Recovery Nurse; Dr J Andrews, Consultant Microbiologist; R Pinate, Practice Development Nurse; contributions from Fractured Neck of Femur Steering Group	Superseded	
3	Sept 2015	Dr Julie Andrews, Consultant Microbiologist Infection Prevention & Control Team	Current	Placed on new Trust template. Minor changes to Vitamin K dose to reflect newly published recommendation. Consultation with stakeholders regarding local processes and pathways in progress.

➢ Criteria for use

This guideline should be used for all patients presenting with fractured neck of femur. These should be used in conjunction with relevant national and related local guidelines (including the clerking check list and trauma list plan) and the Fractured Neck of Femur Enhanced Recovery Pathway Paperwork.

➢ Background/introduction

Patients suffering fractured neck of femur (#NOF) have high mortality and morbidity. Patients having surgery for NOF may develop complications including surgical site infection, pressure ulcer development, other healthcare associated infections and thrombo-embolic events. They are prone to acute confusion/delirium. Interventions can be carried out during the pre, intra and postoperative period with the aim of reducing the incidence of these complications. Patients should be managed in line with these guidelines and documents in the appendices including the Clerking checklist.

This guideline has been revised from the original version and draws on national guidance and outlines the interventions for managing fracture neck of femur to reduce the incidence of complications. This guideline is primarily aimed at medical, nursing and allied health professional (AHP) staff caring for patients with fractured neck of femur. This revised document contains additional guidelines for the management of fracture neck of femur patients including:

- Pre-operative management of patients on warfarin;
- Clerking Check-list for Fractured Neck of Femur for Orthopaedic FY1/2 or CT1/2 (Appendix 1);
- Nottingham Hip Score risk assessment (Appendix 2);
- Transfusion guidelines;
- Assessment of high risk patients

Recognised Standards of Care for Whittington Health

- All patients should be admitted to an acute orthopaedic ward within 4 hours of presentation (The Care of Patients with Fragility Fractures, Blue Book, 2007);
- All patients who are medically fit should have surgery within 36 hours of admission, and during normal working hours (Best Practice Tariff);
- All patients should be managed on an orthopaedic ward with routine access to acute ortho-geriatric medical support from the time of admission (Blue Book, 2007).

Relevant Policies/Documents/Procedures

There is a more detailed list in the appendices containing links to the relevant paperwork and guidelines that accompanies this document.

➢ Clinical management

Pre-operative period

The aim is to operate on the patient as soon as practical after admission, which may be the same day trauma list or at the latest, the day after admission.

- All patients seen with history, examination and/or investigations suggestive of fractured neck of femur should be referred to Orthopaedic team within an hour;
- **Pre-operative check list** must be completed by the admitting orthopaedic doctor when clerking the patient (Appendix 1);
- **Hip X-ray** should be reviewed by orthopaedic surgical middle grade doctor as soon as possible following referral from Emergency department (within 1 hour) and then referral accepted if fracture confirmed and patient requires surgery;
- **Pain Relief** must be given within 30 minutes of attending ED (See NICE Guidance and refer to the pain handbook);
- **Waterlow score** of the patient should be assessed in ED. Any skin integrity issues noted need to be documented clearly in notes on admission;
- **MRSA admission screen** (rapid screen, nose only) should be taken in the Emergency department by ED nursing staff. On admission to Coyle ward nursing staff should ensure this MRSA screen has been taken. If the MRSA screen has not be taken by ED staff, ward nursing staff should complete it as soon as possible;
- The results of the admission MRSA screen must be followed up by orthopaedic doctors and recorded in the new #NOF Enhanced Recovery Pathway notes. All previous MRSA positive results should be noted. Any patient with a MRSA positive result in the past (at any site) should be treated as a MRSA positive patient. MRSA positive patients should be admitted to a side room on Coyle ward if available.
- CPE screening may be required post risk assessment.

Ward Admission

Once decision is made to admit patient for fractured neck of femur surgery the patient should be admitted direct from ED to Coyle ward. The time from diagnosis to admission to Coyle ward should be no longer than 4 hours. Patients with fracture of the neck of femur should not be admitted to the Clinical Decision Unit (CDU).

All patients that are previously known to be MRSA positive must be started on the full 5 day MRSA suppression protocol as soon as possible.

All other patients (when MRSA status is unknown or negative) should be given a wash with 4% chlorhexidene (Hibiscrub) prior to surgery.

At all times staff looking after patients must adhere to standard precautions or Transmission precautions where applicable will adhere with strict hand hygiene compliance.

	Please see Whittington Health Integrated Care Organisation Guideline: **MRSA Suppression Protocol Prescription**

Skin traction should only be applied if requested by the admitting Consultant or middle grade.

All X-rays of patients with fractured neck of femurs will be reviewed at the daily trauma meeting. The aim should be to operate on all patients requiring surgery for fractured neck of femur within 36 hours (i.e on day of or morning after admission) of admission or referral to orthopaedic if already an in-patient.

Patients will be nursed on a pressure-relieving mattress within 4 hours of their admission to the Trust (this includes time in ED)**.** A mattress will be ordered as soon as the decision to admit for fracture neck of femur surgery. Refer to Huntleigh and Whittington mattress/bed operational policy. Patients can be placed on a pressure relieving mattress in ED. When ordering mattresses please inform Clinical site manager of diagnosis.

	Please see Whittington Health Integrated Care Organisation Guideline: **Huntleigh and Whittington Mattress/Bed Operational Policy**

All patients must be entered on the National Hip fracture Database (NHFD).

All patients should have a surgical site surveillance scheme data collection sheet commenced by the Infection Prevention & Control Team.

	Please read in conjunction with Whittington Health Integrated Care Organisation Policies: **Hand Hygiene Policy and Reducing the Risk of Surgical Site Infection Policy**

Theatre

Patients should be booked for surgery with theatres (bleep 2709 for theatre coordinator) and the patient should be discussed with the Trauma Theatre Anaesthetist in working hours, or bleep 3301/3005 out of hours.

Anaesthetic

Early thorough review of fracture neck of femur patients is required. The patient should be discussed with the consultant on call or consultant anaesthetising the patient at the earliest opportunity, if there are any concerns.

There is no clear evidence that regional offers advantages over general anaesthesia. The aim should be to minimise opioid usage. Peripheral nerve blocks may be helpful in this aim. In addition to standard monitoring intra-operatively, consideration should be given to the use of oesophageal Doppler and invasive blood pressure monitoring in high risk patients.

Warfarin

If the patient is on warfarin, 2 mg vitamin K IV should be given after the blood has been taken, without waiting for the INR result. If the patient is not on warfarin and the INR is ≥ 1.5, 2mg vitamin K IV should be given. The on-call haematologist should be subsequently contacted to ask for further advice, stating that vitamin K has been given. It is important to remind them during this conversation that patient will need to be 1st on next day trauma list (or earlier if that is planned). See *Emergency reversal of anticoagulant therapy (Bleeding & Emergency Surgery)* and *Peri-Operative Bridging* guideline on the intranet.

	Please see Whittington Health Integrated Care Organisation Guideline: **Emergency reversal of anticoagulant therapy (Bleeding & Emergency Surgery)** and **Oral Anticoagulants or Anti-platelet Agents Undergoing Surgical Procedures – Peri-Operative Bridging**

Assessment of High Risk Patients

Early referral to critical care outreach service or high dependency unit if appropriate.

Medical Pre-Optimisation for Elderly Trauma

In addition to the routine management and investigations of fractured neck of femur patients listed in the Clerking Check-list (see appendices), there are certain medical conditions that need prompt management and/or review.

What/When to Discuss with Medics

Refer to Duty Medical Registrar (DMR) and critical care outreach team for advice if any of the following:

- Symptomatic anaemia;
- Volume depletion;
- Acute kidney injury;
- Poorly controlled diabetes;
- Severe Electrolyte abnormalities Na_+<120 or >150mmol/l or K_+<2.8 or >6.0mmol/l;
- Uncontrolled heart failure;
- Correctable cardiac arrhythmia (*e.g.* fast AF or heart block);
- Cardiac ischaemia or stroke suspected as cause of fall;
- Acute chest infection or exacerbation of chronic chest disease.

Additional investigations/interventions may be needed prior to surgery. Please refer to DMR and the **A to Z of Anaesthesia for Elderly Trauma Patients** also provides information on investigation and management. This document includes pre-operative management of patients with atrial fibrillation, chest infection, diabetes, pace-makers, when to order specific investigations such as an ECHO, and how to manage patient with 'abnormal' investigation results such as low platelet count, low potassium or low sodium. This document can be accessed via https://audit.rcplondon.ac.uk/FBH/files/a%20to%20z.pdf and further information is also available in the Management of Proximal Femoral Fractures (2011) Association of Anaesthetists of Great Britain and Ireland AAGBI.

Treatment Escalation Plan (TEP)

A TEP should be in place for all high risk patients. A TEP describes the interventions that would be appropriate in the event of a clinical deterioration. It is valid from the time of making the decisions to the end of the inpatient stay unless altered during that period. If the decisions are changed then this form should be scored through with black ink and signed and dated. Patients, their family or next of kin (or an IMCA) should be involved and supported when making these decisions (see appendices).

Nottingham Hip Fracture Score

The Nottingham Hip Fracture Score has been developed to accurately predict 30 day and one year post-operative mortality according to the number of co-morbidities and other factors (age, male sex, malignancy, pre-operative cognitive function, place of residence and anaemia). It provides the anaesthetic, medical and surgical teams with information about outcome that may be discussed with the patient or their relatives. (AAGBI, 2011). A copy of the Nottingham Hip Score is in the integrated care notes and should be completed by the admitting doctor (F1/F2 on-call) clerking. If the Nottingham Hip Fracture Score is high (5 or above) then the patient should be referred to critical care outreach (see appendices).

High Dependency Unit (HDU)

Consideration should be given to referral of the patient to HDU if required post-operatively Alternatively patients may be referred to CCOT (bleep 2837) if HDU is not required, but close observation post-operatively is required.

Pain Relief

Paracetamol(1gm qds, PO or IV) to be prescribed and given from Day 0. Avoid NSAIDS, dihydrocodeine and tramadol. Use codeine (15-30 mg qds) or oramorph 2.5- 10 mg qds if additional analgesia required. Ensure ondansetron 4mg TDS PRN is also prescribed.

Nutritional Assessment

The clerking FY1/2 should prescribe one carton of Ensure tds if the patient has poor nutritional intake, until a review by the dietician. Determining whether to refer to the dietician should be according to nutritional assessment as per Trust guidelines. The Ensures should be prescribed at 10:00, 14:00 and 20:00 to encourage patients to eat their meals offered during the day. Ensure to be commenced if surgery is greater than 6 hours away (Enhanced Recovery guidance).

Discharge Planning

Discharge planning should be commenced on admission.

Peri-operative period

Staff should follow operation behaviour and dress as outlined in the policy “reducing surgical site infections”.

	Please see Whittington Health Integrated Care Organisation Guideline: **Reducing the Risks of Surgical Site Infection**

All patients must receive IV antimicrobial prophylaxis. For most patients antimicrobial prophylaxis will be in the form of IV ceftriaxone 2g infused over 30 minutes and completed before skin incision.

Patients that are either penicillin allergic or known MRSA positive (past or current) should be given IV teicoplanin 400mg plus 120mg gentamicin stat in the 30 minutes before skin incision.

	Please see Whittington Health Integrated Care Organisation Guideline: **Surgical Antimicrobial Prophylaxis Policy**

All patients should have adequate skin preparation such as alcoholic iodine-povidone (currently supplied as Videne alcoholic tincture containing 10% iodine-povidone) followed by 70% IMS.

The wound during the operation should be washed with at least 1 litre of normal saline using pulse lavage.

Skin closure should be performed using a subcuticular suture and steristrips. Clips should be avoided (if possible) due to frequent reactions they cause to skin.

Drains are not required unless the patient is anti-coagulated, on aspirin and clopidrogel or has a bleeding tendency.

A vapour permeable film with pad e.g. tegaderm will be used as the primary dressing. Post-operative weight bearing status should be recorded in post-operative instructions on the operation sheet.

Thromboembolic Prophylaxis

Thrombo-embolic prophylaxis should be started with subcutaneous low molecular weight heparin 6 hours post-surgery. Refer to guideline below. Do not use Tinzaparin in severe renal failure.

Unfractionated heparin should be used instead in this group. Compression stockings or compression boots should be used unless contraindicated.

	Please see Whittington Health Integrated Care Organisation Guideline: **Thromboprophylaxis in Adult Surgical Patients**

Use of Cemented and Un-cemented Prosthesis

In line with the recommendations from the NPSA Rapid Response Report (March 2009) entitled *Mitigating surgical risk in patients undergoing hip arthroplasty for fractures of the proximal femur*, the Orthopaedic Department does *not* routinely use cement when performing hip hemiarthroplasties or total hip replacements following fracture of the hip. *The standard practice is the use of uncemented prosthesis.*

Cemented prosthesis will be used *only* in the following circumstances:

a) Pathological fracture
b) Very wide femoral canal
c) Uncemented prosthesis not available
d) Other clinical indication

Post-Operative Period

The pressure dressing should be removed 48 hours post-surgery. The primary dressing should be left intact unless instructed by an orthopaedic consultant. They should be removed around day 10-12 for inspection and removal of steristrips.

All patients that have had surgery for fractured neck of femur should have weekly MRSA screens performed. All patients subsequently found to be MRSA positive must commence 5 day MRSA suppression protocol.

All staff must follow strict standard precautions or transmission precautions where applicable hand hygiene compliance at all relevant times.

Patients with any wound discharge should have swab sent for microscopy, culture and sensitivity. Antimicrobials should only be commenced if clinical signs of infection are present.

All patients that have had #NOF repair should be reviewed by Consultant physician (twice-weekly) with daily input from orthopaedic medical staff.

Post-operative Checks

All patients must have AMTS repeated post-operatively and if <7/10 an MMSE completed.

Post-op checks should include FBC, renal function, electrolytes and bone chemistry and pain assessment.

Haemoglobin

In the absence of symptoms of anaemia the transfusion threshold is <8g/dL for the majority of patients who have undergone surgery, even in elderly patients with underlying cardiovascular disease or risk factors (Carter et al, 2011). If the Hb is less than 8gd/L two units should be transfused and the Hb re-checked. Some patients may benefit from transfusion at higher Hb levels and each patient should be treated based on their individual clinical picture. If in doubt, seek advice from orthopaedic SpR or Consultant or Geriatricians.

Radiographs

Post-operative radiographs should be performed, (AP Pelvis and Lateral of the operated hip). These can be done when it is clinically appropriate on day 1 or 2 post op. It is not necessary to wait for the radiographs before the patient is mobilised unless there are specific instructions in the post-operative notes.

Reducing Risk of Dislocation

In the rare occasion when a patient has a total hip replacement for a neck of femur fracture they should have an ABDUCTION WEDGE between the legs to reduce the risk of dislocation.

Pain Relief

Prescribed as previously described. If additional analgesia required. If pain not adequately controlled, refer the patient to the Acute Pain Service.

Falls Assessment/Bone Health

Falls Assessment/Bone Health Review of falls history and bone health by Orthogeriatric team. All patients should have a falls risk assessment and care plan completed by nursing staff on admission and a mobility assessment completed by therapist as soon as practical post-operatively. Doctors need to complete the falls care bundle on Sunquest ICE.

Discharge Planning

The aim is to discharge patients back to their own homes as soon as practical with ongoing rehabilitation and support in the community to maximise independence. Discharge planning starts from admission and involves all of the multidisciplinary team working together to ensure all reports are completed to facilitate discharge.

The Enhanced Recovery Pathway paperwork has a section for Estimated Date of Discharge which should be completed on admission for all patients within 24 hours of admission. Daily goals have been included to facilitate the patients discharge and should be used by all clinical staff when reviewing the patient.

➢ Contacts

- Dr Rosaire Gray (Consultant physician) – via switchboard
- Orthopaedic Registrar – **Bleep 3388**
- Anaesthetic Registrar – **Bleep 3005**
- Anaesthetic SHO – **Bleep 3301**
- Theatre Co-ordinator – **Bleep 2709**
- Acute Pain team – **Bleep 2688 (pain nurse)**
- Critical Care Outreach Team – **Ext 3801/Bleep2837**
- Duty Medical Registrar - **Bleep 3300**
- Siobhan Mellett – Enhanced Recovery Nurse – **Bleep 2746**
- Infection Prevention & Control Nurse – **Ext. 3261 Bleep 2669**
- Microbiology Registrars – **Ext. 5085 Bleep 3069**
- Dr J Andrews (Consultant Microbiologist) – **Ext 3894**
- Haematologist on-call out of hours – **Bleep 2686**

➢ References

Carter JL, Terrin ML, Noveck H, Sanders DW, Chaitman BR, Rhoads GG, et al (2011) Liberal or Restrictive Transfusion in High- Risk Patients after Hip Surgery NEJM 365:2453-2462

National Collaborating Centre for Women's and Children's Health (Commissioned by NICE) (2008) surgical site infection: prevention and treatment of surgical site infection. [online] London: RCOG Press (CG74) Available from: http://guidance.nice.org.uk/CG74/Guidance/pdf/English

Surgical repair of fractured neck of femur Integrated care pathway. Whittington intranet/ICP

National Patient Safety Agency (NPSA), Rapid Response Alert; Mitigating surgical risk in

patients undergoing hip arthroplasty for fractures of the proximal femur (11 March 2009); NPSA/2009RRR001

- British Orthopaedic Association and British Geriatric Society - The Care of Patients with Fragility Fracture (2007) www.nhfd.co.uk;
- NICE Clinical guideline 124: The management of hip fracture in adults 2011. www.nice.org.uk
- NICE Clinical guideline 21 Assessment and Prevention of falls in older people www.nice.org.uk
- NICE TAG 161 Secondary prevention of osteoporosis www.nice.org.uk
- Delivering Quality and Value: Fractured neck of femur *NHS Institute for Innovation and Improvement*
- National Hip Fracture Database (NHFD) www.nhfd.co.uk
- National Audits of Falls and Bone Health Royal College of Physicians 2007 and 2010 www.rcplondon.ac.uk/clinicalstandards/ceeu
- NICE Prevention and Treatment of Surgical Site Infection (2008) www.nice.org.uk
- Management of proximal femoral fractures Association of Anaesthetists of Great Britain and Ireland AAGBI Anaesthesia 2012, 67: 85-98
- SIGN, Management of hip fracture in older people . National clinical guideline 111 www.sign.ac.uk

Appendices

Appendix 1 - Pre-operative checklist
Appendix 2 - Nottingham Hip Fracture Risk Assessment
Appendix 3 - Treatment Escalation Plan

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	**Does the procedural document affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the procedural document likely to be negative?**	No	
5.	**If so can the impact be avoided?**	N/A	
6.	**What alternatives are there to achieving the procedural document without the impact?**	N/A	
7.	**Can we reduce the impact by taking different action?**	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	**Title**		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	**Rationale**		
	Are reasons for development of the document stated?	Yes	
3.	**Development Process**		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	**Content**		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	**Evidence Base**		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	**Approval**		
	Does the document identify which committee/ group will approve it?	Yes	
7.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	Yes	
8.	**Document Control**		
	Does the document identify where it will be held?	Yes	
9.	**Process to Monitor Compliance and Effectiveness**		
	Are there measurable standards or KPIs to support the monitoring of compliance with and	Yes	

	Title of document being reviewed:	Yes/No	Comments
	effectiveness of the document?		
	Is there a plan to review or audit compliance with the document?	Yes	
10.	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	**Who will lead on this aspect of monitoring?** **Name the lead and what is the role of the multidisciplinary team or others if any.**	**What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?**	**How often is the need to monitor each element?** **How often is the need complete a report?** **How often is the need to share the report?**	**What committee will the completed report go to?**
Element to be monitored	**Lead**	**Tool**	**Frequency**	**Reporting arrangements**
MRSA screening and suppression compliance will be monitored	Ward managers in conjunction with IPCT	Audit tool developed as part of ongoing surgical site infection surveillance	Audit with this policy overall will be formally recorded by Orthopaedic department bi-annually	Presented quarterly as part of IPCC dashboard assurance via IPCC
Hand hygiene compliance and ward environment scores	Ward managers in conjunction with link practitioners and facilities staff	Measured as part of ongoing work	Audit with this policy overall will be formally recorded by Orthopaedic department bi-annually	Presented quarterly as part of IPCC dashboard assurance via IPCC Produced monthly by Facilities Team
Compliance with antimicrobial prophylaxis prescribing	Part of ongoing work between Pharmacy and Orthopaedic department	Annual antimicrobial compliance audit	Audit with this policy overall will be formally recorded by Orthopaedic department annually	Presented to Antimicrobial Steering Group annually
Surgical site surveillance of patients having surgery for fractured neck of femur surgery	Joint work between Orthopaedic department and IPC Team	ICO takes part in Public Health England SSIS scheme. Data is entered by IPCT. Data is shared quarterly with Orthopaedic team	Audit with this policy overall will be formally recorded by Orthopaedic department bi-annually	Data presented quarterly to IPCC and Quality Committee
Incidence of pressure ulcers time to theatre and length of stay data	Orthogeriatrician and Enhanced Recovery Nurse	Collected by NHFD database	Updated monthly or more regularly	Theatre Efficiency Committee

Compliance with new paperwork and discharge planning	Enhanced Recovery Nurse for fractured neck of femur, hip and knee replacements	Additional fields added to NHFD to capture information	Quarterly	Presented to Fractured Neck of Femur Steering Group

Whittington Health NHS

Clerking Check List for Fractured Neck of Femur For orthopaedic FY1/2 or CT1/2

Patient Name: Date :

Hospital No: Time:

- ❑ Check adequate analgesia prescribed and administered - document pain score.
- ❑ Identify and treat correctable co-morbidities immediately so that surgery is not delayed by:

▪ Anaemia ▪ Anticoagulation ▪ Volume depletion ▪ Electrolyte imbalance ▪ Uncontrolled diabetes	▪ Uncontrolled heart failure ▪ Correctable cardiac arrhythmia or ischaemia ▪ Acute chest infection ▪ Exacerbation of chronic chest conditions [1]

- ❑ AMT on all patients
- ❑ Ensure Intravenous fluids started (unless very severe HF)
- ❑ Check ECG + CXR + AP & lateral hip X-ray done in ED and document findings
- ❑ Check U&E, FBC and coagulation screen taken in ED and document results
- ❑ If INR is > 1.5, or patient is on warfarin (and INR not yet known) give 1mg vitamin K and then contact haematologist to ask for further advice, stating that vitamin k has been given and that patient will be 1st on next day trauma list (or earlier if that is what is planned).
- ❑ Group and save +/- cross match (check if confirmatory sample needed)
- ❑ Check what time patient last ate ….. : ….. and drank ….. : …..
- ❑ NBM (if having operation same day)
- ❑ Does the patient need pre-operative investigations?
  - ❑ Pacemaker check (if not within the last year)
  - ❑ If clinical indication for ECHO d/w anaesthetist and orthogeriatrician first
- ❑ Online VTE assessment + prophylactic tinzaparin @ 18.00 (unless contraindicated)
- ❑ Consent patient
- ❑ Mark side with permanent marker
- ❑ Book patient for theatre through Theatre Coordinator (blp 2709)
- ❑ Add patients details to Trauma board in Thorogood Seminar Room
- ❑ Check Waterlow score done by nursing staff and pressure-relieving mattress and bed on COYLE WARD has been requested by ED
- ❑ Check MRSA status (+ve, -ve, unknown) and prescribe appropriate anti-microbial prophylaxis
- ❑ **Bleep anaesthetist 3005 without delay and inform them of the patients whereabouts, relevant medical history and current medical condition.**
- ❑ Consider calling Critical Care Outreach Team (CCOT) - Refer to obs chart for calling criteria
- ❑ Complete Nottingham Hip Fracture Score – if 5 or above, please refer to CCOT and consider HDU/ITU postoperatively as appropriate
- ❑ Complete Treatment Escalation Plan

If the patient has any acute medical concerns (box above) please contact the DMR bleep 3300 and CCOT/ITU

Print name…… Signature…… Grade ……

[1]The management of hip fracture in adults 2011. National Clinical Guideline Centre – The Royal College of Physicians

Whittington Health October 2011 Project Members: Dr E Nattrogel, Dr A Chekairi, Dr R Gray, Dr J Yeo, Sister C McNally, Mr S Phelan
Updated January 2012 by Dr D Attwood, Dr R Gray, Dr S Gillis, Dr C Shaw, Sr C McNally

The Whittington Hospital NHS Trust

Nottingham Hip Fracture Score

Variable	Score
Age 66-85	3
Age ≥ 86	4
Male	1
Hb ≤10gm.dl^{-1} on admission	1
AMYS ≤ 6 on admission	1
In nursing or residential care	1
More than 1 co-morbidity	1
Active malignancy in last 20 years	1

Score	Predicted 30 day mortality
0	0
1	1%
2	2%
3	4%
4	6%
5	10%
6	15%
7	23%
8	32%
9	45%
10	57%

If score ≥5 please refer to CCOT and consider HDU/ITU postoperatively if appropriate

Please make sure Treatment Escalation Plan is completed on all patients

The Whittington Hospital NHS

TREATMENT ESCALATION PLAN (TEP)

Adults over the age of 18 years old

Name of the patient: .....
DOB: ....date of admission:.....
Hospital No:.....NHS No:.....

Date of TEP:

A TEP describes the interventions that would be appropriate in the event of a clinical deterioration. It is valid from the time of making the decisions to the end of the inpatient stay unless altered during that period. If the decisions are changed then this form should be scored through with black ink and signed and dated. Patients, family (or an IMCA) should be involved and supported when making these decisions.

	Yes	No
For consideration of ITU care *	☐	☐
Limitations.....		
Ward base active treatment*	Yes ☐	No ☐
Limitations.....		
End of Life ICP to be started (from ANGLIA ICE)	Yes ☐	No ☐
DNAR form to be completed (from ANGLIA ICE)	Yes ☐	No ☐

TEP Discussion:
If possible, patients and next of kin must be fully informed of treatment progress and prognosis including what care would be given if the patient deteriorated. Please record level of discussion including language used or the reason why the discussion wasn't possible.

.....
.....
.....
.....
.....
Name/role of those involved in discussion:.....

Consultant/ SpR completing TEP
Name_____
Signed_____Date: / /

Nurse Informed:
Nurse's name_____
Signed_____Date / /

*Treatments for consideration:

- IV fluids
- Oral/IVantibiotics
- NG/PEG feeding
- Blood transfusion
- Renal replacement
- CPAP/NIV
- Inotrope support
- Invasive monitoring
- Central vascular access
- Blood tests
- Palliative care
- Surgery