NHS
University Hospitals Bristol and Weston
NHS Foundation Trust

FEMORAL FRAGILITY FRACTURE OR SUSPECTED FEMORAL FRACTURE ADMISSION PROFORMA

Patient details (Or pre-printed label)

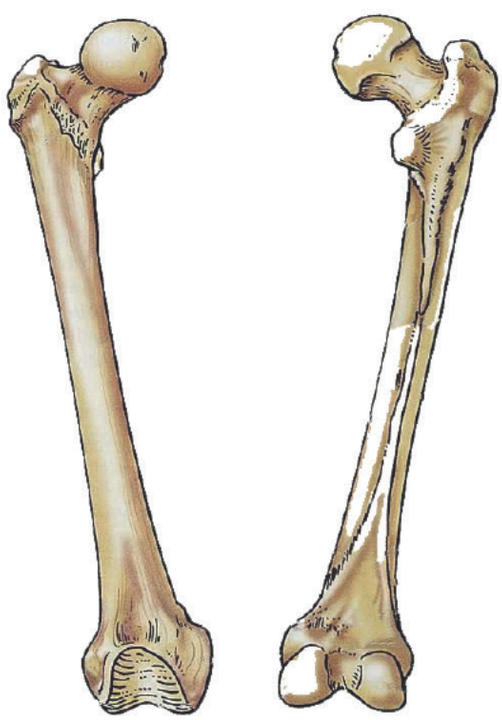
Patient's surname/family name _____

Patient's first names _____

Date of birth _____

NHS number (or other identifier) _____

Age _____



DATE:

TIME Admission to ED:

Admitting Orthopaedic Consultant:

Please complete information as thoroughly as possible as data is mandatory for the National Hip Fracture Database (NHFD) & Best Practice Tariff (BPT) & Coding Payments

Emergency Department FF#

Transfer of care Document

Presenting Complaint:

Affected Hip/Femur? **Right** O **Left** O

Analgesia

Analgesia within 20 mins of arrival in ED? **Yes O** **No O**

Analgesia by Paramedics **Yes O** **No O**

AMTS to be performed prior to analgesia **Yes O** **No O**

Nerve block to be given where possible to all #NOF patients

Nerve block administered **Yes o** **No o**

Time block done:

Type **Fascia Iliaca** o **Femoral** o

WHO checklist ☐

X-Rays

To be ordered within 1 hour of arrival in ED.
affected hip or femur AP & Lateral +/- Chest Xray
(CXR if confusion, Cardiovascular, Respiratory disease or symptoms, unexplained fall)

X-Ray Result: Is a Fracture evident?

Yes O **Type of fracture:**

No O **Consider possible fracture but not radiologically evident**
(refer to proforma guidelines Recognition of Occult Hip Fracture in the Emergency Department)

ADMISSION REQUIRED

If confirmed Femoral Fracture & YES to ALL request a *Fast Track* **DIRECT ADMISSION** to HIP FRACTURE BED & Bleep Elderly Trauma specialist nurse Bleep 6278 (Between 8-4 Mon-Fri)
If any answers NO discuss with Senior Nurse or Doctor

PRE TRANSFER CHECK LIST	YES	NO
Simple trip/slip/fall?		
Vital signs/observat ons normal? stable? NEWS <3		
Pain score recorded and is less than 6 before transfer?		
ECG with notes **& reviewed by doctor?**		
Has had x-ray confirming fragility femoral fracture		
CXR		
Intra venous (IV) cannula inserted and bloods sent? Osteoporosis Bloods: FBC, U&E, LFT, Ca, Glu, G&S x2, Clotting		
Drug Chart with analgesia prescribed?		
Property disclaimer signed?		
Has patient received Morphine more than 20 mins ago?		

TIME OF TRANSFER to WARD:

DO NOT TRANSFER IF <20 MINS OF RECEIVING MORPHINE

4 AT Test: Screening instrument for Cognitive Impairment and Delirium

1. Alertness
- Normal (Fully Alert, but not agitated throughout assessment) **0**
- Mild Sleepiness for <10seconds after waking, then normal **0**
- Clearly abnormal **4**

2. AMT4
Age, Date of Birth, Place (name of the Hospital or Building, Current Year)
- No Mistakes **0**
- 1 Mistake **1**
- 2 or more mistakes/untestable **2**

3. Attention
Ask the patient "please tell me the months of the year in backwards order starting at December". To assist initial understanding one prompt of "what is the month before December" is permitted.

Months of the Year backwards
- Achieves 7 months or more correctly **0**
- Starts but scores <7 months/ refuses to start **1**
- Untestable (cannot start because unwell, drowsy, inattentive) **2**

4. Acute change or Fluctuating course
Evidence of significant change or fluctuation in: Alertness, cognition, other mental function. (eg. Paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hrs)
- No **0**
- Yes **4**

4AT SCORE [ ]

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: Delirium or cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

If not filled in, please identify the reason:
Dysphasic ☐ Reduced GCS ☐
Too unwell ☐ Other ☐

SURGICAL TEAM ADMISSION

Presenting Complaint:

Hip / Femoral Fracture admission through ED ○
Inpatient fall sustaining Hip / Femoral Fracture ○

Consider Fascia Iliac block for inpatient falls by contacting on call Anaesthetist on Bleep [redacted]

Events leading to fall (✓ tick all that apply):

CLEAR history of trip/slip/accident		**Dizzy, light headed, pale, sweaty**	
Unexplained fall		**Unexplained loss of conciousness**	
Palpitations, chest pain, shortness of breath (SOB)		**Gait or balance disorder**	
Aura, tongue bite, incontinence, fit		**Associated acute medical problems**	

Past Medical and Surgical History:

(✓ tick all that apply)

	Known Osteoporosis
	Dementia
	Ischaemia Heart Disease
	Myocardial Infarction
	Hypertension
	Atrial Fibrillation
	Chronic Obstructive Pulmonary Disease
	Diabetes
	Stroke / Transient Ischaemic Attack
	Epilepsy
	Gastroesophageal Reflux
	Deep Vein Thrombosis **Pulmonary Embolism**
	Malignancy
	Chronic Kidney Disease
	Chronic Liver Disease

Osteoporosis risk factors (✔ tick all that apply)	Falls risk factors (✔ tick all that apply)
Over 75 years	Gait/balance problems
Previous Fragility #	History of 1 or more fall in last 12 months
Current Smoker	Fear of falls
Alcohol >3units/day	Dementia
Long term steroid use	Osteoarthritis
Secondary causes eg RA, Coeliac, Drugs	Stroke
Parental Hip #	Visual impairment
Early menopause	Foot problems
Immobility	Peripheral Neuropathy
	Other

Pre-Admission Level of Mobility

Freely mobile without aids	
Mobile outdoors with one aid	
Mobile outdoors with two aids/frame	
Some indoor mobility, but never goes outside without help	
No functional mobility	
Aids Used:	

Smoking History

Never smoked ☐

Ex ..... /day Current ..... /day

NRT Offered / Prescribed ☐

Brief advice leaflet given ☐

Pack years =

Social History and Home Environment

Current / previous occupation

Live: ☐ alone ☐ with

Partner in good health? Yes ☐ No ☐

Type of residence:

☐ House ☐ Bungalow ☐ Flat

Type

Ownership:

☐ Residential home:

☐ Other .....

☐ Warden controlled flat

☐ Nursing home: Type .....

Complete Alcohol Risk Score Below:

None ☐ Ex ..... units /day Quit date .....

How often do you have a drink containing alcohol?	Never Monthly or less 2-4 times a month 2-3 times per week 4+ times per week	0 1 2 3 4
How many units of alcohol do you drink on a typical day when you are drinking?	1 – 2 3 – 4 5 – 6 7 – 9 10+	0 1 2 3 4
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never Less than monthly Monthly Weekly Daily or almost daily	0 1 2 3 4

Score: ☐ **If score 5 or more, give brief advice (leaflet)** ☐

A score of 5 or more indicates increasing or higher risk drinking. Please refer all patients scoring 5 or more to the Alcohol Nurse Specialist via Medway and consider risk of acute alcohol withdrawal.

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Systems Review

Note any symptoms that may require optimising

Respiratory:

Cardiovascular

Bladder & Bowel Function:

Describe Normal Cognitive State/Behaviour/Mood:

Any other patient concerns:

2015 revision of Nottingham Hip Fracture (NHF) Score

from riskprediction.org.uk

Add scores for patient characteristics in table below to get NHF score, then see corresponding row in 30-day mortality table to the right

Age:	< 66 years	0	
	66-85	3	
	≥ 86	4	
Sex:	Male	1	
Hb on admission:	≤ 99 g/L	1	
Abbreviated mental test:	≤ 6	1	
Living in:	institution	1	
Comorbidities:	2 or more	1	
Malignancy (excluding SCC/BCC):	in past 20 years	1	
NHF score			

NHF score	30-day Mortality
0	0.4 %
1	0.6 %
2	1 %
3	1.7 %
4	2.8 %
5	4.6 %
6	7.4 %
7	11.8 %
8	18.2 %
9	27 %
10	38 %

Baseline Frailty Score *(circle Rockwood Chart Score)*:

1 2 3 4 5 6 7

CLINICAL FRAILTY SCALE*

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house.** Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 **Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail.**

Drug History

DOACs	Yes	O	No	O
Clopidogrel	Yes	O	No	O
Warfarin	Yes	O	No	O
Compliance issues	Yes	O	No	O
Dosette box	Yes	O	No	O

Allergies

Drug / Item	Allergy / Hypersensitivity

Medicines on Admission				Patient's own drugs	Medicines prescribed on in-patient chart (✓tick which apply)			MEDICINES MANAGEMENT
Medicine Name **Refer to connecting care if not known**	**DOSE**	Route	Frequency	Tick if brought in	Prescription continued	Prescription changed *	Not prescribed or stopped *	Please review and record any reason for change or stopping, this is an important part of the pre-operative optimisation

Examination

Airway

Mouth care required?

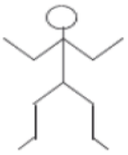
Breathing

Respiratory rate:

SpO2 on % O2

Circulation

Pulse: JVP: BP:



Heart sounds any murmurs?

Disability

GCS /15 or AVPU Blood sugar:

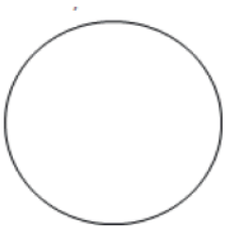
Cognition **4AT Score : ...../12** (see page 2) Confused: Y/N 4AT Delirium Score:

Hearing Aid: Y/N

Visual Problems: Y/N

Glasses Present: Y/N

Clock Drawing: Ask patient to complete the clockface and set the time for 'ten to two' (a sensitive marker of Hip Fracture outcome)

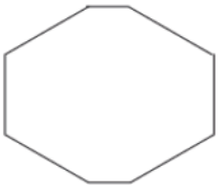


Exposure/Abdomen

Temperature:

Clinically looks malnourished? Yes/No

Look for Palpable bladder: Urinary Retention? Yes/No (Request bladder scan if in doubt)



Fluid Assessment / Gut

Assess Hydration status: Hypovolemic Y/N Euvolaemic Y/N Hypervolaemic Y/N

Urine output: Bowels:

Nutritional Status: Normal BMI Y/N At Risk of Malnutrition Y/N

Sepsis Bundle

Suspected infection?
Request blood cultures and lactate

Is News score:
≥5 or 3 in one parameter

☐ Yes → **Complete Sepsis Screening Tool**

☐ **No**
Standard care.
Monitor for deterioration

Red flags?

- Responds only to voice or pain/ unresponsive
- Systolic B.P ≤ 90 mmHg (or drop >40 from normal)
- Heart rate > 130 / minute
- Respiratory rate ≥ 25 per minute
- New need for Oxygen to keep SpO2 ≥ 92%
- Non-blanching rash, mottled/ashen/ cyanotic
- Not passed urine in last 18 hours
- Urine output less than 0.5 ml/kg/hr
- Lactate ≥ 2mmol/l
- Recent chemotherapy

Yes

Emergency management
Move patient to resuscitation area
Inform middle grade, alert ICU

Do **Sepsis 6** within **1 hour**

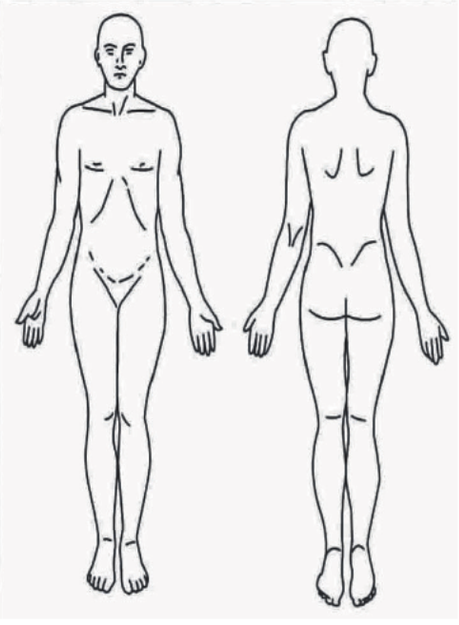
- **Oxygen** to sats 94%-98% or 88%-92% if a CO_2 retainer.
- **IV fluids** 500ml stat and up to 30ml/kg
- **IV antibiotics**
- **Cultures**
- **Repeat lactate**
- Measure **urine** output

Silver Trauma Checklist

BODY MAP, MUSCULOSKELETAL & NERVOUS SYSTEM EXAMINATION

Record fractures, abrasions, lacerations, bruising, PNS, CNS, sensory deficits & peripheral pulses

Injuries found on examination (*all fields must be completed*):			
Head:	Yes □ No □	Abdomen:	Yes □ No □
C-spine:	Yes □ No □	Pelvis:	Yes □ No □
Shoulders:	Yes □ No □	Hips:	Yes □ No □
Chest:	Yes □ No □	Thoracolumbar:	Yes □ No □
Upper limb:	Yes □ No □	Lower limb:	Yes □ No □



Further guidelines Silver Trauma:

Senior (ST3 or above) discussion should be had for →

- > 75 year old fallers with NEWS >/=4
- Significant involvement of 2+ body systems or single system serious injury i.e. compound #. amputations, any penetrating chest/abdomen injuries?

SEE TRUST IMAGING GUIDANCE ON THE DMS

O Yes	Pupillary reflexes normal?	No O
O Yes	Eye movements normal?	No O
O Yes	Fundoscopy normal?	No O
O Yes	Fields and acuity normal?	No O
O Yes	Gait normal?	No O
O Yes	Speech normal?	No O

	Tone	Power	Reflexes	Coordination	Sensation
RUL					
LUL					
RLL					
LLL					

Problem List & Diagnosis	ECG: Echo: Radiology Bloods (enter on page 46)

It is important to act on the initial assessment, investigations & medically optimise patients for theatre. List below the areas requiring pre-op optimisation. Include any target Observations recommended for ward staff. (See page 12 & 13)

ALL patients MUST be discussed with the Senior Anaesthetist on call (bleep 3036) as soon as clerked and blood results available between 7am-11pm (urgent advice available 24/7 via same bleep).

Initial Management plan & Pre-op Optimisation (please apply stickers on Drug charts)

Discussed with patient? Yes / No Discussed with family? Yes / No

Enhanced Recovery standards

- Appropriate Analgesia ☐
- Pre-op Carbohydrate Drink ☐
- Post - op Fortisips (if concerns about nutrition) ☐
- Laxatives ☐
- Prophylactic peri - operative antibiotics (see page 12) ☐
- Request osteoporosis bloods for Day 1 Post - op ☐

Medway VTE Risk assessment completed? Yes / No

Sign	Name & Grade	Date and Time

SENIOR REVIEW

REGISTRAR: **Date:** **Time:**

Diagnosis:

Planned Procedure:

Do you think patient has capacity to consent?	Yes O	No O
Does the Patient have registered lasting power of attorney	Yes O	No O
Was the NOK present during consultation?	Yes O	No O
Name/Relationship		
Thromboprophylaxis Reviewed	Yes O	No O
Is specialist kit required?	Yes O	No O
Has kit been ordered	Yes O	No O

Planned TIME & date for theatre:

Signature and bleep number:

RESUSCITATION STATUS REVIEWED by SENIOR *(decision recorded on the trust form)*	
ReSPECT Form Completed	

POST-TAKE WARD ROUND

CONSULTANT: **Date:** **Time:**

Record Summary of Consultant Review and Dictated notes:

Confirmed TIME & date for theatre:
If delay to theatre >36hrs (Best Practice Tariff) record reason(s):

Signature and bleep number:

Collateral History

Date contacted:

P.O.A for Health & Wellbeing Yes / No

Management of Hip Femoral Fragility Fracture patients

Remember *Femoral fracture patients often have many medical co-morbidities that require pro-active optimisation pre and post operatively. Below are some recommendations for initial management based on national (NICE) & local guidelines.*

Radiology	The majority of patients have medical comorbidities that require a **CXR**. This must be requested in ED to improve patient flow. Consider long bone Xray views if pathological suspected. If no hip fracture evident on Xray but **ongoing hip pain** on weight bearing, discuss with Orthopedic Consultant or musculoskeletal Radiologist to arrange an MRI (or CT) **within 24hrs** (NICE CG124) as per trust guidelines: ***Recognition of Occult hip fracture in the emergency department***.
Analgesia	Attempt peripheral nerve block in ED. Write up regular analgesia according to the trust pain chart and analgesia ladder: Paracetamol 1g QDS+ Codeine phosphate 15-30 mg QDS +/- PRN Oramorph 2.5 – 5mg (low dose) 2 hourly for breakthrough pain. Caution in Renal Failure (see ***Analgesia Prescribing in Adults with Renal impairment***). Traction may be helpful for subtrochanteric / shaft #s. Remember to adjust for Acute on Chronic pain. Co prescribe laxatives. Review & adjust daily. **Aim to wean off strong opioids within 36hrs post-op**. Ondansetron recommended for nausea. Refer to acute pain service for complex pain management. Use the **Abbey pain assessment** for all patients that are cognitively impaired or any patient who cant articulate their needs every time.
Intravenous fluids & Nutrition	Assess fluid balance daily & prescribe an **Individual Goal Directed Fluid Therapy**. Clarify time for NBM status - Fasting for solids for 6 hrs unless on specific instruction, can drink 170 mls of water every hour whilst waiting for their surgery/procedure. right up until they are summoned for their procedure. **See - Sip Til Send Pre-operative Drinking in Adult Patients.** If not diabetic, prescribe: (1) Nutricia fortisip compact drinks 125 ml BD for 3 days (do not give in the 6 hours before surgery as they contain milk), (2) Pre-op Nutricia Carbohydrate drinks 200 ml BD. Review Nutritional Risk Assessment Score (MUST) follow trust guidelines. Ensure food record charts are complete and reviewed on day 3. If oral intake poor continue fortisip and contact Dietitian.If no concern discontinue Fortisip. Weekly nutritional staus review &weights.
Anaemia Blood & Transfusion	Group & save all patients pre-op. Older patients are less tolerant of Hb is also likely to decrease by 20 g/L over 2-3 days postop. ***Blood Transfusion: Clinical Guidelines March* Version 4.4** Pro-actively transfuse patients pre & peri-operatvely. If they have: Acute blood loss ≤70 g/L (especially in younger patients), or if risk factors for cardiovascular disease (≥ 65 years, IHD, CVD, HTN, DM, PVD) consider transfusion ≤90 - 100 g/L (as likely to lose 1 unit intra-operatively) or acute sepsis. Anaesthetist to check Hb at the end of surgery. **Hb must be checked day 1 post op and documented**.
Thrombo-prophylaxis	Complete the **Mandatory Risk Assessment for Venous Thromboembolism (VTE)** on all patients. Prescribe appropriate thrombo-prophylaxis according to trust and Hip # guidelines. Review and update treatment post op. Renal function must be taken into consideration when prescribing; it is Trust policy to administer pharmacological thromboprophylaxis at 6pm to avoid any delays to procedures/surgery planned the following day. Do not give any pharmacological prophylaxis if surgery, spinal anaesthesia or Epidural expected within 12 hours. In line with NICE guideline (NG89) patients are to have extended VTE for 28 days post surgery. Refer to ***Extended Thromboprophylaxis for Adult patients undergoing surgery for a hip fracture***. For Distal Femur fracture, follow surgeons advice. All hip fracture patients must undergo a review of their anticoagulation 72 hour post-op and consideration should be given to restarting any DOAC withheld perioperatively.
Fitness for theatre	Use a consistent approach (ABCDE, Pain & NEWS score) to assess if a patient is unwell. If medically **UNFIT** highlight why & inform the Anaesthetist early. **The oncall Medical Registrar or an Orthogeriatric review may be required to help optimise patient. If severe Aortic Stenosis** suspected inform the anaesthetist as this may influence their anaesthetic approach and request an urgent pre-op Echocardiogram. **Warfarin Reversal** should be carried out according to ***Warfarin Emergency Surgery Protocol***. Indications should be checked before before reversal (e.g. prosthetic heart valves, DVT, PE) Use 3mg IV vitamin K, aiming for INR <1.5. If on Aspirin stop on day of surgery. If on **Clopidogrel** see ***The Management of Anti-platelet Therapy in Patients requiring Emergency Hip Fracture Surgery***, For **Dabigatran** refer to ***NOAC Dabigatran management of Haemorrhage and or Emergency surgery.*** For **Rivoraxaban** or **Apixaban** - ***NOAC Apixaban (Eliquis®) or Rivaroxaban (Xarelto®) Management Of Haemorrhage And/Or Emergency Surgery***. Medicine management in the pre-operative period including corticosteroids -***Perioperative Medicines Management.*** For **Diabetic Patients** follow trust Guidelines for ***Guidelines for the management of adult with diabetes undergoing surgery & elective procedures.*** For **Parkinson's Patients** refer to the ***Emergency Management of acutely unwell and peri-operative patients with Parkinsons disease.***
Medications	**Review all Medications and doses on admission**, some may need to be withheld temporarily (e.g. ACE inhibitors because of renal failure), Beta blockers, should be continued where possible to protect against IHD (**2014 ESC pre-op Guidelines**). Prescribe PRN Meds and Oxygen **Target Saturations of 92-94%**.
Antibiotic Prophylaxis	Follow the ***Adult Trauma & Orthopaedic Surgery Prophylactic Antibiotic Guidelines***. If normal renal function prescribe Co-amoxiclav 1.2 g IV on induction and 8 & 16 hours postop. If Penicillin Allergic or those at risk of colonisation such as a nursing or Residential home resident, Inpatients for ≥ 5 day, or previous admission with MRSA give Teicoplanin 400mg IV plus Gentamicin 1.5mg/kg within 30 minutes of knife to skin time & one further dose of Teicoplanin 400mg IV after 12 hours.

Surgery & Theatre	Discuss most suitable type of prosthesis with senior surgeon. For Intracapsular fractures consider THR if biologically fit and active (**NICE CG124**). **Ensure theatres aware that THR or specialist Kit required**. Please record duration of surgery, time of skin incision and time of closure for NHFD Audit. For ***Atypical Femoral Fractures*** follow the UHB guidelines.
Anaesthetic	Refer to anaesthetic care bundles and 'recipes' for these high risk patients - found in 'Red folder' in Hey Groves theatre 7 and on Induction app. Consider additional help from consultant coordinating anaesthetist (bleep 3036) for ALL frail and/or complex cases. Aim for a Systolic BP for >90mmHg during the anaesthetic to reduce the risk of postoperative renal failure (AKI) or cardiac ischaemia (NCEPOD 2010 & ASAP 2014). Complete anaesthetic section on pages 16-20 and communicate directly with ward teams regarding postoperative concerns and plans.
Bladder & Bowels (B&B)	Review bladder and bowel function daily using fluid chart and **Bristol Stool Chart**. Prescribe Laxido 1 bd and senna 1-2 Nocte to avoid constipation. Refer to trust guidelines on ***The Prevention and Management of Constipation in Older adults in hospital.*** **Remove catheter post-operatively** when transferring (by day 2 or 3), unless required for accurate fluid balance assessment.
Dementia, Post operative cognitive dysfunction (POCD) & Delerium	**The Incidence of dementia, post-operative Cognitive dysfunction (POCD) and delirium is very high in these patients**. Establish pre-admission cognitive state and normal behaviour patterns from carers, family or care home. Refer to **This is Me** care document. Complete a baseline assessment **AMTS, 4AT and Clock drawing & Pre-Discharge AMTS**. Consider serial mini mental examinations (**MOCA**) postoperatively. If delirium is suspected look for a cause (**NICE CG42**). There are trust guidelines available on ***The Treatment of Acute Agitation and aggression of Frail Older People.*** A **Confusion Screen** includes bloods TFTs, B12, Folate, CRP & GGT, LFTs, Urinalysis +/_ MSU, ECG, a Septic screen and a full Medication Review.
Consent & Capacity	Assess capacity formally as per the **Mental Capacity Act**. If they lack capacity, follow 'Best Interest' guidance and complete Consent Form 4. An IMCA may be required if no advocate is available. For **Best Interest meeting/Discussion Mental Capacity Assessment tools are available on trust intranet under Quality and patient safety.**
Investigations	All patients should have an **ECG** performed and reviewed on admission. **Blood test flow chart must be filled out and updated regularly.** This helps early detection of medical complications. Address any metabolic abnormalities (eg correct electrolytes, low Hb).For most relevant admission bloods on ICE, select profile tab, then select "Fracture neck of femur" Initial screening for secondary causes of Osteoporosis include: U&Es, Ca, PO4, VitD, ALP, LFTs, TFTs, Myeloma screen (eps, lgs & 3x Urinary BJPs), TTG and inmen PSA (**osteoporosis bundle** on ICE). Consider **Testosterone in younger men <75yrs**.
Osteoporosis	***Refer To NICE Guidelines TAG 161& frax tool http://www.sheffield.ac.uk/FRAX*** and UHBristol Fracture Liason Service (FLS) ***Colecalciferol Vitamin D treatment guidelines for adults over 50 years.*** Check Vitamin D and Calcium levels. If normal start Adcal D3 one tab Bd (12.00 &18.00) Book OPD DEXA for younger patients<75yrs. For women and men >75yrs prescribe Risedronate 35mg or Alendronate 75mg once weekly unless contraindicated (GFR <35, Severe GORD or compliance issues). For second line treatments discuss withOrthogeriatrician, Fracture Liaison Nurse or Hip # Nurse (Bleep 6278). Provide lifestyle advice on alcohol and smoking cessation.
Falls Risk Assessment	A comprehensive falls history is required. If there is any suggestion of syncope or frequent unexplained falls, further investigation may be needed. Identify any reversible risk factors. Review inpatient nursing **Falls Risk Assessment** and follow trust policy on ***The Prevention and Management of Falls in Hospital*** on how to reduce in patient falls risk. Discuss with physiotherapist and consider referral to Falls and Balance Group (at SBCH) or community Falls service on discharge.
Rehabilitation & Planning Discharge	Discuss potential barriers to discharge with multidisciplinary team (MDT) at board rounds and document this in the notes. Identify fast track (discharge 7 day, see time line page 20), **Main Stream** and **Slow Stream** rehabilitation patients and estimate the estimated date of discharge (EDD). Rehabilitation should commence within 24hrs, sitting out day 1 post-op, review progress daily and aim to decide on discharge destination or referral to appropriate setting by day 5 post-op. Set SMART goals.
Best Practice Tariff (BPT) & the National Hip Fracture Database (NHFD) and Enhanced Recovery (ERP)	The Trust is working toward fulfilling the criteria for BPT and Key performance indicators which describes the most impoertant aspects of patient care. KPI 0 to 7 are 0. Admitted to specialist ward - With nerve-block within 4 hours 1. Prompt orthogeriatric assessment - Assessed by a senior geriatrician (ST3+) within 72 hours of presentation 2. Prompt surgery - Surgery by the day following presentation with hip fracture 3. NICE compliant surgery - Surgical procedure consistent with the recommendations of NICE CG124 4. Prompt Mobilisation after surgery - Mobilised out of bed (standing or hoisted) by the day after operation 5. Not delirious when tested - Not delirious (<4 on 4AT test) when tested in the week after operation 6. Return to original residence - Discharged back to original residence, or in that residence at 120 day follow-up 7. Bone protection medication - Either i.v. medication at discharge or at 120 day follow-up. **All data must be recorded using the National Hip Fracture Database (NHFD), therefore accurate data entry is essential in the medical notes. The trusts performance is published annually and benchmarked against National standards.**For more Information go to www.nhfd.co.uk.
Patient & Carer Information leaflets	**Hip fracture information for patients and carers** are available on Trust Intranet (under DMS patient information Leaflets SH&N section). **My Hip fracture care: 12 questions to ask** (A guide for patients their families and cares) are available on **NHFD database**. Slips, Trips & Falls, smoking cessation and Osteoporosis leaflets available on ward or via Hip Fracture Specialist Nurse. **The National Osteoporosis Society** provides useful resources on specific conditions for health care professionals, patients and carers, http://www.nos.org.uk.

ORTHOGERIATRIC (OG) REVIEW

Consultant Name
Date Time Ward

DOCUMENTATION REVIEWED: AMBULANCE ☐ ED ☐ EVOLVE ☐ C. CARE ☐

BASELINE/BACKGROUND:

SUMMARY OF ISSUES:

SILVER TRAUMA CHECKLIST done ☐

1 & 2 SURVEY completed by: ED ☐ T&O ☐

Case discussed at Trauma Meeting + OG ☐

FRAILTY SCORE =

4AT Score =

RESPECT REVIEWED ☐

FALLS RISK FACTORS:

Vision Check ☐

OSTEOPOROSIS RISK FACTORS:

Height Weight

FRAX Score =

RESULTS REVIEWED:

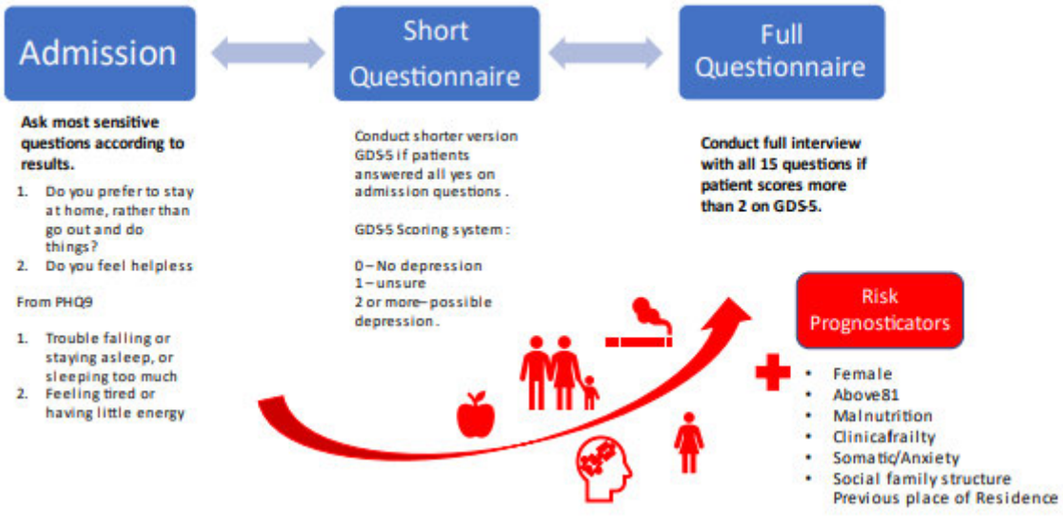
ECG ☐
ECHO ☐

RADIOLOGY:

BLOODS:

PERIOPERATIVE RISKS IDENTIFIED:

Any other patients concerns/ psychological issues?



TRUST NUMBER:.....

SURNAME:.....

FORENAME:.....

GENDER…….. DOB:.....

ASSESSMENT (MRS A-G):

MEDICATION REVIEWED ADR-

STOP/START:

MANAGEMENT PLAN:

BONE HEALTH PLAN:

Calculated creatinine clearance =

SUGGESTED DISCHARGE & REHABILITATION PATHWAY:

Patient & Carer information provided on
Hip# / Falls and osteoporosis / Delirium ☐

ADMIT TO:
A604 (SILVER TRAUMA UNIT) ☐ **A602 (T+O) ☐**

SIGNED: ……. CONTACT DETAILS: ……..

ADDITIONAL COLLATERAL HISTORY

NOK Contacted:
Name / relationship / Tel No / date contacted

SIGNED: ……. CONTACT DETAILS: ……..

ANAESTHETIC INFORMATION

Patient ID label

PREOPERATIVE ASSESSMENT

Completed by (name)_____

Grade _____ Signature_____

Date __ / __ / __ Time __ : __

- Orthogeriatric assessment reviewed Yes □ No □ (not yet done)
- Anaesthetic chart complete □
- ITU/HDU required post-op? No □ Yes □
- Optimisation plan:

Please communicate plan with T&O (Blp [redacted]) or Orthogeris team via A604 ([redacted] or Trauma CNS (Blp [redacted]

SENIOR ANAESTHETIST IN THEATRE:

	Tick ✓
Consultant	
Post-CCT	
ST7/6	
ST5/4	
ST3	
Other (state) _____	

ASA SCORE (Physical Status Classifican System): (✓)

ASA 1	**Healthy**, non-smoker, no or minimal alcohol.	
ASA 2	**Mild systemic disease WITHOUT functional limitation**. E.g. Current smoker, social ETOH, pregnancy, obesity (BMI 30-39). Well controlled DM/HTN/mild lung disease.	
ASA 3	**Moderate to severe disease**. E.g. (not limited to): Moderately reduced ejection fraction, >3months since MI/CVA/TIA/CAD/stents. Poorly controlled DM/HTN/COPD, pacemaker, obesity (BMI 40+)	
ASA 4	**Very severe disease, constant threat to life**. E.g. (not limited to): Recent (<3 months) MI/CVA/TIA/CAD/stents, ongoing cardiac ischaemia, severe valve dysfunction, severe reduction ejection fraction.	
ASA 5	**Moribund, not expected to survive without operation**. E.g.: massive trauma, intracranial bleed with mass effect, ischaemic bowel with multi-organ dysfunction	

Please account for extremes of age, cognitive impairment and frailty when assessing ASA status

ANAESTHETIC:

GA ◯

SPINAL ◯ if spinal, document details below:

		✓	
LA	0.5% Heavy bupivacaine		Volume: __.__ ml Time: __:__
	Plain bupivacaine		
OPIATE	Fentanyl		Dose: ____ mcg
	None		
SEDATION	None		ETCO2 monitoring Yes/No
	Propofol boluses/TCI		
	Midazolam		

NERVE BLOCK DETAILS: **Please complete full details using a sticker in the pain folder and attach it to the anaesthetic chart **

	(✓)		
Fascia iliaca		TIME	Total Volume: _____ ml
Femoral		____:____	Total dose L-bupivacaine:____mg
If no block, why not?	Reason:		(✓)
	(1) High volume peri-articular LA infiltration		
	(2) Other (state):		

BLOOD PRESSURE MANAGEMENT:

Blood pressure	Pre-op baseline	___/___ mmHg
	Minimum acceptable systolic BP (preop baseline minus 20% - see charts)	___ mmHg
	Was BP maintained within 20% of baseline throughout?	YES/NO
	Lowest intraoperative BP	___/___ mmHg
Metaraminol infusion	Start time	:
	Metaraminol infusion continued to recovery?	YES/NO

FLUID MANAGEMENT:

Pre-op Hb	g/L	*Circle:* Laboratory/ABG/VBG/Haemocue
Fluids given	Crystalloid	ml
	Red cells	Unit(s)
	FFP	Unit(s)
	Platelets	Pool(s)

SIGNIFICANT INTRAOPERATIVE EVENTS:

		Briefly describe:
Cement complications	YES / NO / N/A	
Other complications	YES / NO	
Post-operative review in PACU required?	YES / NO	*ALL ASA 3,4,5 or patients with clinical concern should be reviewed in recovery prior to discharge

Date __/__/__ Time ___:___ Signature_____ Print/Stamp Name_____

Grade _____ GMC No._____

To be completed by Recovery Staff:

Immediate post-op Hb If <100 g/L, inform anaesthetist as may need transfusion		**g/L**
Post-op Hb taken from:		**ABG / VBG / HemoCue**
Is blood transfusion required?		**YES/NO**
If transfusion given, repeat Hb post-transfusion		**g/L**
Pain score at rest as soon as patient is awake enough to assess (use Abbey if dementia or other cognitive impairment)	**VAS**	**/10**
	Abbey	**/18**
Pain score on movement as soon as pain is controlled at rest	**VAS**	**/10**
	Abbey	**/18**

Discharge Criteria:		**Value**	**Achieved (✓)**
Pain score on movement (use either VAS or Abbey)	VAS		**VAS ≤ 4 achieved?**
	Abbey		**Abbey ≤ 7 achieved?**
Hb result (aim for ≥ 90-100 g/L)		**g/L**	
Systolic BP within 20% of pre-op reading		**mmHg**	
Vasopressors not required for last 1 hour			
Fluid bolus not required for last 1 hour			

Date __/__/__ **Time** ___:___ **Signature**_____ **Print/Stamp Name**_____

Recovery review by Anaesthetist:

***ALL ASA 3,4,5 patients and any patient with clinical concern should be reviewed in recovery prior to discharge**

- Review by consultant or post-fellowship trainees (ST5+) only
- If discharge criteria are not met, or patient has been on metaraminol for more than 4 hours post-theatre, please discuss with critical care consultant (within limits of TEP)
- Please communicate directly with ward team if any ongoing concerns

Patient-appropriate fluid prescription in place (12-24 hours)?	**YES/NO**
NEWS parameters reviewed and appropriate? (parameters in line with Treatment Escalation Plan)	**YES/NO**
Suitable for discharge to ward?	**YES/NO**

Ortho Bleeps: REG [redacted], SHO [redacted]
Orthogeriatric team – contact via A604 [redacted] / [redacted]) or Hip Fracture CNS: bleep [redacted]

		Doctor's name who was contacted	Grade	Contact number
Have you discussed patient with orthopaedic team?	**YES/NO**			
Have you discussed patient with orthogeriatrician?	**YES/NO**			

Recovery notes:

Date __/__/__ **Time** ___:___ **Signature**_____ **Print/Stamp Name**_____

Grade _____ **GMC No.**_____

Hospital Number / Patient label here

National Hip Fracture Database - Dataset specification v15.0 (2024)

(Applicable to patients with any form of hip/femoral fracture admitted from 1 Jan 2024)

Theatre Data Collection Sheet - Only for use in operating theatre – Only to be completed by theatre staff

All fields on this form must be completed.

Date & time of surgery	**Side of fracture** (For bilateral fractures complete two forms)
__/__ /__ __ :__ __ __ __ __ __ __ __ No operation performed	☐ Left ☐ Right

Fracture Type

Note: The NHFD does not collect data for patients with isolated fractures of greater or lesser trochanters

Hip Fracture

- Intracapsular – displaced
- Intracapsular - undisplaced
- Trochanteric
- Intertrochanteric / Reverse oblique
- Subtrochanteric

Femoral shaft fractures

Definition: A fracture 5 cm or more below the lesser trochanter and 5cm or more above the knee joint

- Femoral shaft

Distal femoral fracture

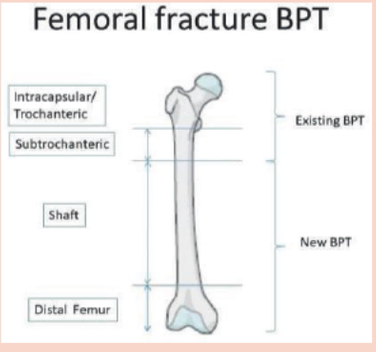
Definition: Fracture within 5cm of the knee joint line (=1 Muller square)

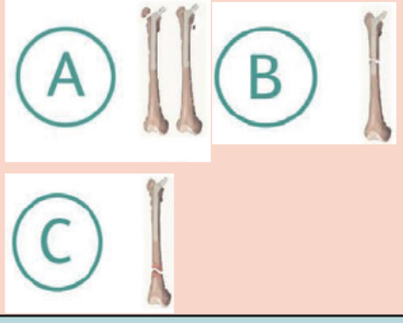
- Distal femoral – extra articular
- Distal femoral –partial articular
- Distal femoral – complete articular

Peri-prosthetic femoral fracture

Do not include acetabular/ pelvic or tibial fractures

- Peri-prosthetic, around a hip replacement – A (apophyseal)
- Peri-prosthetic, around a hip replacement – B (around the stem)
- Peri-prosthetic, around a hip replacement – C (distal to stem/ cement)
- Peri-prosthetic, around a knee replacement – A (epicondyles)
- Peri-prosthetic, around a knee replacement – B (involving implant/ cement)
- Peri-prosthetic, around a knee replacement – C (proximal to implant/cement)
- Peri-prosthetic, between a THR and a TKR – D (inter-prosthetic)
- Peri-prosthetic, around previous fixation device – plate/screws
- Peri-prosthetic, around previous fixation device – nail





Pathological

- ☐ No
- ☐ Malignancy
- ☐ Atypical bisphosphonate type fracture (any site)

ASA grade	Modes of anaesthesia used (Tick all which apply in this case)
1. A normal healthy patient 2. A patient with mild systemic disease 3. A patient with severe systemic disease 4. A patient with severe systemic disease that is a constant threat to life 5. A moribund patient who is not expected to survive without the operation Unknown	GA Spinal Epidural Intra-operative sedation Intra-operative nerve-block High volume peri-articular LA infiltration (by surgeon)
Operation performed	**Reason if delay > 36 hours**
Internal fixation - Sliding hip screw Internal fixation - Cannulated screws Internal fixation - IM nail (long) Internal fixation - IM nail (short) Arthroplasty – Hemiarthroplasty (cemented) Arthroplasty – Hemiarthroplasty (uncemented) Arthroplasty – Primary THR (uncemented) Arthroplasty – Primary THR (cemented) Other **Additional options for fractures of the distal femur or periprosthetic fractures:** Revision THR Revision TKR Internal fixation (plate +/- screws or cables) Internal fixation - IM nail and plate Revision THR & internal fixation (plate) Revision TKR & internal fixation (plate) Proximal femoral replacement Distal femoral replacement Total femoral replacement Other	No delay - surgery < 36hrs Awaiting fracture diagnosis or confirmation (e.g. imaging) Awaiting medical review /investigation or stabilisation Delayed due to insufficient theatre capacity Delayed for reversal of warfarin Delayed for reversal of DOAC* Delay due to appropriate surgeon / equipment not available Other Unknown ** Direct oral anticoagulants (DOACs) are apixaban, edoxaban, rivaroxaban and dabigatran* *(Do not record clopidogrel or prasugrel - they are antiplatelet drugs not DOACs)*

Grade of the senior <u>surgeon scrubbed</u> in operating room	Grade of the senior <u>surgeon present</u> in operating room	Grade of the senior <u>anaesthetist present</u> in operating room
Consultant ☐ Specialist/associate specialist ☐ Specialty doctor/staff-grade ☐ ST3+ ☐ Below ST3 ☐ Unknown	Consultant ☐ Specialist/associate specialist ☐ Specialty doctor/staff-grade ☐ ST3+ ☐ Below ST3 ☐ Unknown	Consultant ☐ Specialist/associate specialist ☐ Specialty doctor/staff-grade ☐ ST3+ ☐ Below ST3 ☐ Anaesthetic associate ☐ Unknown
Documented that the patient is allowed to FULL weight-bear post-op.?		
☐ Yes ☐ No		

HIP FRACTURE OPERATION NOTE

Theatre list:

Date:

Admitting Consultant:

Main Surgeon: Grade:

Assisting Surgeon: Grade:

Supervising Consultant Present? Y / N

OPERATION PERFORMED

POST OPERATIVE INSTRUCTIONS:

Observations and post op bloods: .....

Antibiotics prescribed Augmentin 1.2g @ 8 + 16 hrs ☐ Teicoplanin 400mg @ 12 hrs ☐

DVT prophylaxis Enoxaparin ☐ Time post op 6hrs ☐ 12hrs ☐ 24hrs ☐

DOAC ☐ Re-start post-op .....Hrs

Foot pumps ☐ Extended Thrombo-prohylaxis Yes ☐ No ☐

Wound care ..... ROS 14 days ☐

Weight bearing status FWB ☐ Other (+ reason) ☐ .....

X-ray Hip AP/Lat ☐ Pelvis AP/Lat Hip ☐ Femur AP/lat ☐

Micro/Histo samples sent Yes ☐ No ☐ Follow up Yes ☐ No ☐ 6/52 # clinic ☐

NJR Form completed for Hemi/THR Yes ☐ No ☐

PROCEDURE: incision, findings, technique

Contemporary cementing technique ☐

CLOSURE & SUTURE DETAILS

.....

.....

TIME OF INCISION:..... **TIME OF CLOSURE:**.....

INTRAOPERATIVE COMPLICATIONS : N ☐ Y ☐ (explain)

SIGNATURE: ..... **DATE:**

NAME (print): **GMC NO:**

GRADE: **Consultant** ☐ **SPR/Fellow** ☐ **Core Trainee** ☐

Please attach Implant Stickers to this Page

IMPLANTS: manufacturer, type, size (attach stickers)

National Joint Registry (NJR / SSI) forms completed

Occupational Therapy – Initial assessment

Patient details (Or pre-printed label)

Patient's surname .....
Patient's first name .....
Date of birth .....
NHS number .....
Age .....

Verbal consent to input: Yes / No
Info collected from: patient / NOK
Date/time:

Type of residence: **Ownership:**.....

○ House ○ Bungalow ○ Flat ○ Warden controlled flat ○ Other.....

○ Residential home: Type..... ○ Nursing home: Type.....

Who do they live with? ..... Are they fit and well?.....

External access:

○ Communal ○ Private
○ Level ○ Lift
○ Steps - number of steps .....
Rails: ○ left ○ right Type.....
Additional details.....
.....

Internal access:

○ Level ○ Stair lift
○ Stairs
Rails ○ Left ○ Right
Additional steps: (location + rails).....
.....

Toilet:

○ Upstairs
○ Downstairs
○ Outside
○ Commode
Equipment: .....

Bedroom:

○ Upstairs
○ Downstairs
Bed downstairs? Y/N
Equipment: .....
EARLY RISER? : Yes / No

Bathroom:

○ Upstairs
○ Downstairs
○ Bath
○ Shower type:.....
Equipment:.....

Details of support:

	S	M	T	W	T	F	S	Task completed
Home Care								
Community Meals								
District Nurse								
Day Care								
Other								
Community Matron Involved? Yes / No Name: ☎								

Activities of daily living

1= dependent (1 or 2 people)	2 = Assistance	3 = Independent with or without equipment

Activity	Previous Abilities	Abilities needed for discharge
Mobility		
Stairs		
Transfers: Bed Toilet and Chair		*Consider height forms*
Washing & Dressing		
Accessing: food/drink Shopping		
Continence		

Signature: Print Name: Designation: Date:

Activity	Previous abilities /details	Issue for discharge
Summoning help		Yes/No
Medication		Yes/No
Laundry		Yes/No
Housework		Yes/No
Work/productivity		Yes/No
Finances		Yes/No
Leisure/relationship		Yes/No
Driving/transport.		Yes/No

	Previous	Current
Psychological		
Cognition		Orientated to: ○ Time ○ Date ○ Place

Vision:	Hearing:	Communication:
Wears glasses? Yes/No	Hearing aids? Yes/No	Aid used?

Falls History - How many falls in the last 12 months?
Falls assessment completed?

Treatment plan

Summary and Plan	Date completed

Treatment plan written by:	Name:	Signature:	Date:
Equipment in situ at home	**New Equipment/adaptations needed.**		**Date of Provision**
Discharge from Occupational Therapy: Additional information: Discharge Signature:		Name:	Date:

Guidelines for Daily Ward Review – using ABCDEFGMR

Airway & C-Spine

Check airway patent

Check dentition. Consider regular mouth care or referral to Dental Hospital

Any concerns about C-spine injury?

Exposure

Check temperature

Complete an abdominal and full examination of patient including wound dressing check. Review and update secondary survey findings.

Review any microbiology results

Breathing

Normal Respiratory Rate 12-18 breaths/min

Aim for Oxygen saturations >92-94% on air (unless known CO2 retainer COPD)

Consider nebulisers if bronchospasm, chest physiotherapy if poor cough/mucous plugging

Consider Arterial Blood Gases (ABG)

Any concerns about chest injury?

Fluid

Assess fluid status clinically and review fluid charts

Aim urine output 0.5mls/kg/hr. Aim to remove catheter within 2-3days post op

Check serial U&Es

Prescribe goal directed iv fluid therapy (resuscitation or maintenance)

Circulation

Aim SBP > 100mgHg and HR <100b/min

Any heart murmurs present?

Any evidence of DVT?

Review ECG

Check pre op and day 1 Hb (and consider blood transfusion), also lactate for signs of occult bleeding

Gut

Check bowel chart to see if constipated/ diarrhoea

Adjust laxatives accordingly

Assess nutritional status, weight, food charts and review nutritional care plan. Consider referral to dietician

If concerns about swallow perform bedside swallow test. Consider referral to SALT

Disability

Check BM or blood glucose

Record AVPU or GCS

Any hearing or sight problems?

Check AMTS and 4AT or CAM

Any new focal neurology or concerns about head/spine injury?

Pain assessment using VAS or Abbey scale. Adjust pain medications accordingly

Medication

Obtain complete list of medications (check GP records)

Review medication chart daily and check compliance

START medications - such as preop ERP meds, osteoporosis bloods, VTE and antibiotic cover for surgery

STOP medications - such as hypertensive meds periop

Rehabilitation & Resuscitation Plan

Review and update DNACPR / TEPP status. It is important to obtain a good background collaborative history asap

Check patient sitting out day 1. Identify barriers to rehabilitation (such as pain or cognition)

Predict if patient is fast track, main stream or slow stream rehabilitation. Discuss recommended pathway at MDT board round

Day 1 Post-op Review By:

Ward: Date: Time:

Examination:

A:
B:

C:

D (incl pain):
E:

F:
G:
M:

Current Issues and Management Plan:

Update VTE Risk Assessment ☐

4 AT Test: Screening instrument for Cognitive Impairment and Delirium

1. Alertness
- Normal (Fully Alert, but not agitated throughout assessment) **0**
- Mild Sleepiness for <10seconds after waking, then normal **0**
- Clearly abnormal **4**

2. AMT4
Age, Date of Birth, Place (name of the Hospital or Building, Current Year)
- No Mistakes **0**
- 1 Mistake **1**
- 2 or more mistakes/untestable **2**

3. Attention
Ask the patient "please tell me the months of the year in backwards order starting at December". To assist initial understanding one prompt of "what is the month before December" is permitted.

Months of the Year backwards
- Achieves 7 months or more correctly **0**
- Starts but scores <7 months/ refuses to start **1**
- Untestable (cannot start because unwell, drowsy, inattentive) **2**

4. Acute change or Fluctuating course
Evidence of significant change or fluctuation in: Alertness, cognition, other mental function. (eg. Paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hrs)
- No **0**
- Yes **4**

4AT SCORE [ ]

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: Delirium or cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

Day 1 post-op Review continued

Initial Physiotherapy Assessment Day 1

Affected hip: Right Left

Operation:

Date of operation:

Post Op Instructions:

Addressograph

Past Medical History:

Subjective Assessment:

Objective Assessment:

NEWS Score: _____ Details: _____

Neuro:

MSK:

	Left	Right
AROM		
Strength		

Signed Print Bleep Date

Patient Name T Number

Treatment:

Provided with Hip and Knee Booklet ☐ NMS and CAS completed ☐

Bartel completed ☐ Score: _____

Analysis:

Plan:

Signed Print Bleep Date

Post OP Day 2 Review By:

Ward: Date: Time:

Rehabilitation (please circle):
Fast Track Main Stream Slow Stream

4 AT Test: Screening instrument for Cognitive Impairment and Delirium

1. Alertness
- Normal (Fully Alert, but not agitated throughout assessment) **0**
- Mild Sleepiness for <10seconds after waking, then normal **0**
- Clearly abnormal **4**

2. AMT4
Age, Date of Birth, Place (name of the Hospital or Building, Current Year)
- No Mistakes **0**
- 1 Mistake **1**
- 2 or more mistakes/untestable **2**

3. Attention
Ask the patient "please tell me the months of the year in backwards order starting at December". To assist initial understanding one prompt of "what is the month before December" is permitted.
Months of the Year backwards
- Achieves 7 months or more correctly **0**
- Starts but scores <7 months/ refuses to start **1**
- Untestable (cannot start because unwell, drowsy, inattentive) **2**

4. Acute change or Fluctuating course
Evidence of significant change or fluctuation in: Alertness, cognition, other mental function. (eg. Paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hrs)
- No **0**
- Yes **4**

4AT SCORE [ ]

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: Delirium or cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

Examination:

A:
B:

C:

D (incl pain):
E:

F:
G:
M:

Current Issues and Management Plan:

PLEASE SIGN:	PRINT NAME:	DATE & TIME:

Therapy assessment day 2 **Date** **Time** **Patient name** **T number**

Subjective Assessment: (including consent for proposed plan)
Objective Assessment: (consider range, muscle strength, neurovascular status, respiratory assessment, cognition & function)
Treatment:
Analysis:
Plan and Goals:

Signed Print Bleep Date

Post- Op Day 3 Review By:

Ward: Date: Time:

Examination:

A:
B:

C:

D (incl pain):
E:

F:
G:
M:

Current Issues and Management Plan:

Rehabilitation (please circle):
Fast Track Main Stream Slow Stream

4 AT Test: Screening instrument for Cognitive Impairment and Delirium

1. Alertness
- Normal (Fully Alert, but not agitated throughout assessment) **0**
- Mild Sleepiness for <10seconds after waking, then normal **0**
- Clearly abnormal **4**

2. AMT4
Age, Date of Birth, Place (name of the Hospital or Building, Current Year)
- No Mistakes **0**
- 1 Mistake **1**
- 2 or more mistakes/untestable **2**

3. Attention
Ask the patient "please tell me the months of the year in backwards order starting at December". To assist initial understanding one prompt of "what is the month before December" is permitted.
Months of the Year backwards
- Achieves 7 months or more correctly **0**
- Starts but scores <7 months/ refuses to start **1**
- Untestable (cannot start because unwell, drowsy, inattentive) **2**

4. Acute change or Fluctuating course
Evidence of significant change or fluctuation in: Alertness, cognition, other mental function. (eg. Paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hrs)
- No **0**
- Yes **4**

4AT SCORE [ ]

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: Delirium or cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

Post Op Wound Care

Dressing Dry Yes O
No O

If no, please comment.

Post-op check XRAY
reviewed by
Cons/Reg Y/N

Anticoagulant review
72 Hr post-op
Enoxaparin/DOAC
Consider restarting any DOAC with held pre-operatively.

Therapy assessment day 3 **Date** **Time** **Patient name** **T number**

Subjective Assessment: (including consent for proposed plan)
Objective Assessment: (consider range, muscle strength, neurovascular status, respiratory assessment, cognition & function)
Treatment:
Analysis:
Plan and Goals:

Signed Print Bleep Date

Outcome Measures

NewMobility Score (NMS)

	No difficulty	With an aid	With help	Not at all
Able to get around the house	3	2	1	0
Able to get out of the house	3	2	1	0
Able to go shopping	3	2	1	0

Cumulative Ambulation Score (CAS)

Activity	Not able despite human cueing	Able to with human assistance or cueing	Able to with no assistance or cueing (can use a walking aid)
Get in and out of bed	0	1	2
Sit to stand– sit to chair	0	1	2
Walking	0	1	2

	Day 1:	Date 2:	Day 3:	Total
NMS				
CAS				
	Sign: Date:	Sign: Date:	Sign: Date:	

Home with Outpatient Follow-up	Home with Pathway One	Inpatient setting (Rehab goals PW2)	Inpatient setting (No rehab goals PW3)
NMS 7-9 CAS> 10	NMS 6-9 CAS 7-10	NMS 2-7 CAS 5-7	NMS < 5 CAS < 5

Modified Bartel Index

	Day 1:	Day 3:	On D/C:
Score			
	Sign: Date:	Sign: Date:	Sign: Date:

Signed Print Bleep Date

Modified Barthel Index (MBI)

Key to the MBI score:	
MBI Score:	Overall Dependency Level
0-24 =	Total
25-49 =	Severe
50-74 =	Moderate
75-90 =	Mild
91-100 =	Minimal

Patient details (Or pre-printed label)

Patient's surname .....
Patient's first name .....
Date of birth .....
NHS number .....
Age .....

	Date:	Date:
Personal Hygiene		
0 = Totally Dependent		
1 = Assistance required in all aspects with minimal participation		
3 = Some assistance given in one or more aspects		
4 = Minimal assistance / supervision to complete safely		
5 = fully independent		
Bathing (Including strip wash)		
0 = Totally dependent		
1 = Assistance/direction required in all aspects of bathing		
3 = Assistance required with transfer to shower/bath or washing/drying		
4 = Supervision for safety eg checking water temp or transfers		
5 = Fully independent in whichever method employed		
Feeding		
0 = Dependent in all aspects of feeding / max help with tube feeding		
2 = Can manipulate cutlery but someone must provide active assistance during meal (eg assistant scoops all food onto the utensil)		
5 = Able to feed with supervision. Assistance with opening / cutting / pouring / cueing		
8 = Independent in feeding with prepared tray except assistance may be required to cut meat, open milk carton, jar lid etc.		
10 - Fully independent when food is within reach		
Toileting		
0 = Fully dependent in all aspects		
2 – Maximal assistance required in all aspects		
5 = Assistance may be required with clothing, transferring or washing hands		
8 = Supervision for safety &/or assistance emptying commode/bedpan		
10 = Fully independent with toileting &/or emptying commode/bedpan		
Stairs		
0 = Unable to climb stairs		
2 = Assistance required in all aspects including assistance with walking aids		
5 = Able to ascend/descend but unable to carry aids & needs assistance		
8 = Supervision for safety required at times		
10 = Fully independent ascending/descending		

Dressing		
0 = Dependent in all aspects and unable to participate		
2 = Dependent in all aspects but able to participate with max assistance		
5 = Assistance needed in putting on and/or removing clothing		
8 = Minimal assistance eg with obtaining clothes / help with fastenings		
10 = Fully independent in all aspects		
Bowel control		
0 = Incontinent		
2 = Help with positioning & with bowel movement facilitatory techniques		
5 = Assistance cleaning self/using pads - Frequent accidents		
8 = May require supervision with use of suppository or enema & has occasionally accidents		
10 = Fully continent or independent with any bowel management		
Bladder control		
0 = Incontinent or dependent in bladder management		
2 = Incontinent but able to assist with use of internal/external device		
5 = Dry by day but not at night. Needs assistance with devices		
8 = Generally dry day & night - Occasional accident/assistance with devices		
10 = Fully continent or independent with internal/external devices/pads		
Mobility		
0 = Does not ambulate; Or to *attempt* to mobilise requires two assistants		
3 = Constant assistance of 1 or more. Requires *max* assist to mobilise		
8 = Is able to mobilise but requires assistance of 1 at times for balance		
12 = Independent < 50m. Help or supervision (cueing & prompting) needed for confidence or safety in hazardous situations		
15 = Fully independent > 50m (with/without aid or orthosis)		
Mobility in wheelchair ** if scores 0 in mobility**		
0 = Dependent in wheelchair ambulation		
1 = Self-propel short distance on flat surface but assistance of 1 required for all other steps of wheelchair management		
3 = Constant assistance to manoeuver in/around furniture		
4 = Minimal assistance for tight spaces & kerbs		
5= independent up to 50 metres and able to negotiate kerbs		
Chair and Bed transfers		
0 = Unable to participate in transfer; Or 2 to transfer with or without device		
3 = Able to participate but max assistance of 1 in all aspects of transfer		
8 = Assistance of 1 required in any aspect of transfer		
12 = Supervision for confidence or safety		
15 - Fully independent		
TOTAL SCORE:		
SIGN & STAMP:		

SERIAL DATA CHART	Vitamin D Result Date: / /	Patient details (Or pre-printed label) Patient's surname ..... Patient's first name ..... Date of birth ..... NHS number..... Age									
Date:											
Full Blood Count											
WBC	4 - 11 10^9/L										
Hb	120 - 150g/L										
MCV	83 - 100 fL										
Platelets	150 - 400 10^9/L										
Neutrophils	1.5 - 8.0 10^9/L										
Lymphocytes	1.0 - 4.0 10^9/L										
CRP											
Urea, Creat + Electrolytes											
Sodium	133 - 146 mmol/L										
Potassium	3.5 - 5.3 mmol/L										
Urea	2.5 - 7.8 mmol/L										
Creatinine	45 - 84 umol/L										
eGFR											
Calcium Group											
Albumin	35 - 50g/L										
Calcium (Adjusted)	2.20 - 2.60 mmol/L										
Total Bilirubin	<21 umol/L										
ALP	30 - 130 U/L										
ALT	10 - 50 iu/L										
Total Protein	60 - 80g/L										
Globulin	22 - 36g/L										
Magnesium	0.7 - 1.00 mmol/L										
Phosphate	0.8 - 1.5mmol/L										
Clotting Screen											
APTT	23.0 - 32.0 s										
INR											
HB1AC											
PSA											
Ferritin											
D Dimer	<500ng/ml										
Troponin 1	<0.04 units										
Total Cholesterol											
TSH	0.27 - 4.2 mIU/L										
Glucose	<6.1 mmol/L fasting										
Folate	2.5 - 19.5 ug/L										
Vitamin B12	180 - 900 ng/L										
Parathyroid Hormone	1.6 - 6.9 pmol/L										