Audit group: People who have sustained a hip fracture

Inclusion criteria
All patients aged 50 years or older who have sustained a hip fracture (see guide on page three).

Include patients who are admitted directly from the Emergency Department and also those transferred directly into any ward.

Include patients who are current inpatients in any ward, who sustain a fall resulting in a hip fracture.

Include patients who attend the Emergency Department but die prior to ward admission or treatment.

There is no limit on the age of the fracture i.e. if the patient originally attended ED but the fracture was missed, however these should be discussed on a case by case basis.

Exclusion criteria
People who do not have a hip fracture such as fractures of the shaft of femur (including proximal), acetabulum or peri – prosthetic hip fractures

Patient identification
It is essential that no patient identifiable information is submitted to the audit team at ISD in order to maintain patient confidentiality. It is the responsibility of the Local Audit Coordinator to ensure that submitted proforma do not contain details of this type.

In order to facilitate local re-identification of patients, if required, and the process of validation, each eligible patient should be assigned an audit number. This number should be recorded in duplicate on the proforma and also on the audit cross index.

Audit methodology
Record details of every patient eligible for audit on the audit cross index (see example of a cross index on page three).

Complete a proforma for each patient with a hip fracture. Where a patient is missed and is lost to audit, their details should still be entered in the cross index and added to numbers in the monthly completeness spreadsheet.

Some measures require recording of a date only if completed within a given number of days, for example;

- Date into theatre, CGA – within 7 days of admission
- Physio/OT assessments - within 4 days of surgery
- Date of discharge - give the date of discharge and destination if this is available by the date that the form needs to be submitted. If this isn’t available because patient was still an inpatient, code both variables as 88 provided the patient was still an inpatient on Day 21 post-admission. If 21 days have not elapsed, leave the boxes blank (see more detail under Date of discharge and Discharge destination)

120 day follow up
LACs will be sent a spreadsheet on a monthly basis listing all patients audited 4 months (120 days) previously. Further details of these patients’ stays at home/care home, or elsewhere in hospital (where, dates, reason), residence on Day 120, date of death if within 120 days, bone health medication and further fractures should be completed.
Submission process

Completed proforma for patients admitted in the previous month should be submitted by the 21st of each month e.g. Proforma for patients admitted in August should be submitted by the 21st September.

Proforma must be anonymised prior to submission by removing the patient details strip at the top of the form.

Please ensure the proforma are posted in time as late submission can affect the monthly reporting of results.

Local Information Governance procedures should be followed for transport of data: these usually include double envelope and addressing and posted via a signed for delivery service.

Prior to sending, email data support officer with details of numbers of proforma included to allow a received receipt to be issued.
Types of Hip Fracture

Example cross index

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Audit no</td>
<td>Forename</td>
<td>Surname</td>
<td>CHI</td>
<td>Casenote no</td>
</tr>
<tr>
<td>3</td>
<td>10001</td>
<td>John</td>
<td>Brown</td>
<td>2222222222</td>
<td>12121212</td>
</tr>
<tr>
<td>4</td>
<td>10002</td>
<td>Jim</td>
<td>White</td>
<td>2222222223</td>
<td>12121213</td>
</tr>
<tr>
<td>5</td>
<td>10003</td>
<td>Mary</td>
<td>Green</td>
<td>2222222224</td>
<td>12121214</td>
</tr>
<tr>
<td>6</td>
<td>10004</td>
<td>Harry</td>
<td>Black</td>
<td>2222222225</td>
<td>12121215</td>
</tr>
<tr>
<td>7</td>
<td>10005</td>
<td>Bob</td>
<td>Smith</td>
<td>2222222226</td>
<td>12121216</td>
</tr>
<tr>
<td>8</td>
<td>10006</td>
<td>Rene</td>
<td>McDonald</td>
<td>2222222227</td>
<td>12121217</td>
</tr>
<tr>
<td>9</td>
<td>10007</td>
<td>Frank</td>
<td>McPhee</td>
<td>2222222228</td>
<td>12121218</td>
</tr>
<tr>
<td>10</td>
<td>10008</td>
<td>Margaret</td>
<td>McKay</td>
<td>2222222229</td>
<td>12121219</td>
</tr>
</tbody>
</table>
## Data Definitions

<table>
<thead>
<tr>
<th></th>
<th>General Notes</th>
<th><strong>Please do not put ‘/’ through boxes. All fields should either have an appropriate code from the definitions on the form, be Not Applicable=88, or Not Recorded=99.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name</td>
<td>Record first name and surname.</td>
</tr>
<tr>
<td>2</td>
<td>Case note number</td>
<td>Record hospital record number – numeric and alpha.</td>
</tr>
<tr>
<td>3</td>
<td>CHI number</td>
<td>Record CHI, 10 digits. If you do not have CHI, give date of birth in the first six boxes i.e. DDMMYY (DOB is the first six digits of all CHI numbers).</td>
</tr>
<tr>
<td>4</td>
<td>Audit number</td>
<td>Allocate the next sequential audit number.</td>
</tr>
<tr>
<td>5</td>
<td>Hospital code</td>
<td>Enter the ISD code for the hospital where you are based.</td>
</tr>
<tr>
<td>6</td>
<td>Post code</td>
<td>Document part postcode for patient’s normal residence - first part and first digit of second part e.g. ‘ML3 7’ or ‘ML10 6’. Use home postcode if the patient is admitted from a home in which they are temporarily residing such as holiday or respite care. If admitted from NHS continuing care or from an acute ward use the hospital's postcode. For postcodes outside UK use 999X X.</td>
</tr>
<tr>
<td>7</td>
<td>Audit number</td>
<td>As 4 above.</td>
</tr>
<tr>
<td>8</td>
<td>Sex</td>
<td>1=male, 2=female.</td>
</tr>
<tr>
<td>9</td>
<td>Age</td>
<td>Record age at 1st presentation. 88=Not applicable and 99=Not recorded should not be used</td>
</tr>
<tr>
<td>10</td>
<td>Ortho Consultant</td>
<td>Allocate a number code to each consultant locally e.g. 1, 2, 3. This code should reflect the consultant in charge of the patient's orthopaedic care.</td>
</tr>
</tbody>
</table>
| 11 | Pre-fracture Residence | Record the current residence of the patient prior to fracture.  
| | | • Home/sheltered = when the patient is living at their usual residence i.e. permanent address or if they are permanently living with a relative.  
| | | • Care home = residential or nursing home.  
| | | • NHS continuing care = when the clinical team is no longer attempting to get a patient home. Patient may be awaiting a place in a nursing home or for funding, or may have become permanent hospital patient.  
| | | • If the patient was an inpatient in a Care of the Elderly (COE) ward or ward in another hospital when they fell, code according to type of bed : Rehab=4, NHS continuing care=3, Acute hospital =5.  
| | | • Acute hospital = if currently an inpatient in any acute hospital setting.  
| | | • If patient was a resident in respite care or hospice, code as 9=other.  
| | | • Use 99 if pre-fracture residence not known.  
| 12 | Transferred patients | If patient was not transferred from a different receiving unit, code as 88=Not applicable  
| | | If the patient presented elsewhere and was transferred to your unit, code as 1=Yes if they were transferred into your ortho ward within 24 hours of presenting elsewhere (or within 24 hours if they fell in a ward elsewhere); 2=No if > 24 hours.  
| | | Record all details in the comments section.  
| 13 | ED | The ED information in this section should be taken from the attendance at ED at your site.  
| | | • If the patient has been transferred from another hospital via your ED record if analgesia was given prior to transfer.  
| | | • If a patient was transferred directly into a ward at your site or fell whilst in hospital with no attendance at your ED, code as 88 in the date/time of arrival at ED and leave the rest of the ED boxes blank.  
| | | • If a patient had more than one presentations to ED before the hip fracture was diagnosed start the audit when the patient was admitted to orthopaedic care.  
| | | • If the hip fracture was not suspected until after the patient was admitted (e.g. to a medical ward), start the audit when the Orthopaedic team were first made aware of the patient.  
| | | • Record details of any previous ED attendance (dates/times/diagnosis) in your comments section.  
| 14 | Date/time arrival at ED | Record the date and time that the patient attended your ED.  
| | | Use 99 if date or time is unknown.  
| | | If a patient is transferred directly into a ward at your site or fell whilst in hospital with no attendance at your ED, code as 88 and document in comments.  

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Time left ED</td>
<td>Record the time the patient left ED for transfer to ward/theatre. Use 99 if time is unknown.</td>
</tr>
<tr>
<td>16</td>
<td>Destination from ED</td>
<td>Record where the patient was transferred to from ED. If the patient died in ED code as 9=Other and specify in comments section.</td>
</tr>
<tr>
<td>17</td>
<td>Interventions in ED</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Analgesia</td>
<td>Record if analgesia was given or offered in ED or from SAS (including GP) or prior to transfer.</td>
</tr>
<tr>
<td>19</td>
<td>Nerve block given</td>
<td>Record whether or not a nerve block was given in ED</td>
</tr>
<tr>
<td>19</td>
<td>Bloods taken</td>
<td>Record whether blood samples were taken in ED e.g. FBC, Urea &amp; Electrolytes etc. If nothing is documented in the ED notes, check the Results Reporting System.</td>
</tr>
<tr>
<td>20</td>
<td>IV fluids</td>
<td>Record whether IV fluids were commenced or not in ED or from SAS or prior to transfer. 3=Not Required. In some circumstances it may be clinically appropriate that patients do not have IV fluids. This would normally be documented in the patient’s notes by medical or specialist nursing staff. If in any doubt regarding how this would be recorded please contact the clinical coordinator.</td>
</tr>
<tr>
<td>21</td>
<td>Pressure Areas recorded</td>
<td>Record whether a pressure area inspection was carried out in ED. This can include a visual inspection as well as completion of a formal assessment tool such as waterlow score. <em>99 should not be used in this section unless notes were not seen (explain your use of 99 fully in Comments).</em></td>
</tr>
<tr>
<td>22</td>
<td>EWS score recorded in ED</td>
<td>Record if an Early Warning System score was recorded in ED</td>
</tr>
<tr>
<td>23</td>
<td>ECG carried out in ED</td>
<td>Record whether the patient had an ECG performed in ED.</td>
</tr>
<tr>
<td>24</td>
<td>Inpatient Stay</td>
<td>Please note – some patients may sustain their hip fracture whilst already an inpatient. All of the data collected in the ‘Inpatient Stay’ section pertains to what happened to the patient after the Orthopaedic team are made aware of the patient e.g. patient in a Care of the Elderly ward falls overnight sustaining a hip fracture. Ortho reviews the patient in the morning and arranges surgery and transferred to ortho post-operatively - only record interventions that occur after Ortho are made aware of the patient.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>25</td>
<td><strong>Date/time of admission</strong></td>
<td>Record the date and time when the patient’s care was admitted for orthopaedic care. For most patients whose hip fracture was diagnosed in ED this will be the date and time the patient was admitted to the ward (even if this is a non-orthopaedic ward due to other medical complications). If a patient was already an inpatient (including those already in an orthopaedic ward) and sustained the fracture during their admission, record the date and time of admission as when the orthopaedic team were first made aware that they should become involved in the management of the hip fracture, even if the patient is not transferred to Ortho. If the patient is transferred direct to theatre from ED, record date/time of admission to the ortho ward</td>
</tr>
<tr>
<td>26</td>
<td><strong>Falls Assessment timing</strong></td>
<td>Record where and when the first falls assessment (e.g. Morse Fall Scale) was carried out. Timing relating to when this was carried out should be calculated from the date/time of admission as recorded above</td>
</tr>
<tr>
<td>27</td>
<td><strong>Nutrition assessment timing</strong></td>
<td>Record where and when the first nutritional assessment (e.g. MUST Malnutrition Universal Screening Tool) was carried out. Timing relating to when this was carried out should be calculated from the date/time of admission as recorded above</td>
</tr>
<tr>
<td>28</td>
<td><strong>Pressure Areas assessment timing</strong></td>
<td>Record where and when the first formal pressure area assessment (e.g. Waterlow score) was carried out. Timing relating to when this was carried out should be calculated from the date/time of admission as recorded above. Record only formal assessments rather than evidence of visual inspection only</td>
</tr>
<tr>
<td>29</td>
<td><strong>Delirium Screening/ Cognition Assessment</strong></td>
<td>General: If a patient is not admitted with a hip fracture via ED (e.g. they fall and fracture on a ward), cognition, falls, nutrition or pressure area assessments should still ideally be reassessed. If this did not happen please discuss with the clinical coordinator</td>
</tr>
</tbody>
</table>
| 30 | **Delirium Screening/ Cognition Assessment** | Record where and when the first of the following delirium screening or cognition assessments were carried out;  
- 4AT  
- AMT4  
- MMSE/AMTS10  
- Other (SQID/CAMS/MSQ), record the type in the comments section. If the assessment is not documented record 88 |
### Comprehensive geriatric assessment (CGA) date

Record the date and time the patient first had a comprehensive geriatric assessment (CGA) post-admission (or post-fracture if patient fell whilst inpatient). This would usually have been carried out by either a geriatrician or specialist nurse.

Use 88 = Not Applicable if the patient did not have a CGA by 7 days following admission (do not continue to look for appointments occurring more than a week after admission).

Use 77 if date unknown but known to be within one week.

99 should not be used unless you have been unable to access the notes (confirm in Comments section).

Use the code ‘66’ when the local protocol does not require a CGA (e.g. <75, or fell while skiing).

### Assessed by (geriatric assessment)

Record which discipline carried out the first CGA.

‘1=Geriatrician’ need not be a consultant, but must be a member of a dedicated Care of the Elderly team, e.g. Specialist Trainee.

If the patient has not had a CGA, code as ‘88’.

If 9=Other is used give full details in the Comments section.

### Surgery

#### Date/time into theatre

Record the date and time the patient entered theatre.

Time = when ‘knife to skin’ occurs.

This information should be taken from the anaesthetic/surgical record.

Use 88 to indicate the patient was not treated surgically **within the first week of admission**. If the patient does not go to theatre immediately, continue to monitor until at least Day 8 (e.g. until 12th Feb if patient admitted on 4th Feb) so that you can be sure they have not gone to theatre in the first week.

#### How many times was patient fasted

Record the number of times that the patient was fasted in preparation for surgery. As well as fasting for the actual surgery, include periods of fasting when surgery did not take place (e.g. prior to a previous cancelled surgery, or fasted after a late admission for possible surgery in the morning).

In order to be classed as fasted the patient must have missed at least one meal e.g. fasted from 3am, cancelled at 11.30 but missed breakfast.

Only record as a fasting cycle if this has happened on successive days (e.g. fasted twice if on Sunday for theatre on Monday cancelled for whatever reason and fasted again on Monday night for surgery on Tuesday).
### 36 Main reason for Theatre Delay greater than 36 hours

If patient was delayed by more than 36 hours to operation from time of admission to orthopaedic care (as documented in Section 29 above) record the main reason for the delay e.g.

- Delayed diagnosis e.g. awaiting MRI/bone scan to confirm diagnosis
- Initial conservative Rx=treatment

If no delay (i.e. surgery within 36 hours post-admission) code as 0=No delay.

NB: If there is no medical reason documented why patients have not been taken to theatre within 36 hours, code as 2=Lack of theatre time unless another coded reason is apparent.

99 should only be used if notes are not seen, or for long delays (4+ days) without recorded reason.

### 37 Clear oral fluids stopped

Record the length of time that the patient was no longer permitted to drink clear oral fluids, regardless of how long the patient had been fasting. The period should be calculated by determining when clear fluids were no longer permitted until induction of anaesthetic.

Carbohydrate loading drinks can be recorded as clear fluids.

This information can usually be found on the pre-operative checklist.

If the patient has had nothing to drink since admission to the ward record as 0=Nil post-admission.

Calculate the time period for each patient on an individual basis, regardless of what local policies are in place.

If stopped at exactly 4, 6 or 10 hours, record time-stopped in lower category, e.g. if stopped at 4 hours, record as 1 (<= 4 hours).

Record as 88 if the patient was not treated surgically.

### 38 Type of operation

Record the type of operation that was carried out. This information can usually be found in the operation notes e.g.

- Cannulated screws= AO screw or nail
- Intramedullary fixation= IM nailing, gamma nail, ender nail
- Pin and plate= includes Dynamic Hip Screw (DHS)
- Hemiarthroplasty (Hemi) = Thompsons, Austin Moore, Hastings.
- Total Hip Replacement (THR)= Exeter, Exeter/Ogee

Use 88 if the patient was not treated surgically.

### 39 Catheterised

Record the timing of urinary catheterisation if applicable.

If the patient has a long term catheter in situ on admission, record as 4=Long-term catheter in situ.

99 should not be used in this section unless notes not seen.

### 40 Bone protection medication assessed

Assessment of bone health can include review of current medication as well as commencement of new bone protection medication.

Record as ‘Yes’ even if no new medications have been started.

If the patient’s medication has not been assessed but they have been referred for a DXA scan, to a Fracture Liaison Service or to an Osteoporosis Service code as 3=’Not assessed, for FLS/DXA/OS’
41 Post-op mobilisation

Record when the patient first mobilised after their operation. This can include getting out of bed to use the toilet as well as more formal mobilisation i.e. up to stand/up to sit out of bed.

This information should be recorded in the nursing or physiotherapy notes or the integrated care pathway.

1=By first day post-op includes patients that were mobilised on day of surgery.
Use 88 if treated conservatively.
Use 99 if not documented.

42 Date assessed by physio

Record the date the patient was first assessed post-operatively by a member of the physiotherapy team.

N.B. The patient may have been assessed by the physio but not mobilised due to the patient being unfit to get out of bed. Record the date the first assessment took place.

Use 88 if treated conservatively or if the patient wasn’t seen by a physiotherapist within 4 days of surgery (e.g. by the 7th if patient had surgery on the 3rd).
Use 77 if date unknown but known to be by Day 4
Use 99 if not known whether by Day 4.

43 Date assessed by OT

Record the date the patient was first assessed post-operatively by a member of the Occupational Therapy team.

Use 88 if treated conservatively or if the patient wasn’t seen by OT within 4 days of surgery (e.g. by the 7th if patient had surgery on the 3rd).
Use 77 if date unknown but known to be by Day 4,
Use 99 if not known whether by Day 4.

44 Date of discharge

Record the date of discharge from acute orthopaedic care.

If the patient was transferred to a rehabilitation ward prior to discharge from hospital, use the date of transfer from the orthopaedic ward to the rehabilitation ward.

**If you need to submit your forms before the discharge date is known:**

- Use 88 if the patient has been an inpatient (as per orthopaedic admission date) for at least 21 days
- Leave blank if still an inpatient but 21 days have not yet elapsed before you need to submit the form
<table>
<thead>
<tr>
<th>45</th>
<th>Discharge destination</th>
<th>Record the place that the patient was discharged to from acute orthopaedic care.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Home/sheltered = when the patient is living at their usual residence i.e. permanent address or if they are permanently living with a relative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Care home = residential or nursing home.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• NHS continuing care = when the clinical team is no longer attempting to get a patient home. The patient may be awaiting a place in a nursing home or for funding, or may have become permanent hospital patient. This type of destination should be rare as the patient will be deemed a ‘bed blocker’. Before allocating this code, always check with the nurse in charge of the patient’s care to determine the exact reasoning for the patient’s placement and document in the Comments section.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Care of the Elderly (COE) ward should be coded according to type of bed (Rehabilitation=4, NHS continuing care=3, Acute COE=5).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Acute hospital = when the patient is discharged to another acute ward such as general medicine, critical care.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 6=Hospital at Home/Intermediate Care (discuss Intermediate Care with Clinical Co-ordinator)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 9=Other includes respite care or hospice. Specify in Comments.</td>
</tr>
</tbody>
</table>

If you need to submit your forms before the discharge destination is known:

- Use 88 if the patient has been an inpatient (as per orthopaedic admission date) for at least 21 days
- Leave blank if still an inpatient but 21 days have not yet elapsed before you need to submit the form

46 PB1-6 Not currently in use unless specified locally