

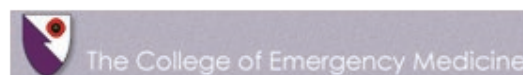
Scottish Standards of Care for Hip Fracture Patients 2018

These Standards are endorsed by the following organisations:

Scottish Committee for Orthopaedics and Trauma (SCOT)

Royal College of Emergency Medicine National Board for Scotland (RCEM)

British Geriatrics Society (BGS)



And supported by:

Association of Anaesthetists of Great Britain and Ireland (AAGBI)

National Osteoporosis Society (NOS)

Health Improvement Scotland



Table of contents

Scottish Standards of Care for Hip Fracture Patients.	1
Recommendations	1
Removed standard	1
Amended standards	1
Scottish Standards of Care for Hip Fracture Patients.	2
Overall Rationale	2
Standard 1: Patients with a Hip Fracture are transferred from the Emergency Department to the Orthopaedic ward within 4 hours	2
1.1 Audit Measure	3
Standard 2: Patients who have a clinical suspicion or confirmation of a hip fracture have the “Big Six” interventions/treatments before leaving the Emergency Department	3
1. Provision of Pain Relief	3
2. Screening for Delirium	3
3. Early Warning Score (EWS) system	3
4. Full Blood Investigation and Electrocardiogram	3
5. Intravenous Fluids Therapy	4
6. Pressure Area Care	4
2.1 Audit Measure	4
Standard 3: Every patient with a hip fracture receives the “inpatient bundle of care” within 24 hours of admission	4
1. Delirium Screening within 24 hours of ward admission and Assessment of Cognitive Function	5
2. Falls Assessment within 24 hours of ward admission	6
3. Food, Fluids and Nutritional Assessment within 24 hours of ward admission	6
4. Pressure Area Assessment within 24 hours of ward admission	6
3.1 Audit Measure	6
Standard 4: Patients undergo surgical repair of their hip fracture within 36 hours of admission	7
4.1 Audit Measure	7
4.2 Audit Measure	8
Standard 5: No patients are repeatedly fasted in preparation for surgery. In addition, clear oral fluids are offered up to two hours prior to surgery	8
5.1 Audit Measure	8
5.2 Audit Measure	8
5.3 Audit Measure	8

Standard 6: Cemented hemi-arthroplasty implants are standard unless clinically indicated otherwise	9
6.1 Audit Measure	9
Standard 7: Every patient who is identified locally as being frail, receives comprehensive geriatric assessment within three days of admission	9
7.1 Audit Measure	10
Standard 8 Mobilisation has begun by the end of the first day after surgery and every patient has physiotherapy assessment by end of day two	10
8.1 Audit Measure	10
8.2 Audit Measure	10
Standard 9: Every patient has a documented Occupational Therapy Assessment commenced by the end of day three post admission	10
9.1 Audit Measure	10
Standard 10: Every patient who has a hip fracture has an assessment of, or a referral for, their bone health prior to leaving the acute orthopaedic ward	10
10.1 Audit Measure	11
Standard 11: Every patient's recovery is optimised by a multi-disciplinary team approach such that they are discharged back to their original place of residence within 30 days from the date of admission	11
11.1 Audit Measures	11
Appendices	12
A - Scottish Hip Fracture Audit and Advisory Group Membership & Contacts	12
B: Access to the Trauma and Orthopaedic Dashboard	13
References	13

Scottish Standards of Care for Hip Fracture Patients.

These standards were initially developed by the National Hip Fracture Advisory Group in 2014³ and have been subsequently revised and updated as of January 2018. The “Standards of Care” apply to every patient who is admitted to hospital in Scotland after sustaining a hip fracture.

A list of current members of the Advisory group can be found at the end of this document ([Appendix A](#)).

Please note the following recommendations and changes to the Standards:

Recommendations

The following recommendations, whilst not standards at this current time, are likely to become so in the next iteration of the document as of 2019:

1. Provision of a patient/carer information leaflet.
2. Local documented Multidisciplinary team (MDT) meetings.
3. Administration of a Nerve Block for analgesia in the Emergency Department (ED) as part of the “Big 6”.

Removed standard

Standard 6: Pre-operative catheterisation should only be carried out for identified medical reasons and not used as ‘routine’ practice.

This standard has now been removed. The rationale remains that pre-operative catheterisation should only be carried out for identified medical reasons and not used as ‘routine’ practice and that SIGN 111⁴ recommends that insertion of urinary catheters should be avoided, except within specific circumstances such as urinary retention or need for accurate fluid balance. If catheterisation is however deemed medically required, then local policies and protocols should be in place for the management of this.

Amended standards

Standard 9: Every patient has a documented Occupational Therapy Assessment commenced by the end of day three post admission to ward.

(Previous standard: “patients with a hip fracture should have an Occupational Therapy Assessment by the end of day 3 post operatively”)

Standard 10: Every patient who has a hip fracture has an assessment of, or a referral for, their bone health prior to leaving the acute orthopaedic ward.

(Previous standard: “every patient who has a hip fracture should have an assessment of their bone health prior to leaving the acute orthopaedic ward”).

Scottish Standards of Care for Hip Fracture Patients.

Overall Rationale

The Scottish Hip Fracture Audit Report (2017)⁵ shows that whilst considerable progress has been achieved since the Standards of Care were introduced in 2014, significant variation still exists across Scotland in terms of the quality of care and outcomes for patients who sustain a hip fracture. Many hospitals, however, do exhibit good practice. The standard of care for all hip fracture patients should be of high quality for all treatment interventions, and in all hospitals. To reduce variation and to further improve the quality of clinical care, this “Standards of Care” document has been prepared with endorsement from The Scottish Committee for Orthopaedics and Trauma (SCOT), The British Geriatric Society (BGS), and The Scottish Board of the College of Emergency Medicine (RCEM). It is also supported by the Association of Anaesthetists of Great Britain and Ireland (AAGBI) and the National Osteoporosis Society (NOS). This document was also originally prepared in collaboration with Healthcare Improvement Scotland to align with “Older People in Acute Care”¹ and “Food, Fluids and Nutrition”² standards.

Audit data is reported each month at national and local levels and is available to NHS staff via the Trauma & Orthopaedic Portal (for details on how to access this see Appendix B). This data enables both national benchmarking as well as the opportunity to review local care delivery to better understand where improvement actions could be developed.

A national patient/carer information leaflet to improve communication for patients’ relatives and carers has been developed. This leaflet includes the standards of care which patients can expect to receive from every hospital in Scotland. This information leaflet can be found on the Scottish Hip Fracture Audit website. Locally developed tools and staff experiences of working to achieve the standards are shared regularly via the Scottish Hip Fracture Audit website in the form of quarterly newsletters. Please visit www.shfa.scot.nhs.uk for further information.

Standard 1: Patients with a Hip Fracture are transferred from the Emergency Department to the Orthopaedic ward within 4 hours

Rationale: Following clinical confirmation or diagnosis of a hip fracture, local protocols should ensure the efficient and safe transfer of the patient to an orthopaedic ward. This transfer should not be delayed by a requirement that the patient is reviewed by the receiving orthopaedic team in ED unless diagnostic uncertainty exists. Unless indicated for essential medical interventions, these frail elderly patients should not have an extended stay in an ED as this represents a delay to an area of definitive care.

It is, however, essential that the emphasis is on good clinical care while in the ED rather than focussed exclusively on transfer time.

Acute medical pathology is common in this patient group and early involvement of anaesthetic and medical teams may be required for focused physiological optimisation.

1.1 Audit Measure

The time between the patient's attendance to discharge from the Emergency Department within 4 hours, expressed as a percentage of patients. Note that this is the ED information from the audited site. People who sustain a hip fracture whilst in an acute care setting are not included in this measure.

Standard 2: Patients who have a clinical suspicion or confirmation of a hip fracture have the "Big Six" interventions/treatments before leaving the Emergency Department

Rationale: Every patient who has a clinical suspicion or confirmation of a hip fracture has the following "Big Six" interventions/treatments in the ED (or earlier if an inter-hospital transfer), as part of a local protocol:

1. Provision of Pain Relief

All patients who sustain this painful injury must be offered optimal analgesia. In many cases opiate analgesia will have been provided by ambulance staff pre-hospital. The early use of nerve blocks to reduce pain, opioid requirement and delirium have grown in popularity, with many hospitals introducing fascia iliaca blocks as standard. The use of a nerve block is the recommendation of the Advisory group. Provision of oral non-opiate analgesia without either opioid or regional analgesia is sub-optimal other than in selected cases e.g. for sub-acute impacted fractures.

2. Screening for Delirium

Identification of patients with delirium by means of a screening test within the ED is essential. Delirium screening is part of the ED hip fracture protocol. The 4AT⁶ is recommended for this purpose and can be conducted by both medical and nursing staff. Patients who score 4 or more should be identified as having delirium, requiring investigation of potential underlying causes and appropriate management. The presence of delirium has obvious implications with respect to the Informed Consent process and the patient's capacity should be formally assessed and documented.

3. Early Warning Score (EWS) system

This requires the measurement of respiratory rate, oxygen saturation, temperature, systolic blood pressure, heart rate and neurological status. NICE recommends that all hospital in-patients should be monitored using a physiological scoring system at least every 12 hours⁷.

4. Full Blood Investigation and Electrocardiogram

Electrolyte abnormalities and anaemia are common in the hip fracture patient. Intravenous cannulation with pre-operative laboratory tests including: urea/electrolytes, full blood count, glucose and group/save should be carried out. A coagulation screen does not necessarily predict operative bleeding complications and may only be required in patients taking warfarin⁸. Further tests may be required depending on clinical circumstances. An electrocardiogram (ECG) must be undertaken and reviewed in ED. Further investigations may be required depending on the result.

5. Intravenous Fluids Therapy

Many hip fracture patients are fluid depleted at the time of presentation. Elderly frail patients may not exhibit typical physiological responses such as tachycardia or hypotension, which can make assessment of fluid status difficult. Additionally this patient group tolerates hypovolaemia poorly, risking cardiovascular instability and organ hypoperfusion. All patients must have a documented assessment of fluid status and resuscitation with IV fluids where appropriate. From admission to hospital, on-going blood loss, pain, confusion and fasting for theatre all contribute to poor oral intake. Consideration must be made to how normovolaemia will be maintained until surgery. IV fluid resuscitation and maintenance fluids will be required in most cases.

6. Pressure Area Care

Documented assessment must be carried out to minimise the risk of pressure injury. Hip fracture patients are at high risk of developing pressure sores and all patients must undergo documented pressure area assessment when admitted to the ED. This assessment may not necessarily be a formal Waterlow Score, although such a score should be encouraged.

2.1 Audit Measure

The percentage of all patients who were admitted to orthopaedics via ED for whom the “Big Six” assessments were completed in ED- compliance with the bundle as whole as well as individual elements.

- Analgesia given or offered and declined by patient. Analgesia by SAS or GP prior to arrival at ED and nerve blocks are included as analgesia but are also reported separately.
- Evidence that bloods have been taken, types of investigation are not included. Rates of ECG performed and reviewed is not currently reported.
- IV fluids commenced in ED or by SAS prior to arrival or transfer.
- Evidence that a recognised delirium screening tool has been used, such as 4AT.
- Pressure areas assessment in ED, this can include an informal visual inspection as well as completion of a validated tool such as Waterlow score.
- Early Warning System, evidence that score was recorded in ED.

Standard 3: Every patient with a hip fracture receives the “inpatient bundle of care” within 24 hours of admission

Rationale: An inpatient care bundle has been developed which must be completed within 24 hours of admission to the orthopaedic/receiving ward (except in the case of people who have suffered a hip fracture as the result of an inpatient fall when these assessments must be carried out within 24 hours of orthopaedic involvement in the person’s care). These five assessments, as well as the subsequent interventions, are essential to maximise the quality of care and overall patient outcome through a multi-disciplinary approach to patient care. Involvement with patients and relatives/carers is essential.

These standards are in line with the Older People in Hospital Standards – June 2015, which support acute episodes of care of older people in hospital.

Seven day supported working must be provided to ensure day of admission or surgery does not affect time to theatre and subsequent overall patient recovery.

1. Delirium Screening within 24 hours of ward admission and Assessment of Cognitive Function

Both acute delirium (hyperactive, hypoactive or mixed) and chronic cognitive impairment are common in hip fracture patients.

Between 35-65% of older patients with hip fracture will develop delirium after hospital admission. The risk of developing delirium, as well as the incumbent risks associated with this condition, can be mitigated with better identification and management.

Delirium is associated with increased length of stay, admission to care homes and mortality. It has strong associations with other hospital associated adverse events including pressure ulcers and falls and is frequently under diagnosed.

Health Improvement Scotland, in collaboration with the Scottish Delirium Association, NHS Education for Scotland and colleagues across NHS Scotland, have developed a range of tools and resources for healthcare professionals to help improve the identification and immediate management of delirium in clinical settings. This includes the 4AT, which is a validated rapid assessment test for both delirium and cognitive impairment⁶ and the TIME bundle to improve the management of delirium and identification of underlying causes¹⁰.

All hip fracture patients are screened for delirium at point of admission to hospital, and again within 24 hours of admission to the ward using the 4AT with associated appropriate use of the TIME bundle.

The 4AT should be repeated if there is any change in the patient's conscious level or cognitive function during their hospital stay, or if the patient is moved from one ward to another. The Single Question in Delirium (SQiD) can be used to help identify those in-patients who have had a change in their cognitive function or conscious level, and this should prompt the 4AT to be performed and subsequent completion of the TIME bundle. The TIME bundle also prompts communication with relatives and carers. It should be recognised that room and ward transfers are associated with an increased incidence of delirium amongst hospitalised elderly patients, and therefore multiple and unnecessary ward moves should be avoided when possible¹¹.

If patients are identified as having possible cognitive impairment through history taking, information from relatives or carers or by scoring >1 on 4AT, they should have an assessment of cognitive function. This can be done using Mini Mental State Examination (MMSE), Montreal Cognitive Assessment (MOCA) or an Addenbrooke's Cognitive Examination Revised (ACE-R). Where cognitive impairment is identified, management plans should be discussed with staff and relatives/carers and documented in the patient care plan. This includes the assessment of the capacity to consent to medical treatment and the appropriate use of the Section 47 certificate under the Adults with Incapacity Act¹². The need for further assessment and management of cognitive impairment in the community must be considered and arranged if deemed necessary.

Patients with delirium, cognitive impairment and communication difficulties can be difficult to assess for pain. The Abbey Pain Chart is designed to assist in the assessment of pain in patients who are unable to clearly articulate their needs.

Many older patients with dementia present to hospital with a hip fracture. They are at increased risk of developing complications such as delirium, infection, malnutrition, dehydration, constipation and falls¹³⁻¹⁵. All provide guidance on the care of patients with dementia in the acute hospital setting.

2. Falls Assessment within 24 hours of ward admission

Falls are common and increase with age, with 30% of those aged 65 or more who live in the community, falling each year and the percentage increasing to 45% in those aged over 80 years¹⁶. The vast majority of hip fractures are the result of a fall¹⁷. Interventions to reduce the risk of falls after the occurrence of a fracture, may contribute to the reduction in the risk of further fractures. Recurrent falls are associated with increased mortality, increased rates of hospitalisation, and higher rates of institutionalisation¹⁸. There are further psychological sequelae with loss of confidence, increased fear of falling and lower quality of life. Half of older people who fall will have a further fall within the next 12 months¹⁹.

All patients who sustain a hip fracture must have a falls risk assessment performed on admission as part of their initial nursing assessment. This should be coupled with a care plan to identify modifiable risk factors and appropriate interventions for each patient with the aim to reduce future falls. This will usually require a multidisciplinary approach. The need for further assessment and management of falls risk in the community must be considered and arranged if deemed necessary.

3. Food, Fluids and Nutritional Assessment within 24 hours of ward admission

The Standards of Food, Fluids & Nutritional Care², highlight the importance of nutritional screening within 24 hours of hospital admission, to identify malnutrition and ensure accuracy of drug dosage. Fluid status must continue to be assessed and monitored regularly during the inpatient stay, as patients are at risk of dehydration given that potential on-going blood loss, delirium and fasting for theatre all affect oral intake.

4. Pressure Area Assessment within 24 hours of ward admission

Pressure sores occur in people who cannot reposition themselves, the acutely ill, the older person and the malnourished⁹. Hip fracture patients are therefore especially at risk, with early documented assessment vital. Assessment for risk of pressure injuries must be made on all patients within 24 hours of admission, and interventions to minimise the risk of development of pressure injury carried out on at risk patients.

3.1 Audit Measure

The percentage of all audited patients who had the bundle of inpatient assessment completed within 24 hours following admission, compliance with the bundle as a whole as well as individual elements. Note that if a patient sustains a hip fracture as an inpatient or if the fracture was missed on presentation at ED, the information in this section pertains to care following involvement of the orthopaedic team.

Please note that the following assessment are expected to be carried out to provide a baseline in-patient status and should therefore be repeated within 24 hours of admission regardless of

when the last assessment was carried out i.e. delirium screening in ED or falls assessment in a non orthopaedic ward.

- The first delirium screen using 4AT.
- The first cognitive assessment.
- Use of the TIME bundle is not currently reported.
- The first formal falls assessment e.g. Morse fall scale
- The first formal nutritional assessment e.g. MUST
- The first formal pressure area assessment e.g. Waterlow

Standard 4: Patients undergo surgical repair of their hip fracture within 36 hours of admission

Rationale: It is essential that the surgical fixation of femoral fractures is expedited. Delayed fixation correlates with increased one-year mortality, increased complications and increased length in hospital stay. The optimal timescale for surgery has yet to be identified. A systematic review in 2008 suggested that delay past 48hr increased one-year mortality by 32%²⁰. Recent studies however, have suggested mortality reductions by reducing time to theatre to 24hr and even 12hr from admission^{21,29}. Hospitals must therefore be organised in such a way that facilitates timely and planned surgery without delays, meaning not only adequate theatre capacity for trauma surgery and availability of anaesthetists and surgeons, but also a means of rapidly assessing and optimising frail, elderly patients with multiple co-morbidities. Patients with a medically reversible condition, who are considered initially medically unfit for theatre, may require optimisation before surgery. Such pre-surgery optimisation must be realistic, focussed, follow a formal risk assessment process and should aim to be completed without unnecessary delaying of surgery. If further optimisation is required, delaying surgery is only acceptable if it is for an intervention thought to significantly improve outcome or reduce mortality, greater than the increase in mortality associated with delay. In general, surgery should not be delayed for investigations as this does not appear to alter outcome²². Patients who require transfer to another unit for surgery should be transferred as close to admission as possible so that surgery is not delayed.

In the very rare case that conservative treatment is agreed as appropriate, the management plan for these patients (or a palliative plan if deemed to be approaching end of life), should be clearly recorded in the patient records following a formal risk assessment. This decision should also be subject to regular re-evaluation should the patient's medical condition improve.

4.1 Audit Measure

The timing of surgical repair of the patient's hip fracture, based on the 'knife to skin' time. Note that patients who did not undergo surgical repair within a week of admission are deemed as being treated conservatively and are therefore not included in this measure.

4.2 Audit Measure

The main reason for delay of surgical repair if greater than 36hrs:

- Medically unfit
- Lack of theatre time, this reason is assumed if there is no other documented evidence why theatre was delayed.
- Initially treated conservatively
- Delayed diagnosis
- Delayed consent
- Delay for total hip replacement

Standard 5: No patients are repeatedly fasted in preparation for surgery. In addition, clear oral fluids are offered up to two hours prior to surgery

Rationale: Nearly 30% of hip fracture patients are nutritionally at risk. Maintaining adequate caloric intake is therefore important to attenuate peri-operative nitrogen loss and loss of muscle mass. Repeated fasting cycles occur when patients are fasted for surgery and then cancelled and results in limited oral intake over a number of days. This can be avoided with careful and realistic planning of theatre lists and ensuring adequate theatre capacity. Communication between the theatre/ward teams and the patient (including relatives/carers) is essential. This collaborative approach can be facilitated through an identified trauma liaison nurse-led service.

Patients should be offered clear fluids until up to two hours before surgery. Most patients will receive intravenous fluids (so the prevention of dehydration is less of an issue) however intravenous fluids do not attenuate the sensation of thirst. As such allowing oral fluids will improve patient comfort. Hip fracture patients are frequently malnourished and/or dehydrated on admission to hospital. Repeated fasting of this patient group can further exacerbate this problem. Repeating a fasting cycle must therefore be avoided where possible, and the length of pre-operative fasting should be minimised.

5.1 Audit Measure

Percentage of patients for whom the fasting cycle was repeated. In order to be classed as having fasted, the patient must have missed at least one meal.

5.2 Audit Measure

The timing of when the patient was no longer permitted to drink clear oral fluids prior to the induction of anaesthesia.

5.3 Audit Measure

The timing of the last recorded drink (including sips), this can include offered but refused.

Standard 6: Cemented hemi-arthroplasty implants are standard unless clinically indicated otherwise

Rationale: The use of cemented hemi-arthroplasty implants should be standard as recommended by NICE²³ unless specifically contra-indicated by significant operative risk. The patient's pre-existing ambulatory status should be a consideration when selecting the type of implant.

Cemented total hip arthroplasty should be considered in all patients who are: mobile independently (with the use of no aids/1 stick), do not suffer from cognitive impairment and who are medically fit for such surgery. This decision should be made in accordance with the wishes of the patient after discussion of the potential risks/benefits of each procedure. Extra-capsular hip fracture should generally be managed with the use of a dynamic/sliding hip screw unless of a reverse oblique, malignant or sub-trochanteric fracture pattern.

6.1 Audit Measure

The percentage of patients who had a hemi arthroplasty which was cemented.

Standard 7: Every patient who is identified locally as being frail, receives comprehensive geriatric assessment within three days of admission

Rationale: Many patients presenting with hip fractures are frail and have complex medical problems. Collaborative working with Geriatricians has been shown to improve the standards of medical care in this frail group^{24,25}. The benefits include, reduction in delay to surgery caused by medical problems, improved management of perioperative medical complications, better coordination of multidisciplinary team work, improved communication with patients and relatives and reduction in adverse events including delirium and falls^{22,23}. There is also a trend towards reduced length of stay and lower in-hospital mortality²⁶.

There are a number of models of orthogeriatric care. These include reactive consultation models, where patients are referred to Medicine for the Elderly on an individual basis but are primarily managed by the orthopaedic team, visits by a geriatrician or specialist nurse who provide advice on medical care on a regular basis in the orthopaedic ward, and combined orthogeriatric care with input from both the orthopaedic team and geriatricians. Advanced Nurse Practitioner roles are developing in some areas to deliver support in the identification and management of frailty, including participating in the delivery of Comprehensive Geriatric Assessment (CGA). In units where the geriatric resource is insufficient to meet required needs, ward sessions for GPs with a specialist interest should also be considered.

CGA is specialist coordinated multidisciplinary care that seeks to assess a patient's needs across medical, functional and psychiatric domains to identify, quantify and manage their deficits to avoid long term disability. In an orthopaedic context this will include: falls history and assessment including an ECG and lying and standing blood pressures, assessment of co-morbidities and functional abilities, medication review, cognitive assessment, nutritional assessment, assessment for sensory impairment, continence review, assessment of bone health and discharge planning.

Input from the Medicine for the Elderly team should be commenced within 3 days of admission for all patients identified at risk.

7.1 Audit Measure

The percentage of patients who had a Comprehensive Geriatric Assessment completed within three days of admission (or following their fracture if the patient fell whilst an inpatient). Note that patients, who under local protocol, do not require a CGA are not included in this measure.

Standard 8 Mobilisation has begun by the end of the first day after surgery and every patient has physiotherapy assessment by end of day two

Rationale: Early mobilisation in combination with post-operative physiotherapy is of value in reducing pulmonary complications, optimising early recovery and reducing falls. If the patient's overall medical condition allows, mobilisation and multidisciplinary rehabilitation should begin within 24 hours post-operatively.

8.1 Audit Measure

The timing of first mobilisation following surgery, this can include getting out of bed to use the toilet as well as more formal mobilisation with nursing or physio staff.

8.2 Audit Measure

The timing of the first assessment by a member of the physiotherapy team.

Standard 9: Every patient has a documented Occupational Therapy Assessment commenced by the end of day three post admission

Rationale: Occupational therapy contributes to both enabling patients to regain function post operatively and assessing the need for support following discharge. All patients must be screened and considered for occupational therapy assessment. Any patient deemed not appropriate for occupational therapy intervention should have written documentation to support this decision.

9.1 Audit Measure

The timing of the first comprehensive recorded OT input by a member of the OT team for all patients. Note that this can occur both pre and post operatively. Documentation of patient 'not fit' or 'not available' is not classed as the start of input. Reasons for commencement beyond day 3 are also recorded.

Standard 10: Every patient who has a hip fracture has an assessment of, or a referral for, their bone health prior to leaving the acute orthopaedic ward

Rationale: Osteoporosis risk assessment and treatment is integral to the prevention of further fractures alongside falls prevention strategies. Fracture begets fracture: a previous fracture will approximately double the risk of a subsequent fracture with the greatest risk

occurring in the first year following the initial fracture²⁴. There is extensive evidence showing the effectiveness of bisphosphonate and other osteoporosis treatments, demonstrating up to a 50% relative reduction in fracture risk²⁷. Hence admission with hip fracture offers a prime opportunity to assess and instigate osteoporosis medication as appropriate. Some units have a Fracture Liaison Service in operation which has been recognised internationally as an effective model of delivering care²⁸. Some patients are commenced directly onto treatment whilst in hospital whereas others have treatment deferred until after they have their bone densitometry assessment.

Significant variation in practice across Scotland is evident in terms of osteoporosis treatment and diagnostic interventions. The aim should be that all patients where appropriate, are either started on treatment during the acute admission aimed at reducing future fracture risk or have an assessment planned for this in the early discharge period.

10.1 Audit Measure

The percentage of all patients whose bone health has been assessed in hospital, this could include new bone protection medications being commenced as well as documentation that these should continue or a referral to a fracture liaison service or for a DXA scan.

Standard 11: Every patient's recovery is optimised by a multi-disciplinary team approach such that they are discharged back to their original place of residence within 30 days from the date of admission

The main aim of the improvement work is “getting patients back to their original place of residence as rapidly as possible, whilst optimising their ability to retain their independence”. This should be achieved by optimising the pathway of care during their acute hospital stay and a seamless and supported transition back to the original place of residence within 30 days from date of admission.

11.1 Audit Measures

Further details are collected regarding the patient's total length of stay in hospital and onward destination. Outcome at 30 days is also collected and includes variables such as place of residence, readmissions and mortality.

These measures report patients originally admitted with a hip fracture from their own homes (including sheltered housing) or care/nursing homes, but not those who sustain their hip fracture whilst already in hospital.

Appendices

A - Scottish Hip Fracture Audit and Advisory Group Membership & Contacts

Name	Role	Organisation	Email
Graeme Holt	Chairman, Consultant Orthopaedic Surgeon	NHS, Ayrshire and Arran	Graeme.holt@aapct.scot.nhs.uk
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B: Access to the Trauma and Orthopaedic Dashboard

Trauma & Orthopaedic Portal [Trauma & Orthopaedic Portal](#)

Audit data are updated and added to this web based platform each month and are provided as management information only i.e. they are routinely available to participating boards. Access can be granted by requesting a username and password by following the process below;

To become an approved user of the Trauma & Orthopaedic Portal please go to [NSS User Access System](#) .

- **Users who already have an LDAP username/password** (it is the same as the LDAP/UNIX one which you may already have for other data systems hosted by ISD). Once logged in please select 'Request new access' from the menu. Then select the Specialty Information from the drop down list and proceed to input your details.

Once you have created and submitted your request an email will be sent to your local authoriser who will approve your request. Once approved you will shortly receive an email with a link to the Trauma & Orthopaedic Portal.

- **Users who think they already have an LDAP username/password but have forgotten them** If you have forgotten these please contact the Customer Support Desk via e-mail nss.csd@nhs.net or phone 0131 275 7777 and then follow the instructions above.

- **Users who don't have an LDAP username/password**

Please register for one by using the link above and clicking the 'register' button and then follow the instructions above.

If you have any issues or questions please contact the team at [NSS](#).

TraumaandOrthopaedicPortal@nhs.net

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