**Fracture Liaison Service**

**Service Specification**

***This resource:***

*This resource has been created by the Royal Osteoporosis Society as part of the Fracture Liaison Service Implementation Toolkit (FLS-IT). The aim of the toolkit is to take some of the hard work out of establishing a new Fracture Liaison Service (FLS) or improving an existing one.*

*This resource has been created by working professionals in the NHS in each of the four home nations and makes use of current policy and best practice. It has been designed to save the user the time and trouble of researching, drafting and editing a document or workbook from scratch. References have been included where relevant.*

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***Disclaimer***

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*Note that this resource is based on the service specification in use in the NHS England as part of the standard NHS contract for acute services. Text may be edited, amended or copied for use in other service specification templates in use in other home nations.*

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* *Mandatory headings 1-4: mandatory but detail for local determination and agreement.*
* *Optional headings 5-7: optional to use, detail for local determination and agreement.*
* *All subheadings for local determination and agreement.*

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| --- | --- |
| **Service Specification No.** | **[insert Spec No here]** |
| **Service** | **Fracture Liaison Service** |
| **Commissioner Lead** | **[insert name of lead commissioner]** |
| **Provider Lead** | **[insert name of lead clinician]** |
| **Period** | **[insert time period]** |
| **Date of Review** | **[insert review date]** |

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| 1. Population Needs |
| National ContextA Fracture Liaison Service (FLS) systematically identifies, investigates, initiates treatment and integrates care for patients over the age 50 who have suffered a fragility fracture with the aim of reducing their risk of subsequent fractures. Fragility fractures are broken bones that result from mechanical forces that would not ordinarily cause a fracture, known as low-level (or 'low energy') trauma[[1]](#endnote-2). The World Health Organisation has quantified this as a force equivalent to a fall from a standing height or less[[2]](#endnote-3). Reduced bone density is a major risk factor for fragility fracture. Other factors that may affect the risk of fragility fracture include the use of oral or systemic glucocorticoids, age, sex, previous fractures and family history of osteoporosis[[3]](#endnote-4). At age 50, the lifetime risk of fracture is greater than 50% for women and 20% for men[[4]](#endnote-5) and many of these will be fragility fractures. After a fragility fracture, patients are five times more likely to experience a second fracture within the next 2 years[[5]](#endnote-6). Half of all hip fractures are secondary fractures i.e. a fracture following a previous fracture[[6]](#endnote-7),[[7]](#endnote-8),[[8]](#endnote-9). Approximately half the number of hip fractures can be prevented if the patient is identified and treated following an initial non-hip fracture[[9]](#endnote-10). Fragility fractures are the clinical manifestation of osteoporosis[[10]](#endnote-11). Osteoporosis is a condition characterised by low bone mass and micro-architectural deterioration of bone tissue with a consequent increase in bone fragility and susceptibility to fracture[[11]](#endnote-12). In 2015, 3.5million people in the UK were estimated to have osteoporosis[[12]](#endnote-13). Osteoporosis is a multifactorial condition, but prevalence increases sharply with age. In women the prevalence of osteoporosis increases from approximately 2% at age 50 to more than 25% at age 80[[13]](#endnote-14). Over 70% of UK population growth between 2014 and 2039 will be in the over 60 age group, an increase from 14.9 to 21.9 million people[[14]](#endnote-15). In 2017, over half a million fragility fractures occurred in the UK with an associated healthcare cost of £4.5billion. This annual expenditure is predicted to increase by 30%, to £5.9billion, by 2030[[15]](#endnote-16).Unplanned admissions and length of stay are important drivers of cost, with emergency admissions due to fragility fractures taking up more acute bed-days than myocardial infarction, heart failure and stroke combined[[16]](#endnote-17). Hip fractures make up one fifth of all fragility fractures, yet they account for 58% of total fracture related costs[[17]](#endnote-18). Each year, hip fractures cost the UK healthcare system approximately £1.1billion/year[[18]](#endnote-19). At any one time, patients recovering from hip fracture occupy 1 in 45 beds in England and Northern Ireland, and 1 in 33 beds in Wales[[19]](#endnote-20). Fragility fractures are a major obstacle to healthy aging. As well as the significant burden on health and social care resources, the consequence of fractures on the individual can be devastating. The impact of hip fracture is often recognised as precipitating the patient’s final illness. Only a minority of people completely regaining their previous abilities and a quarter require long-term care[[20]](#endnote-21). Frailty is common in older people experiencing hip fracture and is a powerful predictor of adverse outcomes, including increased mortality and length of stay[[21]](#endnote-22). Evidence BaseThe Department of Health’s 2009 strategy paper ‘Falls and Fractures: Effective Interventions in Health and Social Care’[[22]](#endnote-23) recognised that the consequences of falls and resultant fragility fractures cut across all local agencies working with older people. Accordingly, they identified four key areas for intervention that commissioners should consider in the context of local services for falls and fracture prevention. The document recommended developing services to achieve these four objectives, which were listed in priority order in terms of impact and evidence-base. Objective 1 was to improve patient outcomes and improve efficiency of care after hip fractures through compliance with core standards. Objective 2 was to respond to a first fracture and prevent the second through fracture prevention services. Objective 3 was early intervention to restore independence, through falls care pathways, linking acute and urgent care services to secondary prevention of further falls and injuries. Objective 4 was about preventing frailty, promoting bone health, and reducing accidents, through encouraging physical activity and healthy lifestyles, and reducing unnecessary environmental hazards.Objective 1 has largely been achieved following introduction of orthogeriatrican roles to improve the management of hip fracture patients on the ward, the Best Practice Tariff for hip fracture and the National Hip Fracture Database. However, there is still some way to go in terms of objective 2 as one in five women who have had a fragility fracture, will break three or more bones before they are diagnosed with osteoporosis[[23]](#endnote-24). The FLS model has demonstrated that it is uniquely effective in preventing secondary fractures by delivering assessments to 95-97% of at-risk patients within the local population as opposed to only 25% of patients being assessed with other service models[[24]](#endnote-25). The FLS model is associated with increased treatment initiation and adherence to treatment (65%–88% at 1 year)[[25]](#endnote-26). Organisations with an FLS were found to have a 40% reduction in the 3-year risk of secondary fragility fractures to major bones and a 30% reduction of re-fracture to any bonecompared with organisations without an FLS[[26]](#endnote-27). FLS is associated with reduced mortality and it is cost-effective[[27]](#endnote-28). In May 2011, a formal cost-effectiveness analysis of the Glasgow FLS was published, which showed that between 1998-2008 the Glasgow FLS saw hip fracture numbers in Glasgow reduced by 7.3% versus an almost 17% increase in England (1.8% per year)[[28]](#endnote-29). Effective secondary fracture prevention throughout the NHS would prevent over 46,000 avoidable fragility fractures (including nearly 20,000 hip fractures) over 5 years in the UK[[29]](#endnote-30). In Glasgow, it was concluded that £21,000 was saved per 1,000 patients that were managed though the service[[30]](#endnote-31). The FLS model, as recommended in Public Health England’s Falls and Fragility Fracture Consensus statement (2017) as an evidence-based, cost effective, preventative intervention that can help to improve the health of the population and reduce health and care service demand[[31]](#endnote-32). In addition, NHS RightCare, whose pathways are designed to support local health economies to concentrate their improvement efforts where there is greatest opportunity to address variation and improve population health, recommend that commissioners focus on three priorities including: falls prevention; detecting and managing osteoporosis and providing optimal support after a fragility fracture. They identify fracture prevention services, incorporating 4 and 12 month follow-up of patients, as a high value intervention on the basis that effective case-finding and appropriate drug treatment reduces risk of further fractures by up to 50%[[32]](#endnote-33). Local Context[use this space to add the local context for FLS] |
| 2. Outcomes  |
| **2.1 NHS Outcomes Framework Domains & Indicators**This section sets out the indicators in each of the outcome frameworks to which an FLS will contribute to the achievement. **NHS Outcomes Framework (2019/20)**[x]  DOMAIN 1: Preventing people from dying prematurely[x]  1a.i Potential years of life lost from causes from causes considered amenable to healthcare – Adults[x]  1b.i Life expectancy at 75 - Males[x]  1b.ii Life expectancy at 75 - Females[x]  DOMAIN 2: Enhancing quality of life for people with long-term conditions[x]  2 Health-related quality of life for people with long-term conditions[x]  2.1 Proportion of people feeling supported to manage their condition[x]  2.3.i Unplanned hospitalisation for chronic ambulatory care sensitive conditions[x]  2.4 Health related quality of life for carers[x]  DOMAIN 3: Helping people to recover from episodes of ill health or following injury[x]  3.5.i Hip fracture: Proportion of patients recovering to their previous levels of mobility at 30 days[x]  3.5.ii Proportion of patients recovering to their previous level of mobility at 120 days[x]  DOMAIN 4: Ensuring that people have a positive experience of care[x]  4b Patient experience of hospital care[x]  4.1 Patient experience of outpatient services[x]  4.9 Improving people’s experience of integrated care[x] DOMAIN 5: Treating and caring for people in a safe environment and protecting them from avoidable harm[x]  5.4 Hip fractures from falls during hospital care**CCG Outcomes Indicator Set (2019)** [x]  DOMAIN 1: Preventing people from dying prematurely[x]  1.22 Hip fracture: incidence[x]  DOMAIN 2: Enhancing quality of life for people with long-term conditions[x]  2.1 Health-related quality of life for people with long-term conditions[x]  2.2 Proportion of people feeling supported to manage their condition[x]  2.6 Unplanned hospitalisation for chronic ambulatory care sensitive conditions[x]  2.15 Health-related quality of life for carers[x]  DOMAIN 3: Helping people to recover from episodes of ill health or following injury[x]  3.10i Hip fracture: Proportion of patients recovering to their previous levels of mobility at 30 days[x]  3.10ii Hip fracture: Proportion of patients recovering to their previous level of mobility at 120 days[x]  3.11 Hip fracture: Collaborative orthogeriatric care[x]  3.13 Hip fracture: multifactorial risk assessment[x]  DOMAIN 4: Ensuring that people have a positive experience of care[x]  4.2 Patient experience of hospital care[x]  4.4 Patient experience of outpatient services**Public Health Outcomes Framework (2019/20)**[x]  DOMAIN C: Health Improvement [x]  C29 Emergency hospital admissions due to falls in people aged 65 and over[x]  DOMAIN E: Health and premature mortality [x]  E13 Hip fractures in people aged 65 and over**The Government’s 2019-20 Accountability Framework** brought together, for the first time, the annual mandate to NHS England and the remit for NHS Improvement. Within this document the Government set two high level objectives for NHS England and NHS Improvement for 2019-20. These are: Objective 1: Ensure the effective delivery of the Long Term PlanObjective 2: Support Government in managing the effects of EU Exit on health and careThe relevant **NHS Long Term Plan and NHS Planning Guidance commitments for 2019-20** are as follows:[x]  New Service Models[ ]  Out of hospital care[x]  Reducing pressure on emergency services[x]  Personalised care[ ]  Digitally enabled primary and out-patient care[x]  Population health/integrated care systems[x]  Prevention and Health Inequalities[x]  Care and Quality Outcomes[ ]  Workforce[ ]  Digital[x]  Financial Tests[x]  Ensure each NHS organisation delivers its agreed financial position and that the NHS budget overall is balanced[x]  Reduce year-on-year the number of trusts and CCGs individually in deficit so that all NHS organisations are in balance by 2023/24[ ]  Phase in an updated Market Forces Factor over the next five years[x]  Extend the Getting It Right First Time (GIRFT) programme\* [x]  Improve patient safety to reduce patient harm and the substantial costs associated with it. |
| 3. Scope |
| **3.1 Aims, Objectives and Outcomes of the FLS** The aim of the FLS is to reduce the incidence of fragility fractures in the older population. **Objectives of the FLS** are to deliver care in line with the published [Royal Osteoporosis Society Clinical Standards for FLS](https://theros.org.uk/media/1eubz33w/ros-clinical-standards-for-fracture-liaison-services-august-2019.pdf), which correlate to the FLS-DB National KPIs. * **Identify:**

The FLS will identify people aged 50 years and older, with a new fragility fracture, including: * **1.1** newly identified vertebral fracture, including those identified as incidental findings on imaging.
* **1.2** new fracture occurring whilst a patient is taking an osteoporosis drug treatment.
* **Investigate:**

People identified by the FLS will be offered a multifactorial assessment to determine their future risk of fragility fracture. This assessment will be completed within 12 weeks of the incident fracture. * **Inform:**

People identified as being at increased risk of fragility fracture will be offered information, according to their needs in relation to osteoporosis and its treatment, lifestyle interventions to promote healthy bones, coping with pain and reducing falls. * **Intervene:**
* **4.1** People assessed as being at risk of fragility fracture will be initiated on appropriate osteoporosis drug treatment, barring any contraindications, within 16 weeks of the incident fracture.
* **4.2** People identified as being at high risk of falls will be referred to a falls prevention service to be offered a comprehensive falls assessment within 16 weeks of the incident fracture.
* **4.3** People who are recommended treatment to reduce their risk of fragility fracture will be reviewed by the FLS at 16 and 52 weeks post incident fracture.
* **4.4** After the 52-week review, the FLS will handed over to Primary Care, for long term osteoporosis management.
* **Integrate with wider healthcare system:**

The FLS will integrate with the wider healthcare system to facilitate an inclusive patient pathway, ensuring effective case-finding, onward referrals and long-term management of osteoporosis* **5.1** Clear management plans will be produced and disseminated across organisational boundaries to facilitate integrated care.
* **5.2** Referral pathways between the FLS and other relevant services will be developed and implemented.
* **5.3** The FLS team will participate inlocal multidisciplinary fracture prevention interest group which meets regularly to co-ordinate, plan and develop the FLS.
* **Quality:**
* **6.1** The FLS will have a designated lead clinician who is accountable for all components of the service.
* **6.2** The FLS will have a quality assurance framework in place
* **6.3** The FLS will participate in national clinical audits such as the [Fracture Liaison Service Database](https://www.fffap.org.uk/fls/flsweb.nsf/) **[in England and Wales]** or the Hip Fracture Audit **[in Scotland]**.
* **6.4** FLS will undertake and act upon feedback from annual surveys of patient experience and satisfaction, to facilitate on-going quality improvement.

**The Outcomes of the FLS are shown in the National and Local Key Performance Indicators[[33]](#endnote-34):** A set of 11 KPIs were developed by the [Fracture Liaison Service Database (FLS-DB)](https://www.fffap.org.uk/fls/flsweb.nsf/) multidisciplinary advisory group, which includes patient representation. All the KPIs are based on NICE technology assessments and guidance on osteoporosis and the Royal Osteoporosis Society (ROS) clinical standards for FLSs. The FLS should aim to deliver these KPIs as part of their service:

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| **Indicator** | **Type** | **Source** | **Description** |
| KPI 1 - Data completeness | Data quality | FLS-DB | Service with good level of data completeness - Defined as fewer than five fields with more than 20% of data missing |
| KPI 2 - Identification (all fragility fractures) | Clinical process measure | FLS-DB | Percentage of patient records submitted compared with the local estimated case load |
| KPI 3 – Identification (spinal fractures) | Clinical process measure | FLS-DB | Percentage of patients with a spine fracture as their index fracture site |
| KPI 4 - Time to FLS assessment | Clinical process measure | FLS-DB | Percentage of patients who were assessed by the FLS within 90 days of their fracture |
| KPI 5 - Time to DXA | Clinical process measure | FLS-DB | Percentage of patients who had a DXA ordered or recommended who were scanned within 90 days of fracture |
| KPI 6 - Falls assessment | Clinical process measure | FLS-DB | Percentage of patients who received a falls assessment or were referred or recommended for a falls assessment |
| KPI 7 - Bone sparing therapy recommended | Clinical process measure | FLS-DB | Percentage of patients who were recommended anti-osteoporosis medication |
| KPI 8 - Strength and balance training | Clinical process measure | FLS-DB | The percentage of non-hip fracture patients who had attended a strength and balance class within 16 weeks of their fracture |
| KPI 9 - Monitoring contact 12–16 weeks post fracture | Clinical process measure | FLS-DB | The percentage of eligible patients who were followed up between 12 and 16 weeks after their fracture |
| KPI 10 - Commenced bone sparing therapy by first follow-up | Outcome measure | FLS-DB | The percentage of patients who had commenced (or were continuing) anti-osteoporosis medication at time of first follow-up |
| KPI 11 - Adherence to prescribed anti-osteoporosis medication at 12 months post fracture | Outcome measure | FLS-DB | The percentage of patients who had confirmed adherence to a prescribed anti-osteoporosis medication at 12 months post fracture |

**[Please edit for any local aims, objectives and Outcomes/KPIs]****3.2 Service description/care pathway****[It is important that this section edited to reflect the agreed local pathway, please edit as appropriate]**The service will employ the 5IQ approach outlined in the Royal Osteoporosis Society’s Clinical Standards for Fracture Liaison Services (2019). This will include **identification**; **investigation**; **information**; (where appropriate) **initiation** (of treatment) and **integration** – facilitatingcoordination between acute, community and primary health care providers to ensure a seamless pathway of care for the patient. There will be a designated lead clinician is accountable for all components of the service. The service will promote coordination between both in-hospital (e.g. acute) and out-of-hospital (e.g. community, primary care) health settings; to ensure that care is seamless and consistent and be in line with the Royal Osteoporosis Service Clinical Standards for FLS.**Standard 1:** **Identification** The service will systematically case find relevant patients, those aged 50 years and over, who meet any of the following criteria: * Patients presenting acutely with a fracture (requiring admission) and being managed in an in-patient setting
* Patients presenting acutely with a fracture (not requiring admission) and being managed in an out-patient setting
* Newly identified vertebral fractures (whether identified opportunistically as an incidental finding on imaging, or anticipated based on clinical signs and symptoms)
* New fractures occurring in those already on bone sparing treatment
* New fractures occurring as a result of a fall during a hospital stay
* Patients usually resident in **[Put local area here]**, who fractured whilst away from home and who present on returning home (as a result of the fracture) to local orthopaedic or primary care services

The service will also accept referrals from other practitioners/services of relevant patients. **Standard 2: Investigation**Patients identified and meeting the inclusion criteria will be offered a comprehensive, multifactorial risk assessment within 12 weeks of the fracture diagnosis. For patients not already on bone sparing treatment, this assessment will include:* In line with NICE guidance, an estimation of absolute risk of (any) major osteoporotic fracture and an estimation of absolute risk of hip fracture over the next 10 years utilizing FRAX® within the allowed age range.
* In line with NICE guidance where clinically appropriate (for those whose fracture risk is in the region of an intervention threshold), an assessment of bone mineral density using axial Dual Energy X-ray Absorptiometry (DXA) **[+/-VFA if available – describe criteria if relevant]**
* In line with NICE guidance, patients over the age of 65 will also be asked about their history of falls, including frequency, context and characteristics of their fall/s. Older people reporting falls or felt to be at increased risk of falling will be considered for their ability to benefit from interventions to improve strength and balance and an onwards referral made to the local falls service, as appropriate, providing the patient consents to this. This may also be indicated in people aged 50-64 who have risk factors for falls. The FLS will work closely with local falls services, to determine appropriate pathways to ensure early falls risk assessment and intervention post-fracture, for relevant patients.
* Other investigations may be appropriate for individual patients depending on the clinical presentation to assess for underlying secondary causes of osteoporosis and high fracture risk.

**Standard 3: Inform and support*** All patients will be offered basic bone health and lifestyle information. Patients identified as being at increased risk of further fragility fractures will be offered additional information to inform shared decision making and self-management, including information on:
* osteoporosis
* risks and benefits of different pharmacological treatment options available
* diet and exercise for healthy bones
* In addition, where appropriate, pain management and reducing risk of falls.
* Information will be available in a range of formats and languages, appropriate to the population served. Locally agreed, Trust approved, written patient information materials will be used, alongside the Royal Osteoporosis Society’s patient information resources.
* Patients and their carers will be advised where to get further information about osteoporosis and/or support should they want or need it.
* Patients will have access to a telephone advice line should they have any concerns or questions about their treatment or the management plan in general.
* Patients will have access to education in the form of newly diagnosed group sessions to promote adherence to treatment and give an opportunity for peer support.

**Standard 4: Intervene*** Where clinically indicated and not contraindicated, bone sparing treatment and adjunct calcium and vitamin D will be initiated, **[it maybe that this is in collaboration with the patient’s GP]** within 16 weeks of the fracture diagnosis.
* Following an analysis of risk versus benefit, treatment choice will take into account individual patient circumstances (including co-morbidities), patient preference, national guidance and locally agreed management pathways. The patient will be included in the decision-making process. **[This section may need to be amended depending on who will initiate treatment]**
* Written bone health management plans will be shared with the patient’s GP and the patient.
* Those who are recommended treatment will be reviewed by the FLS within 16 weeks of fracture and again at 52 weeks post fracture to ensure that recommended interventions (pharmacological and non pharmacological) have commenced, to check that drug treatments are being taken as directed, that the patient is not experiencing any side effects and that they have made a good recovery from their fracture. Follow-up also allows people to express any doubts and concerns about their treatment and to raise any questions. In addition, it is an opportunity to ascertain whether the person has experienced any further falls or fractures and whether there is a need for referral to associated services.

**Standard 5: Integrate*** The FLS team will agree (both incoming and outgoing) referral pathways with relevant teams and services (both internal and external) to maximise case finding and optimise patient care.
* In terms of communications, an outcome letter will be sent to the patient’s GP and copied to the patient after the initial assessment and each review appointment.  As far as possible, without affecting its efficacy as a clinical document, the outcome letter should be written in a way that is understandable to the public[[34]](#endnote-35).  Where technical information needs to be conveyed, the service should consider providing explanatory information in easy to read leaflets[[35]](#endnote-36). Providing the documentation in alternative formats should also be considered to meet individual needs. All clinical documentation should be forwarded to appropriate parties within 7 calendar days.
* The patient will be discharged from the FLS following the 52 week review. At that point, further ongoing annual follow-up, from a medicines management point of view, should be conducted by a member of the primary care team. The FLS 52 week review outcome letter should include a clear, ongoing, bone health management plan (to include review timescales), to facilitate a seamless transfer of care and enable the long-term management of osteoporosis in the primary care setting.

**Standard 6: Quality through leadership, governance, and development*** The Provider(s) must have a robust system of clinical governance in place, noting that the components of clinical governance include:
* Risk management
* Clinical audit
* Education, training and continuing professional development
* Evidence based care and effectiveness
* Patient and carer experience and involvement
* Staffing and staff management
* A designated lead clinician will be accountable for the service **[enter designated lead here].**
* The FLS practitioners will meet with the clinical lead and wider bone health team on a monthly basis to discuss operational and quality issues.
* All FLS clinical staff will participate in Continuing Professional Development, including attendance at relevant regional and national meetings. As a minimum, all clinical staff should undertake the Royal Osteoporosis Society’s foundation and advanced Fracture Prevention Practitioner on-line training modules and pass the associated on-line assessments. After a relevant period of training they should also demonstrate the necessary professional competencies commensurate with their grade and experience, in accordance with the Royal Osteoporosis Society’s Competency Framework for Health Professionals Working in Fracture Prevention (2017).
* Annual appraisal and personal development plans should be in place for all staff (qualified and unqualified) working within the service. Mandatory core and essential skills training must be undertaken in accordance with the Trust policy.
* A quality assurance framework will be in place to support continuous improvement. This will include:
* Maintaining a database of patients assessed through the service to support follow up, quality reporting and outcomes.
* Participation in relevant national clinical audits, for example the Fracture Liaison Service Database (FLS-DB), part of the national Falls and Fragility Fracture Audit Programme (FFFAP), commissioned by the Healthcare Quality Improvement Partnership (HQIP) and managed by the Royal College of Physicians (RCP).
* Undertaking and acting upon the results of regular patient experience and satisfaction surveys.

**3.3 Service Delivery*** The service shall operate **[insert hours/days here]**
* The service shall carry out a comprehensive, multifactorial bone health assessment within 12 weeks of the fragility fracture.
* The service will follow up all patients recommended treatment to reduce risk of further fracture at 16 and 52 weeks post fragility fracture

**[Local discussion will be needed on how the service will deliver each element of the pathway i.e. face to face assessments (location of these), telephone/video assessments, domiciliary visits, questionnaires (with timescales for sending out) etc]** **3.4 Population covered**The service will assess and manage the bone health of all patients over 50 who have suffered a fragility fracture to prevent subsequent fractures. The service will be available to: * All patients attending **[name of hospital]**
* All patients registered with a GP practice in **[name of CCG/Health Board]**

**[Edit above as appropriate]****3.5 Inclusion/acceptance criteria** In order to be eligible for the service, patients * Must be 50 years of age or over
* Have suffered a recent low trauma\* fracture

(\*low trauma is defined as a fracture sustained a slip, trip or fall from a standing height or less)**3.6 Exclusion criteria*** Pathological fractures
* Fractures sustained in high trauma accidents (e.g. road traffic collisions)
* Fractures of the fingers; toes; metacarpals; metatarsals; carpal bones (including scaphoid); face; skull; sternum; olecranon; and patella. **[This needs to be agreed locally]**.

**3.7 Referral Route**The predominant mode of action is proactive systematic case-finding by the FLS; however, referrals should also be encouraged into the FLS from other services, such as GPs, Pain Clinics, interface services and falls services. **[edit as appropriate].** Referrals will be accepted using the following methods: **[add local information here, may include:*** **e-referral**
* **Letter**
* **Electronic mail or message]**

**Interdependence with other services/providers:**The service shall operate as part of an integrated system for the prevention of fractures and falls. It will, therefore, work closely with other parts of the health and social care system including but not exclusive to: Falls services; Medical Assessment Unit; Orthopaedics and trauma; Medicine and care of older people departments; Emergency department; Radiology; DXA Team; Intermediate care; GPs/Practice Nurses; Musculoskeletal Services; Community Pharmacists Community Nurses; Community Hospitals; Clinical Commissioning Groups; Local Authorities; Public health; Allied Health Professionals.**[Edit this list as required to ensure it is bespoke for the local population]** |
| 4. Applicable Service Standards |
| **4.1 Applicable National Standards** * Osteoporosis: Assessing the risk of fragility fracture (2012, updated 2017) NICE Clinical Guideline 146
* Osteoporosis (2017) NICE Quality Standard 16
* Hip Fracture: Management (2011, updated 2017) NICE Clinical Guideline 124
* Hip fracture in adults (2012, updated 2017) NICE Quality Standard 16
* Falls in older people: Assessing risk and prevention (2013) NICE CG 161
* Falls in older people (2015, updated 2017) NICE Quality Standard 86
* Patient experience in adult NHS services: improving the experience of care for people using adult NHS services (2012) NICE Clinical Guideline 138
* Patient experience in adult NHS services (2012, updated 2019) NICE Quality Standard 15
* Medicines adherence: involving patients in decisions about prescribed medicines and supporting adherence (2009) NICE Clinical Guideline 76
* Bisphosphonates for treating osteoporosis (2017) NICE Technology Appraisal Guidance 464
* Denosumab for the prevention of osteoporotic fractures in post-menopausal women (2010) NICE Technology Appraisal Guidance 204
* Raloxifene and teriparatide for the secondary prevention of osteoporotic fragility fractures in postmenopausal women (2008, updated 2018) NICE Technology Appraisal Guidance 161
* SIGN 142, 2020 Management of Osteoporosis and the prevention of fragility fractures. A national clinical guideline.

**4.2 Applicable standards set out in Guidance and/or issued by a competent body (e.g. Royal Colleges)** * Clinical Standards for Fracture Liaison Services (2019) The Royal Osteoporosis Society
* Clinical Guidance for the Effective Identification of Vertebral Fractures (2017) The Royal Osteoporosis Society
* Falls and Fracture Consensus Statement (2017) Public Health England
* [Falls and Fractures: Effective interventions in health and social care](http://www.laterlifetraining.co.uk/wp-content/uploads/2011/12/FF_Effective-Interventions-in-health-and-social-care.pdf) (2009) Department of Health
* Fracture Liaison Service Database Annual Report. Beyond measurement: a focus on quality improvement (2020) Royal College of Physicians
* [The Blue Book: The Care of Patients with Fragility Fractures](http://www.fractures.com/pdf/BOA-BGS-Blue-Book.pdf) (Standards 5 and 6) (2007) British Orthopaedic Association
* Royal College Physicians. Falls and Fragility Fracture Audit Programme (FFFAP)
* Royal College Physicians. FLS Commissioner Report 2019.
* Royal Osteoporosis Society. Competency Framework for Fracture Prevention Practitioners. 2017
* International Osteoporosis Foundation: Broken Bones, Broken Lives: a roadmap to solve the fragility fracture crisis in Europe.
* All Wales Osteoporosis Advisory Group (2015). [All Wales Audit of Secondary Prevention of Osteoporotic Fractures](https://www.researchgate.net/publication/309789494_Poster_All_Wales_audit_-_services_for_secondary_prevention_of_fragility_fractures_2015).

 **[edit this list as required]****4.3 Applicable local standards****[Insert agreed local standards here]** |
| 5. Applicable Quality Requirements and CQUIN Goals |
| **5.1 Applicable Quality Requirements (See Schedule 4 Parts [A-D])****[Insert agreed local quality requirements here]****5.2 Applicable CQUIN goals** **[Insert agreed local CQUIN goals here]** |
| 6. Location of Provider Premises |
| The provider’s premises are located at:**[Add local information here]** |

## *Additional detail and references are available for all figures supplied by the Royal Osteoporosis Society. Note that for any information supplied by the Royal Osteoporosis Society there is no guarantee as to the accuracy of the or reliability of any information contained in this report and use of the information contained is at the user’s risk and no liability whatsoever is accepted by the Royal Osteoporosis Society.*

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