Falls and Osteoporosis Integrated Care Pathway

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1.0 Summary

People who fall, who have low impact fractures or are at risk of osteoporosis can present to one or many services within the primary and secondary health, social and voluntary sectors. The response they receive is influenced by the service to which they present. Evidence suggests that these services, should respond in an integrated way if they are to provide consistent, optimal care and so best prevent further falls and injury. Evaluation and audit of service provision has highlighted that such integration is poor and that better engagement of primary health care services in particular could offer major improvements in management.

A multi agency Falls and Osteoporosis Steering Group was set up locally to address these issues whilst bearing in mind existing extensive national guidance, recommendations and strategies.

Having identified local gaps in provision the group has adopted national guidelines regarding falls, developed local guidelines for osteoporosis management and agreed a care pathway which does integrate falls and bone health across services. The group suggests that the care pathway, which is an operational guideline, should be taken up services across City and Hackney.

This document describes the proposed care pathway, The Falls and Osteoporosis Integrated Care Pathway. The care pathway is illustrated in Appendix 2.

In developing the care pathway subgroups have developed a falls and osteoporosis risk assessment tool (Appendix 3) and an algorithm for the management of falls (Appendix 5). The group also contributed to the development of clinical guidelines for management of osteoporosis (Summary in Appendix 4) and physiotherapy guidelines for the management of falls and osteoporosis (Appendix 7). These following guidelines have been submitted separately for clinical governance review and could be read in conjunction with this document.

Local Physiotherapy Guidelines for the Assessment and Management of Falls and Osteoporosis (Separate document withdrawn in 2011 – Updated version in Appendix 7).

Guidelines for the selective case finding, investigation and treatment of adult osteoporosis

In primary health care, the quality of care and achievement of best practice has been improved for many long term conditions by incorporating relevant standards in the Quality Outcome Framework (QOF). It has been suggested that falls and osteoporosis management would benefit from such incorporation but this has not yet been achieved nationally. Members of the local Falls and Osteoporosis Steering Group have worked with ELIC (East London Integrated Care) to agree a innovative approach in City and Hackney with the setting up of a LES (Local Enhanced Service) in 2006 to support and incentivise local GPs in the delivery of the proposed care pathway. To our knowledge this is a unique achievement. The continuation of the LES is currently supported by the Clinical Commissioning Group.

Negotiation between group members and City and Hackney teaching Primary Care Trust (CHT PCT) has also supported the establishment of a contract which allows local GPs direct access to DEXA (Dual-Energy X-ray Absorptiometry) scanning for their patients. Such an arrangement further compliments the care pathway.
2.0 Introduction

Background

Bone fragility (Osteoporosis) occurs as a result of normal ageing and in association with identified life style factors and chronic diseases states (1). Osteoporosis results in a substantial increase in the risk of fragility fractures (1). One in two women and one in five men suffer an osteoporosis related fracture after the age of 50 (2). 90% of osteoporotic fractures occur as a result of a fall. One in three women and one in five men over the age of 65 fall per year (3). Clearly there are close links between falls, osteoporosis and fractures. Good management of one cannot be separated from the management of the others (4). These links have been recognised in the drawing up of many guidelines including the NICE Guidelines for the management of Falls (5) and The National Service Framework for Older People (6).

The consequences of osteoporotic fractures can be severe for the individual with 20% mortality at 3 months after a hip fracture (7). They also result in a significant loss in functional independence with 50% of people unable to live independently after a hip fracture (8).

Such fractures are also costly for society. The combined cost of hospital and social care for those suffering osteoporotic fractures is estimated to be £1.8 billion pounds per year at current prices (9).

Falls and osteoporosis are related to ageing and as society ages the incidence of both will rise (10, 11).

Evidence exists that the incidence of falls can be reduced (5, 11) and that osteoporosis can be effectively treated with reduction in the incidence of fractures (12).

With optimal management there are opportunities to prevent suffering and reduce costs.

It is well recognised that gaps in management and services for people with falls and osteoporosis mean that best care is often not delivered(13,14). Local service reviews and audits carried out by several separate professional groups have confirmed that such gaps exist in City and Hackney as elsewhere. Local professionals responded by establishing a steering group to address the issues and they began work on a joint care pathway which would cross primary, secondary health care, social care and voluntary sector boundaries. The local group has now been supported in it’s aims by recent national audits (15, 16) which call on ‘PCTs to commission care pathways for the secondary prevention of falls and fractures’ (16).

The development of The Falls and Osteoporosis Integrated Care Pathway answers this strategic recommendation in a very timely way.
3.0 Development process including staff involved.

Staff involved

A multidisciplinary, multiagency steering group (The Falls and Osteoporosis Steering Group) was formed and met for the first time on 12/10/2006. Meetings were held approximately monthly. The group included the following core representatives:

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>AGENCY</th>
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</tr>
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<tbody>
<tr>
<td>General Practice with Special Interest in Musculoskeletal</td>
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<td>Ms D McGreevy</td>
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<tr>
<td>Physiotherapy/ Secondary care</td>
<td>Homerton University NHS Foundation Trust</td>
<td>Ms L Goodwin, Ms K Hayes</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>Homerton University NHS Foundation Trust</td>
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<td>Dr D Das Gupta, Dr M E Britton</td>
</tr>
<tr>
<td>Voluntary Sector Stop Falls Network</td>
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<td>Rheumatology/General Medicine</td>
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<td>Dr R Mootoo, Dr G Sanna</td>
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</table>

Falls and Osteoporosis Steering Group Leads (Dr M E Britton, Dr D Dasgupta, Ms L Goodwin, Ms S Haller, Dr D Keene, Ms D McGreevy, Dr R Mootoo) were the original authors of the Integrated Care Pathway published in 2008. The pathway has been reviewed and updated by the steering group in 2012.

Consultation

During the development phase the steering group members consulted representatives from A+E and General Management as required.

Drafts 1.0a-1.0e of this document were prepared, presented to, discussed, amended and agreed by the steering group. Draft 1.1 emerged and was circulated for consultation to those on list Appendix 1b. Comments and amendments were made and Draft 1.2 emerged. Draft 1.2 will be presented to C&HtPCT Clinical Governance Committee and Homerton Clinical Governance Committee.

Method

The existing services were mapped. Gaps and difficulties were identified during discussion. Existing local and published guidelines were discussed.

It was agreed to adopt the following national and international guidance on falls:-

- NICE. Falls: the assessment and prevention of falls in older people (5).
- National Service Framework for Older People (6).
- British Orthopaedic Association. The care of fragility fracture patients (17).
It was decided that local guidelines for the management of osteoporosis were required. A subgroup was identified to lead on this workstream. The subgroup presented its work to the steering group regularly for consultation and the guidelines eventually agreed. These guidelines were developed closely influenced by:

- Royal College of Physicians. Osteoporosis: clinical guideline for prevention and treatment (12)
- Osteoporosis: assessment of fracture risk and the prevention of osteoporotic fractures in individuals at high risk. NICE clinical guideline (2012). (23)
- Denosumab for the prevention of osteoporotic fractures in postmenopausal women. NICE technology appraisal guidance 204 (2010). (24)
- Alendronate, etidronate, risedronate, raloxifene, strontium ranelate and teriparatide for the secondary prevention of osteoporotic fragility fractures in postmenopausal women. NICE technology appraisal guidance 161 (2011). (26)

The local guidelines for osteoporosis management are presented separately for clinical governance review. More detail of the development process is included in that separate control documentation (See Guidelines for the selective case finding, investigation and treatment of adult osteoporosis)

Local physiotherapy guidelines for the management of falls and osteoporosis were already in development. The guideline developers were members of the steering group and came to form another subgroup. This subgroup presented its work to the steering group regularly for consultation and the guidelines eventually agreed. These guidelines were developed closely influenced by

- Charted Society of Physiotherapy (CSP). Physiotherapy Guidelines for the management of Osteoporosis (20)
- Charted Society of Physiotherapists (CSP): Effectiveness of falls prevention and rehabilitation strategies in older people: implications for physiotherapy (21)

These local physiotherapy guidelines have been updated in 2012, and are attached as an appendix to this document. These guidelines have been re-written to bring them into alignment with national and international guidance.

- NICE. Falls: the assessment and prevention of falls in older people (5).
- National Service Framework for Older People (6).
- College of Occupational Therapists (COT), London. Falls Management Guidance. 2006

The steering group designed the Integrated Care Pathway mindful of the above guidance and local need and facilities.

4.0 Objectives

4.1 The Purpose of the care pathway

To provide local guidance and hence improve the assessment and management of people presenting to services within City and Hackney who have had or are at high risk of falls, osteoporosis and osteoporotic fractures.

To encourage the identification of those with osteoporosis by screening high risk subjects.
4.2 The scope of the guidelines.

   To raise awareness among all service providers in City and Hackney and assist them in provision of care to patients at risk of osteoporosis and falls.

5.0 Target Population

5.1 All patients who make contact with Primary and Secondary Health services, Community and Voluntary Care Services within City and Hackney who are:
   - Men over the age of 75
   - Females over the age of 50
   - On long term steroid
   - Unsteady on their feet
   - Have a history of falls
   - Have a history of low impact fractures
   - Live in residential or nursing home accommodation

6.0 Audience

7.1 All service providers across City and Hackney who will come in contact with the target group

7.0 Practice recommendations

   All service providers across City and Hackney to utilise the Falls and Osteoporosis Integrated Care Pathway in conjunction with relevant appendices.

   To this end all service providers will be made aware and trained in the use of the care pathway.

   A Local Enhanced Service agreement will be set up via ELIC to support the delivery of the care pathway in Primary Care.

8.0 Training and Awareness

   Training was delivered across primary and secondary, health and social care settings on the launch of the care pathway.

   As part of the Falls Awareness Week campaign we are running training to reintroduce and increase awareness across health and social care.

   We aim to establish a rolling education programme on the integrated care pathway.

9.0 Review

   This policy will be reviewed every three years or earlier in light of any new guidance or changes in legislation, exceptional circumstances or organisational change.
10.0 Monitoring / Audit

<table>
<thead>
<tr>
<th>Measurable Policy Objective</th>
<th>Monitoring /Audit</th>
<th>Frequency of monitoring</th>
<th>Responsibility for performing the monitoring</th>
<th>Monitoring reported to which groups/committee(s), inc responsibility for reviewing action plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All patients in the target group to be screened with the Integrated Risk Assessment Tool</td>
<td>Participation in the RCP National Audit of Falls and Bone Health in Older People</td>
<td>Yearly audit</td>
<td>Falls Prevention Nurse Local Falls Leads</td>
<td>Homerton Falls Strategic Group</td>
</tr>
<tr>
<td>2. Patient screened as “At risk” are referred to the appropriate service(s) for multifactorial risk assessment</td>
<td></td>
<td></td>
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<tr>
<td>3. Risk factors identified are addressed with the appropriate interventions</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

11.0 References / Bibliography

24. NICE. Denosumab for the prevention of osteoporotic fractures in postmenopausal women. NICE technology appraisal guidance 204 (2010).

Supporting Documents

Appendix 1 Staff consulted with
Appendix 2 Falls and Osteoporosis Integrated Care Pathway
Appendix 3. Falls and Osteoporosis Risk Assessment Tool
Appendix 4 Osteoporosis guidelines and indications for DEXA Scan
Appendix 5 Falls Pathway
Appendix 6 Therapy teams for falls intervention
Appendix 7 Local Therapy Guidelines for the Assessment and Management of Falls and Osteoporosis
Appendix 8 Exercise Strategy for Hackney for clients with Balance problems
## Appendix 1

List of all staff consulted as part of guideline development

<table>
<thead>
<tr>
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<td>Dr R Mootoo, Dr G Sanna</td>
</tr>
</tbody>
</table>
FALLS & OSTEOPOROSIS INTEGRATED CARE PATHWAY

THE TARGET GROUP
Women over 50 yrs  
Men over 75yrs  
People on long term steroids  
People unsteady on their feet  
People with history of falls  
People with history of low impact fractures  
Residents of nursing or residential homes

COMMUNITY SERVICES
Opportunistically in Voluntary sector, Homecare, Social Service

PRIMARY CARE
Opportunistically and Proactively looking for target group

SECONDARY CARE
Opportunistically in A+E, Fracture clinic, Inpatients, and Outpatients

Falls and Osteoporosis Risk Assessment using integrated assessment tool.  
See Appendix 3

No risk identified  
Osteoporosis risk identified  
Falls & osteoporosis risk identified  
Falls risk identified

Clinical Diagnosis made +/-DEXA scan as per guidelines  
See Appendix 4

No osteoporosis  
Osteoporosis  
Lifestyle advice  
Treat as per guidelines  
See Appendix 4+6+7

Falls pathway initiated  
See Appendix 5+6+7

No risk identified

Primary Care Falls Services  
Secondary Care Falls Clinic

APPENDICES
3. Falls and osteoporosis Risk Assessment Tool  
4. Osteoporosis Guidelines and Indications for DEXA  
5. Falls Pathway  
6. Therapy teams for fallers or those at risk.  
7. Local Physiotherapy guidelines  
8. Exercise Strategy for Hackney

Falls and Osteoporosis Integrated Care Pathway
### APPENDIX 3

**FALLS AND OSTEOPOROSIS INTEGRATED CARE PATHWAY**

**FALLS & OSTEOPOROSIS RISK ASSESSMENT TOOL**

<table>
<thead>
<tr>
<th>Name: ........................................</th>
<th>Date: ....................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital No: / NHS No: ........................</td>
<td>DoB / Age: ..................................</td>
</tr>
<tr>
<td>Address: .......................................</td>
<td></td>
</tr>
</tbody>
</table>

### DOES THE PATIENT HAVE RISK FACTORS FOR FUTURE FALLS?

**PLEASE ASK OR OBSERVE THE PATIENT.**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Previous falls?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. More than 4 medications?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. High alcohol intake?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Postural hypotension?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Visual problems?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Hearing problems?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Unsteady on feet</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Confused?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Environment implicated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Example:**
- Environment implicated: furnishings, floors, stairs, etc.

### DOES THE PATIENT HAVE RISK FACTORS FOR OSTEOPOROSIS?

**PLEASE ASK THE PATIENT.**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Previous fractures?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Maternal history of #NOF?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Family history of osteoporosis?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Risk factors for secondary osteoporosis</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>- Inflammatory joint diseases, inflammatory bowel disease, Anorexia nervosa, Chronic renal/liver disease, malabsorption</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. On any of the following medications?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>- Steroids</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>- Thyroid hormones</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>- Epilepsy treatment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>- Aromatase inhibitors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. If they are female:</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>- Postmenopausal or early menopause</td>
<td>☐</td>
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</tbody>
</table>

If risk factors identified refer to Falls & Osteoporosis Integrated Care pathway.
# Appendix 4

## Adult Osteoporosis Guidelines

### Use of DEXA Scan:
To confirm the diagnosis of osteoporosis if in doubt, to monitor response to treatment in certain cases and to guide change in treatment if patient sustains a fracture on treatment.

### Who to Consider Scanning:

#### A. Men and Women (< 75 yrs old)

1. Major risk factors:
   - History of low trauma (ie low impact / fragility) fracture of peripheral site or vertebra or vertebral deformity
   - Frequent falls or previous falls
   - Planned long term (> 3 months) oral steroid use (Prednisolone 5mg or > or equivalent inhaled dose)

2. Other risk factors:
   - Maternal hip fracture < 75 years
   - Premature menopause < 45 years
   - Chronic inflammatory joint / spine disease
   - Chronic inflammatory bowel disease
   - History of prolonged immobility
   - Osteopenia on thoracic / lumbar spine X-ray
   - Primary hypogonadism
   - Thyrotoxicosis
   - Cushing’s syndrome
   - Primary hyperparathyroidism
   - Anorexia nervosa
   - Amenorrhoea > 6 months
   - Low BMI <19kg/m²
   - Alcoholism > 3units a day
   - Post transplantation
   - Chronic liver disease

#### B. Miscellaneous

- Women on Aromatase Inhibitors
- Men with prostate Ca and Androgen depletion therapy

### Treatment:

#### A. Lifestyle Measures for all Patients

- Weight bearing exercise
- Adequate Calcium and Vitamin D
- Assess falls risk
- Physiotherapy
- Stop smoking
- Reduce alcohol intake if indicated

#### C. For elderly patients over 75

- Treatment for secondary prevention can begin and be continued without a DEXA scan, however it may be useful to have one as a baseline
- In over 85s there is no standardised BMD data so routine scanning may not be helpful but again think of the individual case as a baseline may be helpful
- Ensure patients’ mobility is adequate

#### D. Repeating DEXA Scan

1. Controversial, generally not necessary but if necessary do in 2 or 3 years or longer
2. If patient fractures after 1 year of adequate treatment
3. May improve compliance
4. If baseline T-score or Z-score very low < -3.5

#### E. WHO Criteria for Interpreting DEXA Results:

- T score at or above -1 = normal BMD
- T score -1 to -2.5 = osteopenia
- T score < -2.5 = osteoporosis

**NB:** The DEXA report contains advice for treatment from the National Osteoporosis Foundation (NOF), this is an American Guideline and should be ignored. For advice on treatment see next table as well as the following:

#### D. T score -1 to -2.5, advise lifestyle measures & adequate dietary calcium and Vitamin D (if on long term steroids then treat with specific osteoporosis drugs at T score -1.5 or lower).

#### E. T score < -2.5, treat with specific osteoporosis drugs, calcium and vitamin D

### Additional Investigations to Exclude Causes for Secondary Osteoporosis and Other Metabolic Bone Disease (if indicated):

- FBC, ESR, calcium, phosphate, alkaline phosphatase, Vitamin D,
- PTH
- LFTs
- U&Es, creatinine
- FSH/LH
- TSH
- Serum testosterone
- PSA in men with osteoporotic fractures
- Serum protein electrophoresis and urine Bence Jones protein
- Menopausal screen in peri-menopausal women
- X-ray lateral views of L and T spine
B. General Points:
1. Start treatment 6 to 8 weeks after a low impact fracture (to allow healing) provided no contraindication and regardless of whether or not a DEXA scan is to be performed
2. In cases of secondary osteoporosis, treat the cause or consider specialist referral as well as treating with osteoporosis drugs
3. For corticosteroid induced osteoporosis (see RCP guidelines)
   First line treatment:
   - If post-menopausal:
     Bisphosphonates (po or iv if po contraindicated or patient intolerant or unable to comply with instructions) for as long as high dose steroids used
   - If pre-menopausal consider treatment if T-score -1.5 or lower or previous fractures
4. Men
   - No consensus guidelines for treatment. Osteoporosis in men is usually due to a secondary cause rather than age related, consider specialist secondary care referral
5. Note a T score of > -2.5 does not exclude osteoporosis as fractures can occur above this level and treatment may need to be considered

6. When to consider referral to secondary care:
   - Diagnostic or treatment uncertainty
   - Intolerance or poor compliance to oral osteoporosis treatments
   - Recurrent fractures in spite of treatment
   - Severe osteoporosis, T score > 4
   - Other metabolic bone disorder
   - Osteoporosis in men

SPECIFIC DRUGS (see formulary for doses, precautions and contraindications)

1. Calcium & Vitamin D
   - Elderly house-bound or institutionalised
   - All patients on steroids, unless calcium and vitamin D replete
   - All patients with osteoporosis, unless calcium and Vit D replete
2. Bisphosphonates, first line po or iv
   - Can be used for 5 – 7 years
   - Evidence for vertebral and non-vertebral fractures, secondary prevention in corticosteroid induced osteoporosis
3. Strontium, po
   - Evidence for vertebral and non-vertebral fractures
   - NB DEXA scan results have to be modified as false high BMD values due to high atomic value of Strontium
4. Raloxifene, po
   - Evidence for vertebral fracture. Use if intolerant of (2) or (3) or failure (ie fractures or BMD falls significantly below baseline) after 1 year of treatment with (2) or (3)
5. Teriparatide, sc injection
   - For secondary prevention in women over 65 who fracture in spite of adequate treatment with (2, 3 or 4) for 1 year or more or if intolerant of (2,3or4) and who have a very low BMD of -3.5 or more
   - Obtain secondary care advice
   - Evidence for vertebral and non-vertebral fractures
6. HRT
   - Best used at the menopause and in patients with significant menopausal symptoms
   - Note precautions, contraindications, need for regular monitoring and duration of treatment
   - Evidence for fracture reduction at all sites

- In people over 75 years for secondary prevention a DEXA scan is not essential but would be useful as a baseline if a fracture is subsequently sustained on treatment, so a DEXA scan should be considered on an individual basis. For women on aromatase inhibitors consider advice from Rheumatologists or Breast Surgeons.
- This guideline does not cover the management of acute vertebral fractures, for these cases consider advice from Rheumatologists.
Falls and Osteoporosis Integrated Care Pathway

Risk Factors for Recurrent Falls?
- Medication?
- Sedation?
- Alcohol?
- Vision?
- Hearing?
- Poor gait/unsteady?
- Poor foot health?
- Unsafe environment?
- Confusion?
- Postural hypotension?

Who to refer to
- Doctor
- Doctor/nurse
- Optometrist
- Audiology
- Physio
- Foot health
- Ot
- Doctor/nurse

---

APPENDIX 5

FALLS PATHWAY

1. Acutely unwell? Y
   - Unwell as cause of fall?
     - Y
     - Treat and/or refer e.g. GP/A&E/OT/PT
     - Unwell as consequence of fall?
       - N
       - First fall?
         - N
         - Risk factors for recurrence? See insert *
         - Yes
         - Assess risk factors for recurrence? See insert *
         - Yes
         - Manage in primary care – GP/OT/PT/chiro/foot health/PPNT/Etc
         - Stop falls
         - Syncope recognised?
           - Y
           - Clear need cardiology or neurology?
             - Y
             - Referral cardiology or neurology?
               - Y
               - Unrecognised syncope may exist
               - N
               - Refer falls clinic Homerton
         - N
         - Do the risk factors adequately explain the falls?
           - Y
           - Refer falls clinic
           - N
           - Remember osteoporosis and pendant alarms
         - N
         - Advise return if recurs

2. N
   - Acute cause of fall?
     - N
     - Unwell as consequence of fall?
       - Y
       - Treat and/or refer e.g. GP/A&E/OT/PT
       - N
       - First fall?
         - N
         - Risk factors for recurrence? See insert *
         - Yes
         - Assess risk factors for recurrence? See insert *
         - Yes
         - Manage in primary care – GP/OT/PT/chiro/foot health/PPNT/Etc
         - Stop falls
         - Syncope recognised?
           - Y
           - Clear need cardiology or neurology?
             - Y
             - Referral cardiology or neurology?
               - Y
               - Unrecognised syncope may exist
               - N
               - Refer falls clinic Homerton
         - N
         - Do the risk factors adequately explain the falls?
           - Y
           - Refer falls clinic
           - N
           - Remember osteoporosis and pendant alarms
         - N
         - Advise return if recurs

---

Falls and Osteoporosis Integrated Care Pathway
APPENDIX 6
FALLS AND OSTEOPOROSIS INTEGRATED CARE PATHWAY

INTERVENTION FOR PATIENTS WHO HAVE FALLEN OR AT RISK OF FALLING

COMMUNITY THERAPY TEAMS
(Clinical rehabilitation required)

1. URGENT ASSESSMENT

FIRST RESPONSE DUTY TEAM: (Homerton Hospital - 020 8510 7545)
- A & E assessment to facilitate safe discharge home
- Urgent community referrals to prevent hospital admission
- Risk reduction via advice, immediate therapeutic input and urgent equipment provision/minor adaptations
- Referral to specialised medical teams for investigations or therapy teams for ongoing rehab
- URGENT care packages provision (please note for non-urgent care packages, please refer to ACCESS team on 020 8356 6262)

2. ASSESSMENT AND REHABILITATION

ADULT COMMUNITY REHAB TEAM: (St. Leonards – 020 7683 4382)
- Primary care rehabilitation team
- Uni-disciplinary referrals accepted
- Balance group (Weekly, 9 week exercise class; physio + OT led; transport available)

THERAPY AT HOME TEAM: (Homerton Hospital – 020 8510 8964)
- Short term intensive rehabilitation
- Working with clients in their own homes
- Up to 6-12 weeks of multidisciplinary, functional goal orientated rehabilitation
- Clients requiring input from at least 1 discipline and therapy assistant.

BRYNING ASSESSMENT AND REHABILITATION
- Multifactorial Medical, Nursing and Therapy assessment within the Falls Clinic
- Full medical assessment of cardiovascular risk factors and referral to syncope clinic as required
- OT Home Hazard Assessment and Intervention
- Falls Group (Twice weekly, 8 week exercise and education programme, transport available)

3. TERTIARY REHABILITATION IN THE VOLUNTARY SECTOR

STOP FALLS NETWORK: (Springfield House) phone/fax 020 7254 3910
- Falls prevention classes with qualified Postural Stability Instructor (upto 24 weeks; no transport available)
- Falls prevention classes for Osteoporosis clients (diagnosis required)
- Home visits to housebound clients to offer exercise (average 6 sessions)
- Home safety check with fitting of small aids
- Access to active lifestyle/seniors classes.

4. OTHER SERVICES

TELECARE: (020 8525 5054)
- Offer information and advice regarding assistive technology to allow clients to remain independent and in their own homes for longer
- Assess and provide appropriate equipment (eg pendant alarm, falls detector etc)
- Depending on clients circumstances, there may be a small charge for services
Local Therapy Guidelines for the Assessment and Management of Falls and Osteoporosis

**Screening**
- All women over 50 and men over 75 coming into contact with a health and social care professional should be screened with the locally developed falls and osteoporosis screening tool.
- The tool should also be used with others presenting with recurrent falls, unsteady on their feet, on long term steroids, history of low impact fractures, residents of nursing or residential homes.
- Simple standardised outcome measures such as the Timed Up and Go and the 180 Degree Turn are useful to use in conjunction with the local screening tool, to identify patients with gait and balance deficits (TUAG > 15 seconds indicates risk of falls, 180 Degree Turn > 4 steps indicates risk of falls).

On screening those presenting with:
- a gait and balance deficit
- have presented for medical attention because of a fall
- fragility fractures
- have had more than 1 fall

should receive a **full multifactorial assessment**

- Those that have had one fall, but present with no gait or balance deficit or other significant risk on the screening tool, may require lifestyle advice only.
- On screening those that present with undiagnosed osteoporosis or unmanaged osteoporosis should be referred to their GP, the Bryning Unit, or to Rheumatology via an Extended Scope Physiotherapist.

**Assessment**
- Patients identified through falls screening require full clinical assessment of:
  - Gait, balance, mobility and function
  - Vestibular assessment where indicated
  - Neurological examination, Lower limb strength and joint function
  - Medications, cardiovascular risk factors, continence, memory, cognition, visual acuity
  - Home hazards, foot health and footwear
  - Fear of falling
  - Telecare and Social Services need

- If a full therapy assessment cannot be carried out completely in your work setting please refer onto the appropriate service for further therapy assessment i.e. Therapy at Home Team or Adult Community Rehabilitation Team.

- Therapy assessment is standardised in line with national guidelines with the use of:
  - Community Falls Assessment form
  - Agreed modified forms that cover the same content as the above

- When the patient has had a full therapy assessment the multifactorial assessment can be completed by referring to the GP and other relevant services indicated in the Falls and Osteoporosis Integrated Care Pathway.

- Those with **multiple risk factors or unexplained falls** should be referred to the **Falls Clinic** at the Bryning Unit.
- **Therapy Interventions for Falls**
  - Strength and Balance Re-training
  - Functional Rehabilitation
  - Vestibular Rehabilitation (as appropriate)
  - Walking aid provision and gait re-education
  - Home Environment Modification/enabling equipment
  - Fear of falling management
  - Management of long lie and getting up from the floor
  - Education and provision of written information

- **Strength and Balance Re-training**
  - An individualised treatment programme should be initiated in a rehabilitation setting *(Stage 1)*
  - **All consenting patients** who can appropriately participate should then be referred on to a Standardised Evidence Based Programme. These are delivered in either a group and 1:1 setting and include the following:
    - Falls group Bryning Assessment and Rehabilitation Unit *(Stage 2)*
    - Balance group (ACRT): Britannia Leisure centre *(Stage 2)*
    - Postural Stability classes (PSI)- Stop Falls Network *(Stage 3)*
    - OTAGO home based exercise programme (1:1)- Stop Falls Network *(Stage 3)*
  - Patients needing support from therapists to participate would need to enter a *Stage 2* programme, and then ideally be referred onto a *Stage 3* programme. Other patients may be appropriate to enter straight in at *Stage 3*, or may not progress linearly through all stages. Please refer to the Exercise Strategy for Hackney for further detail.

- **Physiotherapy management of Osteoporosis**
  - Patients should be individually assessed and treated according to the clinical stage of Osteoporosis as listed below:
    - Those with normal bone mass or with mild bone changes (osteopenia).
    - People with a clinical diagnosis of osteoporosis without any history of fracture.
    - A frailer group with advanced bone changes usually having sustained a fracture.
  - Factors to consider in management may include:
    - Spinal mobility, strength and endurance, aerobic capacity, balance, function and pain
    - Health promotion
    - Referrals as per the falls and osteoporosis integrated care pathway
  - Precautions in the management of this patient group include:
    - Consideration when recommending high impact exercise
    - In patients with diagnosed osteoporosis precaution with trunk flexion, rotational movement with loading, and lifting
## APPENDIX 8  Exercise Strategy for Hackney for clients with Balance problems

<table>
<thead>
<tr>
<th>Client</th>
<th>No/Mild balance impairment</th>
<th>Moderate balance impairment (able to stand unsupported for 30s with eyes open)</th>
<th>Significant balance impairment (unable to stand unsupported for 30s with eyes open unaided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs support/unable to participate independently (poor cognition/motivation)</td>
<td></td>
<td>Falls group (Homerton) or Balance Group (ACRT) Stage 2</td>
<td>Individual strength and balance training with ACRT or T@HT Stage 1</td>
</tr>
<tr>
<td></td>
<td>• Consider referral to Day Centre for exercise in supported environment</td>
<td>• Individual strength and balance training with ACRT or T@HT Stage 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Community exercise groups (general)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent/Able to participate independently (cognitively able/motivated)</td>
<td>Advice and recommendations for exercise outside of healthcare setting:</td>
<td>Falls group (Homerton) or Balance Group (ACRT) Stage 2</td>
<td>Individual strength and balance training with ACRT or T@HT Stage 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Postural Stability Instructor Classes (Stop Falls Network) Stage 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Otago based home exercise programme (Stop Falls Network) Stage 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Community exercise groups (general)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ‘Healthwise’ exercise on referral</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Walking groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tai Chi</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sharp End**, Dalston Methodist Church, 11 Richmond Road, E8 3HY: Yoga, Tai Chi, Chair based exercise, house bound exercise **020 7923 9031**

**Stop Falls Network**: 96-102 Springfield House, 5 Tyssen Street, E8 2LZ: PSI classes, Otago Home Exercise **020 7254 3910**

**Hoxton Health**: Ground floor B Block, St Leonards, Nuttall Street, N1 5LZ: Chair based exercise **020 7739 2533**

**Healthwise**: Direct or via GP. Exercise on Prescription/drop in groups: Britannia Leisure centre, 40 Hyde road, N1 5JU: **020 7749 76**
Equalities Impact Assessment
This checklist should be completed for all new Corporate Policies and procedures to understand their potential impact on equalities and assure equality in service delivery and employment.

<table>
<thead>
<tr>
<th>Policy/Service Name:</th>
<th>Falls and Osteoporosis Integrated Care Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author:</td>
<td>Dr D Dasgupta, Dr B Hameed, Ms Ailsa Howitt, Ms A McCartney, Ms J De Silva</td>
</tr>
<tr>
<td>Role:</td>
<td>Consultants and Lead Therapists</td>
</tr>
<tr>
<td>Directorate:</td>
<td>Integrated Medicine and Rehabilitation Services</td>
</tr>
<tr>
<td>Date</td>
<td>10/7/12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equalities Impact Assessment Question</th>
<th>Yes</th>
<th>No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How does the attached policy/service fit into the trusts overall aims?</td>
<td></td>
<td></td>
<td>Meeting standards set out in NICE and RCP guidance</td>
</tr>
<tr>
<td>2. How will the policy/service be implemented?</td>
<td></td>
<td></td>
<td>Local training</td>
</tr>
<tr>
<td>3. What outcomes are intended by implementing the policy/delivering the service?</td>
<td></td>
<td></td>
<td>Quality care for at risk patients, reduced falls and fragility fractures in Hackney</td>
</tr>
<tr>
<td>4. How will the above outcomes be measured?</td>
<td></td>
<td></td>
<td>Local audit</td>
</tr>
<tr>
<td>5. Who are they key stakeholders in respect of this policy/service and how have they been involved?</td>
<td></td>
<td></td>
<td>See policy</td>
</tr>
<tr>
<td>6. Does this policy/service impact on other policies or services and is that impact understood?</td>
<td>Yes</td>
<td></td>
<td>Inpatient falls policy Adult osteoporosis policy</td>
</tr>
<tr>
<td>7. Does this policy/service impact on other agencies and is that impact understood?</td>
<td>Yes</td>
<td></td>
<td>Social services</td>
</tr>
<tr>
<td>8. Is there any data on the policy or service that will help inform the EqIA?</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>9. Are there information gaps, and how will they be addressed/what additional information is required?</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Equalities Impact Assessment Question</td>
<td>Yes</td>
<td>No</td>
<td>Comment</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>---------</td>
</tr>
<tr>
<td>10. Does the policy or service development have an adverse impact on any particular group?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Could the way the policy is carried out have an adverse impact on equality of opportunity or good relations between different groups?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Where an adverse impact has been identified can changes be made to minimise it?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Is the policy directly or indirectly discriminatory, and can the latter be justified?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Is the policy intended to increase equality of opportunity by permitting Positive Action or Reasonable Adjustment? If so is this lawful?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EQUALITIES IMPACT ASSESSMENT FOR POLICIES AND PROCEDURES**

2. If any of the questions are answered ‘yes’, then the proposed policy is likely to be relevant to the Trust’s responsibilities under the equalities duties. Please provide the ratifying committee with information on why ‘yes’ answers were given and whether or not this is justifiable for clinical reasons. The author should consult with the Director of HR & Environment to develop a more detailed assessment of the Policy’s impact and, where appropriate, design monitoring and reporting systems if there is any uncertainty.

3. A copy of the completed form should be submitted to the ratifying committee when submitting the document for ratification. The Committee will inform you if they perceive the Impact to be sufficient that a more detailed assessment is required. In this instance, the result of this impact assessment and any further work should be summarised in the body of the Policy and support will be given to ensure that the policy promotes equality.
### Policy Submission Form

To be completed and attached to any policy or procedure submitted to the Trust Policy Group

<table>
<thead>
<tr>
<th></th>
<th>Details of policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Title of Policy:</td>
</tr>
<tr>
<td>1.2</td>
<td>Lead Executive Director</td>
</tr>
<tr>
<td>1.3</td>
<td>Author/Title</td>
</tr>
<tr>
<td>1.4</td>
<td>Lead Sub Committee</td>
</tr>
<tr>
<td>1.5</td>
<td>Reason for Policy</td>
</tr>
<tr>
<td>1.6</td>
<td>Who does policy affect?</td>
</tr>
<tr>
<td>1.7</td>
<td>Are national guidelines/codes of practice incorporated?</td>
</tr>
<tr>
<td>1.8</td>
<td>Has an Equality Impact Assessment been carried out?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Information Collation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Where was Policy information obtained from?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Policy Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Is there a requirement for a new or revised management structure if the policy is implemented?</td>
</tr>
<tr>
<td>3.2</td>
<td>If YES attach a copy to this form</td>
</tr>
<tr>
<td>3.3</td>
<td>If NO explain why</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Consultation Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Was there internal/external consultation?</td>
</tr>
<tr>
<td>4.2</td>
<td>List groups/Persons involved</td>
</tr>
<tr>
<td>4.3</td>
<td>Have internal/external comments been duly considered?</td>
</tr>
<tr>
<td>4.4</td>
<td>Date approved by relevant Sub-committee</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>4.5</td>
<td>Signature of Sub committee chair</td>
</tr>
</tbody>
</table>

### Implementation

<table>
<thead>
<tr>
<th>5.1</th>
<th>How and to whom will the policy be distributed?</th>
<th>Intranet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>If there are implementation requirements such as training please detail?</td>
<td>Local departmental staff training</td>
</tr>
<tr>
<td>5.3</td>
<td>What is the cost of implementation and how will this be funded?</td>
<td>No</td>
</tr>
</tbody>
</table>

### Monitoring

<table>
<thead>
<tr>
<th>6.1</th>
<th>List the key performance indicators e.g. core standards</th>
<th>See policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>How will this be monitored and/or audited?</td>
<td>See policy</td>
</tr>
<tr>
<td>6.3</td>
<td>Frequency of monitoring/audit</td>
<td>Yearly</td>
</tr>
</tbody>
</table>

Date policy approved by Trust Policy Group:

\[24/9/2012\]

Signature of Trust Board Group chair: