

Next Steps

Edinburgh, 2007

The role of a UK National Hip Fracture Database in improving clinical care

David Marsh

Professor of Orthopaedics, University College London

Royal National Orthopaedic Hospital, Stanmore, UK

Ambassador for the Bone and Joint Decade

The NHFD Project

- jointly led by BOA and BGS

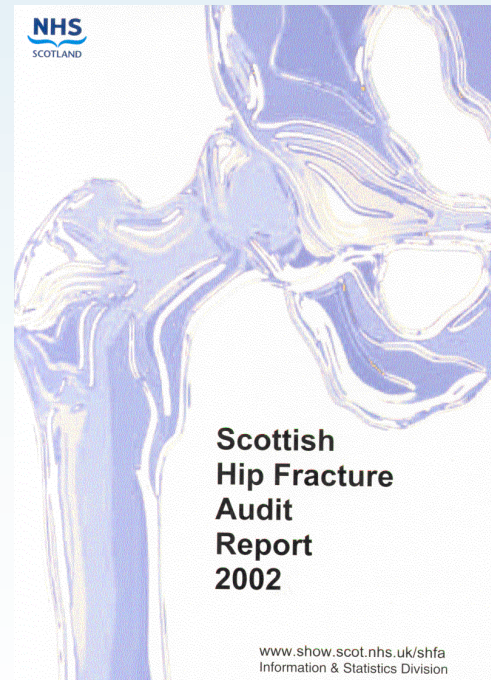
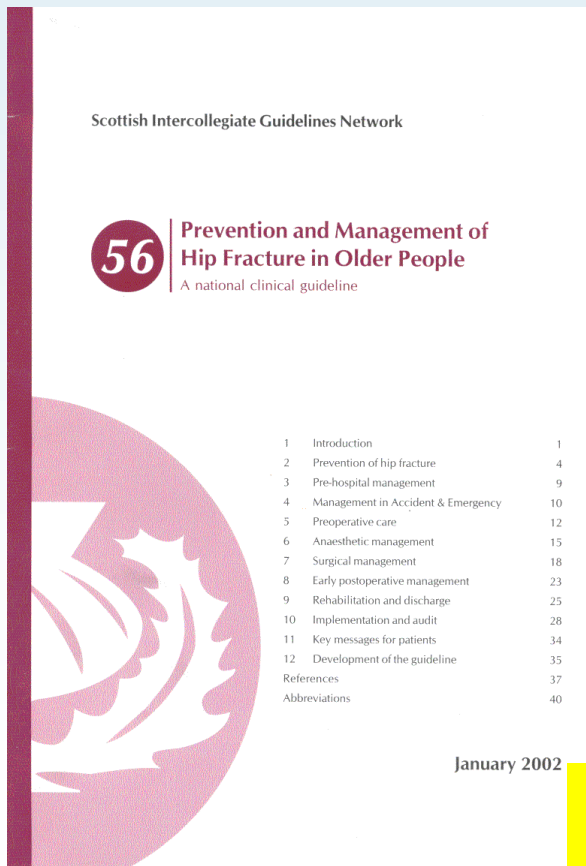
Memorandum of
understanding

- Take the established continuous hip fracture audits in Scotland, Northern Ireland, Cardiff, Nottingham, Oxford etc
- Combine them into a national database
- Invite new fracture units to contribute via the web, aiming eventually to include every UK fracture unit
- Linkage to ONS, pharmacy database etc
- Establish a professional steering group to manage analysis of, and access to the data
- Feed back to units their performance compared to national

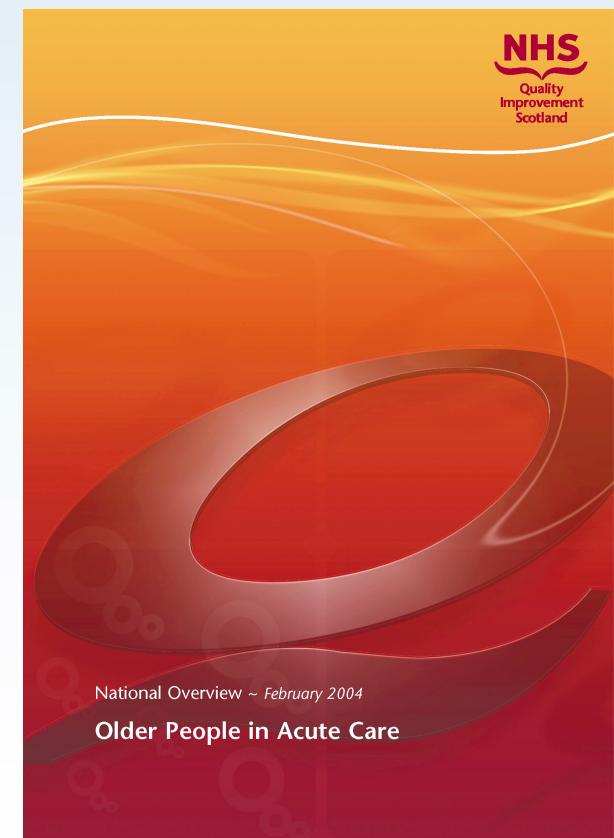
NHFD – What's the point?

- To change the behaviour of doctors and other health workers who look after patients with fragility fractures
- To change the attitude of healthcare commissioners to musculoskeletal medicine

Guidelines to standards



Imitation is the sincerest form of flattery



Things the SHFA has taught UK orthopaedics about fragility fractures

- Orthopaedic/geriatric collaboration is powerful
- Hip fracture is a good tracer condition
- Systematic process and outcome data is not a threat to fracture units
- Ongoing hip audit leads to incremental improvement in standards
- ... and keeps fragility fractures, orthopaedics and old people's services high on the agenda

This is needed everywhere

Two great things that have come out of Scotland

- The SHFA
- The Fracture Liaison Service model for secondary prevention

The NHFD aims to apply both to the whole UK

Fracture epidemiology Edinburgh Trauma Unit

- Analysis of year 2000
- Adults (12 years and over)
 - 534,715 people
 - 5953 fractures
- All reviewed at fracture clinics or admitted
- Diagnosis made from x-ray review
- Analysis of incidence by age

Osteoporotic fractures

- Proximal humerus
- Distal humerus
- Olecranon
- Proximal radius and ulna
- Distal radius
- Proximal femur
- Subtrochanteric femur
- Femoral diaphysis
- Distal femur
- Bimalleolar ankle
- Trimalleolar ankle
- Thoracolumbar vertebrae
- Pelvis
- Multiple injuries

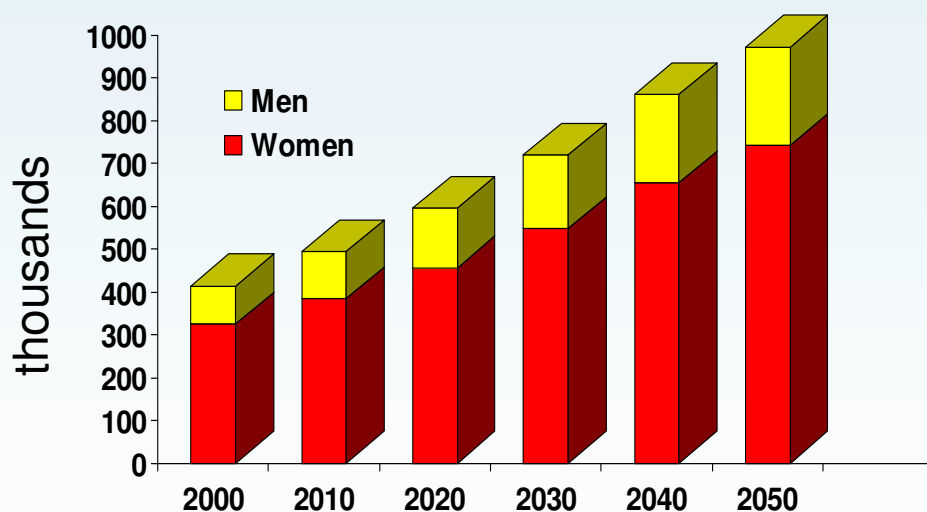
Osteoporotic fractures

- 52.1% of all fractures
- 30.1% of fractures in males
- 66.3% of fractures in females
- 34.7% of outpatient fractures
- 70.4% of inpatient fractures

Why focus on hip fracture?

Hip Fracture Incidence

Forecast in European Community



European Commission, 1998

~20% excess mortality at 1 yr
 25% never get back to own home
 80% elderly women would rather die than have a hip fracture

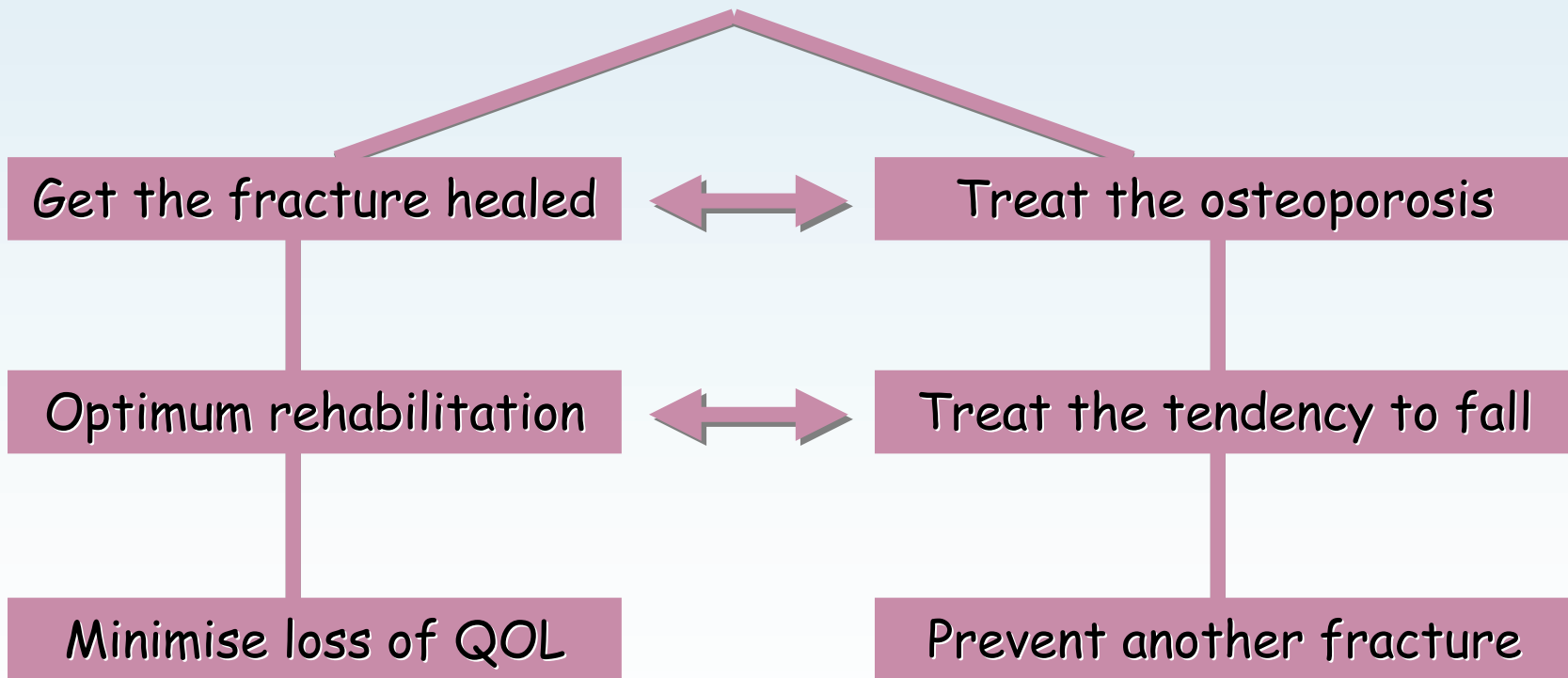
Tests the whole system:

Orthopaedics

Geriatrics

Social services

Our goals



The main point

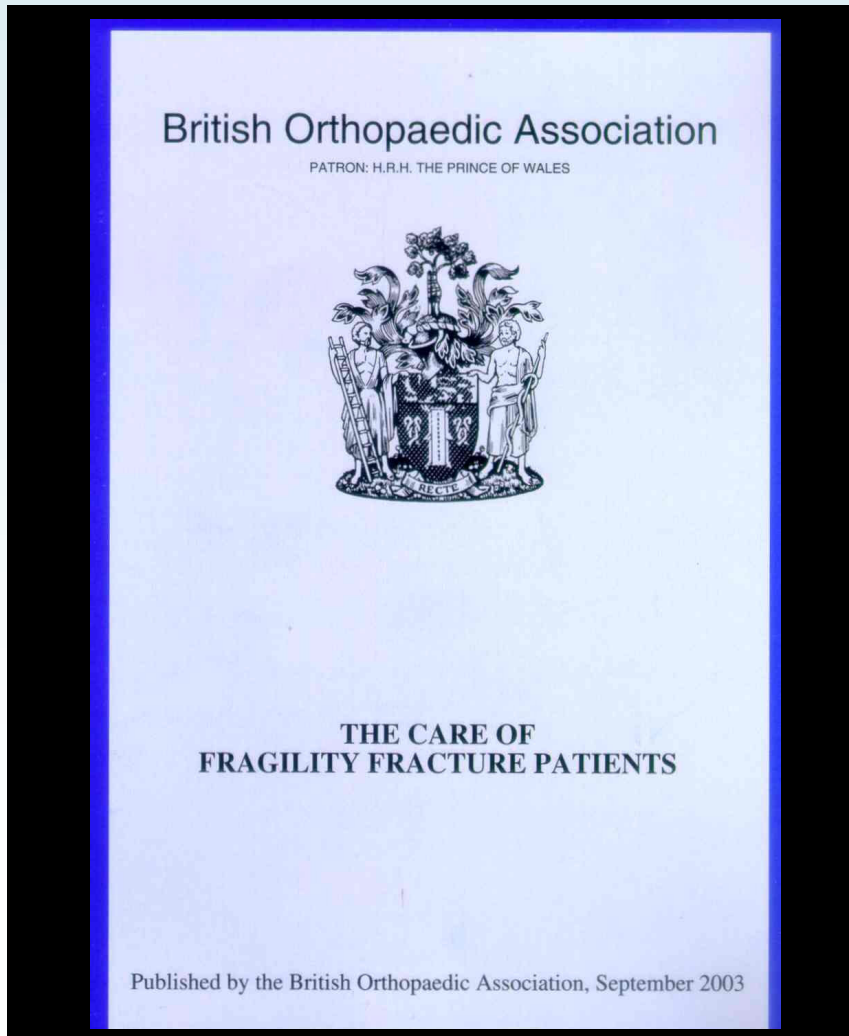
We need to develop a multidisciplinary, integrated model for management of a multi-faceted chronic disease which will affect many years of a patient's life

- Integration of treatment and prevention (of fractures)
- Integration of falls prevention and bone health
- Integration of primary and secondary care roles
- Full use of the skills and insights from all professions working in the fields of
 - Orthopaedics
 - Geriatric medicine
 - Rheumatology, metabolic medicine etc
 - Primary care

Changing behaviour

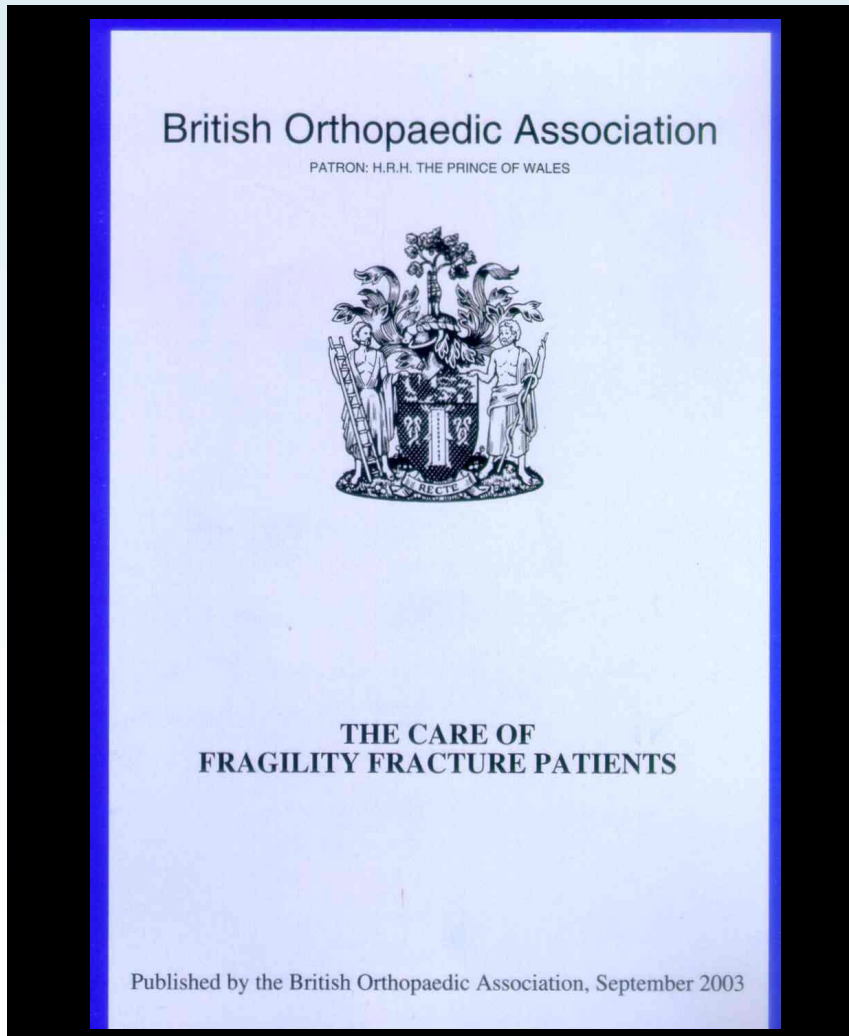
- NHFD will raise awareness
- Blue Book will give guidance

First edition, 2003



- The challenge we face
 - Orthogeriatric support
 - Rehabilitation systems
 - Secondary prevention
 - Surgical treatment
 - Information and audit
-
- Italian Blue Book
 - German Weissbuch

The two main messages

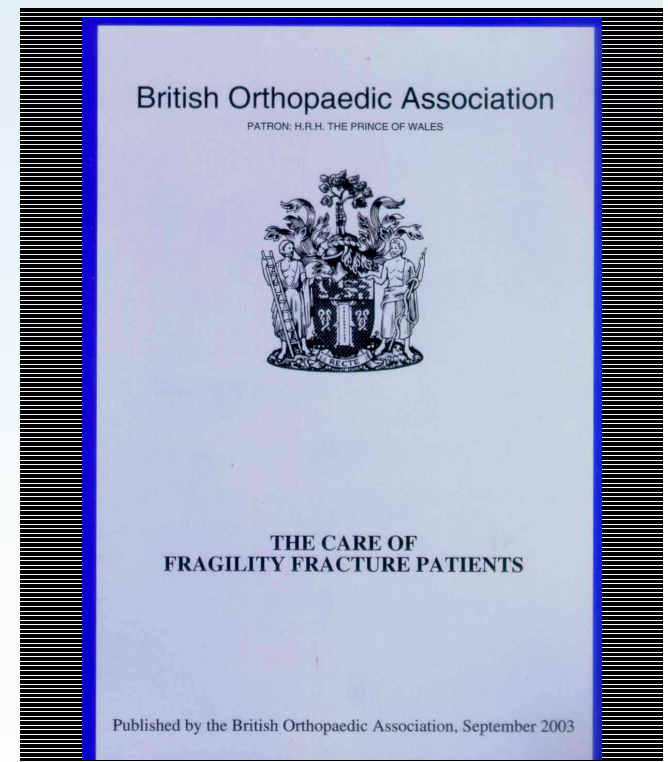


- Orthogeriatrics
- Secondary prevention

Acute medical management of fracture patients

- Slow but steady rise in age of
 - The whole population
 - Patients with hip fractures
- Comorbidity the rule

The days of entrusting complex medical management to inexperienced and overburdened orthopaedic trainees must be ended.



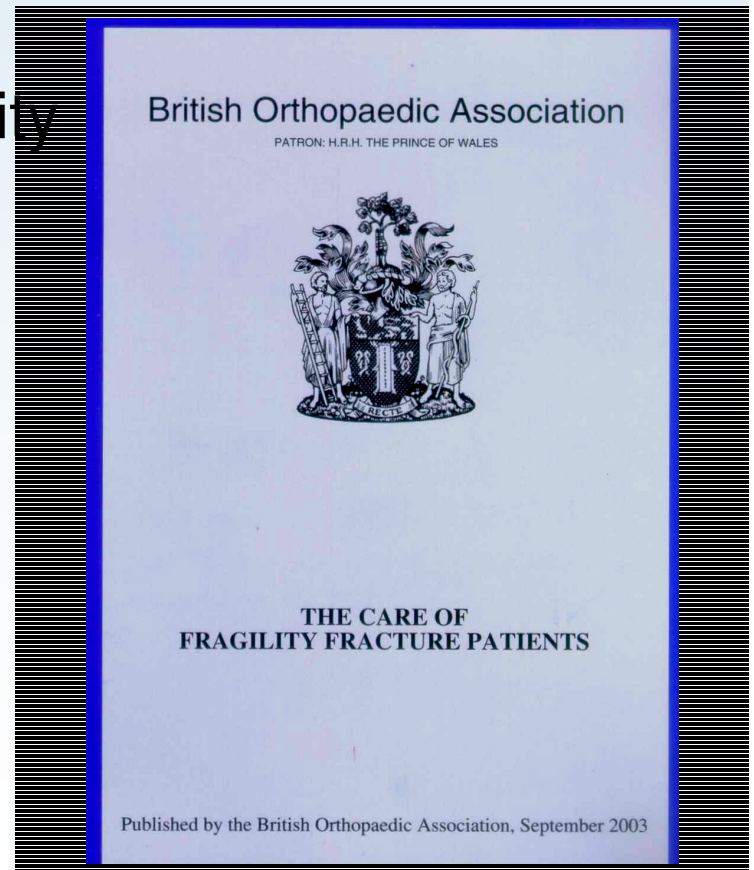
Every fracture unit should include orthogeriatric staff

Secondary prevention

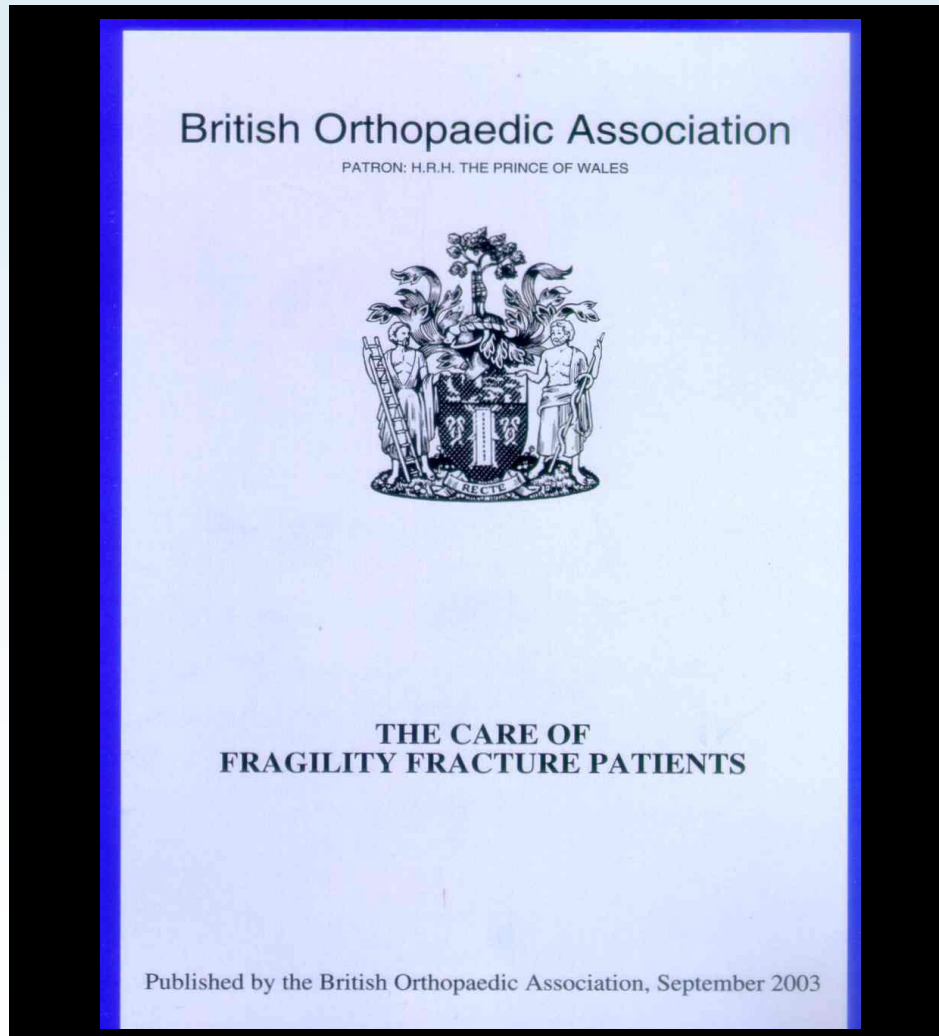
- The most powerful predictor of a fragility fracture is having had one already
 - Osteoporosis
 - Tendency to fall

Our response to a fragility fracture must include a determined attempt to prevent another one in the future.

Every fracture unit needs a Fracture Liaison Service



Second edition, 2007



Authoring group

- Orthopaedics
 - Geriatrics
 - NOS
 - Primary care
 - Anaesthesia
 - Nurses
- Release to coincide with NHFD launch -June 2007
 - Future editions will be web-based

Analogy between MI and hip fracture

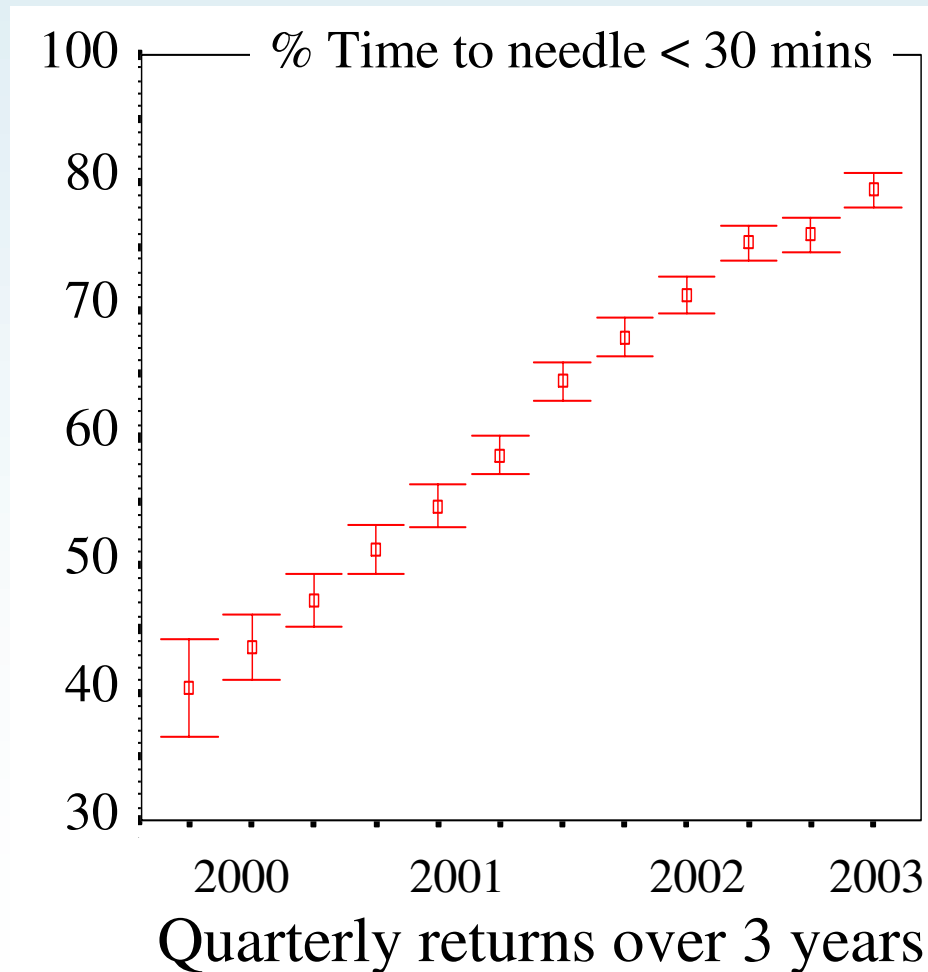
- Both life-threatening, sentinel events carrying a secondary prevention implication
- Acute issues: time to thrombolysis needle, time to op
- Follow-on issues: rehabilitation and secondary prevention
- MI and hip fracture incidence easy to measure
 - ‘cardiovascular health’ or ‘falls’ hard to measure

MINAP

Myocardial Infarction National Audit Project

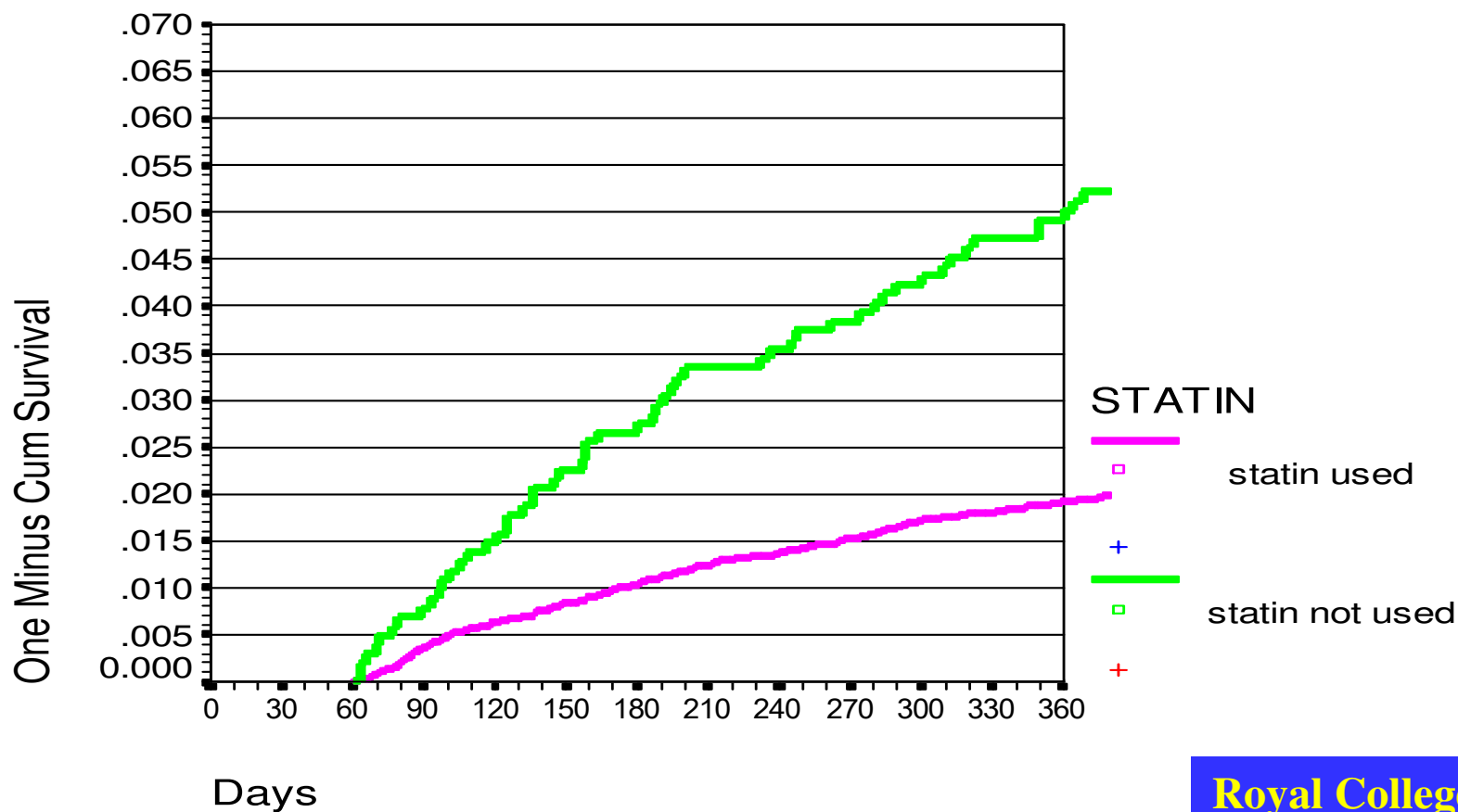
- Royal College of Physicians
 - Clinical Effectiveness Unit
- Web-based entry of simple data from all CCUs
 - Record linkage to national datasets eg ONS (mortality)
- Database centrally funded, voluntary local data entry
- Powerful data to argue for investment in the service, policy change etc

Feedback drives improvement in time-to-needle



Deaths following MI

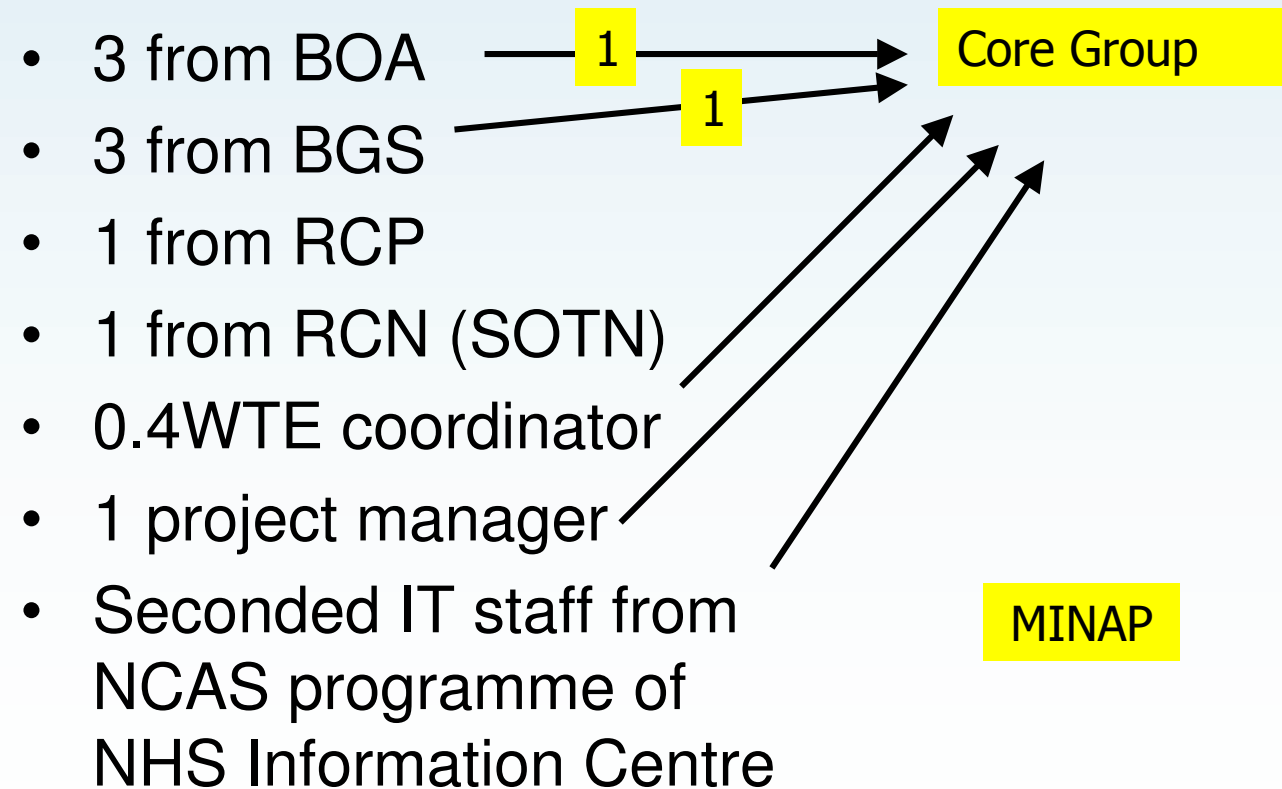
KM analysis from 60 days



NHFD – main tasks

- Establish the national database
 - Standard dataset
 - Populate by uploads from local audits
 - Professional steering group to oversee analysis and dissemination
- Roll-out to fracture units currently without hip audit.
Need local packages of:
 - Web-based input mechanism or compatible local audit software
 - Specialist nurses or other staff combining local roles:
 - Smoother management of hip and other elderly fractures
 - Secondary prevention
 - Collection of NHFD data

NHFD Exec



Funding

- £300k assembled from a consortium of industrial partners
 - ABPI and ABHI
 - Feed back to them on 19th July
- Data collection by local staff
 - Research nurses or clerical staff
 - Trauma nurse coordinators
 - Fracture liaison nurses
- Long term funding from DoH
 - Challenge to demonstrate value of data

Launch

- BOA meeting in Manchester, Sep 07
 - Three years on
- Meetings of BGS, SOTN, NOS and others
- NHFD leaflet

NATIONAL HIP FRACTURE DATABASE

Minimum data set

Day 0 - admission data

- 1 Age and sex
- 2 Fracture type
- 3 ASA grade
- 4 Mobility score
- 5 Residence score

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Process data

- 6 Time to acute orthopaedic ward
- 7 Time to theatre
- 8 Operation type
- 9 Specialist review in respect of 2⁰ prevention

Day 30 - status data

- 10 Residence score plus mortality
- 11 Date of death or discharge

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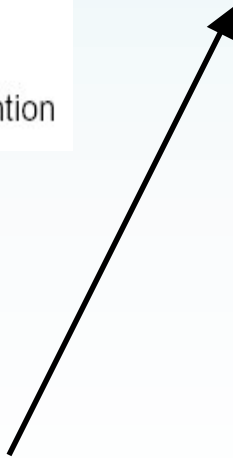
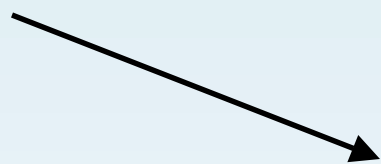
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Central
data
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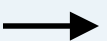
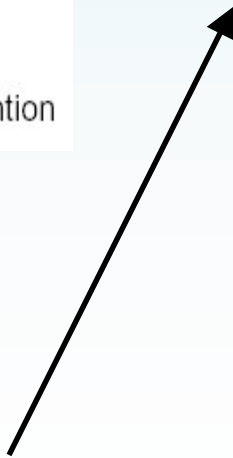
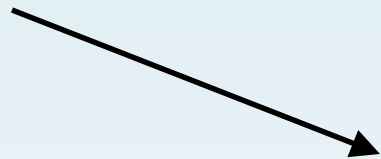
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Minimum data set

Central
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Output

- Casemix adjusted 30 day mortality
- Casemix adjusted 30 day return home
- Delay in transfer to trauma ward
- Delay in operation
- Rates of different operations
- Rates of 2⁰ prevention provision



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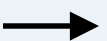
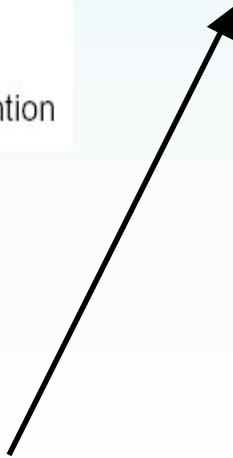
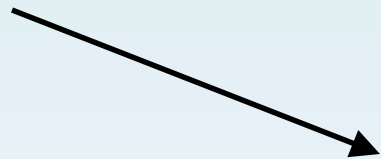
Optional additional fields

Extended datasets for:

- casemix
- care pathway
- surgical care
- 2⁰ prevention

Outcome data at:

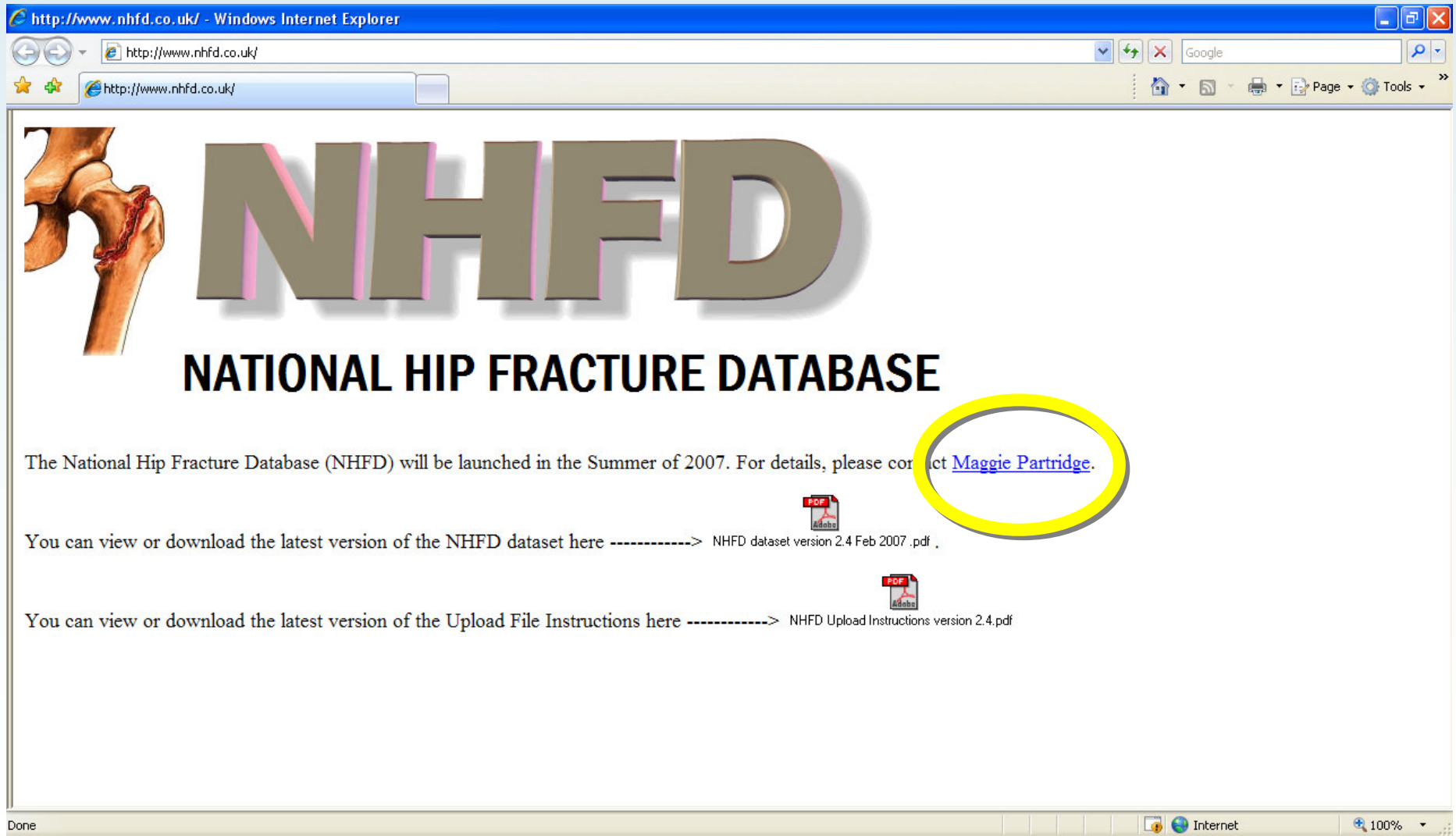
- 120 days
- 365 days
- Facilities audit



Research potential of a London Hip Fracture Network


- 15,000 hip fractures per year within the M25
- The network that runs the NHFD could independently address treatment hypotheses, eg:
does earlier administration of anti-OP drugs lead to
 - Better fracture healing
 - Better prosthesis integration
 - Reduced disuse osteoporosis
 - Better long-term compliance
 - Better QOL outcome
- Link with International Hip Fracture Research Collaborative
 - Evidence base for surgical questions: eg intracapsular dilemmas

www.nhfd.co.uk




http://www.nhfd.co.uk/ - Windows Internet Explorer


http://www.nhfd.co.uk/

 **NHFD**

NATIONAL HIP FRACTURE DATABASE

The National Hip Fracture Database (NHFD) will be launched in the Summer of 2007. For details, please contact [Maggie Partridge](#).

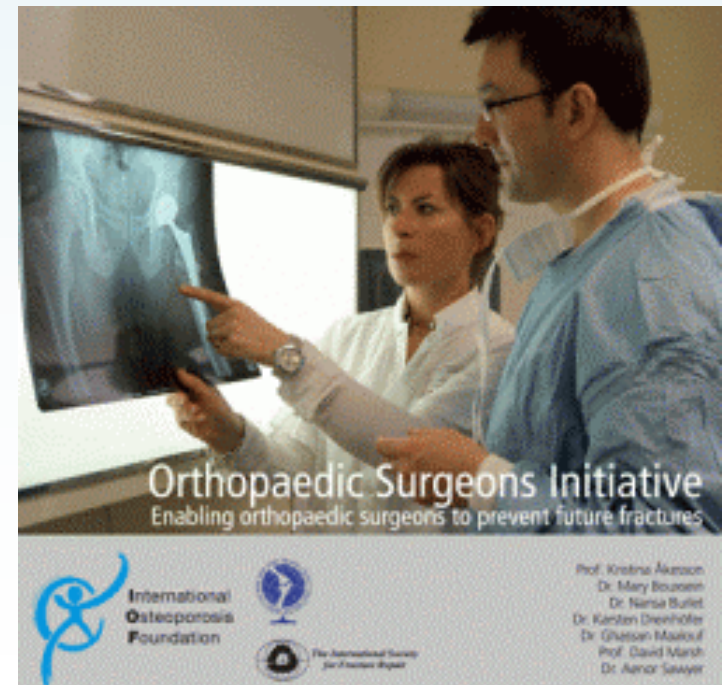
You can view or download the latest version of the NHFD dataset here ----->  NHFD dataset version 2.4 Feb 2007 .pdf

You can view or download the latest version of the Upload File Instructions here ----->  NHFD Upload Instructions version 2.4.pdf

Done Internet 100%

CD-ROM resource for orthopaedic surgeons interested in osteoporosis and fragility fracture treatment

- Jointly produced by
 - International Osteoporosis Foundation
 - International Society for Fracture Repair
 - Bone and Joint Decade
- Osteoporosis and fractures:
The size of the problem
- Pathogenesis of fragility fractures:
A biomechanical view
- Challenges of fragility fracture treatment
- Clinical pathways for secondary prevention
- Available from Maggie at this meeting



Summary

- Patients need an interdisciplinary, chronic disease-model
 - involving primary and secondary care, surgeons and physicians
 - integrating prevention and treatment of fractures
 - monitoring quality
- In UK, an orthogeriatric-based NHFD is the best way to
 - Raise consciousness and change behaviour
 - Encourage the spread of FLS and orthogeriatrics
 - Monitor quality, raise standards
 - Raise the political profile of fragility fractures and musculoskeletal medicine generally
- The networks built around NHFD can also be used for much-needed multicentre clinical research