A pragmatic randomised controlled trial of the effectiveness and cost-effectiveness of screening for osteoporosis in older women for the prevention of fractures

Submission date 14/05/2007	Recruitment status No longer recruiting	Prospectively registered		
		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
19/06/2007	Completed	[X] Results		
Last Edited 15/02/2018	Condition category Musculoskeletal Diseases	[] Individual participant data		

Plain English summary of protocol

Background and study aims

Osteoporosis is a condition that weakens the bones, making them fragile and more likely to break (fracture). Osteoporotic fractures – in particular hip fractures – have major adverse effects on quality of life in terms of pain and disability. Around 50% of hip fracture patients lose the ability to live independently and 20% die within a year of their fracture. The aim of this study is to investigate whether a community-based screening programme for osteoporosis reduces the incidence of fractures, and is cost effective, in older women (aged 70 - 85 years).

Who can participate?

Women aged 70 to 85 who are not currently on prescription medication to prevent osteoporotic fractures.

What does the study involve?

Participants are randomly allocated to either the screening group or the control group. Those in the screening group have their risk of fracture calculated using data from a questionnaire and, for some participants, results from a DXA (x-ray) scan. Participants above an age-dependent threshold are recommended for treatment (typically bisphosphonate tablets), and to continue treatment for the duration of the study. The risk of fracture is not calculated for participants in the control group, who receive usual care. Participants are followed-up 6 months later and then annually by postal questionnaires and checking of medical records. The proportion of participants sustaining fractures is measured for each group, along with hip fracture rate. Costeffectiveness is also assessed, as well as the acceptability of the DXA scanning and risk assessment process.

What are the possible benefits and risks of participating?

Participants in the screening group have the opportunity to discuss treatment with their GP that would reduce their fracture risk. In addition, everyone taking part in the study will be helping to determine whether screening would be beneficial in older women. Taking part in this study will

involve some time to complete questionnaires. If a participant in the screening group is invited to have a DXA bone density scan this would involve a single appointment lasting about 15 to 30 minutes with the DXA provider (usually at an NHS hospital trust). The DXA scanner uses much less radiation than a normal x-ray, such as a chest x-ray, and is equivalent to a few days of natural background radiation.

Where is the study run from? University of East Anglia (UK)

When is the study starting and how long is it expected to run for? February 2007 to December 2015

Who is funding the study?

- 1. Medical Research Council (MRC) (UK)
- 2. Arthritis Research Campaign (UK)

Who is the main contact? Prof. Lee Shepstone l.shepstone@uea.ac.uk

Study website

http://www.scoopstudy.ac.uk/

Contact information

Type(s)

Scientific

Contact name

Prof Lee Shepstone

Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

MRC ref: G0601019

Study information

Scientific Title

A pragmatic randomised controlled trial of the effectiveness and cost-effectiveness of Screening for Osteoporosis in Older women for the Prevention of fractures (SCOOP)

Acronym

SCOOP

Study objectives

To investigate whether a community-based screening programme for osteoporosis reduces the incidence of fractures, and is cost effective, in older women (aged 70 - 85 years).

Ethics approval required

Old ethics approval format

Ethics approval(s)

The North West Research Ethics Committee, 20/09/2007

Study design

Two-group pragmatic randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Prevention

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Musculoskeletal Diseases: Osteoporosis

Interventions

Intervention subjects will have a 10-year absolute risk of fracture calculated from a World Health Organization (WHO) risk algorithm based on data from a screening questionnaire and, for some subjects, results from a Dual energy X-ray Absorptiometry (DXA) scan. GPs will be advised of those at high risk and whether to consider treatment.

The control group will have usual care.

Both intervention and control groups will be provided with lifestyle advice through an Arthritis Research Campaign (ARC) booklet on osteoporosis.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

All osteoporosis-related fractures (excluding those of hands, feet, nose and skull), assessed at the annual follow-up visits for 5 years post randomisation.

Secondary outcome measures

- 1. All clinical fractures (including hip fractures)
- 2. Quality of life, assessed by the European Quality of life (EQ-5D) and Short Form 12 (SF-12) questionnaires at baseline (immediately prior to randomisation), 6 and 12 months and then annually for 5 years post randomisation
- 3. Psychological anxiety, assessed by the State-Trait Anxiety Index at baseline, 6 and 12 months and then annually for 5 years post randomisation
- 4. Mortality (assessed annually for 5 years post randomisation)

A process measure will be treatment adherence as ascertained by an ad-hoc questionnaire at follow-up visits.

Overall study start date

01/02/2007

Completion date

30/12/2015

Eligibility

Key inclusion criteria

- 1. Female
- 2. Aged 70 to 85 years
- 3. Able to provide informed consent

Participant type(s)

Patient

Age group

Senior

Sex

Female

Target number of participants

11,580

Key exclusion criteria

- 1. Currently known to be on treatment for osteoporosis (other than calcium and vitamin D)
- 2. Any known co-morbidity that would make entry to the trial inadvisable, in GP's opinion

Date of first enrolment 01/02/2007

Date of final enrolment 01/07/2009

Locations

Countries of recruitment England

United Kingdom

Study participating centre University of East Anglia Norwich United Kingdom NR4 7TJ

Study participating centre University of Birmingham United Kingdom B15 2TH

Study participating centre University of Bristol United Kingdom BS2 8DZ

Study participating centre University of Manchester United Kingdom M13 9PT

Study participating centre

University of SheffieldUnited Kingdom S57 7AU

Study participating centre University of Southampton United Kingdom SO16 6YD

Study participating centre University of York United Kingdom YO10 5DD

Sponsor information

Organisation

University of East Anglia (UK)

Sponsor details

Research Enterprise & Engagement University of East Anglia Norwich England United Kingdom NR4 7TJ

H.Ings@uea.ac.uk

Sponsor type

University/education

ROR

https://ror.org/026k5mg93

Funder(s)

Funder type

Government

Funder Name

Medical Research Council (MRC) (UK)

Alternative Name(s)

Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

Arthritis Research Campaign (UK)

Results and Publications

Publication and dissemination plan

To be confirmed at a later date.

Intention to publish date

Individual participant data (IPD) sharing plan

The trialists plan to make data available on request, subject to terms of data sharing agreement drawn up by University of East Anglia.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>	protocol	01/10/2012		Yes	No
Results article	results	24/02/2018		Yes	No