Osteoporosis
Assessing the risk of fragility fracture
A visual guide to NICE guideline CG146

This infographic covers assessment of fragility fracture risk factors in people aged 18 and over with osteoporosis.

Consider assessment of fracture risk:

All women over 65 and men over 75 years of age

Don’t routinely assess for fracture risk in those aged under 50 years of age unless:
- Using oral glucocorticoids
- Untreated premature menopause
- Previous fragility fracture

Don’t routinely measure BMD to assess fracture risk without prior FRAX or QFracture

Women aged 50 – 65 years of age and men aged 50 – 75 years of age if any of the following risk factors are present:

- Current/frequent oral/systemic glucocorticoids
- Previous fragility fracture
- Falls history
- Family history of hip fracture

Secondary osteoporosis
BMI lower than 18.5kg/m²
Smoker
Alcohol intake >14 units/week in women >21 units/week in men

Assess risk factors with FRAX or QFracture
(FRAX can be used for those aged 40 – 90 years of age)
- www.sheffield.ac.uk/FRAX/tool.aspx
- www.qfracture.org

If below threshold, don’t refer but consider recalculating:
- After 2 years if original calculation was borderline
- If risk factors change

If fracture risk requires intervention, consider referring for BMD with DXA

Predicted 10-year fracture risk may underestimate the short-term fracture risk in those over 80 years of age – interpret with caution in this age group.

NOTE!
Risk factor assessment tools may underestimate fracture risk in cases of:
- Multiple previous fractures
- High alcohol intake
- Previous vertebral fracture
- Other causes of secondary osteoporosis
- High dose glucocorticoid (7.5mg/day for 3 months)

NOTE!
Fracture risk can also be affected by:
- Living in a care home
- Drugs that impair bone metabolism i.e. antiretrovirals, protein pump inhibitors, anticonvulsive etc.

NOTE!
Measure BMD in those under 40 years of age with:
- History of multiple fragility fracture
- Major osteoporotic fracture
- Use of high-dose systemic glucocorticoids

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