




Cost impact of implementing a proactive fracture risk assessment strategy



A model based on NICE guidance^{1,2} and data⁴ from a joint working bone health initiative between the Academic Health Science Network North East and North Cumbria and Amgen Ltd delivered by Interface Clinical Services from Nov 2017–Nov 2018

 **71** GP practices assessed
579,508 total population




 **27%** 158,946 people meet the criteria defined in NICE clinical guideline [CG146] for targeting fracture risk assessment

 **9%** 13,848 people were identified with a fracture risk above the upper intervention threshold (recommended for treatment)^{3,4}









 **77%** 10,611 of 13,848 people identified at high risk of fracture **not** receiving current BSA therapy⁴ (equating to 1.8% total practice population)

REFERENCES

- National Institute for Health and Care Excellence (NICE, 2012) Osteoporosis: assessing the risk of fragility fractures. [NICE Clinical guidelines CG146]
- NICE (2017). Bisphosphonates for preventing osteoporotic fragility fractures (including a partial update of NICE technology appraisal guidance 160 and 161). [NICE Technology appraisal guidance TA464]
- National Osteoporosis Guideline Group (NOGG, 2017). NOGG 2017: Clinical guideline for the prevention and treatment of osteoporosis
- Interface Clinical Services 2018. North East and Cumbria practice level fracture risk assessment data. Data on file
- NICE (2017). Bisphosphonates for preventing osteoporotic fragility fractures (including a partial update of NICE technology appraisal guidance 160 and 161). Committee Papers

Expected fractures over a 3 year period in 10,611 untreated, high risk population ^{4,5}		Direct care cost ⁴
	223 Hip fractures	£ 1,883,911
	208 Vertebral fractures	£ 1,006,652
	318 Wrist fractures	£ 318,605
	126 Humerus fractures	£ 181,716
	Total 875 Total direct care costs attributed to 875 fractures	£ 3,390,884

Expected impact from treating 10,611 people for 3 years

3 years treatment with alendronic acid in 10,611 people = £468,900⁵			
275 fractures could be prevented with effective bone sparing agent treatment ^{4,5}			
	74 Hip		114 Vertebral
	60 Wrist		26 Humerus
	£ 621,691		£ 553,659
	£ 60,535		£ 38,160

£ 1,274,045 could be saved in direct care costs due to prevented fractures^{4,5}

£ 328,143 could be saved in residential/nursing home costs due to prevented fractures^{5,4}