

Improving Patient Outcomes through a Quality Improvement Based Medication Adherence Programme in a Primary Care Setting

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Introduction

- Anti-osteoporosis medications (AOM) are highly effective in reducing fracture risk
- Yet adherence is poor, with approximately 50% of patients stopping taking their medication within the first year
- Poor adherence is associated with significantly increased risk of fracture
- Primary care IT systems present an opportunity to identify, monitor and support adherence, alongside quality improvement methodology to ensure sustainability



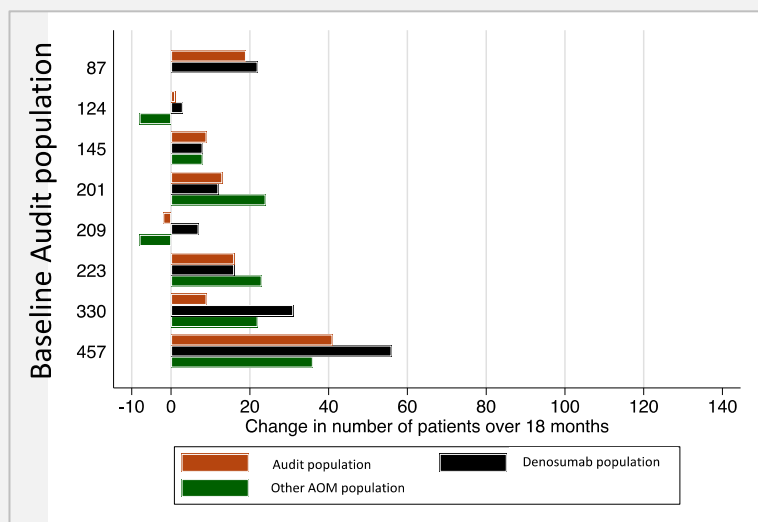
Method

- We developed a primary care clinical system-based search tool with excel-based reporting dashboard, review template and QI package
- Search identified:
 - adults with history of fracture when aged 50 or over,
 - with a prescription for AOM in previous 5 years,
 - but no prescription for oral AOM for more than 3 months or Denosumab for more than 6 months
- 8 GP practices from Oxfordshire participated in the proof-of-concept pilot
- GP practices ran 5 reports between August 2021 and December 2022 to identify non-adherent patients requiring a medication review
- GP practices could access online osteoporosis resources and regular calls with the local secondary care lead

Results

- 283 patients screened
- 31% treatment restarted/switched
- 16% treatment stopped/paused
- QOF fragility fracture coding increased by 21%
- Adherence rates increased:
 - Oral: 62% → 66%
 - Denosumab: 79% → 84%
- Additional 252 patients on AOM treatment, equating to 13 fewer fractures (including 5 hip) within next 2 years
- Extrapolated to 1million population: additional 32,266 patients on AOM; 1162 avoided fractures (including 465 hip) over 2 years; hospital cost saving of £6.5m over 2 years using hip fracture reduction alone

Absolute change in audit population, denosumab and other AOM users from August 2021 to December 2022



Recommendations

- ICBs should consider use of the GRASP-OsteoporosisRx tool as way of improving care and monitoring improvements, thereby reducing fracture risk at a local level
- GRASP-Osteoporosis can be used to assist the recall of patients on Denosumab