

## **O-062 Incidence Trends Of Recorded Osteoporosis, Osteopenia And Fragility Fracture In Older People: Analysis Of UK Primary Care Data**

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**Introduction:** Osteoporosis, leading to fragility fractures, is associated with increased mortality, disability, and costs. There is lack of data on the incidence of osteoporosis from population-based studies. We aimed to estimate the incidence of recorded diagnosis of osteoporosis, osteopenia, and fragility fracture in older people, explore time trends in diagnosis, and differences by age, sex, and social deprivation.

**Methods:** We used de-identified patient data provided as part of routine primary care (IQVIA Medical Research Database). All patients aged 50-99y registered with participating GP practices between 1/1/2000-31/12/2018 were included. Crude incidence rates (IR) were estimated per 10,000 person-years (PY). We used Poisson regression to calculate Incidence Rate Ratios (IRR) adjusted by sex, age, calendar year, social deprivation, and GP practice.

**Results:** The incidence of osteoporosis showed a peak in 2009 in women, followed by a second peak in 2014-2015 in both men and women. Fragility fractures peaked in 2012-2014. These could be associated with the introduction of fracture risk assessment tools. In the adjusted models, men in the most deprived areas had a higher risk of being diagnosed with osteoporosis [IRR 1.45 (95%CI 1.38-1.53)], osteopenia [IRR 1.17 (95%CI 1.09-1.26)], and fragility fracture [IRR 1.49 (95%CI 1.43-1.55)] compared to those living in the least deprived areas, but smaller differences were seen in women.

**Key conclusions:** Community bone health interventions might be targeted at populations at higher risk of fragility fractures, including older men living in socially deprived areas.