THE NATIONAL TREATMENT GAP IN SECONDARY FRACTURE PREVENTION IN DENMARK 2005-2014: INDIVIDUAL PATIENT DATA INCLUDING BOTH HOSPITAL ADMINISTERED AND ALL PRESCRIBED ANTI OSTEOPOROSIS MEDICATIONS

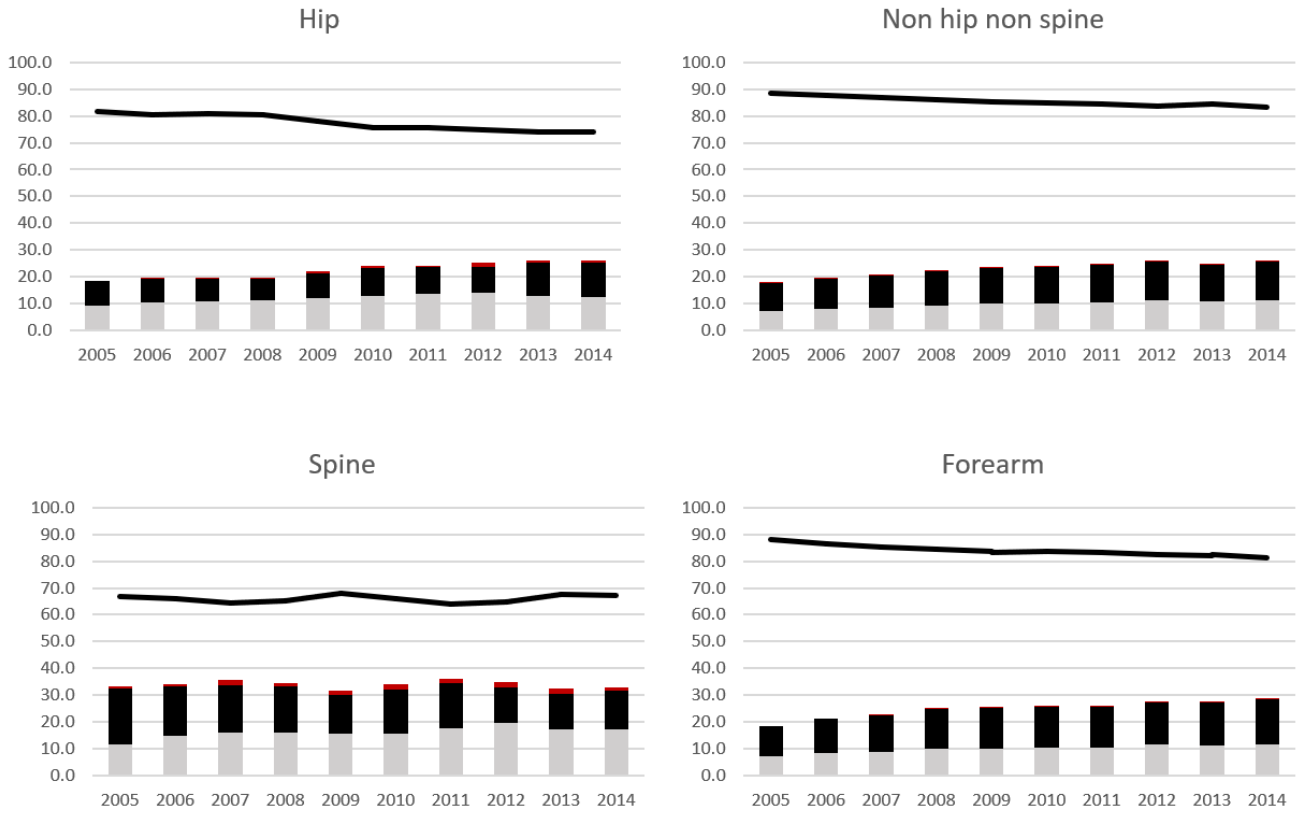
Character limit:

AUTHORS: MK Skjødt, MT Ernst, S Khalid, C Libanati, C Cooper, A Delmestri, D Martinez-Laguna, E Toth, D Prieto-Alhambra, B Abrahamsen

Objective: Patients with recent fractures are at elevated risk of osteoporotic fractures and are candidates for evaluation and treatment with anti osteoporosis medications (AOM). Assessment of the secondary fracture prevention gap in Denmark is generally done by linkage only to the National Prescription Register but this fails to account for hospital-administered drugs including Zoledronic acid (ZA) and denosumab (dmab) hence possibly overestimating the gap. The purpose of this analysis was to use individual patient data for both treatment settings to accurately access the size of the treatment gap in Denmark.

Material and methods: Using Danish national health data for all fractures for persons aged 50+ in the period 2005 to the end of 2014, we established post fracture cohorts for each fracture category and calendar year to calculate the percentage of fracture patients who were already treated (fig 1, grey shading) or who began AOM through prescriptions (black shading) or hospital administered ZA/dmab (red shading) in the 12 mo following the fracture event. The analysis comprised 92,690 hip fracture events, 15,381 vertebral fracture events and 338,261 non-hip non-spine fracture events. If a patient had more than one fracture at the same site recorded in the same year, the treatment gap was only based on the first fracture, but the same person could contribute to the fracture gap in more than one calendar year representing the repeated missed opportunities for intervention presented by additional fractures.

Results: The use of hospital administered ZA and dmab increased over time. However, including this treatment effort in the analysis did not materially reduce the large treatment gap following fracture (fig 1, black curves), though the number of persons treated was 5-10% higher than that found using prescription data only. Over the ten-year period, we observed a small decrease in the treatment gap after hip fracture (81.6% to 74.1%) and forearm fracture (88.0% to 81.4%), with no narrowing in the treatment gap for vertebral fractures.



Conclusion: Including hospital administered AOM did not materially narrow the measured treatment gap after fractures in Denmark. Over a ten-year period we observed only a small narrowing of the large post fracture treatment gap in the country.