## 1263 Does Multimorbidity Influence the Likelihood of Receiving A Total Hip Replacement for Osteoarthritis?

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Introduction: Limited data are available on the influence of multimorbidity on the outcomes of total hip replacement for patients with hip osteoarthritis. Thus, patients with multimorbidity and their clinicians across the UK are making decisions on whether or not to proceed with total hip replacement without clear information available on the potential risks and benefits. It is not known how such patients are currently managed. The aim of this study was to investigate the influence of multimorbidity on the likelihood of receiving total hip replacement in patients with  $\dot{\rm hip}$  osteoarthritis in the UK.

Method: A cohort study was performed, with cohort comprised of all patients over 65 years with a diagnosis of hip osteoarthritis recorded in Clinical Practice Research Datalink. Severity of multimorbidity burden was measured using four different scores (Charlson Comorbidity Index, Electronic Frailty Index, count of drugs prescribed, count of primary care interactions). The outcome was total hip replacement, evaluated using Kaplan-Meier survival and competing-risk analyses.

Results: 28,025 patients were included. 10,948 patients underwent total hip replacement. Increased multimorbidity burden was associated with decreased likelihood of undergoing surgery, irrespective of the method of scoring multimorbidity. Electronic Frailty Index had the largest difference between categories. Adjusted hazard ratio ('severe multimorbidity versus 'fit') was 0.34 (95% CI 0.22, 0.51).

Conclusions: Patients with hip osteoarthritis and concurrent multimorbidity were up to two thirds less likely to undergo total hip replacement. Whether this difference in healthcare management is appropriate depends on to what extent multimorbidity influences the outcomes of total hip replacement.