

INEQUALITIES IN PROVISION AND PATIENT OUTCOMES AFTER PUBLICLY-FUNDED ELECTIVE PRIMARY TOTAL HIP REPLACEMENT BETWEEN PUBLIC AND PRIVATE HOSPITALS USING LINKED DATA FROM THE NATIONAL JOINT REGISTRY AND NHS HOSPITAL EPISODE STATISTICS

Orthopaedics / Pelvis, Hip & Femur / Joint Replacement - Primary

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Background

Outsourcing elective joint replacement surgery to the private sector is a key component of the National Health Service's (NHS) strategy to address the waiting list backlog, now accounting for over half of NHS-funded hip replacements. While this approach aims to expand capacity and reduce waiting times, its implications for patient outcomes and healthcare inequalities remain uncertain.

Objectives

We investigated the association between hospital type (public or private) and patient outcomes after elective primary total hip replacement surgery.

Study Design & Methods

Linked data from the National Joint Registry and NHS Hospital Episode Statistics for England were used for this population-based cohort study. Adult patients having elective primary total hip replacement for osteoarthritis between 2013 and 2022, funded by the public sector, were included. The primary outcome was serious adverse events within 90 days of surgery. Secondary outcomes included mortality within one year, revision surgery and prolonged hospital stay. Logistic regression and flexible parametric survival models were used to evaluate the association between hospital type and patient outcomes, adjusting for clinically relevant risk factors.

Results

The analysis included 391,371 procedures. Mean age was 69.0 years (SD 10.4); 233,046 (59.5%) were female; 139,465 (35.6%) occurred in private hospitals. Patients from more deprived socioeconomic groups were less likely to have surgery in a private hospital. A serious adverse event occurred in 2,770 (2.1%) private and 156,025 (6.5%) public hospital procedures. Surgery in public hospitals was associated with a higher adjusted risk of serious adverse events (OR 2.49[95%CI 2.39-2.60]), mortality (HR 1.34[95%CI 1.23-1.46]), revision surgery (HR 1.07[95%CI 1.00-1.14]) and prolonged hospital stay (OR 2.58[95%CI 2.53-2.62]).

Conclusions

Patients having total hip replacement in public hospitals had worse postoperative outcomes than those outsourced to private hospitals. As patients from more deprived groups are more likely to be treated in public hospitals, ongoing outsourcing may widen socioeconomic inequalities in surgical outcomes.