

Does waiting longer for joint replacement make surgery less effective?

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Waiting for healthcare has been part of public debate in the UK and other countries for many years. One concern is that waiting not only extends any suffering but may also mean poorer outcomes are achieved, even after treatment is provided. The COVID-19 pandemic led to substantially longer waits for planned care, making this possibility even more important to investigate.

Our research considered hip and knee replacement, two common planned surgeries. We used data from before and during the COVID-19 period and for NHS and private hospitals. We looked at patient reported health scores six months after surgery, length of hospital stay and emergency readmission to hospital within 28 days as indicators of health outcomes.

Waiting time was measured from referral by a GP to hospital admission for surgery. Our analysis compared patients treated in the same hospital but waiting different amounts of time for care. We used advanced statistical methods to account for differences between patients which might affect how long they waited, for example, their health status before surgery.

Our results showed that the effect of longer waits on patient outcomes was very limited. On average, hip replacement patients stay in hospital for around 4 days. An increase in waiting time by one month for patients receiving this surgery in an NHS hospital led to longer stays in hospital of around an hour and a half.

We found no effect on length of hospital stays if patients received knee replacement surgery or if they were treated in a private hospital. We found no effect on health status six months after surgery or on readmission within 28 days for any patient group. Finally, we found effects were similar between patients regardless of gender, ethnic group, local area measures of income and education, as well as health status shortly before surgery. The effects were also consistently small across all groups.

Our findings suggest outcomes following surgery are generally similar, even if waiting times are longer. While providing some reassurance, waiting will still impose a burden on those patients whose health gains from surgery are postponed, making them suffer ill-health for longer, so it remains a policy priority. Also, our findings are limited to the specific outcomes and procedures we considered. It is possible that outcomes from other surgeries may indeed be affected by waiting.

[Read the full paper, funding sources and disclaimers in Economics & Human Biology.](#)

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