

### Do you stay in hospital longer if you live alone?

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A surgical procedure, such as a hip replacement, is followed by a period of recovery. Once clinically safe, patients are discharged home to avoid unnecessary risk of hospital-acquired infections and to free up the bed for other patients.

Hospitals are under pressure to increase the number of procedures performed to reduce waiting times. This has become even more important post-pandemic, because waiting times have increased.

How long a patient stays in hospital is largely a medical decision. However, non-medical factors such as personal circumstances might also play a role. One important factor is whether or not the patient lives alone, because if so, they may not receive the required support that would allow them to be discharged quickly to their home. An increasing proportion of older people live alone, so this is potentially an important factor in determining how hospitals make discharge decisions.

Our research investigated differences in how long patients stayed in hospital when receiving a hip replacement procedure. We compared patients living alone with patients living with other people who were treated in the same hospital and reside in the same neighbourhood. By adjusting for other medical and non-medical factors that may influence length of stay, we were able to isolate the impact of living alone.

We found that stays in hospital were 11% longer (0.36 days) if a person lived alone. The difference was larger, by 0.11 days, for patients treated in an NHS hospital than for those staying in private hospitals that treat NHS patients. This suggests decisions made about discharge in private hospitals are less strongly influenced by non-medical circumstances. The impact of living alone was also higher for older patients. Length of stay for this set of patients was similar before and after the COVID-19 pandemic, after accounting for a general downward trend over time.

Our results have implications for policy as they suggest that improving support at home, especially for older people living alone, could help shorten stays in hospital. This can free up beds to treat other patients and reduce waiting times. Although the effect per patient may appear modest, the overall impact could be significant across all types of surgery and all sectors. Knowing more about the kind of support that would help those living alone the most would provide useful information for decision makers.

[Read the full paper, funding sources and disclaimers in the Journal of Health Economics.](#)

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