# The role of service factors on variations in place of death: an observational study

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## **Plain English summary**

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## **Plain English summary**

Previous research has found a geographical variation in place of death (PoD) in England, which was only partly explained by individuals' characteristics. This suggests that health services may play a part in the geographical variation in PoD, but their role has never been assessed systematically.

The current study examined > 400,000 adult deaths in England and found that nearly 50% of the deaths occurred in hospitals, about 20% occurred in both care homes and at home, and < 10% occurred in hospices. Approximately 30% and 70% of the deaths were due to cancer and non-cancer, respectively.

Almost all the service factors studied contributed to the geographical variation in the PoD. Type, capacity and location of services explained between 11% and 74% of this variation. The contribution of the other service factors was inconsistent.

The independent association of health services with PoD was weak overall, but it was consistent. It was found that the further someone lived from a care facility, the less likely it was that they would die there. Higher hospice capacity was associated with a higher chance of dying in a hospice in non-cancer cases, but there was a lower chance of this in cancer patients.

The study demonstrates that health services were related to where people die. The effects of health services were also found to be interacting with individuals' characteristics, which suggests that high-quality end-of-life care provision needs to be designed with individuals' circumstances in mind.

This study identified, and was limited by, a large data gap, particularly those that are useful for planning palliative and end-of-life care services. The data limitation is partly due to a lack of attention and investment in this area. Thus, we urge for a more comprehensive, national collection of service data relevant to palliative and end-of-life care. The data limitation also means that further investigation is needed to confirm our findings.

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