Effects of increased distance to urgent and emergency care facilities resulting from health services reconfiguration: a systematic review

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Plain English summary

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Changes to urgent and emergency care services (e.g. closure or relocation of emergency departments) sometimes mean that patients have to travel further to receive treatment. This research study looked for published research investigating the relationship between travel distance or time and outcomes for patients needing emergency care.

We included 44 studies in the review, of which eight were from the UK. The quality of the research was generally low because many of the included studies had no control group. For people attending emergency departments as a whole, there was no evidence that service changes that resulted in increased travel time/distance affected the risk of dying. However, this may not be the case for people with certain conditions, such as a heart attack. None of the included studies looked at stroke patients specifically.

A second set of studies did not look at service changes but compared groups of people travelling different distances to receive treatment. This international research found evidence that increased travel time or distance may lead to increased risk of dying for people who have a heart attack or trauma (e.g. after a traffic accident). The evidence for pregnant women needing emergency care was inconsistent.

Telehealth (using telephone-based or digital technology to exchange information) was found to help to reduce the effects of increased travel distance.

Further research is needed to understand how emergency departments and ambulance services could change their ways of working to adapt to changes that increase travel distance or time for the people whom they serve.
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