Closing five Emergency Departments in England between 2009 and 2011: the closED controlled interrupted time-series analysis

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Plain English summary

The closED controlled interrupted time-series analysis

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Plain English summary

Some emergency departments (EDs) in England have been closed or downgraded (i.e. to a minor injuries unit or urgent care centre) in recent years, with further closures expected in the future. When this study began, there was no research evidence to suggest that the closure of an ED had either a positive or negative impact on patients or the NHS. The residents of the catchment areas of five EDs that were closed or downgraded between 2009 and 2011, in Newark, Rochdale, Bishop Auckland, Hartlepool and Hemel Hempstead, were the focus of our study. A control area was selected for each of these areas. Routinely available data were drawn from NHS and Office for National Statistics records to assess the impact of closures at the population and emergency care provider level. Some of these data were missing or unreliable and we could not do all of the analyses that were planned in every area.

We identified a number of measures to test the impact of closing EDs: population-level measures assessed if death rates changed and emergency care provider measures assessed changes in ED, emergency admission and ambulance service activity. Data were analysed over a 48-month period: for 24 months before and 24 months after each closure. Results sometimes differed between the areas, but, when combining the five areas together, we found evidence to suggest that there were changes in ambulance service activity following the ED closures. There was an increase in the number of incidents that were dealt with by the ambulance service and an increase in the time taken to get to hospital. There was no evidence to suggest a change in the number of emergency or urgent care attendances or emergency hospital admissions. We found some evidence to suggest a small increase in an indicator of the risk of someone dying following an emergency problem, but no evidence to suggest a change in the actual number of deaths in the study areas following the reorganisation of emergency care.

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