Developing new ways of measuring the quality and impact of ambulance service care: the PhOEBE mixed-methods research programme

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Ambulance services are mainly judged on how well they are doing by measuring how quickly they respond, or by measuring the care provided for a few emergency conditions. We wanted to develop new measures that are important to patients, reflect all types of 999 calls and can provide information to improve care.

The development of new measures was done in stages. First, the literature on what measures had already been used was reviewed. Patients who had recently used the service were interviewed and it was found that patients valued receiving appropriate advice, treatment, care and reassurance.

A series of events was then held and consultations were had with a wide range of people, including the public, clinicians, service managers, commissioners and policy-makers, to identify a small number of measures for development. A new information record in one ambulance service was also created by combining ambulance, hospital and death records.

Six measures for further development were identified: managing pain; managing the 999 call; response time; decisions about whether or not to leave people at home; decisions about whether or not to take people to hospital; and survival after a serious emergency.

The new patient record was used to find the best way of calculating each measure. It was found that when the impact of ambulance service care is measured on, for example, survival, factors (such as the patient’s age, clinical condition and which hospital they went to) have to be taken into account, as these also have an effect. This is important, because without considering these factors there is a risk of making unfair judgements about ambulance service quality. It was also found that the process of creating the combined patient record was complicated and time-consuming. The set of six measures provides a comprehensive picture of the different aspects of ambulance care but, at present, the difficulties in combining information means that it is not possible to do this routinely.
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