Electronic health records in ambulances: the ERA multiple-methods study

Alison Porter,[1*] Anisha Badshah,[2] Sarah Black,[3] David Fitzpatrick,[4] Robert Harris-Mayes,[5] Saiful Islam,[1] Matthew Jones,[1] Mark Kingston,[1] Yvette LaFlamme-Williams,[6] Suzanne Mason,[7] Katherine McNee,[3] Heather Morgan,[8] Zoe Morrison,[9] Pauline Mountain,[5] Henry Potts,[10] Nigel Rees,[6] Debbie Shaw,[11] Niro Siriwardena,[12] Helen Snooks,[1] Rob Spaight[11] and Victoria Williams[1]

[1]Swansea University Medical School, Swansea University, Swansea, UK
[2]Department of Human Resources and Organisational Behaviour, University of Greenwich, London, UK
[3]South Western Ambulance Service NHS Foundation Trust, Exeter, UK
[4]Faculty of Health Sciences and Sport, University of Stirling, Stirling, UK
[5]Independent service user, UK
[6]Pre-Hospital Emergency Research Unit, Welsh Ambulance Service NHS Trust, Swansea, UK
[7]School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK
[8]Health Services Research Unit, University of Aberdeen, Aberdeen, UK
[9]Aberdeen Business School, Robert Gordon University, Aberdeen, UK
[10]Centre for Health Informatics and Multiprofessional Education, University College London, London, UK
[11]East Midlands Ambulance Service NHS Trust, Lincoln, UK
[12]School of Health and Social Care, University of Lincoln, Lincoln, UK

*Corresponding author a.m.porter@swansea.ac.uk

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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Plain English summary

The ERA multiple-methods study

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Plain English summary

We examined the use of electronic health records by emergency ambulance services. There is considerable variation in patient records among UK ambulance trusts, from entirely paper-based systems to fully electronic records, despite national policy encouraging the introduction of electronic health records. We were interested in the effect of using electronic health records on working practices, and whether or not these records helped ambulance services reduce the number of patients conveyed to hospital.

Work package 1 was a rapid literature review. Initially, we searched relevant databases using search terms such as 'electronic record', 'paramedic' and 'ambulance'. This search returned 1464 results, which were whittled down to 18 relevant articles from around the world. These articles covered varying types of electronic health records and showed varying results. The expected benefits were not always obtained, but a range of positive benefits were identified.

For work package 2, we interviewed at least one representative of each UK ambulance service. Seven services were using electronic health records, with varying durations of up to 10 years. Four services were in the process of introducing electronic systems.

Work package 3 involved a more detailed study of four ambulance services selected for being in different stages of implementing electronic health records. The study involved focus groups with paramedics, observations on-board ambulances and interviews with stakeholders in each local health community and ambulance service.

For work package 4, a dissemination event was held to which a wide range of participants were invited. The results that had been obtained so far were presented and a lively discussion ensued.

We found that there is no common standard of hardware or software for electronic health records. Many services were in the process of changing systems. Often, there is indirect data input, with data entered after the event. There seems to be little direct transfer of data from the devices into the hospital systems. The devices seem to be used mainly as data stores.

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