

Do RATs save lives? A retrospective analysis of out-of-hospital cardiac arrest in an English Ambulance Service. (Abstract)

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A01.EMSG. Breakfast Education Sessions - a novel approach to learning.

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Introduction: The need for continuing professional development is well recognized and is supported by professional bodies in all healthcare disciplines. It can be difficult to access CPD for those who work shift. Aims: To create a multidisciplinary learning environment within a National Ambulance Service (NAS) station. To describe the participants responses to the education sessions by the participants of the sessions: on whether they thought they were helpful, they learned anything and if they thought it contributed towards team building. **Methods:** The National Transport Medicine Programme (NTMP) has recently become a service within the National Ambulance Service (NAS), under the new name of the NAS Critical Care & Retrieval Services (NASCCRS). This service is responsible for transporting critically ill neonates, children & adults with a multidisciplinary team. The Breakfast education sessions were planned a number of months in advance with the purpose of creating a multidisciplinary learning environment. The sessions lasted for no more than one hour from 7.30am-8.30am once a month. The sessions often focused on topics that the teams encountered during their clinical work. The sessions were also started to further enhance and build the multidisciplinary team consisting of NAS staff and the NASCCRS medical teams. The participants were sent a questionnaire to assess their attitudes towards the sessions. **Results:** Most participants believed that the sessions were very enjoyable and that they learnt from them. They also felt that the sessions created a sense of teamwork and they got to know the greater team more. They felt the way it was run was relaxed and was easy to attend as it was mostly during work hours. Almost all the results were positive towards the sessions. **Conclusion:** The breakfast education sessions created by the team at the National Ambulance Service Critical Care & Retrieval Services are a novel idea to learn, build teams and more importantly eat breakfast! We plan to extend the sessions with a view to streaming them in the future.

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A02.EMSG. Do RATs save lives? A retrospective analysis of out-of-hospital cardiac arrest in an English Ambulance Service.

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Introduction: Out of hospital cardiac arrest (OHCA) is a major public health problem leading to a substantial number of deaths in the UK. Survival to discharge rates in the UK have remained below that of the best performing European countries. In response to this, Yorkshire Ambulance Service (YAS) has introduced several initiatives to improve outcome from OHCA including the introduction of Red Arrest Teams (RATs). This study aims to determine the impact of the RATs on survival to 30 days and return of spontaneous circulation (ROSC) at hospital. **Methods:** A retrospective cohort study analysing routinely collected data was undertaken. All adult (≥ 18 years) OHCA entered onto the YAS computer aided dispatch (CAD) system between the 1st October, 2015 and 30th September, 2017 were included if the patient was resuscitated, and the cause of the arrest was considered to be medical in origin. Multivariable logistic regression models were created to enable adjustment for common predictors of survival and ROSC. **Results:** During the 2-year data collection period, 15,151 cardiac arrests that were attended by Yorkshire Ambulance Service. After removing ineligible cases, 5,868 cardiac arrests remained. RATs attended 2,000/5,868 (34.1%) incidents, with each RAT attending a median of 13 cardiac arrests (IQR 7–23, minimum 1, maximum 78). The adjusted odds ratios suggest that a RAT on scene is associated with a slight increase in the odds of survival to 30 days (OR 1.01, 95%CI 0.74–1.38) and odds of ROSC on arrival at hospital (OR 1.13, 95%CI 0.99–1.29), compared to the odds of not having a RAT present, although neither results are statistically significant. **Conclusion:** The presence of a RAT paramedic was associated with a small increase in survival to 30 days and ROSC on arrival at hospital, although neither were statistically significant. Larger prospective studies are required to determine the effect of roles such as RAT on outcomes from OHCA.