

A new model for Nurse Lead Neuro-prognostication services in Out of Hospital Cardiac Arrest (OHCA) in a UK tertiary cardiac centre.

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Background

Standalone cardiac centres within the UK often do not have direct access to specialist staff and diagnostic equipment available in larger hospitals necessary to provide guideline directed neurological prognostication for comatose survivors of OHCA (EEG / SSEP / neuropeptides). As such, utilisation of neurophysiology is poor, leading to a lack of clinical decision making in the early stages of post-resuscitation care.

Materials and Methods

We have previously shown the feasibility of setting up a nurse led, multi-disciplinary neurophysiology service in a standalone cardiac centre and have recently expanded our service to two specialist nurses to provide at least a 5 day service. They ensure guideline directed neurological-prognostication is performed where appropriate after 72 hours of admission post OHCA and results are discussed in a twice weekly telemedicine MDT with cardiology team, intensive care team, expert neurologist with interest in neuro-prognostication and imaging.

Results

Since the introduction of this service (August 2021) the average time to performing neurophysiology is now 3 days and average time to decision for withdrawal of life with-sustaining treatment (WLST) is 5 days. The OHCA nurse team also acts as clinical continuity, improving care planning and acting as a family liaison to ensure consistent prognostic messaging. In those with favourable outcome the nursing team provide a full hand over to therapists post ICU discharge, ensuring optimal personalised ongoing therapy support.

Conclusions

A nurse-led neuro-prognostication service with twice weekly MDT allows timely guideline directed neuro-prognostication, and appropriate WLST in line with International guidelines.