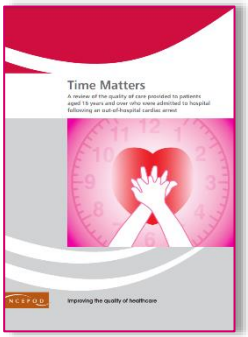

Time Matters

A review of the quality of care provided to patients aged 16 years and over who were admitted to hospital following an out-of-hospital cardiac arrest.

NCEPOD Stakeholder meeting

February 2023

BACKGROUND

The NCEPOD 2021 report, Time Matters identified 5 key areas, informed by 13 recommendations that needed addressing to improve the care and outcomes for patients that have an out of hospital cardiac arrest (OHCA). Two years on from the release of the report a stakeholder group met to discuss progress since the report and to highlight those key areas that need further work to implement improvements.

KEY AREAS AND PROGRESS

1. BYSTANDER CARDIOPULMONARY RESUSCITATION (CPR)

Ongoing strategies are needed at a population level to ensure that people who sustain an OHCA are treated rapidly with high quality resuscitation, including defibrillation, through a co-ordinated network of accessible and identifiable public access devices.

Recommendations

Implement whole population strategies to increase the rate of cardiopulmonary resuscitation (CPR) by bystanders and the use of public access defibrillators.

Target audiences: Public health departments of all UK countries and Crown Dependencies, *with support from the Resuscitation Council UK*

Recent developments

- Restart a Heart Restart a Heart Day | Annual CPR awareness day in October - BHF
- Mandatory training requirement for school children in all four nations
- Department for Education PADs for Schools
- The Circuit
    - The Circuit is the BHF defibrillator network, providing a nationwide overview of where defibrillators can be found National Defibrillator Network - The Circuit - BHF
    - NHSE looking to support this so it is not reliant on the charitable sector
- CPR community network
    - NHSE commissioned St Johns Ambulance to recruit and train CPR advocates targeting areas of deprivation and where survival rates are lowest
- eLifesaver and GoodSAM cardiac responders GoodSAM (goodsamapp.org)
    - Online learning for non-healthcare cardiac responders

2. ADVANCE TREATMENT PLANS

When advance treatment plans are in place, they should be documented using a standard process (e.g. ReSPECT) to ensure that people receive treatments based on what matters to them and what is realistic. Effective communication between all parts of the healthcare system including, primary care, community services, ambulance services and acute hospitals is then needed to ensure that appropriate decisions are made, irrespective of time or location.

Recommendations

Put effective systems in place to share existing advance treatment plans (such as ReSPECT*) between primary care services, ambulance trusts and hospitals so that people receive treatments based on what matters to them and what is realistic in terms of their care and treatment.

Target audiences: Local commissioners, *with support from primary care, ambulance trusts and care home providers (* www.resus.org.uk/respect)*

Recent developments

- ReSPECT
    - Coverage has much improved over the last 2 years but not adopted by all nations (Wales has their own equivalent)
    - Standardisation of electronic systems for sharing needs improving
    - NCEPOD are currently working on an end of life care study which will look at advance treatment plans
- Rockwood paper
    - Report data on Rockwood clinical frailty score, initial rhythm and outcome written and submitted for review

3. Prediction of survival

No single factor is accurate enough for clinical decision-making at the time of admission to hospital following an OHCA. Time is needed to ensure an accurate assessment of prognosis can be made. Neurological prognosis is particularly difficult to assess, and this should be delayed for at least 72 hours after return of spontaneous circulation.

Recommendations

Do not use a single factor such as time to the return of spontaneous circulation, blood lactate or pH to make decisions about organ support or interventions in critical care. No single factor on admission accurately predicts survival after an out-of-hospital cardiac arrest.

Target audiences: All clinicians *who see patients after an out-of-hospital cardiac arrest and relevant clinical directors*

Recent developments

- Report recommendations are inline with latest guidance. European Resuscitation Council and European Society of Intensive Care Medicine Guidelines 2021:Post-resuscitation care
- Impression of progress but no hard data
    - Trending data from NCAR and ICNARC planned

4. Targeted temperature management

Elevated temperature is common following an OHCA and is associated with a worse prognosis, but this can be improved by accurate, active temperature control. The current approach in clinical practice appears to be inconsistent and a more active approach is needed.

Recommendations

Use active targeted temperature management during the first 72 hours in critical care to prevent fever (temperature over 37.5°C) in unconscious patients after an out-of-hospital cardiac arrest.

Target audiences: Critical care leads *and critical care clinical staff See also the Resuscitation Council UK guidelines www.resus.org.uk/library/2015-resuscitation-guidelines/guidelines-post-resuscitation-care#1-the-guidelines*

Recent developments

- NCEPOD recommendation in line with new guidance (2022 recommendations)
    - Preferred terminology is temperature control
    - Adoption of guidelines will need local audit
- The STEPCARE trial About the study | stepcare
- British Cardiovascular Interventional Society's Out-of-Hospital Cardiac Arrest (OHCA) working group
- Ensure more people appropriately triaged to Cath Lab
- Validation of the MIRACLE2 Risk Score for Early Prediction of Neurologic Outcome in Out-of-Hospital Cardiac Arrest

5. Rehabilitation

Physical, neurological, cardiac and emotional impairment following an OHCA can all affect quality of survival, and patients benefit from targeted rehabilitation and support. In some areas of the UK there is no provision of these services. These gaps should be closed by local clinical teams and commissioners working together.

Recommendations

Identify all inpatient survivors of an out-of-hospital cardiac arrest who would benefit from physical, cardiac and/or neurological rehabilitation before hospital discharge and ensure this is offered to them.

Target audiences: The clinical team caring for the patient after an out-of-hospital cardiac arrest, *supported by the appropriate rehabilitation service leads. Commissioners, where these services are not already in place.*

Recent developments

- Quality Standard covering all four nations is being developed (est. September 2023)
    - Needs to be patient centred
    - Provision of services are still very patchy
- NCEPOD is currently working on an ICU rehabilitation study which will look at current service provision in more detail
- STEPCARE will include follow up of survivors