The aim of this study is to describe variability and identify remediable factors in the process of care of adult patients who receive resuscitation in an in-hospital setting. The study will investigate factors which may affect the decision to initiate the resuscitation attempt, the outcome and the quality of care following the resuscitation attempt; as well as determining antecedents in the preceding 48 hours, and possible opportunities for intervention.

NCEPOD will collect data on all patients aged 16 and older who experienced a cardiac arrest, triggering a call to the resuscitation team (or equivalent) leading to the delivery of chest compressions and/or defibrillation by the hospital based resuscitation team (or equivalent) in all hospitals, both NHS and independent, across England, Wales, Northern Ireland, the Isle of Man and Channel Islands.

Data will not be collected from patients under the age of 16 years or from patients already undergoing CPR on admission to hospital or from patients on ICU.

The resuscitation lead during the cardiac arrest resuscitation attempt should complete the form.

This form will be electronically scanned. Please use a black or blue pen. Please complete all questions with either block capitals or a bold cross inside the boxes provided e.g.

- Was the cardiac arrest: 
  - Monitored? □ 
  - Witnessed? □

If you make a mistake, please “black-out” the incorrect box and re-enter the correct information, e.g.

- Inpatients □ 
- Outpatients □

Unless indicated, please mark only one box per question.

A list of definitions is provided on the second page of the questionnaire.

Please return the completed questionnaire to NCEPOD in the SAE provided.

A copy MUST NOT be kept in the patients’ notes.

NCEPOD recommends that clinicians who complete NCEPOD questionnaires keep a record of this activity which can be included as evidence of internal/ self directed Continuous Professional Development in their appraisal portfolio.
Acute Coronary Syndrome: Development of chest pain of cardiac nature, often but not exclusively associated with an abnormal electrocardiogram (ECG). It is the most common presentation of myocardial infarction (heart attack), and investigations are aimed at confirming this pathology.

Cardiac Arrest: Cardiac arrest is the cessation of cardiac mechanical activity as confirmed by the absence of signs of circulation.

HDU/Level 2: High Dependency Unit - a specialist unit in a hospital, where patients requiring a high level of specialist intervention are cared for. HDU care is appropriate for: patients needing support for a single failing organ, but excluding those needing advanced respiratory support; patients who can benefit from more detailed observation than can safely be provided on a general ward; patients no longer needing intensive care, but not yet well enough to be returned to a general ward; or post-operative patients who need close monitoring for longer than a few hours, i.e. the period normally spent in the recovery area. HDU can also be referred to as Level 2 care.

ICU/ITU/Level 3 care: Intensive Care Unit/Intensive Therapy Unit - an area to which patients are admitted for treatment of actual or impending organ failure, especially when mechanical ventilation is necessary.

Primary rhythm: Presenting first documented rhythm apparent on first applying ECG or defibrillator electrodes. Shockable rhythms include: Ventricular fibrillation (VF), Broad complex tachycardia (VT) or unknown (e.g. when using an AED rhythm maybe documented as shockable but unknown. Unshockable rhythms include Asystole and Pulseless electrical activity (PEA).

DEFINITIONS

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CODES FOR GRADE

- 01- Consultant
- 02- Staff Grade or Associate specialist
- 03 - Trainee with CCT
- 04 - Senior Specialist Trainee (SPR3+ or ST5)
- 05- Junior specialist trainee (SPR 1&2)
- 06 - Basic grade (ST1 & ST2, FY1 & FY2 or CTs)
- 07 - Specialist Nurse Practitioner
- 08- Other Registered Nurse
- 09 - Resuscitation Officer
- 10 - Unknown
- 11 - Other

NATIONAL SPECIALTY CODES

<table>
<thead>
<tr>
<th><strong>S</strong></th>
<th><strong>U</strong></th>
<th><strong>R</strong></th>
<th><strong>G</strong></th>
<th><strong>I</strong></th>
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<tr>
<td>Neurosurgery</td>
<td>Plastic Surgery</td>
<td>Burns care</td>
<td>Cardiotoracic Surgery</td>
<td>Paediatric Surgery</td>
<td>Cardiac Surgery</td>
<td>Thoracic Surgery</td>
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<tr>
<td>Paediatric Trauma and Orthopaedics</td>
<td>Paediatric Ear, Nose and Throat</td>
<td>Paediatric Maxillo-Facial Surgery</td>
<td>Paediatric Neurosurgery</td>
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<td>258</td>
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<tr>
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<td>Paediatric Clinical Haematology</td>
<td>Paediatric Respiratory Medicine</td>
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<td>340</td>
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<td>Dermatology</td>
<td>Thoracic/Respiratory Medicine</td>
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<td>Genito-Urinary Medicine</td>
<td>Nephrology</td>
<td>Medical Oncology</td>
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<td>Neurology</td>
<td>Clinical Neuro-Physiology</td>
<td>Paediatrics</td>
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<td>421</td>
<td>422</td>
<td></td>
</tr>
<tr>
<td>Paediatric Neurology</td>
<td>Neonatology</td>
<td></td>
</tr>
</tbody>
</table>
A. PATIENT DETAILS

1a. Hospital Number of Patient? 

1b. NHS Number of Patient? 

1c. Date of Birth of Patient? 

1d. Gender of Patient? 

B. RESUSCITATION ATTEMPT

2. Where did the cardiac arrest occur? (Please see definitions)
   - Operating room/Post operative Anaesthetic Care Unit
   - Emergency department
   - Cardiac Monitoring Area/Coronary Care Unit (CCU)
   - Procedure/Intervention area
   - Medical ward
   - Outpatient area
   - Surgical ward
   - Unknown
   - Other

3. As far as you can tell, what was the cause of the cardiac arrest?
   - Primary cardiac disease (e.g. Acute Coronary Syndrome, primary arrhythmia, etc.)
   - Secondary to non-cardiac disease (e.g. pneumonia, sepsis, electrolyte disturbance, hypovolaemia, etc.)
   - Unknown

4a. Time and date of cardiac arrest: (Please use 24 hour clock)

4b. Is this time: 
   - estimated
   - actual

5. Time of cardiac arrest call (e.g. 2222 call): (Please use 24 hour clock)

5b. Is this time: 
   - estimated
   - actual

6. Who was on the team? Grade Specialty Code ALS Trained
   - Team leader
   - Person 2
   - Person 3
   - Person 4
   - Person 5
   - Person 6

7a. Was the cardiac arrest: 
   - Monitored
   - Witnessed

7b. If the cardiac arrest was witnessed, was the witness competent to defibrillate the patient (if defibrillation was appropriate)? 
   - Yes, and they did
   - Yes, but they did not
   - No

448244984605
8a. During the resuscitation attempt, did the patient receive any of the following? (Please mark all that apply)

- [ ] Defibrillation
- [ ] Tracheal intubation
- [ ] Adrenaline
- [ ] Assisted ventilation
- [ ] Chest compressions
- [ ] Supraglottic airway

8b. During the resuscitation attempt, were there any clinically significant delays in obtaining access to:

- [ ] Defibrillation
- [ ] Appropriate equipment
- [ ] Appropriate drugs

9a. Were any problems encountered during the resuscitation attempt with:

- [ ] Drugs
- [ ] Equipment
- [ ] Staff Availability
- [ ] Defibrillation
- [ ] Communication & Teamwork
- [ ] Airway Management
- [ ] Other (please specify)

9b. If yes to any of the above, please comment:

10. Was a Critical Incident report made following the resuscitation attempt?  
- [ ] Yes  
- [ ] No  
- [ ] Unknown

11. What was the primary rhythm?  
- [ ] Ventricular Fibrillation (VF)  
- [ ] Ventricular Tachycardia (VT)  
- [ ] Asystole  
- [ ] Not monitored  
- [ ] Unknown  
- [ ] Pulseless Electrical Activity (PEA)

12a. Time from cardiac arrest to first resuscitation attempt: [ ] minutes [ ] Unknown

12b. Time from cardiac arrest to defibrillation, if shockable rhythm: [ ] minutes [ ] Unknown

12c. If shockable rhythm, with which device was defibrillation attempted?

- [ ] Manual defibrillators
- [ ] Unknown
- [ ] Not applicable (please specify below)
- [ ] Both: Hybrid manual defibrillators/AED
- [ ] Shock advisory system: Automated Electrical Defibrillators (AEDs)

12d. Duration of resuscitation attempt: [ ] h, [ ] m [ ] Unknown

13. Was a DNAR order in place?  
- [ ] Yes  
- [ ] No  
- [ ] Unknown

14. How was the resuscitation event documented?  
- [ ] Recorded in casenotes
- [ ] Pro forma
- [ ] Audit
- [ ] Not recorded  
- [ ] Other (please state):

Many thanks for completing this form