

## **Surgery in Children**

Over the last 20 years, following recommendations by NCEPOD and others, there have been changes in the delivery of surgical services to children. One of the major changes is a decreased numbers of surgical procedures carried out in district general hospitals (DGHs) together with increased numbers of procedures carried out in tertiary centres. Although this, in principle encourages concentration of expertise, it may lead to the deskilling of surgeons and anaesthetists in their abilities to manage children and ultimately be to the detriment of quality of care within DGHs. Networks of paediatric surgical and anaesthetic care have been recommended as a solution, however there is not, as yet, any national initiative and implementation has been very slow.

Congenital cardiac surgery is one area of paediatric surgery that requires a high level of technical skill as well as good organisational care and teamwork. Since the recommendations made by the Kennedy inquiry in 1995, a series of care standards have been proposed, which include development of regional teamworking. However, there has been little review of this area since then. This study will, therefore provide data on the current state of paediatric surgical and anaesthetic practice that can be used to develop an organisational model of best practice.

## **Aims**

The aim of this study is to explore remediable factors in processes of care of children less than 18 years of age, including neonates who die within 30 / 120 days of emergency or elective surgery on the same admission (time period to be decided from pilot).

## **Objectives**

The study will explore the following areas of care:

1. Pre-operative care and admission
2. Inter-hospital transfer
3. Networks of care
4. The seniority of clinicians
5. Multidisciplinary team working (involvement of paediatric medicine)
6. Delays in surgery
7. Anaesthetic and surgical techniques
8. Acute pain management
9. Critical care
10. Co-morbidities
11. Consent

## **Sites**

All NHS and independent hospitals which admit children less than 18 years of age for surgery (both emergency and elective) in England, Wales and Northern Ireland; and public hospitals in the Isle of Man, Jersey and Guernsey will be included in the study.

## **Data collection**

Data will be collected on **all** patients aged **17 or younger**, who died following a procedure between **1<sup>st</sup> April 2008 and 31<sup>st</sup> March 2010**. We would be grateful if you could complete the spreadsheet for all patients who are recorded as having undergone a procedure (determined by the recording of an OPCS code(s)) on their final admission and who died prior to discharge between 1<sup>st</sup> April – 31<sup>st</sup> March 2008-2010.

All patients who underwent an intervention (including radiological imaging) under **general or regional anaesthetic, or who have been identified by NCEPOD as having undergone a surgical procedure based on their OPCS codes** will be included in the study, and the clinicians responsible will be sent questionnaires for completion.

We aim to collect data in the following batches:

| Data collection period (date of death)                        | Due date                        |
|---|---------------------------------|
| 1 <sup>st</sup> April 2008 – 30 <sup>th</sup> June 2009       | September 25 <sup>th</sup> 2009 |
| 1 <sup>st</sup> July 2009 – 30 <sup>th</sup> September 2009   | January 4 <sup>th</sup> 2010    |
| 1 <sup>st</sup> October 2009 – 31 <sup>st</sup> December 2009 | 31 <sup>st</sup> March 2010     |
| 1 <sup>st</sup> January 2010 – 31 <sup>st</sup> March 2010    | 30 <sup>th</sup> June 2010      |

The spreadsheet will collect data on a number of fields, some of which are **key** and must be fully completed. These key fields are:

- Hospital number
- Date of birth
- Date of admission
- Date of death
- Type of anaesthetic (general/regional/none/not recorded)
- Date of primary procedure
- The primary procedure (text description or OPCS code(s)), (NB: if the primary procedure code is not listed, please list all procedure codes for the patients' final admission).

If these fields are not fully completed we will need to return the spreadsheet to you to gather the additional data. Clinician details can be collected at a later date if necessary.

The primary procedure is defined as the procedure for which the patient was admitted to hospital. If this data is not available, please list all OPCS codes for that admission.

We would be grateful if you could return the attached and completed spreadsheet for the first data collection period to NCEPOD in a password protected spreadsheet by **Friday September 25<sup>th</sup> 2009**. Questionnaires (surgical, anaesthetic and organisational) are currently under development, and will begin to be disseminated in October 2009.

For your information, the casenote extracts we will be requesting are as follows:

- Inpatient and outpatient annotations from pre-admission (birth) to death
- Transfer documentation, including information from the transferring hospital where available
- Integrated care pathways
- Nursing notes
- Drug charts
- Imaging reports
- PICU/SCBU charts
- Fluid balance charts
- Operation notes
- Notes from MDT meetings
- Consent forms
- Pathology results
- Haematology (FBC), biochemistry results (LFT, U&E),
- Incident report form and details of outcome
- Post mortem report
- Discharge summary
- Operation notes
- Anaesthetic charts
- Pre-anaesthetic or pre-admission protocols/checklists
- Recovery room records
- DNAR documentation

We will be asking for these to be returned alongside the completed questionnaires.

If you have any questions regarding this study please contact Heather Cooper, Clinical Researcher, or Hannah Shotton, Researcher on email: [paediatricsurgery@ncepod.org.uk](mailto:paediatricsurgery@ncepod.org.uk); or by calling the office on 020 7631 3444.

**Please send all completed spreadsheets to our nhs.net account; [ncepod@nhs.net](mailto:ncepod@nhs.net)**