Information for Local Reporters

Sepsis study

Background

Sepsis is an overwhelming systemic response to infection affecting of the order of 300/100,000 patients [1] and with a mortality rate of around 36% [2]. Successful management requires prompt recognition, appropriate escalation for decisive medical management, and appropriate interventions to identify and control the micro-organism and prevent consequent organ failure. However, despite real improvements in care that have been made in recent years through the introduction of various care bundles and initiatives, sepsis is still a major cause of avoidable mortality and morbidity, and despite the wealth of research in this area there remains a need for a study to identify, in greater detail, themes associated with avoidable mortality and morbidity due to sepsis, and the overall quality of care provided to this group of patients.

Aim

The aim of the study is to identify and explore avoidable and remediable factors in the process of care for patients with known or suspected severe sepsis.

Objectives

1) To examine organisational structures, processes, protocols and care pathways for sepsis recognition and management in hospitals from admission through to discharge or death;
2) To identify avoidable and remediable factors in the management of the care for a sample of adult patients with sepsis, throughout the patient pathway from presentation to primary care (if applicable) throughout secondary care to discharge or death, focusing on the following areas of care:
    - Evaluation of systems and processes that are in place to facilitate timely identification, escalation and appropriate treatment of infection, including transfer to high dependency and intensive care units where appropriate;
    - Examining the recognition of sepsis and early signs of septic shock across the entire patient pathway from onset of acute illness recognisable as sepsis through to admission to definitive clinical area (e.g. intensive care)
    - Investigating the appropriate management of established severe infection
    - Reviewing whether there was multidisciplinary team approach
    - Assessing adequate communications with families and carers, as can be obtained from the case notes
    - Examining the management of the 'acute' end of life pathway and ceilings of treatment

Data collection

For the main part of the study, cases will be identified prospectively through the completion of the 'SEPSIS case ID' spreadsheet for every patient that is identified as having sepsis during the 2 week data collection period: **6th-20th May 2014**. This process will be coordinated by specially appointed study contacts in ICU/HDU and on the critical care outreach team (CCOT, or equivalent), together with the NCEPOD Local Reporters.

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

- Case note/ hospital number
- NHS number
- Date of Birth
- Trust name
- Hospital name
- Route into the study: identified with sepsis on ICU/HDU or seen by the critical care outreach team (CCOT, or equivalent outreach team)
- Date of admission to HDU/ICU or date seen by the CCOT (or equivalent outreach team)
- Name of consultant responsible for the patient's care prior to entry into the study (prior to admission to critical care or being seen by the outreach team- in a number of cases, this will be the admitting consultant)

We will ask for the spreadsheets to be returned as soon as possible after the end of the 2 week study period.

At a later date, after waiting for the outcome at 30 days and filtering any duplicate cases identified via the different sources, the spreadsheets will be passed to the NCEPOD Local Reporters and we will ask for extra data fields to be completed that are recorded on the central (PAS) records, including: dates of admission/ discharge, discharge destination, ICD10 coding.

Clinical Questionnaire and case notes

A sample of around 700 cases (limited to a maximum of 5 from each hospital) will be selected for the peer review part of the study. For these cases a questionnaire will be sent to the named consultant to collect data on the episode when the patient was diagnosed with sepsis.

The case note extracts we will be requesting are as follows:

- Clinical notes from hospital admission* to transfer/discharge/death
- Nursing notes
- Integrated care pathways including sepsis care bundles
- Imaging reports
- Drug charts
- Operation notes (if applicable)
- Anaesthetic charts (if applicable)
- Consent forms (if applicable)
- Notes from MDT meetings
- Pathology/ post mortem reports (if applicable)
- Observation charts

- DNAR documentation (if applicable
- Discharge documentation
- Rehabilitation documentation (if applicable)

*For patients who are in hospital for more than 2 weeks prior to diagnosis with sepsis/entry in to the study, we do not require all the case notes from the time of admission. It is sufficient to return case notes only for the 2 weeks prior to entry into the study.

Organisational questionnaire

In order to build up as complete a picture as possible of the organisational structures in place to identify, escalate and appropriately treat patients with sepsis, an organisational questionnaire will be disseminated to hospitals that may deal with adult patients with sepsis.

Sites

The organisational questionnaire will be disseminated to all acute hospitals, community/cottage hospitals, treatment centres, independent hospitals etc.

Hospitals with critical care facilities will be eligible to participate in the patient data part of the study.

If you have any questions regarding this study please contact Hannah Shotton or Karen Protopapa on email: sepsis@ncepod.org.uk; or by calling the office on 020 7251 9060.
Please send all completed spreadsheets to our nhs.net account; ncepod@nhs.net

[1] Dombrovskiy et al; Critical Care Medicine 2007; 35(5): 1244-1250
[2] Vincent JL, Sakr Y, Sprung CL, et al; Critical Care Med 2006; 34(2): 344–353