Medical Admissions into Adult General Intensive Care Units

Notes on completion of the questionnaire including definitions

General

THE QUESTIONNAIRE WILL BE ELECTRONICALLY SCANNED. USE BLACK OR BLUE PEN – DO NOT USE A RED PEN. PLEASE COMPLETE QUESTIONS WITH EITHER BLOCK CAPITALS OR A BOLD CROSS. IF YOU MAKE A MISTAKE, PLEASE 'BLACK OUT' THE WHOLE BOX AND MARK THE CORRECT ONE.

Please complete a questionnaire for every adult, Level 3 **medical** admission to the Intensive Care Unit (ICU) from 1st June – 30th June 2003. The completion of the questionnaire may be delegated to an appropriate person (e.g. SpR), however NCEPOD would value a consultant response in those sections that request an opinion (questions 9 & 22).

The questionnaire(s) should be returned to the NCEPOD Local Reporter/Named Contact for this study as shown on the front of the questionnaire.

Please check the patient identifier in the top left corner on the front of the questionnaire to ensure that the correct patient information is completed. All the data will remain confidential at the NCEPOD office and will be destroyed once the report has been published (2005).

Please enclose copies of the following for each patient who dies on the ICU:

- Copies of the medical admission notes and medical notes for 3 days before ICU admission
- Copies of the nursing notes for 3 days before ICU admission
- Copies of the patient monitoring charts for 3 days before ICU admission
- Drug prescription chart for 3 days before ICU admission
- Inpatient (i.e. "discharge") summary as sent to the General Practitioner
- Autopsy report, if available.

Trigger for completing the questionnaire

For each patient, an intensive care questionnaire should be completed after one of the following:

1. The patient dies on the ICU
2. The patient is discharged from the ICU
3. The patient is transferred to another Level 3 care facility, either within the same hospital or another hospital
4. The patient is downgraded to Level 2 care
5. The patient is still on the ICU 30 days after admission and still classified as Level 3.

Patients included in the study

All adult, medical patients classified as Level 3:

- Adults are defined as 16 years of age and older
- Medical patients are defined as those patients who have been referred to the ICU by a physician and if they survive will be discharged from the unit to the care of a physician
- Level 3 patients are those requiring advanced respiratory support alone or support of at least two organ systems. This level includes all complex patients requiring support for multi-organ failure.

Patients excluded from the study

- Patients classified as Level 3 but not admitted to ICU due to bed shortage or care being given elsewhere etc.
- All pre and post-operative surgical patients, including those that develop a medical complication which is unrelated to the surgical procedure
- All Level 3 patients admitted to specialist ICU's e.g. neurosurgical units.

Definitions

Intensive Care Unit (ICU):
A dedicated specialist unit within the hospital which provides care for patients classified as Level 3. ICUs may provide a mixture of Level 3 and Level 2 care. May still be referred to as Intensive Therapy Unit (ITU).

High Dependency Unit (HDU):
A unit that provides intermediate care for patients classified as Level 2 who do not require intensive care but who are not well enough to return to an ordinary ward.

A **general ICU/HDU** will be equipped to provide care to patients with a broad range of medical and surgical morbidities. Specialist units, e.g. coronary units, which are equipped to provide specialist Level 3 care will be excluded from this study.

Patient Classification[#]:

Level 0 Patients whose needs can be met through normal ward care in an acute hospital

Level 1 Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional advice and support from the critical care team

Level 2 Patients requiring more detailed observation or intervention including support for a single failing organ system or post-operative care and those "stepping down" from higher levels of care

Level 3 Patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organ systems. This level includes all complex patients requiring support for multi-organ failure.

[#] Department of Health, *Comprehensive Critical Care, A Review of Adult Critical Care Services*, Department of Health, London, 2000.

Notes for completion of questionnaire

Note 1:
Risk of hospital death (R) = -3.517 + (APACHE II score x 0.146) + Diagnostic category weight.
Diagnostic categories are shown in question 11.

Note 2:
Categories of Organ System Monitoring and Support from *Department of Health, March 1996.*

Advanced respiratory system monitoring / support is indicated by one of more of the following:
- Mechanical ventilatory support, excluding mask (CPAP) or non-invasive methods, e.g. mask ventilation
- Extracorporeal respiratory support

Basic respiratory system monitoring / support is indicated by one or more of the following:
- More than 50% oxygen by fixed performance mask
- The potential for deterioration to the point of needing advanced respiratory support
- Physiotherapy to clear secretions at least two hourly, whether via a trachesotomy, minitracheostomy, or in the absence of an artificial airway
- Patients recently extubated after a prolonged period of intubation and mechanical ventilation
- Mask CPAP or non-invasive ventilation
- Patients who are intubated to protect the airway but needing no ventilatory support and who are otherwise stable.

Circulatory system monitoring / support is indicated by one of more of the following:
- Vasoactive drugs to support arterial pressure or cardiac output
- Circulatory instability due to hypovolaemia from any cause
- Patients resuscitated after cardiac arrest where intensive care is considered clinically appropriate
- Intra aortic balloon pumping.

Neurological system monitoring / support is indicated by one or more of the following:
- Central nervous system depression, from whatever cause, sufficient to prejudice the airway and protective reflexes
- Invasive neurological monitoring, e.g. ICP, jugular bulb sampling.

Renal system monitoring / support is indicated by:
- Acute renal replacement therapy (haemodialysis, haemofiltration etc.).

What is NCEPOD doing that is different from ICNARC?

ICNARC participates in audit of critical care, primarily through the case-mix programme. However, not all units participate (79% England, 56% Wales, 64% Northern Ireland, 2 non-NHS hospitals). NCEPOD collects data from all NHS hospitals in England, Wales and Northern Ireland, and public hospitals in Guernsey, Jersey and the Isle of Man are included in the Enquiry, as well as the majority of hospitals in the independent healthcare sector.

The main focus of this NCEPOD study is to look at the **process of referral of medical patients to the ICU**. Data collected on the ICU will be used to examine the patient's physiological status and subsequent outcome in relation to the referral process. Critical care is not the main focus of this study.

It is essential that we collect data on the same patient from the referring and intensive care team. No information is available on the patient's journey prior to ICU admission from ICNARC. We also ask the ward and intensive care consultant for their views on the patient's management. This qualitative aspect of the data collection has formed an integral part of the NCEPOD peer review process in past studies.

Much of the physiological and case-mix data that NCEPOD will be collecting is the same as that which the case-mix programme collects. Therefore, if your unit does participate in the case-mix programme, data collection may be made easier as the data will be available as part of the ICNARC audit.