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# THE 2002 REPORT OF THE NATIONAL CONFIDENTIAL ENQUIRY INTO PERIOPERATIVE DEATHS

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***Compiled by:***

K G Callum MS FRCS (Surgical Clinical Co-ordinator)

N J Carr MB BS FRCPATH (Chair of Pathology Advisors Group)

A J G Gray MB BChir FRCA (Anaesthetic Clinical Co-ordinator)

C M K Hargraves BSc RGN DipHSM MBA (Chief Executive)

R W Hoile MS FRCS (Principal Surgical Clinical Co-ordinator)

G S Ingram MBBS FRCA (Principal Anaesthetic Clinical Co-ordinator)

I C Martin LL.M FRCS FDSRCS (Surgical Clinical Co-ordinator)

K M Sherry MBBS FRCA (Anaesthetic Clinical Co-ordinator)

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35-43 Lincoln's Inn Fields, London WC2A 3PE

Tel: (020) 7831 6430

Fax: (020) 7430 2958

Email: [info@ncepod.org.uk](mailto:info@ncepod.org.uk)

Website: [www.ncepod.org.uk](http://www.ncepod.org.uk)

Requests for further information should be addressed to the Chief Executive

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Copies can also be purchased from the NCEPOD office.

The analysis of data from anaesthetic and surgical questionnaires is not included in full in this report. A supplement containing additional data is available free of charge from the NCEPOD office, as are copies of the questionnaires.

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# CLINICAL CONTRIBUTORS

## NCEPOD CO-ORDINATORS

- K.G. Callum** Clinical Co-ordinator,  
NCEPOD and Consultant  
General and Vascular Surgeon,  
*Southern Derbyshire Acute  
Hospitals NHS Trust*
- A.J.G. Gray** Clinical Co-ordinator,  
NCEPOD and Consultant  
Anaesthetist,  
*Norfolk and Norwich University  
Hospital NHS Trust*
- R.W. Hoile** Principal Clinical Co-ordinator,  
NCEPOD and Consultant  
General Surgeon,  
*Medway NHS Trust*
- G.S. Ingram** Principal Clinical Co-ordinator,  
NCEPOD and Consultant  
Anaesthetist,  
*University College London  
Hospitals NHS Trust*
- I.C. Martin** Clinical Co-ordinator,  
NCEPOD and Consultant Oral  
and Maxillofacial Surgeon,  
*City Hospitals Sunderland  
NHS Trust*
- K.M. Sherry** Clinical Co-ordinator,  
NCEPOD and Consultant  
Anaesthetist, *Sheffield Teaching  
Hospitals NHS Trust*

## SPECIALTY ADVISORS

### Anaesthesia

- P.B. Harvey** Major GU, Maxillofacial and  
Obstetrics  
*Plymouth Hospitals NHS Trust*
- A. Dennis** Colorectal and Emergency  
*Sheffield Teaching Hospitals  
NHS Trust*
- A.J. Kilner** ICU and Renal  
*Newcastle upon Tyne Hospitals  
NHS Trust*
- D.J. Niblett** ICU, Orthopaedic,  
Ophthalmology and General  
*Bedford Hospital NHS Trust*
- J. Rickford** Pre-assessment, Plastic, Head  
and Neck and Day Surgery  
*East & North Hertfordshire  
NHS Trust*
- A.C. Timmins** ICU, Upper GI and  
Orthopaedic  
*Essex Rivers Healthcare  
NHS Trust*
- S. Underwood** Cardiac  
*United Bristol Healthcare  
NHS Trust*
- P.M. Upton** Vascular and Paediatric  
*Royal Cornwall Hospitals  
NHS Trust*  
Hospital SubDean  
*Peninsula Medical School*
- P. Fernando** General  
(Staff Grade) *King's Lynn & Wisbech Hospitals  
NHS Trust*
- M. Grocott** ICU and Trauma  
(Specialist Registrar) *University College London  
Hospitals NHS Trust*
- R. Yetton** General and special interest in  
sedation  
(Associate specialist) *Brighton and Sussex University  
Hospitals NHS Trust*

## SURGERY

### Cardiothoracic surgery

- M. Jones** *South Manchester University Hospitals NHS Trust*
- P. Kay** *Leeds Teaching Hospitals NHS Trust*
- S. Livesey** *Southampton University Hospitals NHS Trust*

### General surgery

- N. O. Aston** *Queen Elizabeth Hospital NHS Trust*
- A. Ball** *Surrey & Sussex Healthcare NHS Trust*
- P. Edwards** *Countess of Chester Hospital NHS Trust*
- P. Hurst** *Brighton and Sussex University Hospitals NHS Trust*
- M. Lansdown** *Leeds Teaching Hospitals NHS Trust*
- H. Sweetland** *Cardiff and Vale NHS Trust*
- R.W. Talbot** *Poole Hospital NHS Trust*

### Gynaecology

- H.J. Mellows** *Doncaster and Bassetlaw Hospitals NHS Trust*
- J.B. Murdoch** *United Bristol Healthcare NHS Trust*
- A.R.B. Smith** *Central Manchester & Manchester Children's University Hospitals NHS Trust*

### Neurosurgery

- S. Marks** *South Tees Hospitals NHS Trust*
- C.G.H. West** *Salford Royal Hospitals NHS Trust*

### Ophthalmology

- M. Wishart** *North Cheshire Hospitals NHS Trust*

### Oral and maxillofacial surgery

- V. Ilankovan** *Poole Hospital NHS Trust*

### Orthopaedic surgery

- D. Chan** *Royal Devon & Exeter Healthcare NHS Trust*
- C.M. Dent** *Cardiff and Vale NHS Trust*
- R.A. Hill** *Great Ormond Street Hospital for Children NHS Trust*
- A.C. Hui** *South Tees Hospitals NHS Trust*
- F. Monsell** *Great Ormond Street Hospital for Children NHS Trust*
- J. Murray** *Pontypridd & Rhondda NHS Trust*
- T.L. Thomas** *Essex Rivers Healthcare NHS Trust*

### Otorhinolaryngology

- G. Cox** *Oxford Radcliffe Hospitals NHS Trust*

### Paediatric surgery

- M. Jones** *Royal Liverpool Children's NHS Trust*
- E. Cusick** *United Bristol Healthcare NHS Trust*

### Plastic surgery

- D.J. Ward** *University Hospitals of Leicester NHS Trust*

## PATHOLOGY

**Urology**

**D.R.J. Greene** *City Hospitals Sunderland  
NHS Trust*

**H.G. Kynaston** *Cardiff & Vale  
NHS Trust*

**R. Persad** *United Bristol Healthcare  
NHS Trust*

**M. Burke** *Royal Brompton & Harefield  
NHS Trust*

**N.J. Carr** *Southampton University Hospitals  
NHS Trust*

**K.P. McCarthy** *East Gloucestershire  
NHS Trust*

**V. Suarez** *Mid Staffordshire General  
Hospitals NHS Trust*

**Vascular surgery**

**C.P. Gibbons** *Swansea NHS Trust*

**D. Hocken** *Swindon & Marlborough  
NHS Trust*

**G. Stansby** *Newcastle upon Tyne Hospitals  
NHS Trust*

**K. Varty** *Addenbrooke's NHS Trust*



## FOREWORD

National CEPOD has repeatedly emphasised the need for the development of multi-professional and multidisciplinary teams to provide optimum care for the most seriously ill patients. This was also one of the principal recommendations made by Professor Kennedy in his report into paediatric cardiac surgery in Bristol [1]. In this report, based on deaths within three days of an intervention, NCEPOD looks at how far team working has developed and, most particularly, at weaknesses in the systems which create barriers to change.

The issue of shared responsibilities in multi-professional teams raises the need for appropriate and effective leadership, a skill not evident in everyone and not taught as part of the undergraduate curriculum to health care workers. Yet, with older and sicker patients presenting to

hospitals, frequently as emergencies, successful outcomes depend on the disciplined care provided by integrated and well functioning teams with good leadership to ensure effective communication between all parties. Regrettably, communication failures are evident throughout many cases in this report.

Examination of patients scheduled for elective admission in preoperative assessment clinics is good practice which, if properly conducted, should lead to internal referral to appropriate team members when unexpected comorbidities are detected.

Unfortunately, this does not seem to happen with any regularity. If this fundamental element of team working is lacking in the most ideal of planned circumstances, it is hardly surprising to find there is greater failure when it matters most, namely with emergency admissions. Failure to recognise comorbidities and act upon them preoperatively jeopardises the postoperative outcome and no example is more pressing than those seen under critical care circumstances.

Teams involved in a patient's perioperative care must equally be involved in morbidity/mortality reviews and receive a copy of the discharge summary or autopsy result. Autopsies should be subject to formal external audit with clinicians

being involved in evaluating the quality of reports and the basis for the conclusions drawn, including the cause of death.

One encouraging finding is the increasing seniority of the clinician taking the ultimate decision to operate, a consequence of which should be a decline in the number of patients who are operated upon inappropriately. However, unless patients are seen by such experienced clinicians, the report highlights that patients can still die from a missed diagnosis of common conditions, such as acute appendicitis.

Unfortunately, the lack of a HDU/ICU, so frequently a feature of NCEPOD comment, still blights postoperative care. Returning critically ill patients to general wards postoperatively produces a poorer prognosis even amongst patients who went through ICU facilities preoperatively. The 6% who died under such circumstances are a measure of the weakness. NCEPOD has commented previously on the deficiency of suitably trained ICU nurses, but a serious lack of funded sessions for consultants trained in critical care is equally apparent.

Specifically funded ICU sessions to ensure the presence of appropriate consultant medical staff is fundamental to good team working in these vital clinical areas.

The report demonstrates the need for national guidelines, for example, for clinical prescribing in hospitals to reduce the risk of drug errors and for protocols to cover actions to be taken in the event of complications associated with endoscopic surgery. Whilst recommending new parameters of care, it is distressing to see already agreed national standards for anaesthetic monitoring being ignored when we would expect those responsible for clinical governance within hospitals to insist on the maintenance of such examples of good medical practice.

In this report we also highlight issues around poor medical record keeping, a further area of clinical governance which must be addressed.

This extends to fluid balance charts and other areas of routine observations. These can be seen as further indications of pressure due to lack of staff and time. The pace of change in medical practice does seem to be running ahead of the ability to recruit suitable people into health care and unless this is overcome, weaknesses in clinical teams will continue to impede improvements in the quality of clinical care.

**John LI Williams CBE**

*Chairman*

## INTRODUCTION

The patient's journey through an illness leading to surgery is perilous at the best of times, but when the presentation is urgent or an emergency, it is even more treacherous. Over 80% of patients in this year's sample, that is those dying within three days of a surgical procedure, were urgent or emergency admissions. Inevitably, in the urgent/emergency situation there has often been no formal assessment of comorbidities and many otherwise remediable medical conditions go uncorrected. Management must be pragmatic, problems are overlooked, complication rates are high and deaths occur. This is often despite the best anaesthetic and surgical expertise available.

Despite this scenario, much can be done to pre-empt problems but this requires an adequate provision of services and a team that functions in a co-ordinated

manner. For example, for elective and scheduled patients there needs to be better organisation of pre-admission assessment clinics with the appropriate involvement of anaesthetists. This would help identify high-risk cases. Unfortunately, many guidelines for preoperative assessment are for fit patients who are not at risk. From the information available to NCEPOD, it appears that the pre-assessment of high-risk patients is not always done well. There also needs to be an adequate provision of supporting services, such as hospital beds, critical care beds and imaging services (amongst others). Continuity of care and an understanding of the case throughout the patient's journey through the hospital stay must be assured.

For the process that delivers patient care, particularly for the acutely ill, to function effectively there has to be close co-ordination between all those involved. Clinicians recognise the importance of the highest quality care for urgent and emergency cases but the burden of this emergency work does interfere with the planned functioning of the elective service. Will these pieces ever link together whilst current inadequate staffing levels, restraints on working hours and short-term political incentives concerned with elective throughput are allowed to predominate? Perhaps there is a need for two systems, allowing the emergency system to

function without the impact on the elective system, but with shared experience influencing the quality of both.

Where does responsibility for the patient's care reside? Individual clinicians are becoming transient acquaintances during the surgical patient's passage through an illness rather than having a continuing responsibility for care. There appears to be an emerging picture of poor ward care by medical staff. This may be the impact of staffing arrangements and shift working, which disrupts the continuity of care. Currently the only constant factor is the individual consultant who is now subject to increasing and conflicting pressures. Too often he or she is left in a state of uncertainty as to their responsibility in guaranteeing continuity of patient care; this undermines his or her ability to fulfil their professional role satisfactorily.

There has to be more working as a team. This involves not only consultants working together but also trainees, nurses, managers, professions allied to medicine and sometimes patients themselves (who must recognise their responsibility to maintain general health and fitness). We need anticipation and co-ordinated thinking to smooth the patient's progress through an illness. No longer should individual surgeons make decisions in isolation.

The ability to work in teams is becoming the cornerstone of modern medical practice. Decisions to operate in difficult circumstances cannot be made by one individual alone. There should be multidisciplinary team discussions rather than a decision that is solely made by the surgeon. However, every ship needs a captain and it is for individual teams to decide who ultimately, with team support and ownership, makes the final decision. The risks associated with the specific decision should then be fully understood, documented and described to the patient. Emergency situations may militate against this way of working but, with time, specialist groups should be able to anticipate and plan for most common scenarios of presentation and the associated complications.

Even after death that continuity should continue with the direct interaction between the pathologist and the clinical teams. In the event of a patient's death there are lessons to learn. These may only point out the natural progression and lethality of a particular pathology, the impact of comorbidity or the effects of age. Conversely, there may be errors in decision-making, team working, diagnosis, technical performance etc. The autopsy is pivotal to revealing these lessons. When asked to do an autopsy on a case involving a perioperative death, the pathologist effectively becomes a member

of the multidisciplinary team. At present the majority of these examinations are conducted under the auspices of the coroner, whose aim is to determine where and how – but not why – the death occurred. The result is that the autopsy has become a process that has lost its link with clinical medicine. In the context of the team approach, the role of the autopsy is not just to fulfil the coroner's requirements as to how the patient died but also to verify the patient's last illness and to study the effects of treatment. The sequence of events leading to death can be difficult to determine in complex perioperative cases; discussions with clinical colleagues before and after the autopsy are essential in ensuring that the examination and report are problem-orientated and that the cause of death accurately reflects what happened. Hopefully the examination and subsequent discussion will confirm that the management was appropriate, safe and of a high standard. If not, what lessons can be learnt? The problem is that the coronial system, which, unlike hospital autopsies, was not set up to help clinicians, is failing to provide the lessons we need to learn in order to understand a patient's death. This system, based mainly on coroner's autopsies, must adapt or be radically altered. This need to review working relations and communications between clinicians, pathologists and coroners was mentioned in the 2001 NCEPOD

Report [2] and it still remains an important concern. It is to be hoped that the Home Office review, currently ongoing, of death certification and of the coronial system will address these issues.

A key role of NCEPOD is to set agendas which other institutions or organisations can take up. This report highlights the need for the delivery of care to be a co-ordinated process, with various disciplines functioning as an effective team. But who is going to put this together? There are many different facets of care within individual hospitals and then there are regional and national requirements. There is a need for a philosophical fusion between views of care as seen at local, regional and national levels. Only then will the system function seamlessly to the benefit of patients.

**Ron Hoile and Stuart Ingram**

*Principal Clinical Co-ordinators*



## PRINCIPAL RECOMMENDATIONS 2002

- Management should ensure that an appropriate number of funded sessions for consultants trained in critical care are allocated to the ICU to allow appropriately qualified medical staff to be available to the ICU at all times.
- There are national agreed standards for anaesthetic monitoring. The absence of an essential anaesthetic monitor constitutes an unacceptable clinical risk that must be the subject of audit.
- There need to be national guidelines for clinical prescribing in hospitals in order to reduce the risk of drug error.
- Failure to diagnose acute appendicitis can still cause death in fit young adults. It is essential that experienced clinicians are available to ensure that cases are not missed.

- If a medical team is involved in a patient's perioperative care it should also be involved in any morbidity/mortality review of the case and receive a copy of the discharge summary and, where available, the autopsy report.
- Complications may arise following endoscopic surgery. Protocols should be available to deal with these and remedial actions should be rehearsed and involve senior experienced clinicians.
- Autopsies should be the subject of a formal external audit process. Clinicians should be involved in evaluating the quality of reports and the basis of conclusions drawn, including the cause of death.

