



RISK MANAGEMENT

Published by
The Association of Anaesthetists of Great Britain and Ireland,
9 Bedford Square, London WC1B 3RA, UK.
Telephone 0171 631 1650; Fax 0171 631 4352;
E-mail: aagbi@compuserve.com

MEMBERSHIP OF THE WORKING PARTY

Dr Anna-Maria Rollin	Chairman
Dr P J Bickford Smith	Secretary
Professor A R Aitkenhead	
Dr J E Charlton	
Dr Margaret C Stockwell	
Dr H Maddock	GAT
Dr Samantha Shinde	GAT

Ex Officio: Office Bearers of the Association of Anaesthetists

Dr W L M Baird	President
Dr S M Lyons	Past President
Dr D A Saunders	Honorary Treasurer
Dr D J Wilkinson	Honorary Secretary
Dr R E Atkinson	Vice President
Dr M Morgan	President-elect/Editor
Dr P G M Wallace	Assistant Honorary Secretary
Dr Ann F Naylor	Honorary Membership Secretary

January 1998

© Copyright of the Association of Anaesthetists of Great Britain and Ireland.
No part of this book can be reproduced without the written permission of the
Association of Anaesthetists.

CONTENTS

Section 1	Introduction.....	1
Section 2	General Considerations	3
Section 3	Pre-Operative	9
Section 4	Per-Operative	13
Section 5	Post-Operative.....	19
Section 6	Outcome	23
Appendix I	List of AAGBI booklets	25
Appendix II Sample induction procedure for staff	
26		
Appendix III	Anaesthetic Record Set	28
References	31
Suggested Further Reading	34
Acknowledgements	36

SECTION 1 - INTRODUCTION

The literature on Risk Management is growing all the time. The aim of the working party which produced this booklet was to review this literature and to distil the salient points into an easily usable format.

Risk is defined as 'a chance or possibility of danger, loss, injury, or other adverse consequences' [1].

Risk Assessment is the careful examination of what could cause harm, its significance and what precautions are needed to eliminate the risk, or reduce it to an acceptable level.

Risk Analysis is the estimation of the probability, likelihood and severity of any possible loss.

Risk Management is a systematic process for the identification, analysis and control of actual and potential risks and their resource implications.

Risk Management policies should be formulated with regard to safety, efficiency and cost.

Conscientious anaesthetists already practise risk management, although it may not be so labelled. Over the years the Association of Anaesthetists of Great Britain and Ireland (AAGBI) has published a series of booklets on aspects of good anaesthetic practice which may form the basis of a risk management policy (Appendix I).

Chief executives are requiring departments of anaesthesia to formulate and implement risk management policies to incorporate into an overall Trust Policy.

In order to prevent each department of anaesthesia having to “re-invent the wheel”, this booklet contains advice on methods of identifying, minimising and managing risk. It is designed to provide a template which can be modified to suit local requirements and to provide a list of useful source material.

Resources must be identified for the implementation of risk management. It is the duty of a hospital to ensure that potential risks are identified and, *as far as is reasonably practicable*, avoided. It is necessary to balance the frequency or severity of the risks against the cost of eliminating or minimising those risks.

SECTION 2 - GENERAL CONSIDERATIONS

1. Management, organisation and planning

a. Management

The provision of health care carries with it the potential for risk. Since April 1991, healthcare providers have been able to 'insure' themselves against non-clinical risks. In April 1995 the Clinical Negligence Scheme for Trusts (CNST) was set up as a voluntary scheme, managed by the Medical Protection Society, to underwrite claims for clinical negligence arising within England and Wales. Since Trusts are not permitted to take out private insurance for clinical risks, it is expected that the vast majority will join the CNST scheme. Until March 31st 1996, hospitals were covered by Crown Indemnity. Since then, Trusts have been required to bear their own risks. In order to minimise these, Trusts are required to put in place formal risk management policies.

Overall responsibility for the management of risk rests with the Trust's Chief Executive. Day to day implementation is usually devolved to a named deputy, supported by a risk management team on which the directorate of anaesthesia should be adequately represented.

IT IS THE VIEW OF THE AAGBI THAT IDENTIFICATION OF ATTRIBUTABLE RISK AND GUIDELINES ON RISK MANAGEMENT SHOULD BE THE RESPONSIBILITY OF THE CLINICAL DIRECTOR OR NOMINATED DEPUTY.

b. Organisation & Planning

There are four recognised stages of risk management:

- identification
- analysis
- control
- funding

Risk identification and analysis will logically lead to policies for risk control, which will have implications for funding.

Detailed discussion and suggested methods of implementation for the four stages can be found in 'Risk Management in the NHS' [2].

In hospitals, risk can be divided into two types, clinical and non-clinical:

non-clinical risks are those arising from the environment

clinical risks are linked to direct patient care

Because of the inevitable overlap, clinicians will need to be aware of both categories [3].

Clinical directors of anaesthesia will need to formulate specific advice on anaesthetic risk and may wish to identify individual consultants to take responsibility for various aspects, e.g. equipment, staffing, training etc.

2. **Communication**

Hospitals are complex organisations employing a multiplicity of people engaged in a variety of interrelated and interdependent activities. The potential for misunderstanding is high, and failure of communication is the root cause of many mishaps.

It is the responsibility of the clinical director to establish and maintain clear formal and informal routes of communication with:

- his or her own department
- colleagues in other specialities e.g. surgeons
- other departments e.g. pharmacy, information technology, estates, etc.
- operating theatre management, where that is not within the remit of the department of anaesthesia
- the Intensive Care Unit (ICU) and High Dependency Unit (HDU), where these are not within the remit of the department of anaesthesia
- pain management and palliative care services, where these are not within the remit of the department of anaesthesia
- the Accident and Emergency Department
- other departments in which anaesthetists may work e.g. Diagnostic Imaging
- the hospital Risk Management Officer
- hospital management, particularly the Medical Director.

It is the responsibility of the individual anaesthetist to communicate effectively with:

- patients
- colleagues of all grades within the department, especially when handing over care of individual patients
- surgeons
- colleagues in other departments or disciplines.

3. Performance

Suspected poor clinical performance by anaesthetists should be notified to the clinical director, or other responsible consultant in the first instance.

The General Medical Council has developed new procedures to deal with doctors whose professional performance is seriously deficient [4].

4. Team Organisation

a. Staffing

Numbers and grades of staff employed within the department must be commensurate with its clinical, professional and contractual obligations. These include service provision, training, continuing medical education, research, audit and management.

It is necessary to bear in mind, when calculating staff requirements, that annual and study leave entitlements and external professional commitments will take most doctors off-site for up to 10 weeks per annum. Allowance must be made for such absence.

It is important that clearly defined arrangements are in place to provide continuous on-call cover as required.

An induction procedure should be implemented for all new members of the department (Appendix II).

Only consultants may work independently within NHS hospitals. All other grades of staff are responsible to a nominated consultant (most often the clinical director or chairman of the department).

There is published guidance on suggested workloads for various grades of staff [5] [6] [7].

b. Trainees

Induction: All trainees, on arrival, should take part in a formal induction programme. Although the responsibility of the clinical director, this may be organised by the postgraduate tutor for trainees of all specialities, with additional elements provided by the Royal College of Anaesthetists' tutor. Local rules, responsibilities and protocols should be made clear at the outset, verbally and in writing.

Supervision: All trainees work at all times 'under supervision'. This may be direct or indirect, depending on the seniority of the trainee and the nature of the work being undertaken. Nevertheless, the trainee should:

- know the identity and whereabouts of the responsible consultant
- communicate any potential problems
- ask for help or advice as appropriate
- be firmly discouraged from undertaking any activity which is not comfortably within his/her competence and experience in the absence of such help (except in a life-threatening emergency)
- notify the responsible consultant of any clinical incident which either resulted in, or which might have, material sequelae.

Departments should consider formulating local guidelines to define when trainees should request help.

Training: Training should be in line with the requirements of the Royal College of Anaesthetists [8] or the Faculty of Anaesthetists of the Royal College of Surgeons in Ireland [9].

c. Delegation

It is the responsibility of the clinical director to ensure that the particular requirements of the service are matched by the skills of the anaesthetist.

d. Locums

The employment of locums should be kept to a minimum.

Locums must be appropriately qualified and experienced for the work they will be required to do [10]. It is the responsibility of the clinical director to ensure that references are taken up, candidates are interviewed, and that locums are supervised on arrival and undergo an induction period. On rare occasions, this responsibility may fall to the consultant on call.

Advice to clinical directors on non-consultant locum appointments is available from the AAGBI [11].

e. Records

There must be an agreed system of record keeping, covering patient identification, and the pre-, per- and post-operative periods. The risk of adverse incidents is diminished by good record keeping, as this equals good communication. An added bonus is that comprehensive, contemporaneous medical records are extremely powerful in the successful defence of a claim.

The ideal anaesthetic record has still to be devised. Nevertheless, a suggested Anaesthetic Record Data Set has been developed (Appendix III).

f. Clinical Guidelines

Every department should have an agreed set of clinical guidelines to cover unexpected or unusual situations, e.g. failed intubation, malignant hyperthermia, anaphylaxis. Where possible, nationally agreed guidelines [12] [13] should be used, with local variations if necessary. Guidelines should be included in the departmental

information given to new members of staff, and displayed prominently in places where they may need to be consulted (e.g. anaesthetic rooms, Accident & Emergency departments).

Unnecessarily prescriptive guidelines or protocols can be double-edged weapons, because they are disclosable to plaintiffs and their lawyers, who may seek verification of compliance.

g. Transfer of Patients

Local guidelines on the transfer of patients within and between hospitals should be drawn up [14].

SECTION 3 - PRE-OPERATIVE

1. Pre-operative assessment

Pre-operative assessment starts in the Outpatient Department when a surgeon decides that there are indications for surgery. Assessment by an anaesthetist should be undertaken before surgery, unless a local anaesthetic technique to be performed by the surgeon is anticipated. Usually, this assessment will take place after admission to hospital and wherever possible it should be carried out by the anaesthetist who will actually be giving the anaesthetic. If it is suspected that special investigations or preparation are required, there are advantages in referring patients for pre-operative assessment at an earlier stage. This may be achieved in a number of ways:

- direct referral by the surgeon
- outpatient assessment clinics organised by the department of anaesthesia.
- referral directly to an anaesthesia assessment clinic by the patient's general practitioner, enclosing information about past medical history and current drug therapy
- routine screening by questionnaire, with referral by a trained nurse who reviews the responses, in consultation with an anaesthetist as appropriate.

The purposes of pre-operative assessment by an anaesthetist are to:

- establish rapport with the patient
- obtain a history and perform a physical examination, when appropriate
- review the results of pre-operative investigations
- note concurrent medication, drug allergies and response to previous anaesthetics
- order special investigations
- assess the risks of anaesthesia and surgery, make special arrangements (e.g. for difficult intubation), and if necessary postpone or cancel the operation
- institute pre-operative management
- prescribe premedication and plan anaesthetic management
- discuss the process of anaesthesia with the patient, including special techniques which may be employed.

Unless there are overriding circumstances, patients should be assessed by their anaesthetist before transfer to the operating theatre suite. If appropriate, the availability of an ICU/HDU bed should be ascertained. Assessment in the anaesthetic room can result in pressure being put on the anaesthetist to proceed when the patient is either in sub-optimal condition, or has been inadequately prepared or investigated.

Departments of anaesthesia should design protocols for pre-operative investigations. These should be distributed throughout the surgical wards and included in information packs for new anaesthetic and surgical staff. This minimises the risk of operations being postponed because essential investigations have been omitted, and avoids unnecessary investigations being ordered.

Before anaesthesia starts, the anaesthetist should ensure that an appropriate volume of blood has been cross-matched and is available.

The decision to premedicate and the selection of premedication should take into account the clinical requirements, the wishes of the patient, and the expected time of discharge from hospital.

The department of anaesthesia must ensure that appropriate measures are implemented by the hospital to confirm the correct identity of patients brought to the operating theatre. Further checks are outlined in Section 4.

2. Communication

a. With the patient

The anaesthetist should introduce him/herself.

It is necessary to explain the process of anaesthesia to the patient.

This raises the question of how much the patient should be told. The following are essential points to be communicated:

- an explanation of what the patient will experience before and after anaesthesia. This includes the need to fast, administration of pre-medication, transfer to anaesthetic room, connection to monitors, insertion of needles and administration of anaesthetic drugs
- reassurance that the anaesthetist will be present at all times during anaesthesia to ensure safety

- if general anaesthesia is to be given, an explanation that the patient will be awake soon after the end of the operation, but may remember nothing until back in the ward
- information regarding intensive or high dependency care if required
- if a local or regional block is to be used, a warning that numbness and/or weakness may be experienced in the first few post-operative hours. If local or regional block is not accompanied by general anaesthetic, patients should be told that they may experience some sensation during surgery but no pain.
- any techniques of an intimate nature, such as the insertion of an analgesic suppository.

In patients who are at increased risk from anaesthesia and surgery, the nature of the increased risk should be discussed. Some patients do decide against surgery if told that there is a substantial risk of death.

Finally, **all patients** should be given the opportunity to ask questions, and honest answers should be provided.

Information leaflets [15] or videos describing the process of anaesthesia may be of value.

b. With colleagues

Where, exceptionally, the pre-operative assessment and the anaesthetic are carried out by different anaesthetists, it is essential that there is good communication between them.

3. Consent

Consent is usually equated by doctors with the provision of a signature by the patient on a consent form. Perfectly valid consent may be given verbally. The basis of consent is the explanation given to the patient. It may not be appropriate to explain every possible complication and side-effect of treatment. However, recent legal cases have suggested that the courts expect a greater degree of explanation than was expected some years ago. A balance must be struck between telling a patient enough to enable him or her to give informed consent, and yet not so much as to frighten the patient needlessly. The degree of disclosure expected depends on many factors, including the patient's age and maturity, physical and mental state, intellectual capacity and the reason for the procedure.

Obtaining consent for complicated or specialised procedures should not be routinely delegated to trainees.

Consent should be obtained before the administration of premedication. The presence of a signed consent form should form part of a checklist completed before the patient leaves the ward.

At the present time, there is no requirement or expectation to seek sectionalised consent for anaesthesia. However, if special risks are present in an individual patient, then the fact that these have been explained should be recorded.

Local guidelines may be incorporated into a Trust consent policy which should include provision for the presence and involvement of students.

SECTION 4 - PER-OPERATIVE

1. Security Check - Identification of Patient and Operation

a. Patient identification

- an identity label/bracelet should be attached to the patient immediately on admission to hospital
- the label should note the patient's full name, hospital number and date of birth.

More than one bracelet may be required since the removal of one may be necessary to allow access for an invasive procedure e.g. arterial cannulation.

Where an identity bracelet cannot be used or must be removed, the patient's identity should be marked on the skin with an indelible marker.

It is the responsibility of the operating team to mark the operative side/site indelibly, before the patient comes to theatre.

b. Theatre list

Ideally, the theatre list should be published in good time and should not be altered. Abbreviations should not be used. If any alterations are required, it is the responsibility of the person making the changes to ensure that all appropriate members of staff are notified of them. Hospitals should develop guidelines to cover procedures for amendments to the published lists.

The theatre list is a confidential document. It should identify the following:

- patient's full name, age, sex, hospital number and ward
- intended surgery - including side and names of digits, if relevant
- name of surgeon
- anticipated anaesthetic technique, if germane
- blood availability, if appropriate
- other relevant information e.g. infection risk.

c. Admission to reception area / anaesthetic room

The patient should be accompanied by an appropriate member of staff, in accordance with local guidelines.

A standard pre-operative checklist signed by a **trained** nurse should accompany the patient. This should be counter-signed by a trained nurse or Operating Department Practitioner (ODP) in the reception area/anaesthetic room.

IT IS THE DUTY OF BOTH THE ANAESTHETIST AND THE SURGEON TO CONFIRM THAT THE CORRECT PATIENT HAS BEEN BROUGHT TO THE ANAESTHETIC ROOM, TOGETHER WITH THE CORRECT RECORDS.

2. Standards of Theatre Staffing

a. Medical

The anaesthetist should have the appropriate experience and grade for the intended procedure and condition of the patient. Complex procedures or very heavy or prolonged operating lists may require the presence of more than one anaesthetist to provide continuity of medical cover for essential breaks.

b. Assistance for the anaesthetist

The anaesthetist should have skilled dedicated assistance throughout the entire case. This may be provided by suitably qualified anaesthetic nurses, Operating Department Assistants (ODAs) or ODPs.

c. Nursing staff

There is no national set standard, but a formula has been calculated by the National Association of Theatre Nurses for the basic number and grades of nursing staff required for an operating list. This number varies depending on the type of surgery, number of cases, anaesthetic and recovery requirements [16]. Operating Department Assistants or Practitioners may form part of the staffing complement in the theatre.

d. Support services

There should be sufficient:

- Health Care Assistants
- auxiliary staff
- portering staff

There should be ready access to:

- laboratory services
- Sterile Supplies services
- technical / Medical Physics facilities
- pharmacy

3. The Operating Theatre Environment

"Primum non nocere" - first, do no harm. This admonition should refer to staff as well as to patients.

Staff should be registered with the Occupational Health Department and immunised against hepatitis B as necessary.

Needle stick injuries are common and local procedures for dealing with them should be in place.

Staff should adhere to the Control of Substances Hazardous to Health (COSHH) regulations [17], lifting and handling procedures and waste disposal policies.

Staff should be trained in the use of electrically powered equipment, e.g. diathermy, and be aware of the requirement and arrangements for their maintenance and decontamination.

Protective clothing and equipment must be available for patients and staff when ionising radiation, lasers, ultra-violet and other non-ionising radiation are being used [18] [19].

4. Patient Transfer and Positioning

It is the joint responsibility of the surgeon and the anaesthetist to ensure that the patient is positioned appropriately and safely to minimise the risk of physical damage.

Patient transfer aids should be provided to minimise the risk of injury to both patients and staff.

5. Anaesthetic and Monitoring Equipment

An equipment standard should be agreed by the department of anaesthesia. This should be adequate to cope safely with the diversity of the workload [20].

It is the responsibility of the clinical director to ensure that staff are trained in the use of the equipment available.

Before every operating list starts, the anaesthetic and monitoring equipment must be checked by the anaesthetist [21]. Further checks should be undertaken if equipment is changed during an operating list, or if another anaesthetist takes over.

Monitoring should be in accordance with AAGBI guidelines [22].

All types of equipment associated with anaesthetics and patient monitoring should be subject to regular maintenance and servicing. Where appropriate, the next service date should be displayed on equipment.

Instruction manuals for equipment should be available, easily accessible and read by the users.

Alarm limits should be set appropriately and alarms should not be disabled [23].

Staff should be aware of current Hazard Warnings and Safety Action Bulletins published by the Department of Health.

The Consumer Protection Act 1987 requires documentation of all equipment used. Because of the many products used in the care of patients, agreement should be reached within the department as to the extent and detail of the records required.

Additionally, there should be a record of the serial numbers of anaesthetic machines and vaporisers, their deployment and maintenance records, held at a location known to the department of anaesthesia.

6. Adverse Reactions and Uncommon Conditions

Guidelines, or "Anaesthesia Action Plans" for uncommon conditions or adverse reactions should be readily available.

Training sessions for problems such as difficult intubation or anaphylactic reactions should be regularly undertaken by both medical and nursing staff.

7. Anaesthetic Records

The maintenance of meticulous anaesthetic records is vital. Suggestions for the recommended content of an anaesthetic record have been published (Appendix III). Drug doses (including inhalational agents) should be documented as well as physiological parameters and intra-operative events. Automated printouts from anaesthetic machines may form part of the record.

8. Drug Security

The anaesthetist is responsible for the drugs which he or she administers. If local policy allows nurses, ODAs or ODPs to draw up drugs, these must be checked by the anaesthetist.

Syringes should be clearly labelled and the drug concentration noted on the label. Similarly, infusions must be labelled with the drug concentration, time and date of preparation and the signature of the person making up the infusion.

9. Controlled Drugs

Storage, usage and disposal of controlled drugs should be in accordance with published AAGBI guidelines [24].

SECTION 5 - POST-OPERATIVE PERIOD

1. Transfer to recovery

Patients should be transferred from the operating theatre by suitably trained staff under the supervision of the anaesthetist. Since protective reflexes may still be compromised, steps should be taken to protect the patient from:

- traumatic injury (especially to limbs and neck) during transfer from operating table to bed
- hypoxia
- soiling of the airway
- accidental disconnection or removal of drains and lines.

The design of transfer trolleys/beds should comply with AAGBI recommendations [25]. In particular, there is a need for:

- oxygen cylinders, masks and tubing
- equipment to secure and support the airway and assist ventilation
- protective "sides"
- a means to produce a head-down tilt
- provision of clamps for drainage tubes
- infusion poles.

The condition of the patient may alter during transfer and provision must be made for this possibility. Portable monitoring equipment may be required.

2. Staff injury

Staff injury during lifting procedures is common [26]. Staff should be cognisant of:

- the hospital "lifting" policy, including any specified role for doctors
- means for summoning assistance
- devices for assisting patient transfer e.g. "Pat Slide".

Normally, the operating table and the trolley or bed should be at the same height for patient transfer.

3. Hand-over

A full and formal hand-over should take place on arrival in the recovery area or other receiving unit.

A completed anaesthetic record must be made available to the staff at this time, together with details of the surgery which has taken place.

Specific verbal and written instructions for post-operative care should be given.

Drug and fluid regimens must be written on the appropriate charts.

The anaesthetist should ensure that recovery staff are happy to take over responsibility before leaving the patient.

4. Staffing and equipment levels

One-to-one staffing is required at least until the patient is conscious and able to maintain a clear airway.

5. Observations and record keeping

Each patient must be kept under continuous clinical observation. Physiological parameters should be measured and recorded at regular intervals [25].

6. Use of controlled drugs

Administration of opioid analgesics by recovery staff should be subject to local protocols. Staff should be aware of the potential synergistic effects of different analgesic methods.

7. Transfer from recovery area

A formal checklist [25] should be established for staff to satisfy themselves that a patient is fit to be discharged from a recovery area.

Documentation to accompany the patient should include instructions (as required) for:

- supplemental oxygen
- fluid replacement

- analgesic and anti-emetic regimens
- monitoring, if this differs from the normal practice of the receiving unit
- physiotherapy.

Formal hand-over should occur between recovery staff and ward staff; hand-over should be to a qualified nurse.

8. Transfer to ICU/HDU

The receiving unit must first be advised of:

- the imminent arrival of the patient
- the level of equipment which will be required to manage the patient
- settings for ventilatory support
- drugs required.

Monitoring and infusion equipment used for transfer must have:

- fully-charged batteries of adequate capacity to cope with delays during the transfer
- a capacity to measure and control an appropriate range of physiological parameters.

Mechanical ventilatory assist devices must:

- if gas powered, be accompanied by cylinders of adequate capacity
- if electrically-powered, have fully-charged batteries of adequate capacity
- be backed up with a manually operated device e.g. a self-inflating bag.

9. Post-operative pain management

The department of anaesthesia should be aware of its responsibilities in this area. Staff should be informed of the arrangements for running an acute pain service.

If patient-controlled analgesia systems are to be used, all staff who are likely to come into contact with them must have undergone training in their use and be able to recognise complications should they arise.

The same principles apply to those staff required to look after patients receiving continuous epidural or other regional blockade. Drug prescription charts should be reviewed and annotated to highlight the administration of neuraxial opioid infusions and help eliminate the risk of unintentional, simultaneous administration of opioids by other routes. Current protocols and policies should be disseminated widely, and should include procedures to be followed in the event of complications.

10. Discharge home

Patients to be discharged home directly from a recovery area require special arrangements [27] to ensure an adequate level of after-care.

11. Medication on discharge

The supply of analgesic and other drugs (e.g. anti-emetics) for a patient to take home should be made in accordance with hospital policy and in co-operation with local general practitioners, if appropriate.

Particular care should be taken to advise patients how to obtain a further supply of analgesics, especially when discharge precedes a national holiday period.

12. Requests for advice after discharge

Telephone requests from patients for advice on matters relating to their surgery or anaesthetic should be logged.

A signed note outlining the substance of any advice given should be placed in the medical records.

SECTION 6 - OUTCOME

From the patient's viewpoint, successful outcome means full recovery without major complications (e.g. death or major morbidity) or minor complications (e.g. bruises or chipped teeth).

When the patient considers that the outcome has been less than satisfactory, anaesthetists should recognise this and respond actively and sympathetically to the concerns of the patient and his or her relatives.

1. Complaints management and prevention

Each hospital should have an agreed complaints procedure based on the current NHS model [28]. Staff should be acquainted with this.

Complaints should be dealt with as rapidly as possible. Trainees should seek advice from consultants. It may be wise to consult the medical defence societies especially when an apology is deemed appropriate.

The department of anaesthesia should review relevant complaints at regular intervals.

2. Untoward events

Untoward events or anaesthetic risk factors should be discussed with the patient and then recorded in the hospital notes. Relevant details should be sent to the patient's general practitioner.

In the event of a drug reaction the patient and relatives should be advised, and investigated where appropriate. Where necessary the wearing of warning bracelets, e.g. MedicAlert, should be encouraged. This may be supplemented by an advisory letter giving clinical details.

Where severe or life threatening events have occurred, warnings should be placed in a prominent position on the hospital records/clinical databases. If, exceptionally, the patient has more than one set of notes, the same warning should be replicated in each set.

If the patient is known to attend other hospitals, the warning should be passed on.

3. Audit and critical incident reporting

Departmental audit is mandatory and should include regular review of all protocols and clinical guidelines.

Critical incident reporting should be part of regular audit [29].

It is the responsibility of the clinical director to initiate appropriate procedures to rectify any deficiencies revealed by the audit process.

4. Communications strategy

Discharge summaries of consultations and independent procedures carried out by anaesthetists should be sent to the general practitioner, the referring physician and, where appropriate, to other medical attendants as speedily as possible.

Practising anaesthesia where levels of equipment, staffing and resources are considered inadequate increases the risk of legal action against anaesthetists and may result in disciplinary action by the General Medical Council. Equipment, staffing and resource problems should be communicated to the Trust Board via the clinical director. Any actions required should be recorded and copies of recommendations made to hospital managers should be kept on file. The law regarding corporate liability in hospitals is currently unclear, but the clinical director could be at risk of legal action if he or she was shown to have been aware of an obvious risk, but had failed to draw the attention of hospital managers to that risk.

APPENDIX I

List of AAGBI Publications

Recommendations for standards of monitoring during anaesthesia and recovery (revised 1994)
Intensive Care Services - provision for the future (1988)
Guidelines on duties of Chairmen of Divisions of Anaesthesia (1988)
Anaesthetic services for obstetrics - a plan for the future (1987)
Consultant: trainee relationships - a guide for consultants (1989)
Efficiency of theatre services (1989)
Guidelines on contracts and workload for consultant anaesthetists (Revised 1997)
Checklist for anaesthetic machines (revised 1997)
Anaphylactic reactions associated with anaesthesia 2 (revised 1995)
The High Dependency Unit - acute care in the future (1991)
The role of the anaesthetist in the emergency services (1991)
Anaesthesia in Ireland - the provision of a safe service (1989)
Workload for consultant anaesthetists in Ireland (1992)
NHS management changes - implications for anaesthetists (1992)
HIV and other blood borne viruses (1992)
Department of Anaesthesia: secretariat and accommodation (1992)
Non consultant career grade anaesthetists (1993)
Anaesthetists and non-acute pain management (1993)
Immediate postanaesthetic recovery (1993)
Anaesthetic-related equipment (1994)
Day case surgery (1994)
Surgery and general anaesthesia in general practice premises (1995)
Controlled drugs (1995)
Anaesthesia in Great Britain and Ireland: a physician only service (1996)
Recommendations for the transfer of patients with acute head injuries to neurosurgical units (1996)
Stress in anaesthetists (1997)
Provision of pain services (1997)

APPENDIX II

Sample Induction Procedure for Staff

This is an example of information which is required by new members of staff. It should not be interpreted as a standard, since the specific information which needs to be made available in each department of anaesthesia will vary.

The clinical director is responsible for ensuring that all new members of the department (including locum appointments) are:

1. familiarised with the general layout of the hospital and specifically the operating theatres, Accident and Emergency Department, wards, on-call rooms and catering facilities.
2. shown how to gain access to the hospital at night, and to pertinent areas of the hospital protected by security locks.
3. instructed in the use of the telephone and paging systems.
4. familiarised with the checking and operation of anaesthetic and monitoring equipment provided for use in all locations in which the new member of staff may be expected to work.
5. familiarised with the procedures and protocols for recovery from anaesthesia and for discharge to surgical wards.
6. shown the locations of emergency equipment (e.g. defibrillator, difficult intubation kit) and drugs (e.g. dantrolene).
7. told about the expectations of the department with regard to pre-operative assessment, postoperative follow-up and reporting and recording of complications.
8. shown the anaesthetic record, and told the expectations of the department regarding its completion.
9. told about the procedures for ordering urgent investigations and for obtaining blood or blood products in an emergency.

10. informed about local protocols for clinical management, e.g. protocols used in the obstetric and intensive care units, criteria for notifying a more senior anaesthetist including the on-call consultant.
11. informed about local protocols for specific emergency situations, e.g. malignant hyperthermia, difficult intubation, or anaphylaxis.
12. told about the role of the department of anaesthesia in the hospital's Major Incident Plan.
13. informed about local educational and audit activities, including critical incident reporting.

It may be appropriate for items 7-13 to be presented in written form as an 'Information Pack' together with a list of useful paging system and telephone numbers.

APPENDIX III

This is an abstract from the document produced jointly by the Royal College of Anaesthetists, the Association of Anaesthetists of Great Britain and Ireland, and the Society for Computing and Technology in Anaesthesia in April 1996.

Anaesthetic Record Set

Suggestions as to a reasonable content

PRE-OPERATIVE INFORMATION

Patient Identity

Name / ID No. / gender
Date of birth

Assessment & Risk Factors

Date of assessment
Assessor, where assessed
Weight (kg), [height (m) optional]
Basic vital signs (BP, HR)
Medication, incl. contraceptive drugs
Allergies
Addiction (alcohol, tobacco, drugs)
Previous GAs, family history
Potential airway problems
Prostheses, teeth, crowns
Investigations
Cardiorespiratory fitness
Other problems
ASA ± comment

Urgency

Scheduled - listed on a routine list
Urgent - resuscitated, not on a routine list
Emergency - not fully resuscitated

PEROPERATIVE INFORMATION

Checks

- Nil by mouth
- Consent
- Premedication, type and effect

Place & Time

- Place
- Date, start and end times

Personnel

- All anaesthetists named
- Operating surgeon
- Qualified assistant present
- Duty consultant informed

Operation Planned/ Performed

Apparatus

- Check performed, anaesthetic room, theatre

Vital Signs Recording/Charting

- Monitors used and vital signs (specify)

Drugs & Fluids

- Dose, concentration, volume
- Cannulation
- Injection site(s), time & route
- Warmer used
- Blood loss, urine output

Airway & Breathing System

Route, system used
Ventilation: type and mode
Airway type, size, cuff, shape
Special procedures, humidifier, filter
Throat pack
Difficulty

Regional Anaesthesia

Consent
Block performed
Entry site
Needle used, aid to location
Catheter: y/n

Patient Position & Attachments

Thrombosis prophylaxis
Temperature control
Limb positions

POSTOPERATIVE INSTRUCTIONS

Drugs, fluids and doses
Analgesic techniques
Special airway instructions, incl. oxygen
Monitoring

Untoward Events

Abnormalities
Critical incidents
Pre-op, per-op, postoperative
Context, cause, effect

Hazard Flags

Warnings for future care.

REFERENCES

1. *The Concise Oxford Dictionary of Current English*. Oxford: Clarendon Press; 1990
2. *Risk Management in the NHS*. Department of Health, November 1994
3. *Risk Management in the NHS*. Health Policy and Economic Research Unit. Briefing Note No 6: British Medical Association, February 1996
4. *The Professional Performance Rules*. General Medical Council, 1997
5. *Guidance on Contracts and Workload for Consultant Anaesthetists*. The Association of Anaesthetists of Great Britain and Ireland, 1997
6. *Management of Consultants On Call and Other Additional Work*. British Medical Association, October 1996
7. *Model Workload Document for Associate Specialists in all Specialties*. British Medical Association, April 1997
8. *Specialist Training in Anaesthesia, Supervision and Assessment*. Royal College of Anaesthetists, May 1994
9. *The Criteria for Recognition for Posts for Training for the Fellowship in The Faculty of Anaesthetics of the Royal College of Surgeons in Ireland*. The Faculty of Anaesthetics of the Royal College of Surgeons in Ireland, 1985
10. *EL (97) 48. A Code of Practice in the Appointment and Employment of HCHS Locum Doctors*. NHS Executive, August 1997
11. *Advice to Clinical Directors on Non-Consultant Locum Appointments*. Association of Anaesthetists of Great Britain and Ireland, 1994
12. *Anaphylactic Reactions Associated with Anaesthesia 2*. Association of Anaesthetists of Great Britain and Ireland, 1995

13. *Guidelines for Advanced Life Support*. European Resuscitation Council 1992, 1997
14. *Guidelines for the Transportation of the Critically Ill Adult*. Intensive Care Society, 1997
15. *Anaesthesia and Anaesthetists: Information for patients and their relatives*. Association of Anaesthetists of Great Britain and Ireland, 1997
16. *Risk Assessment Guide*. National Association of Theatre Nurses, July 1995
17. *Control of Substances Hazardous to Health Regulations (COSHH)*. Health and Safety Executive, 1994,1995
18. *The Personal Protective Equipment at Work Regulations (England, Wales and Scotland)* Health and Safety Executive, 1992
19. *Guidance Notes for the Protection of Persons against Ionising Radiations Arising from Medical and Dental Use*. National Radiological Protection Board, 1988
20. *Anaesthetic Related Equipment*. Association of Anaesthetists of Great Britain and Ireland, 1994
21. *Checklist for Anaesthetic Apparatus 2*. Association of Anaesthetists of Great Britain and Ireland, 1997
22. *Recommendations for Standards of Monitoring during Anaesthesia and Recovery*. Revised Edition Association of Anaesthetists of Great Britain and Ireland, 1994

23. *The Report of the Expert Working Group on Alarms on Clinical Monitors, in response to Recommendation 11 of the Clothier Report: The Allitt Inquiry.* Medical Devices Agency, Department of Health, February 1995
24. *Controlled Drugs.* Association of Anaesthetists of Great Britain and Ireland, 1995
25. *Immediate Postanaesthetic Recovery.* Association of Anaesthetists of Great Britain and Ireland, 1993
26. Luntley J B. Lifting and Handling of Patients by Anaesthetists *Anaesthesia* 1995; **50**: 729-732
27. *Day Case Surgery.* Association of Anaesthetists of Great Britain and Ireland, 1994
28. *EL (96) "Implementation of the new complaints procedure" Final Guidance.* NHS Executive, March 1996
29. *Clinical Audit and the Quality of Practice in Anaesthesia.* Royal College of Anaesthetists, June 1994

SUGGESTED FURTHER READING

- Vincent C, ed. *Clinical Risk Management*, London: BMJ Publishing Group, 1995
- Secker-Walker J, ed. *Quality and Safety in Anaesthesia* London: BMJ Publishing Group, 1995
- Aitkenhead A R. Risk Management in Anaesthesia. *Journal of the Medical Defence Union*; 1991, **4**: 86-90
- Aitkenhead A R. Risk Management in Anaesthesia. *Healthcare Risk Management Bulletin*, 1992; **2**, 4-5
- Runciman W B. Risk assessment in the formulation of anaesthesia safety standards, *European Journal of Anaesthesiology*, 1993;**10**, (suppl.7) 26-32
- Strunin L ed. Mishap or Negligence. *British Journal of Anaesthesia*, 1994, Suppl., July
- NHS Management Executive. *Risk Management in the NHS*. London: Department of Health, 1993
- *Report on Transport of the Critically Ill*. Dublin: Intensive Care Society of Ireland, July 1993
- Campling E A et al. *Report(s) of the National Confidential Enquiry into Peri-Operative Deaths*. London: Royal College of Surgeons, 1989-1993
- Gallimore S C, Hoyle R W, Ingram G S, Sherry K M. *The Report of the National Confidential Enquiry into Peri-operative Deaths 1994-1995*. National CEPOD London, 1997
- Aitkenhead A R ed. *Quality Assurance and Risk Management in Anaesthesia*. London: Baillière Tindall, 1996
- Green S, Goodwin H, and Moss J. Risk Management Services at the MDU. *Risk Management In Anaesthesia*. London: The Medical Defence Union Ltd, 1997
- Clinical Negligence Scheme for Trusts. *Risk Management Standards and Procedures, Manual of Guidance*. Bristol: CNST, April 1996
- Medical Devices Agency. *Guidance on the Safe Use of Lasers in Medical and Dental Practice*. London: The Department of Health, April 1996
- The Royal College of Anaesthetists *Guidance for Purchasers* London: Royal College of Anaesthetists, July 1994
- Campling E A et al. *Who Operates When? A Report by the National Confidential Enquiry into Peri-operative Deaths 1 April 1995 to 31*

March 1996. London: National CEPOD, 1997

ACKNOWLEDGEMENTS

The Association is grateful to the Medical Defence Union and to Capsticks, Solicitors, for their help and advice.