



The Anaesthesia Team

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SECTION 1 - RECOMMENDATIONS

Comprehensive peri-operative care can only be provided by an anaesthesia team led by consultant anaesthetists. All members of the team must be trained to nationally agreed standards.

Pre-admission screening is a vital early component of pre-anaesthetic assessment. It reduces cancellations, promotes efficient bed usage and can allay patient anxieties. It does not replace the need for the anaesthetist's pre-operative visit.

Anaesthetists must have dedicated qualified assistance wherever anaesthesia is administered, whether in the operating department, the obstetric unit or any other area.

Recovery (Post Anaesthetic Care Unit) areas must have trained staff available throughout all operating hours and until the last patient meets all the criteria for discharge.

All acute hospitals providing inpatient surgical services must have an acute pain team led by a consultant anaesthetist.

The Association of Anaesthetists supports the concept of common training schemes for operating department staff which share objectives and lead to the development of common working practices, pay, conditions and career opportunities.

The possibility of non-physician Anaesthetic Care Practitioners (ACP) being a part of the Anaesthesia Team is being addressed by the Association of Anaesthetists and is to be kept under constant review.

SECTION 2 - INTRODUCTION

In 1988 the Association of Anaesthetists of Great Britain and Ireland (AAGBI) first made recommendations on assistance for the anaesthetist. It is now accepted that such assistance is essential for the safe and effective provision of an anaesthesia service.

The 'Anaesthesia Team' concept, now well established, has seen an increase in non-medically qualified personnel involved in the anaesthesia process. Pre-operative assessment, intra-operative support and post anaesthetic care have all improved the quality of anaesthetic care, while allowing many patients to be admitted later and discharged earlier from their surgical or investigative procedure.

The development of nationally recognised qualifications for operating department practitioners and nurses has improved the standard of anaesthesia support.

Previously, the Association of Anaesthetists has stated that anaesthesia should be a physician-only service. The workforce problems in anaesthesia have necessitated a new look at the possibility of training Anaesthetic Care Practitioners to work under the direction of medically qualified anaesthetists. While still in an assessment and development phase, the potential influences of this on the anaesthesia team is addressed in this publication. If Anaesthetic Care Practitioners do become part of the "Anaesthesia Team" this publication may need to be reviewed at that time.

This report, therefore, revises the previous publication, states the current position and looks to possible changes to the anaesthesia team in the future.

SECTION 3 - ORGANISATION AND MANAGEMENT

Ensuring that properly trained supporting staff and anaesthetists are available in the right place at the right time requires considerable effort, knowledge and expertise to organise and manage.

Each acute hospital facility should have a designated head of anaesthesia services who will be responsible for all activities in which the department of anaesthesia is engaged. This individual will usually be the clinical director and will have managerial and budgetary control of the service. If, however, the department of anaesthesia is part of another directorate, it is necessary to have an identified anaesthetist to take responsibility for all aspects of the anaesthesia service. For the sake of simplicity we refer to this individual as the clinical director. Whatever the wider directorate structure, the anaesthesia department's budget should include all expenditure that is within anaesthetists' control.

The clinical director's role

The clinical director must ensure that the relevant senior manager understands and accepts the recommended national standards of staffing required to provide a high quality anaesthesia service throughout the peri-operative period. Sufficient resources must be committed to recruiting and training staff and to encouraging continued professional development. The clinical director must be provided with management support, usually in the form of a business manager and clinical service manager, as well as having sufficient contracted time to undertake his other duties. In addition to management responsibilities, the clinical director must offer support, guidance and encouragement to all members of the department.

The role of other consultants

Some operational aspects of the anaesthesia team will usually be delegated by the clinical director. It is often helpful to have a lead consultant to provide medical supervision in specialist areas such as day surgery, obstetric anaesthesia and analgesia and postoperative pain control.

The manager's role

The practical running of the non-medical component of the anaesthesia team will largely be the responsibility of the clinical service manager, a senior Operating Department Practitioner (ODP) or a senior nurse, via appropriate line managers in each functional area. As with medical staff, some functions will need to be delegated or managed in co-operation with managers in other departments:-

- pre-operative screening requires careful co-ordination and communication with individual surgeons, the medical records department and outpatient clinics; the individual responsible for overseeing the adequacy of these processes needs to be identified;
- maintaining adequate staffing with anaesthesia assistants in the operating department and other areas of activities must be the day-to-day responsibility of a senior manager;
- the recovery area must be appropriately supervised;
- there are advantages in rotating trained staff with common skills between theatres, recovery areas, high dependency and intensive care. This requires co-ordination by managers in several departments;
- the postoperative pain service will require independent supervision but should be integrated into the overall anaesthesia service;
- all components of the anaesthesia service require regular auditing not only for the efficient use of resources but also for clinical quality.

There is therefore a need for close communication with all users of the service. A multidisciplinary theatre users' committee is often a useful instrument for engendering common goals, co-operation and motivation across specialities.

SECTION 4 - PRE-OPERATIVE ASSESSMENT

Assessment prior to anaesthesia is the responsibility of the anaesthetist. However, pre-anaesthesia screening prior to assessment achieves several desirable objectives. It ensures that patients are *prima facie* fit for anaesthesia and surgery, and that all likely investigations will be completed and available at the time of admission. It thus minimises the disruption caused by late cancellation or postponement and their adverse effects on theatre utilisation and bed occupancy, not to mention the distress and inconvenience to patients and their relatives or carers. It enhances efficiency and ensures a higher level of overall patient care. It also gives an opportunity for patients to express other concerns they may have about anaesthesia and surgery.

Good practice dictates that all patients should be seen by an anaesthetist before undergoing an operation that requires the services of an anaesthetist. Ideally, this should be the doctor who is to give the anaesthetic. However, while it is the anaesthetist who is responsible for deciding whether a patient is fit for anaesthesia, other professional groups may be involved in the screening and pre-operative assessment process.

It is important to be clear about the boundaries between the remit of the pre-anaesthesia assessment team and the responsibilities of the anaesthetist. The Association of Anaesthetists feels that it is inappropriate for a non-anaesthetist to promise a particular type of pre-medication, anaesthesia technique or postoperative pain management and that the decision to proceed (with anaesthesia) cannot be delegated.

Screening and pre-operative assessment is commonly carried out by a specially-trained multi-disciplinary team with access to a consultant anaesthetist. Nursing, ODP and other trained staff play an essential role when, by working to agreed protocols, they screen and assess patients for fitness for anaesthesia and surgery (1).

Currently, nurses work to an agreed job description, and are professionally accountable to the Nursing and Midwifery Council (NMC). ODPs are accountable to the Health Professions Council (HPC).

It is not within the remit of this document to go into the details of the running of pre-operative assessment clinics. This is addressed in the AAGBI publication on pre-operative assessment (2001) (1).

SECTION 5 – THE OPERATING DEPARTMENT

Assistance for the anaesthetist

Trained assistance for the anaesthetist must be provided wherever anaesthesia is provided.

The safe administration of anaesthesia cannot be carried out single-handedly; competent and exclusive assistance is necessary at all times.

The clinical director must insist on adequate resources to employ, train and develop sufficient numbers of assistants to ensure a safe anaesthesia service in accordance with good practice.

If appropriate basic resources are not available, the clinical director should limit clinical practice so that safe, quality-based patient care is ensured.

Management

The operating department must have a manager who is responsible for ensuring an efficient and effective service. This individual will be responsible for ensuring the provision of adequately trained staff and ongoing audit of activity, whatever the local directorate structure. Proper use of resources and optimum throughput of patients depends on maintaining good communication between anaesthetists, surgeons and operating department staff.

Reception

Written guidelines are required to cover the process of sending for patients and their handover at reception to a designated member of the operating department by the ward nurse (2). Local protocols should determine the grade and experience of the nurse accompanying the patient to the operating department. Factors such as the underlying condition, including the level of consciousness, should be taken into account in individual patients. The handover must include clear communication of the patient's name, clinical

details and medical records. The name of the patient should be confirmed verbally, and name and hospital number should be checked with the armband, notes, operating list and consent form (3).

Anaesthetic room

There should be a minimum of two members of staff present in the anaesthetic room at induction, the anaesthetist and a trained anaesthesia assistant. In some departments, additional personnel will be present to assist in transferring and positioning patients or for procedures such as urinary catheterisation. Depending on circumstances and local policy, a ward nurse and parent/carer or chaperone may also be present at induction of anaesthesia.

The Association of Anaesthetists recommends that a trained anaesthesia assistant should always be present during anaesthesia. Only in extreme emergencies as judged by the anaesthetist should anaesthesia proceed without an assistant.

The role of the anaesthesia assistant

The current trend is towards multiskilling where most professionals in the operating department are able to perform many tasks including assisting the anaesthetist, assisting the surgeon, working in the recovery area and undertaking administrative duties. However, patterns of work must ensure that skills are maintained.

Training

Assistance for the anaesthetist may be provided by ODPs or nurses. Whatever the background, the training for all anaesthesia assistants must comply fully with national standards. Employment of staff without an appropriate national qualification is not acceptable. Learners are accepted for formal training as anaesthesia assistants, but they must be supernumerary and supervised at all times by a fully-trained person. It is usual for an individual senior ODP or nurse to be responsible for rostering the anaesthesia assistants and for their ongoing training.

Operating Department Practitioners

As of September 2003 the appropriate qualification for ODPs is the Diploma of Higher Education in Operating Department Practice. This two-year qualification is provided by 23 Universities. The NVQ Level 3 in Operating Department Practice (SCQ in Scotland) has been extended to 2008. These candidates must hold a student ODP post in a hospital which can provide the necessary work based training and supervision.

The ODP who has undergone such training will be appropriately skilled and adequately trained, but competence must be constantly updated and each Trust should provide facilities for further professional development.

ODPs became a statutorily-regulated profession (within the HPC) in October 2004. Without this, career development of ODPs is limited and the handling of controlled drugs, some non-controlled drugs and fluids is restricted.

Nurses

Qualified nurses are already registered professionals but require additional training before taking on the duties of an anaesthesia assistant. In England until 2002, the recognised national qualification of competency for nurses as anaesthesia assistants was the English National Board qualification. The Universities now provide postgraduate nurse training and have developed a theatre course to replace the ENB 182. This comprises three core modules and three optional modules, including anaesthesia.

Qualified nurses can still train as ODPs, either through the NVQ route (until 2008) or by APL (accreditation of prior learning) with a University ODP provider. They cannot complete an award that entitles them to the title of ODP unless they complete the full Dip HE in ODP award.

Despite the availability of such training and qualifications, some nurses working with anaesthetists have at best undergone an abbreviated local training scheme with no national accreditation and at worst are seconded without any specific training. These practices are unacceptable.

In Scotland, until 1997, professional studies modular courses which included assistance for the anaesthetist were run by colleges of nursing and validated by the National Board for Scotland. These have now been suspended and replaced by a university course leading to a BSc for specialist practitioners. There is an urgent need for the introduction of an intermediate level of nurse training. Such courses have also been proposed in Wales and Ireland but local encouragement and resources are required for their development.

Recruitment

There is currently a shortage of anaesthesia assistants throughout the United Kingdom and Ireland, and an urgent need for further recruitment and training. It would be to the advantage of anaesthetists and patients if motivated, trained assistants were recruited from as wide a professional spectrum as possible.

To this end, ODP training schemes should be expanded and those achieving the necessary qualification should receive national professional recognition. More nationally accredited nursing courses relating to anaesthesia assistance should also be developed in the United Kingdom and Ireland. There is much to be said for developing common training schemes and establishing common goals, working practices, pay and conditions and career opportunities.

The Association of Anaesthetists encourages its members to take an active interest in such developments in their own areas.

Agency employed staff

Many Trusts rely heavily on agencies to fill staff vacancies. If Trusts were to ensure that proper pay and conditions were in place, the need for agency staff would diminish. This may be found, in the long run, to be the cheaper option. A new NHS pay scale – Agenda for

Change – will be introduced in 2004/5 which will affect ODPs and nurses. The recent report published by the Audit Commission has drawn attention to the high costs of employing agency staff (4). Agencies should be discouraged from employing ODPs with less than 12 months' experience after qualification. As with all non-medical staff, it is the theatre manager's responsibility to ensure that appropriately trained and experienced ODPs are employed. If it is necessary to recruit staff from agencies, it is essential that an induction period is undertaken. Advice on the employment of ODPs from agencies may be obtained from the Secretary, AODP, Lewes Enterprise Centre, 112 Malling Street, Lewes, East Sussex, BN7 2RJ, and for nurses from the National Association of Theatre Nurses, Daisy Ayris House, 6 Grove Park Court, Harrogate, HG1 4DP

It is unacceptable for Trusts to recruit nurses as anaesthesia assistants who do not possess a nationally recognised qualification for work in this specialised area of practice.

SECTION 6 – RECOVERY (POST ANAESTHETIC CARE UNIT)

The Association of Anaesthetists published guidance on the required facilities for the safe recovery from anaesthesia in 2002 (5). There is, however, a need to re-emphasise the principles outlined in that report and to emphasise the recommendations on staffing and training.

The responsibility of anaesthetists for the care of their patients extends into the postoperative period and includes the management of postoperative pain. Emergence from anaesthesia is potentially hazardous and patients require close observation until recovery is complete. If the anaesthetist is unable to remain with the patient during this period, care must be transferred to staff who have been specially trained in recovery procedures.

While patients remain in the recovery area there must always be a suitably trained anaesthetist (and surgeon) immediately available within the hospital. The anaesthetist must be readily contactable and able to return promptly to the recovery area.

Close collaboration between the anaesthetist and the surgeon is particularly important at this time so that clear instructions are given to recovery staff.

Transfer to recovery area

The anaesthetist should be satisfied that the recovery staff are competent to take responsibility for the patient before care is transferred. No fewer than two staff should be present when there is a patient in the recovery room who does not fulfil the criteria for discharge to the ward (5). If this level of staffing cannot be assured, the anaesthetist should stay with the patient until satisfied that the patient is fit to return to the ward.

Recommendations on the transfer of the patient from the operating theatre to the recovery area are outlined in the Association of Anaesthetists' publication referred to above (5).

Immediate recovery

Continuous individual observation of each patient is required on a one-to-one basis until the patient is able to maintain their own airway. The recovery staff, therefore, must not have any other duties at this time. Failure to provide adequate care for patients during this period of vulnerability, in which the possibility of serious complications is well recognised, may prove catastrophic for the patient and could result in serious medicolegal consequences for the hospital. *In hospitals with an emergency surgical service, fully staffed recovery facilities must be available throughout the 24 hours.*

A postanaesthesia care plan should be implemented for each patient which includes monitoring to ensure satisfactory cardiorespiratory function, fluid and pain management and the administration of drugs to agreed protocols. These have been the subject of previous advice (6). Careful records must be maintained and recovery staff must be able to interpret the information and initiate appropriate action where necessary. Staff must also be able to assess the suitability of transfer of patients to the next level of care.

All staff must be trained in basic and advanced resuscitation techniques.

Discharge

The patient should remain in a suitably equipped recovery area until all the criteria for discharge have been met. Discharge must be based on a carefully worded protocol or on the personal instructions of the anaesthetist. Recommendations on the criteria for discharge from the recovery area have been published previously (5)

Management

The optimal management structure for the recovery area should be within the overall responsibility of the anaesthesia directorate. There must be clear lines of communication with other relevant directorates and departments.

Training and qualifications

All staff who work in the recovery area should have received appropriate training and possess a nationally recognised qualification. The core skills required are summarised in our previous published work (5).

Personnel who are in training may work in recovery areas but must be supervised by trained staff. Staffing levels should not be depleted to fill deficits in other areas of the hospital, although rotation between staff within the operating department should be encouraged to maintain skills. All staff must have access to further professional development and there should be appropriate, funded study leave.

SECTION 7 - POSTOPERATIVE PAIN MANAGEMENT

Background

This area of clinical practice is a useful model to illustrate the benefits of a team approach. All hospitals performing major surgery should have a multi-disciplinary acute pain team with an anaesthetist in overall charge (the majority having a sessional commitment by a consultant to acute pain) and a senior nurse running the service on a day-to-day basis, following predefined protocols.

In 1997, an Audit Commission report (4) recommended more effective collaboration between the anaesthetist, surgeon, trainee surgeons and nurses.

A high quality postoperative pain management service should include identifying the patient's individual requirements on admission and then 'tracking' the patient from the surgical ward, through recovery, critical care if appropriate and back to the ward.

The acute pain team

Potential members of an acute pain team include:

- a consultant anaesthetist(s) with sessional commitments to the team;
- trainee anaesthetists, either part of the on-call team or as part of their modular training in pain management;
- a specialist nurse or nurse practitioner with specific training in the management of acute pain;
- nurses in training and student ODPs
- a pharmacist
- a physiotherapist

Consultant responsibility

It is important that postoperative pain be controlled immediately on recovery from anaesthesia. The pain team must therefore be involved from an early stage and the consultant responsible for the pain service has an obvious role in the recovery area and the HDU. This role will involve the design and implementation of pain management protocols and the education and training of staff.

Roles of non-medical personnel

A senior nurse is the appropriate person to be responsible for running the service on a day-to-day basis within the limits defined by protocols. In a similar manner to that described for the consultant role, it is important for there to be senior nursing input from HDU and recovery to the activities of the pain team. This pain nurse is responsible for liaison between the wards, troubleshooting problems and referring problem patients to medical staff. They also have an important role in education. Potential additional roles for this individual are the placing of intravenous cannulae, administering appropriate drugs intravenously and topping up epidurals. The appropriateness of the delegation of any of these tasks is obviously influenced by the location in which they were used, with different roles being appropriate in the HDU, recovery and general ward.

The pharmacy has a role in the provision of drugs for the acute pain team, including ready-prepared epidural and Patient-Controlled Analgesia Packs (PCA). It should also be involved in maintaining the range of drugs required for the service, the evaluation of new drugs and education. This important role is enhanced by nominating a specific pharmacist to the team.

An important aim of postoperative analgesia is restoration of function and this can be assessed by the ward physiotherapist who should be involved with the acute pain team and may be a source of secondary referrals.

Standards of practice

The majority of pain services are delivered on the basis of protocols which have been drawn up by consultation between anaesthetists, surgeons and staff from recovery and general wards. Because there are local differences in both the role of the nurse and the extent of their remit, there will be variations in the protocols between hospitals. The pain team should be responsible for the implementation of a system to introduce, disseminate and review protocols for all grades of staff caring for postoperative patients and for continuing audit of the service.

Educational implications

The educational implications are two-fold: education of the team members and education by the team members.

Anaesthetists must play a major role in educating the members of the acute pain team, in collaboration with the senior nurse.

Appropriate aspects of training should also be addressed by other members of the team.

SECTION 8 – ANAESTHETIC CARE PRACTITIONERS IN THE ANAESTHESIA TEAM

The Association of Anaesthetists has previously stated that the highest standards of anaesthesia could only be achieved by a *physician-only* delivered specialty (7). However, the workforce crisis in anaesthesia in the UK is such that the Association of Anaesthetists and Royal College of Anaesthetists (RCA) have had to look responsibly at the possibility of *physician-led* delivery systems.

During 2003, the Association of Anaesthetists and RCA joined a project to consider the possibility of employing non-medical practitioners as a part of the anaesthesia team (8). Pilot Sites have been selected to test different models of this modified anaesthesia team, and the work was funded by the NHS through the Changing Workforce Program. The project aims to evaluate the model of anaesthesia delivery as practiced in some European countries and the USA, where medically qualified anaesthetists supervise more than one theatre.

The Project is expected to inform UK anaesthetists of the options for changing the delivery of anaesthesia in the future, which may help the NHS meet the challenges of a shortage of anaesthetists, and the Working Time Directive.

The project may not result in a more economical model of anaesthesia delivery, but it is possible that physician anaesthetists may be able to work more flexibly, allowing a greater throughput of patients if ACPs were able to care for selected anaesthetised patients in theatre.

The roles envisaged for the ACP would be mainly assisting during induction and reversal of anaesthesia, but also being competent to maintain anaesthesia during straightforward surgery. At all times the ACP would be supervised by a physician anaesthetist, who would be in the theatre suite, but possibly supervising two lists. In Trusts where ACPs may be employed, it is anticipated that changes to theatre

layout, and list organisation, will be essential to allow the team to work effectively.

The curriculum for the ACP is under development, will last two years and will be at postgraduate diploma level. This will be a national qualification administered through the NHS University/Birmingham University in conjunction with the Royal College of Anaesthetists; the academic standard of the curriculum will, out of necessity, be high. Additional competencies will also be developed, depending on the local roles anticipated. ACPs may be recruited from a variety of backgrounds including graduates, ODPs and Nurses. Care will have to be taken not to cause shortages in already understaffed areas.

Progress in this area will be closely monitored by the Association of Anaesthetists and the RCA.

References

1. Pre-Operative Assessment - The role of the Anaesthetist, Association of Anaesthetists of Great Britain and Ireland, 2001.
2. Risk Management, Association of Anaesthetists of Great Britain and Ireland, 1998.
3. Principles and Safe Practice in the Operating Department, National Association of Theatre Nurses, Harrogate, revised 1998.
4. Anaesthesia under Examination, Report of the National Audit Commission. National Publications, Oxford, 1997.
5. Immediate Postanaesthetic Recovery, Association of Anaesthetists of Great Britain and Ireland, 2002.
6. Recommendations for Standards of Monitoring During Anaesthesia and Recovery, Anaesthetist, Association of Anaesthetists of Great Britain and Ireland, 3rd edition - revised December 2000
7. The Anaesthesia Team, Association of Anaesthetists of Great Britain and Ireland, 1998.
8. Clinical Leads Group Report for Stakeholder Group – Anaesthetic Practitioner Pilot Sites, July 2004.



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