Guidelines for safety and quality in anaesthesia practice in the European Union

SECTION and BOARD OF ANAESTHESIOLOGY¹, European Union of Medical Specialists

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Summary

Anaesthesia is a medical specialty that is particularly concerned with the safety of the patient who is undergoing a surgical procedure. This is a prerequisite in order to provide quality of care, which is based on good clinical practice, on a sound organization, on an agreement on best practice and on adequate communication with other healthcare workers involved. Providing a safe environment for those working in healthcare is at least as important as other factors serving that objective. A working party on Safety and Quality in Anaesthesiological Practice in the Section and Board of Anaesthesiology of the European Union of Medical Specialists (EUMS/UEMS) has prepared guidelines that were amended and approved recently.

Guidelines for safety and quality in anaesthesiological practice in the European Union

The following guidelines for safety and quality in anaesthesiological practice are intended as a tool to optimize these important aspects in patient care in Europe. Thus, they reflect the common minimum criteria for work on quality and safety at the time of publication. The individual countries are responsible for their medical practice, and, in many

nations, there will be adjustments to define a desired level of safety and quality above what is described in this document [1-4].

The guidelines deal with risk and risk management concerning patients, anaesthetists, equipment, syringes and documentation, as well as with legal aspects, external and internal audits, definition of quality assurance cycle (Table 1).

They should be reviewed at minimum 4 yr intervals.

Introduction

The basis for this document is UEMS Policy 'Promoting Good Medical Care' [5], tailored to anaesthesiology.

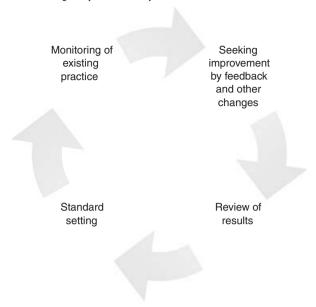
Anaesthesiologists are working in a team context. The stakeholder groups are the patients, the

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¹The areas of expertise of Anaesthesiology are: Perioperative Anaesthesia Care, Emergency Medicine, Intensive Care Medicine, Pain Medicine and Reanimation.

Table 1. Quality assurance cycle.



Sequence of events in a continuous quality improvement cycle.

practitioners, the regulatory authorities and the fund holders. Hence, the performance of a single doctor cannot be evaluated in a vacuum. In most situations, not only the single health professional, but also the system (team, group, department and regulatory bodies) must be considered – the appropriate method most often will be a systems approach. However, this does not exclude the responsibility of each doctor to strive for perfection from a quality assurance point of view.

All anaesthesiological medical work must be led and personally supervised by a doctor anaesthesiologist.

Risk and risk management

Patients

Preoperative clinics are desirable.

Every patient should undergo a doctor anaesthetist-led preoperative evaluation, and every effort to optimize the condition of the patient should be taken in the available time.

There should be a checklist to document that

- The condition of the patient has been assessed.
- The patient has received relevant information on the anaesthetic procedure, including risks.

Anaesthetists and fatigue [6–8]

Anaesthetists should be aware of the problem of fatigue and less favourable outcome data during night duty and prolonged shifts.

Anaesthetists have an obligation to minimize the problem of fatigue as far as possible in the context in which they are working.

Employers have an obligation to optimize rosters and working/resting conditions to minimize risk of fatigued anaesthestists.

Equipment

- Minimum standards for available equipment should be defined at three levels (mandatory, recommended and possible).
- Guidelines for equipment handling should be in place.
- All equipment should be labelled and conform to ISO or other quality regulations.
- Equipment should be tested according to a checklist at defined intervals. Anaesthesia machines should be checked at least daily with smaller checks between cases.
- There must be a backup strategy in the case of power cuts.

Syringes

Syringes should be colour labelled [9].

Documentation

All activities in the operating theatre must be systematically documented. Anaesthetic records should be kept in all cases. All departments should have a systematic approach to anaesthesia-related problems and use these data for quality improvement strategies in the department. In the case of adverse outcome, the anaesthetic contribution to those should be analysed systematically in the department.

Legal aspects

Every anaesthetist must conform to the country's regulations concerning:

- Duty to give medical assistance.
- Information to patients and consent.
- Documentation of all anaesthetics.
- Documentation of unexpected events.
- Following up unexpected incidents/problems/ deaths
- Shortcomings with equipment, staffing, etc., which are an obstacle to providing safe anaesthetics, should be reported to the relevant authorities.

The institution is responsible for ensuring that adequate resources to provide safe anaesthetics are available.

Audits

Continuous review of practice against defined standards, established by:

- Determination by peers.
- Comparison with norms of practice.
- Scientific evaluation of new techniques/medicines.
- Acknowledged panel of experts.

When performance outcome is assessed, the auditors should strive to distinguish between measures of the results of clinical practice in the form of:

- Individual reflective of the practice of individual doctors.
- Collective reflective of the team.
- Global reflective of the practice environment.

Outcome is influenced by:

- Case-mix of patients.
- Influence of other team members (e.g. surgeon vs. anaesthetist).
- Environment resources, number of patients, their expectations, etc.

Taking the above into account, every practitioner, department and hospital should undergo audits at regular intervals.

Internal - the individual doctor

There should be a system in place to facilitate the doctor to review his/her own results, e.g. via the anaesthetic chart, and these should be used systematically.

- Knowledge.
- Skills.
- Behaviour.
- Engagement in Continuing Medical Education (CME)/Continuing Professional Development (CPD), which is a crucial element of quality assurance. Every practitioner must live up to national requirements of CME/CPD.
- Departments must allocate sufficient resources to facilitate this. Training in the basic requirements of quality assurance and in the implementation of quality assurance projects constitutes part of the CME/CPD.
- The team should be audited by local quality monitoring methods.
- For doctors working part time, reduced working hours must be counterbalanced by other educational activities.
- After longer periods out of daily anaesthetic work, there should be a 'recovery' programme in place.

External

The doctors and the department should undergo peer review at regular intervals. Working environment

- External audits by peer review:
 - Practice facilities.
 - \circ Provision and management of resources.
 - Outcomes of clinical practice.
 - o Teaching facilities.
 - o Local QA initiatives.
 - o Communication.
 - Team-determined outcomes.
- Support by employing institution:
 - Provision of resources for CPD, teaching and research.
 - o Systems of assessment of CPD.
 - Inclusion of employees in all aspects of the institution's function.

Other anaesthesia providers

- Should be trained according to a programme that will give them defined qualifications.
- The co-operation with other health providers should be defined and controlled.
- Should report to a trained physician anaesthetist.

To enable the quality efforts, sufficient time, people, money and electronic resources must be allocated.

- Can be established at any tier: Team, department, cross-specialty, hospital-wise.
- Must itself be subject to regular assessment and review.
- Development and functioning should involve:
 - Patients and public groups (setting of standards).
 - Regulatory authorities (whole process).
 - Employers and fund holders (implementation of change/improvements).

Ethics

- Quality assurance by assessing and adjusting performance in medical practice is an ethical obligation for every doctor throughout his/her entire professional career.
- You have a duty to prevent risk to patients.
- Informed consent is not only a legal, but also an ethical obligation.
- All patients should be met with respect and courtesy.
- Inter-professional relationship: Every anaesthetist should treat other health professionals with due respect.

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