



NEW TRENDS FOR PATIENT SAFETY PERIOPERATIVELY

ESSAY

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Anaesthesia

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Introduction

Some may consider anesthesia a risky endeavor. However, anesthesia is safer now than ever before, and compared to other disciplines, anesthesiology is still among the leading disciplines with regard to patient safety. The presence of a knowledgeable, competent, careful, and vigilant anesthesia provider is the most important element in delivering safe anesthesia. Therefore, strong efforts have to be made to further improve our skills and to better understand the complex systems in which we work. Given the facts that errors and adverse events associated with patient harm and deaths continue to occur and that the complexity of our health care system will steadily increase, it is clear that more needs to be done in order to make anesthesia safer. (*Staender, 2010*)

Patient safety: Is the avoidance, prevention, and amelioration of adverse outcomes or injuries stemming from the processes of healthcare. These events include “errors,” “deviations,” and “accidents.” Safety emerges from the interactions among the components of the system; it does not reside in a single person, device, or department. Improving safety depends on learning how safety emerges from the interactions of the components through analysis of “near misses” and adverse

outcomes or injuries. Patient safety is a subset of healthcare quality. **(Cooper et al, 2008)**

Patient safety has three components

- i. A set of guiding principles
- ii. A body of knowledge and
- iii. A collection of tools

The principles are: the tendency for things to go wrong is both natural and normal, rather than an opportunity to find someone to blame; safety can be improved by analyzing errors and critical incidents, rather than pretending they have not happened; humans, machines and equipment are all part of a system, the component parts of which interact to make the system safe or unsafe. Knowledge is largely taken from other safety-critical, high-reliability industries such as mass transportation and nuclear power and includes an understanding of how accidents arise and how they can be prevented. finally, the tools include critical incident reporting, checklists, safe system design, communication protocols and systematic analysis of risk **.(Olsen et al.,2010)**

The patient's most fundamental needs are for high quality and complete safety. Meeting these expectations demands knowledge, skills, and continuous vigilance. Equally important is a system that ensures safe practitioners; provides the appropriate drugs, technologies, policies, and procedures to foster safe practice; monitors performance of the entire process (including both outcomes and patient satisfaction); identifies safety and quality problems; and implements corrections. All of these demand a culture of safety and quality at all levels of the system, a culture that supports these needs not just in word, but also in deeds and actions (*Longnecker et al., 2008*).

Aim of the work

This Essay determines how to integrate quality, patient safety improvement and data acquisition into our workflow to be successful because feedback is imperative to success.

Chapter One

Pillars of Patient Safety

1. **Patient safety plan.**
2. **Patient education (informed consent).**
3. **Anesthetist performance.**

1-Patient safety plan

Around 230 million patients undergo anaesthesia for major surgery in the world every year. Seven million develop severe complications associated with these surgical procedures from which one million die (200,000 in Europe).All involved should try to reduce this complication rate significantly (*Weiser et al* .,2008)

Anaesthesiology has always participated in systematic attempts to improve patient safety; for example, in the setting of standards for colour codes of medical gas cylinders as early as 1932, this important fact brings two equally important consequences:

First, it is the duty of anaesthesiologists to build on their past achievements and not to allow the familiar and comforting image of the specialty as 'safe' to permit complacency.

Second, anaesthesiologists' care of patients is not limited to the perioperative period. (*Olsen et al.,2010.*)

Our specialty is closely involved in intensive care medicine, in which patients are exposed to both similar and additional risks, also critical emergency medicine is another area where anaesthesiologists play an important role, anaesthesiologists were involved in the care of 60% of hospital inpatients, and this included all clinical specialties when their patients' degree of illness became critical.

In all these fields, anaesthesiologists share skills and experience to enhance patient safety. Thus, anaesthesiologists have a unique, cross-specialty opportunity to influence safety and quality of patient care.(*De Robertis et al .,2010*)

However anaesthesia as a medical specialty is particularly concerned with the safety of the patient who is undergoing a surgical procedure in or out the operating room This is a prerequisite in order to provide a quality of care, which is based on:

- Good clinical practice.
- A sound organization.
- An agreement on best practice .
- 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, ***(Mellin-Olsen et al., 2007)***

The early years of the speciality were marked by the challenge of achieving technological improvements and striving for pharmacological advances. These efforts led to tremendous innovations, such as electronically controlled respirators, sophisticated monitoring with beat-to-beat cardiac output measurement, various airway devices, the use of ultrasound, and drugs with context-sensitive half-lives of only minutes. In these technical respects, the safety level has now almost reached the maximum possible, so that further improvements could probably only be achieved through immense effort. There will obviously be a few technical improvements in very specialized aspects in the future as well, but new technology or new medications will probably not be responsible for major improvements. ***(Hugo et al., 2011).***

Anaesthesiology is the key specialty in medicine to take up responsibility for achieving the goals listed below which will notably improve Patient Safety in Europe.

Heads of agreement

We, the leaders of societies representing the medical speciality of anaesthesiology, met in Helsinki on 13 June 2010 and all agree that:

- Patients have a right to expect to be safe and protected from harm during their medical care, and anaesthesiology has a key role to play improving patient safety perioperatively. To this end we fully endorse the World Federation of Societies of Anaesthesiologists International Standards for a Safe Practice of Anaesthesia .(**Merry *et al* ,2010**)
- Patients have an important role to play in their safe care which they should be educated about and given opportunities to provide feedback to further improve the process for others. (**Peat *et al.*, 2010**)
- The funders of healthcare have a right to expect that perioperative anaesthesia care will be delivered safely and therefore they must provide appropriate resources. (**Davis *et al.*, 2007**)

- Education has a key role to play in improving patient safety, and we fully support the development, dissemination and delivery of patient safety training. (***Staender , 2010***)
- Human factors play a large part in the delivery of safe care to patients, and we will work with our surgical, nursing and other clinical partners to reliably provide .
- Our partners in industry have an important role to play in developing, manufacturing and supplying safe drugs and equipment for our patients' care.
- Anaesthesiology has been a key specialty in medicine leading the development of patient safety. We are not complacent and know there are still more areas to improve through research and innovation. (***Gaba, 2000***)
- No ethical, legal or regulatory requirement should reduce or eliminate any of the protections for safe care set forth in this Declaration. (***Mellin-Olsen et al.,2007***)

Principal requirements

Today we pledge to Join with the European Board of Anaesthesiology (EBA) in declaring the following aims for Improving Patient Safety in Europe. Close cooperation between European organisations will be required to achieve these goals, for which the input and efforts of the European Society of Anaesthesiology (ESA) will be instrumental:

1. All institutions providing perioperative anaesthesia care to patients (in Europe) should comply with the minimum standards of monitoring recommended by the EBA both in operating theatres and in recovery areas.
2. All such institutions should have the necessary facilities for managing the following:
 - Checking Equipment and drugs.
 - Preoperative assessment and preparation.
 - Syringe labeling.
 - Difficult/failed intubation.
 - Malignant hyperpyrexia.
 - Anaphylaxis.
 - Local anaesthetic toxicity.
 - Massive haemorrhage.
 - Infection control.
 - Postoperative care including pain relief.
3. All institutions providing sedation to patients must comply with anaesthesiology recognised sedation standards for safe practice.
4. All institutions should support the WHO Safe Surgery Saves Lives initiative and Checklist .