Raising the Standard: a compendium of audit recipes
for continuous quality improvement in anaesthesia

The Royal College of Anaesthetists

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We also wish to acknowledge a considerable debt of gratitude to all the contributors to the first and second editions. It is testament to the foresight of the editors of the first edition that, 12 years on, their original strapline ‘continuous quality improvement in anaesthesia’ is now more generally recognised in the application of the emerging science of improvement across all branches of medicine as outlined in the foreword by Dr Carol Haraden, of the Institute of Healthcare Improvement.

Dr John R Colvin

Dr Carol J Peden

Editors, third edition
We improve what we measure. We often do not believe that processes and outcomes require improving until we have the data we need to make us change. Data builds will for improvement, allows us to know if we are improving, and to understand the degree of improvement possible with a given change in practice. This book will help clinicians do all of this and more.

It is no surprise that this book is written by and for anaesthetists, and spear-heads a transition from audit into quality improvement. Anaesthesia was the first medical specialty to champion patient safety as a specific focus. Anaesthetists have a long history of innovation and have lead the field in both measurement, and improvement, of clinical practice. From the 1950s through to the 1970s, though reports and data were imperfect, it was believed that anaesthesia care itself caused a high mortality in the region of one to two deaths per 10,000 anaesthetics. In order to improve the outcomes for patients, several actions had to be taken, the first of which was that anaesthetists had to decide that the cost of death and suffering was too high. The courage to look critically at practice and decide that the current outcomes were simply unacceptable was unprecedented. Secondly, anaesthetists had to look beyond the simply personal to the system of practice for answers. Thirdly, they used the data to build the will to embark on a systematic programme of improvement that resulted in a 10 to 20-fold reduction in mortality and catastrophic morbidity for healthy patients undergoing routine anaesthetics. Application of human factors and high reliability concepts to anaesthesia practice promises further gains. This is especially critical now, as technology extends our human capacity in ways that are not yet known or understood.

In the past, audit was used as a measure of the adequacy of a process or the reliability of a desired outcome. Many a medical student or doctor in training, required to do an audit, experienced the fact that audit was frequently used as a measure of the state of a process or outcome at a singular point in time. There was often no expectation of an improvement plan, and little discussion about what the data told them about their work. There are changes afoot that require clinicians to look at data over time to help understand variation – both wanted and unwanted – for the purpose of improvement not judgment. Doctors are increasingly being asked to lead or join improvement teams with the aim of learning, not only how to audit data, but how to improve the associated processes and outcomes.

We need data for research, improvement, and judgement of how we perform compared with the best – all are necessary but none alone are sufficient to ensure that our care is safe. Clinical research continues to create new knowledge at a rate that has thus far surpassed our ability to apply the findings to practice. Improvement science can help us bring those needed new advances to the bedside where they can help patients. This book will help anaesthetists continue their pursuit of ever safer, and ever more effective care for their patients, and ultimately, more rewarding work for themselves.

Dr Carol Haraden PhD

Dr Haraden is a Vice President at the Institute for Healthcare Improvement (IHI), Boston USA. From 2006–2010 she was the National Lead for The Scottish Government Patient Safety programme. She was the External Faculty Lead for IHI for the South-West of England Quality and Safety programme from 2009–2012. She continues to mentor and actively support many British doctors, particularly anaesthetists and intensivists, involved in quality and safety work.
Introduction

The Audit Recipe Book has provided a popular manual of audit topics for anaesthetists since the first edition in 2000. The strapline for the past two editions has read ‘a compendium for continuous quality improvement in anaesthesia’. The emphasis has been on the provision of audits focused mainly on measurement against defined process standards. Since the publication of the last Recipe Book clinical audit nationally, has demonstrated some very impressive achievements, such as the NAP 3 and 4 audits,1 2 and the improvements in patient care driven by the data provided in the national hip fracture database and hip fracture peri-operative network.3 4 However, at a local level, enthusiastic clinicians can be frustrated by audit when they realise that identifying less than optimal system performance may create the momentum for change, but may not be enough to alter the workings of a complex system, nor sustain initial improvements that may have been made. This new edition of the Recipe Book seeks to bridge the gap between audit and improvement, by providing anaesthetists with an introduction to the science of improvement5 and demonstrating some basic tools which can be used to drive positive patient centred change. A number of anaesthetists and intensivists throughout the UK have now learned improvement methodology, often from participation in one of the national or regional patient safety programmes.6 7 8 We have therefore included a number of examples from practising clinicians illustrating how they have identified problems using audit methodology, and then applied simple improvement techniques to achieve change.

Anaesthesia has a long tradition of improving clinical safety and outcome by continuous critical examination of our practice. However, changing the increasingly complex clinical systems in which we work and making those changes last, is a very difficult task. We need to combine our professional knowledge of what is the best evidence in practice with knowledge of how to improve, in order to deliver consistent care for the patients we treat in our hospitals. Improvement science takes into account that context is key in delivering best care; what works best for one patient population in one hospital, may not be relevant in another.9 Knowing what is the best care is not enough, we must ensure that delivery is effective.6 9 The NCEPOD reports10 provide ample evidence that delivery of evidence based care is at best inconsistent and at worst woefully inadequate.

Audit is recognised as the cornerstone of clinical governance, strengthened by acceptance of the value of systematic critical and objective examination of practice by clinicians and management alike. The quality of delivery of healthcare can be divided into three domains:11

- **Structure**: e.g. how many emergency operating theatres are available 24 hours per day?
- **Process**: e.g. what percentage of the components of the ventilator bundle are delivered reliably
- **Outcome**: e.g. what is your hospital’s 30 day mortality for ruptured aortic aneurysm?

Much audit has been process based; many of the audits in the 2006 Edition assess adherence to process measures. Although we still have this emphasis, we would urge anaesthetists undertaking a process-based audit to always consider the question, how will this improve care for my patients? The NHS White Paper ‘Equity and Excellence: Liberating the NHS’12 demands a ‘relentless focus on clinical outcomes’. It states that success will be measured, not through bureaucratic process targets, but against results that really matter to patients, such as survival rates. Darzi’s NHS plan ‘High Quality Care for all’13 describes the NHS as ‘safe, effective and personal’, and therefore audit should evaluate care against one of these three domains. These principles are also the central focus of the key Scottish Health Policy ‘The Quality Strategy’ which is currently being implemented by three Ambition Delivery Groups for Safe, Effective and Person-Centred Care.14

The Compendium is now in two sections. The first section is an updated version of the Audit Recipe Book. The second section includes some simple guides to basic improvement techniques, based mainly on the PDfSA cycle developed by Associates in Improvement15 and taught by the Institute for Healthcare Improvement.16 Most of the UK safety and quality programmes such as the Safer Patients Initiative, the Lead in Patient Safety programme, the Scottish, Welsh and Southern safety programmes use this methodology6 7 8 and therefore...
that is the one we have chosen to demonstrate. We do acknowledge that other techniques such as Lean and Six Sigma may be in use in some centres and familiar to some colleagues, but while we have referenced them there is not scope in the Recipe Book to provide an extensive discussion of different approaches. We have chosen to illustrate a few common topics with improvement projects undertaken by anaesthetists and illustrated with run charts and multiple PDSA cycles. Where appropriate, we have linked these examples with audits in the Recipe section. We chose not to change the whole format of this successful book, but to introduce the topic of improvement more gradually; maybe by the next edition audit and quality improvement will be so inexorably linked that both sections will seamlessly merge!

What is clinical audit?

Clinical audit has been variously defined over the years. This appears to be a well-accepted and relevant definition endorsed by the National Institute for Clinical Excellence (NICE) and others:

‘Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, process and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.’

The NICE publication ‘Best Practice in Clinical Audit’ clearly sets out the challenge to universally implement good quality audit and is worthwhile reading for those involved in audit on all levels. Essentially this involves an increased emphasis in the value of clinical audit, recognising that it is a key tool to changing practice and that it requires a supportive environment and use of appropriate methods. As we noted earlier, clinical audit particularly, has had some marked successes in recent years. The NAP 3 and 4 Audits have examined important areas of our clinical practice and highlighted areas for improvement. In surgery, following the Bristol Enquiry, the Society of Cardiothoracic Surgeons has relentlessly driven up standards by the publication of outcome results by hospital and individual surgeon, and identification and investigation of mortality that are

Figure 1: The clinical audit cycle. From: Principles for best practice in clinical audit

![Clinical Audit Cycle Diagram](attachment:image.png)
higher than expected. This methodology has been applied to all operations undertaken since 2006 and has been associated with a more than 50% improvement in risk-adjusted mortality. The improvement in outcomes has not only saved lives but reduced costs, and engendered a cultural change, putting patients at the centre of care delivery. Creating a multidisciplinary link between surgery and anaesthesia, the interest in outcomes in emergency surgery has driven contribution to the emergency laparotomy network, publication of emergency laparotomy data from multiple centres and the funding of the first anaesthesia driven Healthcare Quality Improvement Partnership (HQIP) audit for emergency laparotomy.

What is quality improvement and how does it differ from clinical audit?

Quality improvement is a formal approach to the analysis of performance, and then the use of systematic efforts to improve it. Improvement comes from the application of knowledge and a thorough understanding of the system you are trying to improve. The Model for Improvement has five key points (see Figure 2).

- Knowing why or what you need to improve (audit will have provided this information).
- Having a feedback mechanism to identify if improvement has happened (closing the audit loop).
- Developing a change that will lead to improvement.
- Testing a change before implementation, this may lead to multiple cycles of further change.
- Knowing when you have an effective change that will lead to an improvement.

Doctors have not traditionally been taught how to achieve change; and techniques widely used in industry, based on the work of Deming from which the Model for Improvement and most other improvement techniques derive, have only recently been introduced into healthcare. The quality improvement section provides some examples of the successful use of this technique to drive change. It is important to remember however, that improvement can result from learning from failure and so testing what works and learning what does not, is central to this methodology.

The process of audit, quality improvement and the role of the Audit Compendium

At its simplest level audit involves systematic collection and analysis of data to drive change in clinical practice. This may be manifest at several levels from the large national audit projects described, through structured hospital and departmental audit programmes, to individuals carrying out single projects. Perhaps the simplest form of cyclical examination of practice and change uses the PDSA (plan-do-study-act) methodology to drive small steps of change in practice at a very local level. Whilst all these approaches are valid, the strengths and weaknesses of each have to be recognised. Large national audits may be comprehensive, well constructed and authoritative but locally may suffer from lack of ownership and an understanding of how to drive change identified by the audit, into widespread practice. The use of small stepwise changes in practice via application of PDSA cycles may be seen as a very basic level of audit. The principles of this methodology of change management are well described by the Institute of Health Care Improvement. This process is increasingly recognised as a powerful and effective driver for change though its requirement for very local ownership and application may make widespread uniform applications difficult. However, the learning from small PDSA cycles can be accelerated by shared learning in collaborative working, an approach used with success in the national and regional patient safety programmes. In between these extremes lie single audit topics and the use of structured Departmental audit programmes.

It is the intended place of this Audit Compendium to facilitate and strengthen the link between audit and quality improvement:

- Individual topics have been chosen to reflect key areas of practice, relating to quality of service, which are relevant to most departments. In this Edition we have attempted to prioritise clinical topics, though recognise also the value of organisational/departmental issues and their impact on overall service provision and quality of care.
- Individual sections or themes may be used as a basis for developing a structured programme of audit across all sub-specialty areas of anaesthesia practice. Each section has been constructed by a theme editor who has recognised expertise in their area of practice. Individual topics have been chosen to reflect typical aspects of the theme and are written by authors with a proven track record. In developing such a structured programme, Departments may care to consider which of the topics are core, requiring regular investigation at specified time intervals, and those which are perhaps of more ‘one-off’ or occasional relevance.
An important related function of the Compendium is to encourage and enhance training in audit and quality improvement by providing trainees with a source of material to stimulate their training in this key area of practice. Evidence of training and participation in the assessment and improvement of patient care and service provision is a vital part of training in anaesthesia. This volume should provide a useful starting point to stimulate trainees’ interest across many subspecialty areas.

**Getting started**

We would encourage clinicians to consider the domains of quality: safe, effective and personal, and to choose a balance of audits for assessing the quality of care using structure, process and outcome measures for a departmental programme or personal portfolio that reflect all the different components of patient care.

One way to consider how to choose a topic is to look at your environment. What poses a risk to patient safety? How could you improve that risk? What processes do not work well? What are your ideas for improving them? What is inefficient and wastes resources that could be used for better patient care (this can include your time which could usefully be redeployed elsewhere).

- Look for circumstances or a process where the quality of performance is important. Choose a topic relevant to this process, and modify it to suit your needs if necessary. If you can’t find one, then write one using the same format.
- Topics, extra material and the blank template can be accessed and printed directly from the website.

**How can we make audit and quality improvement as effective as possible?**

- Make sure that there is a realistic potential for improvement, and that the end result is likely to justify the investment of time and effort involved.
- Make sure that you have the necessary will, political support, and muscle to act upon what you find.
- To have a realistic chance of driving improvement choose to examine an area of practice where you have influence, e.g. the use of nerve stimulators to reverse muscle relaxation, is likely to be easier to influence as an anaesthetist than the quality of consent by the surgical team.
- Make sure that the issue either occurs relatively frequently, or is of significance when it does occur. This will help to get results that matter.
- Discuss your proposed standards or targets with your colleagues so as to ensure that they are realistic and achievable.

**Data collection**

- Consider sample size. While we have discussed the success of very large scale audits, local audit should consider what sample size is really needed to rapidly identify a problem and to begin the improvement process.

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**Figure 2: Model for Improvement. Reproduced from 'The Improvement Guide'.**
The sample size for audit should be small enough to allow for rapid data acquisition but large enough to be representative.23 If the data acquisition time is too long, interest will be lost and data completeness will often suffer, e.g. for an audit of the adequacy of intra-operative fluid documentation consider examining a small sample, such as ten sets of notes. If a problem is found in the majority of cases there is clear room for improvement and energy can be directed into changing how fluid recording is done, rather than auditing a large number of notes, which will take longer and result in the same finding.

Prepare a method of collection of data that does not require undue additional work from your colleagues. Remember that in an atmosphere of staff shortage and pressure of work, others may not be as interested in your audit as you are. Any paperwork should be simple and self-explanatory. Wherever possible aim to take data from existing charts (such as pain scores, temperature or theatre records) rather than expect colleagues to fill in extra forms.

Once under way, monitor the quality of the data frequently and ensure that collection is going smoothly by visiting the wards or the recovery room, or dropping in on the operating list. Thank everyone involved. Provide feedback as to how many cases you have monitored, and how many are left to go.

Moving towards action

When you have all your data, analyse it and discuss it with colleagues. Discuss reasons for failure to meet standards or targets. If targets have been met, consider whether they might be tightened.

For a major audit invite all interested parties, such as ward, theatre, finance or administrative staff to an audit meeting. This is the place to make recommendations for improvement and set a timescale for review. A well-attended audit meeting with time for discussion from a wide range of perspectives, is very valuable. However, small tests of change can be performed in a more dynamic way and small meetings may be adequate until changes are well tested and ready for implementation.

Identify the changes required for improvement using the model for improvement:

- What are we trying to accomplish and by when?
- How will we know that a change is an improvement?
- What change can we make that will result in an improvement?

Start to make small tests of change and continuously evaluate success or failure until your changes are stable and ready for implementation.

Ensure that the majority of time in a meeting is not spent on describing the problem, positive patient-centred change requires time for solutions.

Revalidation and quality improvement

For the purposes of revalidation, the GMC has stated that doctors will need to demonstrate that they regularly participate in activities that review and evaluate the quality of their work.24 To help meet this requirement the College suggests that, over the course of a 5-year revalidation cycle, anaesthetists should participate in at least one departmental audit throughout a full audit cycle.25 Participation should adhere to the standards and principles outlined in the Audit Recipe Book. Anaesthetists will also need to provide details of this participation in their appraisal and revalidation portfolio, as well as any personal reflection and evaluation of the process and results, and finally, any planned actions to implement change or meet professional development needs that came out of the audit.26

Patient and relative participation

Patient experience and patient-centred care27 should be a cornerstone of the modern NHS and as such we would encourage the use of, and further development of patient and family experience audits. The limitations and pitfalls associated with collection and interpretation of patient satisfaction data are increasingly recognised.28 Conversely the high value of specific information relating to patient experience is also recognised and we would encourage the use of such data including PROMS (patient reported outcome measures) in any service evaluation.29 We are grateful to representatives of the RCA Patient Liaison Group who provide discussion of these aspects documented in this book. We would expect this to be of use in the execution of many of the included topics and in the future design of new audits.
The future, and how far we have come!

In the last introduction we stated: ‘the editors of the first edition had a vision that providing standard structured audits may facilitate regional or national audit initiatives... this has not yet happened at a national level to any great extent...’. Of course since then Anaesthetic Audit has been very successful, providing excellent outcome data (NAP3) and driving change such as the need for capnography in all areas where patients are intubated (NAP4), and the urgent need for improved care for patients undergoing emergency surgery through the hip fracture database and emergency laparotomy network. Anaesthetists have also always been a major force in critical incident reporting and we would very much encourage continued reporting as part of audit and risk management. Whenever possible this should be done locally (to ensure learning within your own organisation) as well as to the national bodies supported by the Royal College of Anaesthetists. Developments in IT and electronic data management should be utilised to assist audit especially outcome-based audit. We would encourage all anaesthetists to use the methods in this book and the basic template to create their own topics or adapt topics to their own particular needs. If these are of general applicability we would also encourage you to submit them to us (auditrecipes@rcoa.ac.uk) for consideration in our next update, and will publish them on the website. The hip fracture database and emergency laparotomy network have demonstrated the power of audit and the use by large numbers of us of standardised data collection. We can now learn from comparisons of practice on a grand scale. We would encourage readers to consider other audits, which may be found in this book, which could be used on a large scale to create the same momentum for change in important areas of patient care, if enough data is collected. Our next major step as a specialty with a proven track record in audit and patient safety will be to improve patient care by reducing variation in outcome.

We hope the third edition of this Audit and Quality improvement Compendium will continue to be a useful reference source to specialist and trainee anaesthetists across the breadth of our specialty.

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Editors, third edition
References

9. Woolf SH, Johnson RE. The break-even point. When medical advances are less important than improving the fidelity with which they are delivered. Ann Fam Med 2005;3:545–552.
28. Healthcare Commission and Picker Institute About the Advice Centre for the NHS Patient Survey Programme (http://www.nhssurveys.org/).
Quality improvement in a reducing budget environment

Perspective from the RCoA Patient Liaison Group

Ensuring consistent best practice tailored to individual need

The current Health and Social Care Bill\(^1\) and Scottish Government Healthcare Quality Strategy\(^2\) recognise that patients want to receive consistent safe high quality care wherever they are treated and however they present – as an emergency admission, an elective surgical patient or as a regular hospital attendee with a chronic condition. Patients rightly expect that decisions about their care are made in partnership with themselves ‘no decision about me without me’,\(^3\) and expect care to be tailored to suit their individual need. National initiatives to drive developments in person-centred care include the DH (England) Shared-Decision Making project\(^4\) and the Scottish Healthcare Quality Strategy.\(^5\) Each patient is also entitled to expect that having been admitted to hospital they will not be made sicker and that they can expect to get better without unnecessary complications.

However to do this, a gap needs to be closed in some clinical areas between best practice and common practice. Whilst an innovative new drug may often be readily taken up across the board, effective operational and systematic change can seem slower to implement nationally on an even basis. There are clearly areas of excellence within the hospital system but distressingly also pockets of substandard care and procedure. For example, several of the Care Quality Commission’s (CQC) recent reports\(^6\) highlighted a lack of basic hydration and nutrition in some elderly patients. It is also worrying to continue to observe the variation between hospital trusts on reducing hospital standardised mortality rates (HSMRs).\(^7\)

We are also concerned that whilst some parts of the system may have highly specialised skills and teams delivering highest standards of care, others in the NHS do not know when to call upon them. For example, a rapid response team within a hospital can save the lives of patients in immediate distress but staff who are not members of the specialist team must also know when and how to access and mobilise them.

It is heartening to observe the success of system-wide operational changes such as the zero-tolerance approach to hospital-acquired infections. Patients and the wider public feel part of this operational change. They now expect to see and use antibacterial hand gel when they enter a hospital or unit and feel increasingly confident to ask clinicians and other staff if they have washed their hands before examining them.

Whilst it may seem easy to justify introducing care bundles into a high-risk environment such as an ICU, as patients, we would also strongly encourage bundle-type procedures for other healthcare areas such as management of venous thromboembolism, sepsis and acute stroke. NICE Guidelines, ‘expert’ pathways and many other protocols of care increasingly exist for many clinical scenarios and situations but the checklists seem to be a mixture of essential, evidence-based imperatives merged with ‘preferable’ ones, not necessarily linked to research evidence. Guidelines alone do not make for consistent practice. The value of Improvement Science in driving consistent application of best practice is increasingly recognised.

Reducing waste, variation and harm – access to information

It is known that the number and costs of claims associated with medical errors across the UK are rapidly increasing year on year. Indeed in the year 2010–2011, expenditure in this area was estimated to be at record levels, exceeding £900m.\(^8\) We are all concerned to see a reduction in this financial burden thereby releasing elements of these funds for expenditure on treatments and improvements within the NHS.
In today’s ‘high technology’ society, it would seem wholly reasonable to expect that members of the public and those within the healthcare industry would be able to have ready access to accurate, up-to-date information providing details of the numbers, costs and types of errors occurring. Locating such information is however, often extremely difficult.

At the beginning of the 21st century two publications from groups of international health experts, identified major problems associated with incomplete and poor data quality related to medical errors both in the UK and in the USA. The UK Department of Health (DH) report ‘An Organisation with a Memory’ and ‘To Err is Human’ that had been commissioned in the USA by the Institute of Medicine, found that such data as was available was often inaccessible, inaccurate and unreliable.

‘To Err is Human’, makes the shocking claim that ‘More people die in a given year as a result of medical errors than from motor vehicle accidents...’. In addition it was estimated that around 10% of patients entering hospital are at risk of incurring an adverse medical event. These studies caused great public anxiety and political concern resulting in major international efforts being taken to make the healthcare industry safer.

Whilst patient safety has markedly improved and the volume of information related to medical errors has increased over the last ten years, the accuracy, accessibility and usefulness of that data still needs much improvement. Those Government funded internet sites that do publish statistics, often present their data in bulk format, making little attempt to summarise it or to present the data as intelligent information that would be useful to members of the public and others.

It has been shown that the adoption of bundles, (supported by the Plan–Do-Study-Act approach, developed initially for use in quality management within the industrial sector) frequently results in improvements in patient care and treatment costs. The ability to deliver a robust business case to make such changes may be hindered and underused as the raw data required to support a detailed argument are often either unavailable or of questionable value.

As patients, it seems clear that a reduction in medical errors together with the delivery of cost savings (operating in parallel with quality improvements) based on sound financial arguments are necessary in today’s economic environment. Even modest reductions in the cost of errors would release significant resources to contribute to improvements.

The Government has in a recent paper promised that patients will be able to access the data they require through an ‘Information Revolution’ and we look forward to being in a position to make more informed choices in the future. We also perceive that an extension of Patient Related Outcome Measures (PROMs) to other areas of healthcare has the potential to support future improvements in healthcare and to contribute to reducing treatment costs.

Healthcare and the ‘postcode lottery’

While improvements in the patient experience should manifest themselves because of enhanced consistency of care and data gathering, it is important from the person-centered point of view that clinical audits take on board the elements of location and multiculturalism that define the United Kingdom as an inclusive society.

Geography is important. Patient care in the Scottish Highlands and Islands may be delivered differently from those of patients living and working in the Capital. Ambitious clinical auditors will wish to build sufficient latitude into both the design and analysis of their schemes to incorporate the variety of patient experiences, requirements and aspirations.

Practitioners and patients alike have become more and more aware of the differences of delivery of services across the four countries that form the United Kingdom. With four governments, four Chief Medical Officers of Health and four separate hierarchies, it is inevitable that different geographical areas will have different priorities. The result will be variations in the method and quality of the delivery of service. It therefore becomes more and more relevant to produce rigorous schemes of audit to agreed national best practice standards that will help to consistently provide a high quality service to all, no matter where patient care is delivered.

Successfully recognising the multicultural nature of our society is a mark of excellence in any attempt to raise standards of patient care and, concomitantly, patient satisfaction. There is no one-size-fits-all solution.
Communication with patients and their relatives needs to be understandable, appropriate and empathic within all cultural, religious and social contexts. It is clear from past editions of the compendium that anaesthetists are, by and large, very aware of the need for good communication skills and the need to continuously examine and improve practice. We look forward to the positive impact of this new edition, particularly of the increased emphasis on using audit to drive meaningful change through modern Quality Improvement Science.

References


Mr David Weatherill  
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Mrs Sara Payne

**Patient Liaison Group**  
**Audit Compendium Review Group**