The Society for Cardiothoracic Surgery in Great Britain & Ireland

Maintaining patients' trust: modern medical professionalism 2011

Prepared by

The Society for Cardiothoracic Surgery in Great Britain & Ireland

Dendrite Clinical Systems

The Society for Cardiothoracic Surgery in Great Britain & Ireland

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phone +44 1491 411 288
fax +44 1491 411 377
e-mail publishing@e-dendrite.com

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Foreword: a patient's view

For many people with heart disease it is not only the pain and disablement, but the prospect of sudden death that alarms the senses and loads the souls of the patients and their families. The alarm bells have been muffled by advances in the science and technology of treatment and surgery, but unhealthy lifestyles and increased longevity have contributed to increased morbidity. In December 1999 more than 1,450 heart patients in England and Wales had been waiting for over a year for their coronary bypass operation. The pilot scheme *Choice* Initiative in Cardiac Surgery, 2001, together with the Society for Cardiothoracic Surgery in Great Britain & Ireland (SCTS) data collection programme, enabled cardiac surgical units to break down restrictive practices, especially that of having patients allocated to specific surgeons, and then having to wait in line, live or die. This proved to be a huge success and waiting times for surgery are still short.

The programme, driven by the Department of Health, but fully supported by the SCTS, showed that the professionals could respond to the needs of patients by changing the way they delivered services. The cardiac surgeons have subsequently gone further by comprehensively analysing their mortality data and publishing the results, displaying another example of commitment to involving patients in their treatment pathway and available choices. Patients were heavily involved in shaping these developments. As a result older and sicker patients are coming to surgery each year, yet overall the mortality results continue to improve. Whenever patients ask me for advice about their cardiac surgery, I always refer them to these data.

For years we patient representatives have used a language that demands patient participation in decisions about their health. Having been involved with SCTS as their patient representative since 2008, I know that they are committed to the principles of establishing and maintaining patients' trust. They are striving to improve the service they deliver, and to identifying weaknesses and resolving them promptly; for example the proportion of patients who come to cardiac rehabilitation continues to improve and they are looking to understand and resolve issues of poor access to cardiac surgery for women.

So how do the SCTS ensure that all surgeons are performing to the levels that the public expects? For the patients, important characteristics of a surgeon are skill, experience and empathy. We would expect the surgeon would have a good reputation with their colleagues and, if we needed unusual surgery we would expect the surgeon to have that sub-specialist expertise and, if not, that they would refer us onwards to someone who did. We would assume that they would have up to date knowledge, and would expect that the profession would make assessments to ensure that was so. Finally we would expect a transparency in all dealings, and an ability to independently *check* any claims made would be key to earning and maintaining Trust. We would expect the professional societies responsible for the practice of surgery under consideration to set clear standards of care, monitor those standards, and use the data to drive quality improvement. We would also expect them to have a strategy for getting information to patients about the relevant disease and treatments, as well as providing comparative clinical outcomes, to help us become an informed partner in any decision making process.

The themes explored in this report go a long way to reassuring me, and other perspective patients, that the trust placed in United Kingdom cardiac surgeons is well deserved. They collect outcomes data and publish them openly. They have developed strategies for investigating mortality rates that are not as expected (and have wisely involved patients in developing these policies). They are providing education to their colleagues and the SCTS have recommended to their members that they should show possession of that knowledge openly through their SESATS programme (see page 55). Consideration of demonstrating appropriate empathy with patients through measurement of patient experience and functional team working through multi-source feedback is the *icing on the cake*. The whole medical profession must respond to these issues – sooner or later the public will demand it.

Of great interest to me, the surgeons have not stopped there. They have invited contributions to the report from Julian Hartley, an NHS chief executive, who gives powerful messages about the need for team-working and a positive, engaging and explicit hospital culture, to enable the surgeons to do the best for patients. This is a long way from the target-driven obsession often portrayed about hospital managers in the media. These themes are developed further by the performance experts Carol Rothwell and David Halliday. There is consistency here between the different players.

To the patients *Maintaining Patients' Trust: Modern Medical Professionalism 2011* is a mightily important document. SCTS will be hosting its third Patient Forum at its Annual Meeting in March 2011, another demonstration that it is taking patient participation and representation very seriously. Our sincere appreciation must go to SCTS, to the contributors to this document, and to all the surgeons and their teams across the United Kingdom & Ireland. Never forget that we are with you all the way!

David H Geldard MBE, Patient Representative and Executive Board Member, SCTS

The structure of the book

We hope this book will be of interest to members of SCTS, patients and the public and to colleagues in the medical profession.

The book has been written in three parts. In the first we tell how SCTS has moved from informal paper-based data collection to a comprehensive and audited electronic database of all adult cardiac surgical operations in England, Wales, Scotland, Northern Ireland and Eire. And how, from this database we have placed outcomes, including surgeon specific results, in the public domain. We describe the important improvements in quality that we have seen as a consequence of collection, analysis and publication of this data (whilst acknowledging that we must also ensure that there are sufficient safeguards to ensure that patients receive appropriate treatment). Whilst these are substantial achievements we also recognize that we must guard against complacency in the face of changing medical professionalism and increasing expectations of patients in a more transparent society.

In the second part we have therefore invited some internal SCTS and external contributions to look at wider aspects of medical professionalism. Whilst these do not represent current SCTS policy they provide interesting insights that will influence our thinking in future. We are equally aware that some of these concepts may currently seem challenging but so was the concept of publishing surgeon specific data when initially debated more than a decade ago.

Many other areas of medicine are interested in developing their own professionally led national audits. A question we are often asked is about the cost of the SCTS endeavour. The third part of the book therefore contains our estimate of the resources necessary for us to fund our current model.

Graham Cooper,
Honorary Secretary,
The SCTS in Great Britain & Ireland

David Taggart,
President,
The SCTS in Great Britain & Ireland

Executive summary

The Society for Cardiothoracic Surgery in Great Britain and Ireland (SCTS) believes that every single patient should always receive the best possible care from every surgeon undertaking cardiothoracic surgery. We have written this book to describe to patients and the wider public – and to our colleagues across medicine who are working towards a similar objective in their own fields – what we have done so far to make this ambition come true.

The story begins in 1977 when SCTS began to collect data on outcomes following surgery. In 1996 outcome data collection became more sophisticated with the implementation of the SCTS database. By 1999 we had reported the results of a comprehensive audit of all United Kingdom cardiac surgery. Since 2005 clinical outcomes from the database have been published continuously through the Care Quality Commission website.

These initiatives underscore our commitment to making cardiac surgery as safe as we possibly can for patients. Furthermore, we believe that the marked, sustained, incremental improvement in the quality of care the surgical teams have achieved is directly associated with the process of recording, reporting and publishing outcomes at the level of the individual clinician.

This journey has not always been easy. However, the collecting and benchmarking of clinical outcomes has helped us to appreciate the need for a change in the culture of our professionalism, to try to see our surgery more through the patient's eyes, and so place the care of patients unequivocally first in everything we do. We have come to understand that this new approach to medical professionalism extends well beyond the clinical outcomes agenda. This approach of patient-focussed care with open publication of results sits comfortably within the aspiration of the White Paper *Equity and excellence: liberating the NHS*.

By the nature of our speciality, the measure that we have focussed on primarily is *risk adjusted post-operative in-hospital mortality*, but we fully accept that this may not be the most appropriate metric for other areas of medicine and surgery. We do however believe that many of the principles derived from our analyses of mortality are transferable to outcome measures in other specialities and are therefore worth reporting in some detail here.

We have subdivided our report into three sections. In the first we describe the direct experiences and thoughts of the SCTS. In the second we have included further thoughts alongside invited commentary both on our initiatives and the wider context of medical professionalism from outside our clinical specialty - these thoughts do not, as yet, reflect our direct activities and policy but we are actively considering these issues and their possible implementation. Finally we have summarised what we believe to be the costs of providing this model.

Part 1: the SCTS story

The era of accessible information

Patients are developing changing perspectives, with increasing access to and expectations of information of all types. SCTS has worked with Colin Jeffreys, a retail expert from Deloitte UK, to describe:

- The rapid increase in the take up of mobile, internet-connected devices.
- The marked impact this has had on the way people shop. A large proportion of major purchases are researched online and bought with a multi-channel approach involving mobile devices, the internet, phones, personal recommendations and retail outlets.
- How social networking will inevitably influence attitudes to healthcare decisions.
- That the majority of accessible healthcare information for patients is not prepared, analysed, interpreted or endorsed by the medical profession.
- We conclude that the medical profession, and in particular professional societies, should respond to the public need and produce authoritative useful information for patients.

The role of professional societies

We describe SCTS' view on the role of professional societies in modern medicine and conclude that:

- To deliver the best quality of care for patients requires strong clinical engagement. The NHS has found it difficult to achieve this consistently.
- Professional societies, such as the SCTS, are well placed to engage their members and drive quality-improvement.
- Improving quality of care should be the fundamental aim of a professional society and is best achieved by measuring, feeding back and public reporting of clinical outcomes.

- This gives rise to a tension between professional societies being a membership organisation and acting in the best interests of patients but, if this tension is acknowledged, it can be mitigated by professional societies being transparent about what they do and having an open commitment to raise standards.
- We believe that this tension can be resolved. A recent survey shows that 94% of members who responded agree with the current position, where outcomes are collected, benchmarked and published.

Utilising clinical outcomes

Within the SCTS we have gained significant experience in collecting and utilising clinical outcomes. We have described our current processes in some detail.

- It has been possible to include all adult cardiac surgery operations performed in NHS hospitals in the United Kingdom in the SCTS database.
- We know that in-hospital mortality is critically dependent on casemix and pre-operative patient risk factors, and these vary between hospitals and surgeons. We have applied an adaptation of the ***EuroSCORE*** risk prediction model to adjust for these factors.
- We have analysed and compared in-hospital mortality outcomes by hospital and individual surgeon, after making the appropriate adjustments. These adjustments mean that each hospital and surgeon's practice is compared to a standard that comes directly from the national, contemporary, peer group average.
- SCTS has devised a methodology, explaining divergence, for identifying and investigating mortality rates that are higher than expected.
- We have applied this methodology to the national dataset, for all operations undertaken since 2006. This demonstrates that over 99% of surgeons are performing satisfactorily.
- The application of this methodology has been associated with a more than 50% improvement in risk-adjusted mortality.
- The process of collecting and benchmarking clinical outcomes has driven a cultural change to put patients at the centre of care delivery by the multi-disciplinary team.

Continuing professional development

- Spending sufficient time on continuing professional development (CPD) is one of the keystones of professional revalidation.
- Within the SCTS we accept that a comprehensive knowledge base, and the ability to apply that knowledge, is of paramount importance to delivering high quality care to patients.
- An ideal CPD programme should be comprehensive, multi-faceted and balanced across clinical, academic and professional pursuits.
- SCTS has developed a portfolio of educational courses for trainees & consultants, including both clinical and professional topics, underpinned by sound adult education principles.
- We recommend that our consultant members should undertake an on-line educational / assessment tool (SESATS), which will help to ensure that all cardiothoracic surgeons are up to date, and will demonstrate this openly to the public. We hope this will act to continue to maintain public trust in the profession.

Thoracic surgery

The themes in this book, although developed from our experience with adult cardiac surgery, are generic and applicable to thoracic and all other medical specialties. As we develop recording and reporting in thoracic surgery we recognise that:

- Responsibility for key decisions in thoracic surgery are largely taken in the context of multi-disciplinary teams.
- This is not the case in adult cardiac surgery although this is changing with the implementation of recent guidelines for management of patients with coronary artery disease.

- The development of the *Thoracoscore* as a risk stratification methodology for thoracic surgery makes benchmarking of risk-adjusted outcomes feasible.
- There is significant variation in resection rates for lung cancer surgery in the United Kingdom. These need to be better understood, and resolved.
- Thoracic surgeons recognise that more openly recording and reporting this variation is an important step in reducing it.

Part II: the wider context

Every patient should have a good doctor

Sir Donald Irvine, GMC Past President and long-time advocate of patient centred professionalism, and Professor Frederic Hafferty, expert on medical professionalism from the Mayo Clinic, review the history of professionalism as it applies to doctors. They conclude that:

- The generally good public standing of doctors has tended to obscure the fact that the profession has been prepared to tolerate poor practice from a minority through a misplaced sense of collegiality and dated ideas of professional autonomy.
- The public has made it clear that it wants a 21st Century health service in which patients can take the optimum performance of their doctors for granted.
- The challenge for doctors is whether they are willing and able to meet the expectation of society.
- A new framing of medical professionalism is emerging, which welcomes patient autonomy, and embraces the pursuit of excellence through knowledge, skill, service, accountability, transparency, and a collective responsibility for setting and assuring professional standards.
- The United Kingdom cardiac surgeons are travelling this road; they see their particular approach to revalidation as a socially responsible expression of their personal and collective commitment to patient-centred professionalism.

Measuring patient experience

Penny Woods and Charlotte Williamson from the influential patient organisation Picker Institute Europe conclude that:

- For many patients, the experience of care is a powerful determinant of their view of the quality of care.
- Collecting useful data on patient experience requires effective instruments to be developed.
- For many patients, shared decision-making is a key factor for a good experience.
- Appropriate measurement of patient experience, rather than patient satisfaction, is important for improving healthcare as it allows targeted intervention where necessary.
- Newer methods of measurement should enable low-cost, convenient, repeated measurement of patient experience with easy feedback, thereby optimizing patient care.
- Routine measurement of patient experience, at organisation and clinical team level, should be an important domain alongside clinical outcomes to assure patients and the public of the quality of healthcare delivery.
- SCTS has published clinical outcomes and Picker encourages them to also pioneer the collection, feedback and publication of patient experience measures. By so doing they would continue to lead the medical profession in delivering what is important to patients.

The role of multi-source feedback

Multi-source feedback (MSF) is a widely-accepted tool to encourage personal development and effectiveness. We have reviewed the use of MSF in our professional life.

- SCTS has experience of using MSF around the professional domains of good medical practice and the NHS leadership qualities framework.
- We believe that MSF is a useful formative tool for doctors and has an important role in helping doctors in difficulty.

- We do not think that MSF as it is currently used will be effective in robustly providing evidence for professional revalidation.

A chief executive's view

Julian Hartley, the Chief Executive of South Manchester University Hospital NHS Foundation Trust puts the SCTS experiences and the wider context of medical professionalism into the context of the NHS, writing that:

- Culture, in relation to an organisation, describes a system of values, beliefs and behaviours which informs and influences the day to day actions of people within that organisation.
- Organisational culture is a key factor in the quality of healthcare delivery; the right culture can facilitate good clinical care, and *bad* culture can enable unacceptable care to flourish.
- There is a significant evidence base which defines *good* culture within healthcare, and lays down the route for effective cultural change. Many NHS organisations have an important need to change.
- Trust Boards and Chief Executive Officers have a key role to play in delivering the right organisational culture and infrastructure, and it is only within this culture that optimum medical professionalism can flourish.

Focussing on poor performance or managing for excellence?

The Invited Review Mechanism of the Royal College of Surgeons of England (the usual process through which concerns about poor performance are investigated) is a reactive process. Carol Rothwell and David Halliday, performance experts with extensive experience of working with the NHS, argue for a more proactive approach. They describe:

- The strong and developing scientific base for performance management, which is used extensively outside medicine.
- That performance management expertise is only utilised at a late stage of investigating or attempting to resolve performance concerns in healthcare.
- The two key and intimately related factors to high quality healthcare delivery are behaviours and performance.
- Great organisations outside healthcare demonstrate, without exception, a high feedback culture. This is in stark contrast to the majority of the NHS.
- The medical profession, and NHS organisations, need to move towards a model whereby they look at performance management to achieve engagement and motivation,
- The profession should develop a behaviour-based approach linked to job planning that enables individual and team performance to be defined from the patients' perspective.

Part III: costings

The costs of delivering the SCTS model of modern medical professionalism

A common reason given for not recording and reporting clinical outcomes is that it is too expensive. We have calculated the costs associated with the SCTS model.

- The majority of the costs associated with SCTS model are those for local data collection and are approximately £45,000 *per* hospital *per* year.
- The resource for essential clinical input into the process is currently met from within existing allocations in most hospitals. Decreasing these allocations would threaten the current programme.
- National data collection, collation and analysis costs around £290,000 *per annum.*
- The total costs for measuring the quality of clinical outcomes is £1,480,000 *per annum* in England, which is less than 1% of the total NHS spend on adult cardiac surgery.
- There are large cost saving benefits associated with improving clinical quality, and analysis about improved length of stay in the United Kingdom compared to an international standard suggests savings of over £5,000,000 *per annum* to the NHS purely for isolated coronary artery surgery.

Introduction

From as long ago as 1977, the cardiac surgical community in the United Kingdom began to collect data on mortality outcomes after surgery, to support quality improvement and allow individual surgeons and units to compare their results to the national average. However, despite this initiative, serious failings in clinical governance and professional regulation were exposed in paediatric cardiac surgery at the Bristol Royal Infirmary in the 1990s. The problems were made public in a high profile GMC hearing in 1997 and were described comprehensively in the report of the Public Inquiry that followed [1]. Most of the failings were professional, institutional and cultural. They were not confined to cardiac surgery, but generalised throughout United Kingdom medical practice, as evidenced by cases reported in other specialties at around the same time. This led to a move by the government and the medical profession together to overhaul and modernise professional regulation and institutional governance.

The emotive aspects of surgical mortality in children have emphasised the need for cardiac surgeons to respond to, and be seen to be responding to, reported shortcomings in the specialty. Within the Society for Cardiothoracic Surgery in Great Britain & Ireland (SCTS) we believe that we have a compelling professional duty to make sure that our surgery is as safe and as acceptable to patients as we can possibly make it. Consequently, we have taken seriously the recommendations in the Bristol Inquiry report, particularly those around the need for data collection and publication of mortality outcomes. Since the Inquiry reported there has been interaction between the professional society (the SCTS), the organisational regulator (the Healthcare Commission / Care Quality Commission), the media and politicians that led to surgical mortality results for adult cardiac surgery first being published by surgical team in the United Kingdom in 2005. Results are now available for all NHS hospitals and about 85% of individual surgeons (http://heartsurgery.cqc.org.uk/index.aspx). We have also produced a comprehensive national audit data report that has been widely distributed and is freely available [5]. The paediatric cardiac surgeons in conjunction with the cardiologists of the British Congenital Cardiac Association (BCCA) also analyse and publish the results of surgery [6] (we will not consider the complex issues of congenital surgery further in this report). This type of data is not usually available for other branches of medicine and surgery.

The drive to publication of mortality data has been accompanied by several initiatives that include:

- active local consideration of aspects of data collection, validation, governance and quality improvement, to ensure both that the data is fit for purpose and that mortality results in adult cardiac surgery are as good as they can be [5].
- the SCTS has implemented strategies for appropriate casemix adjustment to allow fair comparison of mortality results for hospitals or surgeons to be made.
- we have also accepted that some hospitals or surgeons will inevitably, sooner or later, have mortality rates that are higher than expected, either due to chance alone or sub-optimum performance. We have devised and implemented policies for dealing with this.
- this detailed focus has given the SCTS an unusual insight into what quality in medical care should look like.

In addition to data collection we have considered how we need to optimise surgical training and continuing professional development for surgeons and how measurement of aspects of patient safety and patient experience dovetail into the chosen quality measure of in-hospital mortality. Because our surgical mortality outcomes are now so transparent we have also observed that managers (both clinical and non-clinical) in cardiac surgical departments have been forced into interventions to improve quality, which may have not have happened in other branches of medicine or surgery. We feel that there are important lessons to be learnt from this experience.

In parallel with the professionally driven initiatives in cardiac surgery there has been some progress towards better organisational and professional regulation across medicine as a whole but it is fair to say this progress has been disappointingly slow. The GMC has been working towards a model for professional revalidation for doctors following the events in Bristol and elsewhere, but Dame Janet Smith's report into the events surrounding Dr Harold Shipman (2005) was critical about the speed and rigour of the later versions of the proposed plan. In response the Chief Medical Officer published Good Doctors, Safer Patients (2006). This report described detailed proposals that are now becoming law through the White Paper about regulation of Healthcare professionals: Trust Assurance and Safety. Despite this, achieving robust arrangements for assuring the public that doctors maintain optimum professional performance are not straightforward and there are on going discussions between the GMC, the Academy of the Medical Royal Colleges, the royal colleges, the professional societies and the government about how revalidation will work in practice. The specific plans for implementation still remain unclear.

In this period of uncertainty, we in SCTS have been moving on, somewhat independently of the professional

revalidation agenda, working towards a new model of medical professionalism (see page 68). In this model, robust data on clinical outcomes are collected, analysed, benchmarked and fed back for the purposes of quality improvement and quality assurance. As a result we have detected a 50% reduction in risk adjusted mortality in the United Kingdom in recent years and United Kingdom cardiac surgery mortality is lower than an international standard [7]. We believe these improvements have been a result of intense scrutiny on mortality rates, which has forced the development of highly skilled and focussed multi-disciplinary teams of surgeons, anaesthetists, intensive care physicians, nurses, physiotherapists perfusionists, managers and other healthcare professionals who have worked together to drive up overall quality of care for patients.

We are now combining the clinical outcome measures with an evidence-based approach to a surgeon's continuing professional development, and considering aspects of multi-source feedback, appraisal, and patient experience measures. We believe these processes together are driving a desired change within our specialty, and therefore form a good model of a new medical professionalism and professional regulation that creates benefit for both patients and doctors. We are also optimistic as our experience of these issues sits very comfortably within the direction of travel towards patient focussed care supported by increased accountability described in the White Paper Equity and excellence; liberating the NHS [8]. In cardiac surgery, the measure that we have focussed on primarily is *risk adjusted post-operative in-hospital mortality*, but we accept that this may not be the most appropriate metric for other areas of medicine and surgery. We do, however, believe that many of the principles derived from our analyses of mortality are transferable to other specialities, and are therefore worth reporting in detail.

We have described this story in the following pages. This journey has been challenging. The SCTS is a professional membership organisation which exists due to the enthusiasm and direct financial contributions of cardiothoracic surgeons. As with all groups there is a spectrum of opinion on key issues, and in no area has this been more ferociously debated than the publication of surgical results for named consultants; many believe it has driven quality and contributed to the maintenance of public trust in the profession, others think it has caused the surgical community to practice risk averse behaviours, which has led to some patients being denied surgery because hospitals or surgeons have been worried about the implications of having high mortality rates. These discussions continue.

We think that some important messages can be extracted from these experiences. However we accept that whilst we have considerable expertise in some aspects of this agenda, our initiatives are better described with the help of other contributors with more knowledge than ourselves and have included thoughts from Sir Donald Irvine (past President of the GMC and long-term advocate of patient-centred medical professionalism) and Professor Frederic Hafferty (expert on medical professionalism from the Mayo clinic) on the history of medical professionalism and professional regulation, where they describe what they see as necessary changes to the current model and discuss how cardiac surgical developments in the United Kingdom should contribute. There is a section on the role of patient experience measures, written by Penny Woods and Charlotte Williamson from the highly regarded patient organisation Picker Institute Europe, an invited contribution from Julian Hartley, a Chief Executive of a leading NHS trust, exploring the roles and interplay between employing organisations and professional societies in ensuring that patients always get the highest quality treatment and thoughts on the management of poor performance in healthcare, written by Carol Rothwell and David Halliday, organisational psychologists with great expertise and experience in working with hospitals and clinicians in difficulty.

There are consistent themes throughout this book which include the importance of truly placing patients at the heart of healthcare delivery and the need for significant cultural change within the medical profession to achieve this aim. We believe that the initiatives described need to be seen against the major sociological changes occurring in the population as a whole in the era of increasingly accessible information and the desire for greater accountability for public servants, both in medicine and outside, and in the United Kingdom and abroad.

We hope that this description of our experiences, seen against the context described by other contributors to this book, will be of interest to the public, regulators and policy makers in developing thoughts on modern medical professionalism , as well as helping to shape a sensible and robust process for professional revalidation. We also hope that sharing our thoughts on these issues may be of interest to other professional groups who are working towards a similar aim.

References

1. The Bristol Royal Infirmary Inquiry. http://www.bristol-inquiry.org.United Kingdom/
2. The Shipman Inquiry. http://www.the-shipman-inquiry.org.United Kingdom/reports.asp.
3. Good Doctors, Safer Patients (2006): Proposals to strengthen the system to assure and improve the performance of doctors and to protect the safety of patients. http://www.dh.gov.United Kingdom/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4137232.
4. The White Paper Trust, Assurance and Safety: The regulation of health professionals. http://www.dh.gov.United Kingdom/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_065946.
5. Bridgewater B, Kinsman R, Walton P & Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
6. http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/heart-disease/congenital-heart-disease.
7. Bridgewater B, Gummert J, Kinsman R & Walton P. Fourth EACTS Adult Cardiac Surgical Database Report Towards global benchmarking. ISBN 1-903968-26-7. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
8. Equity and excellence; liberating the NHS. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117794.pdf.

Part I: the SCTS model

The era of accessible information

Colin Jeffrey
Multi-channel retail lead, Deloitte UK

Malcolm Dalrymple-Hay
Ben Bridgewater
Society for Cardiothoracic Surgery in Great Britain & Ireland

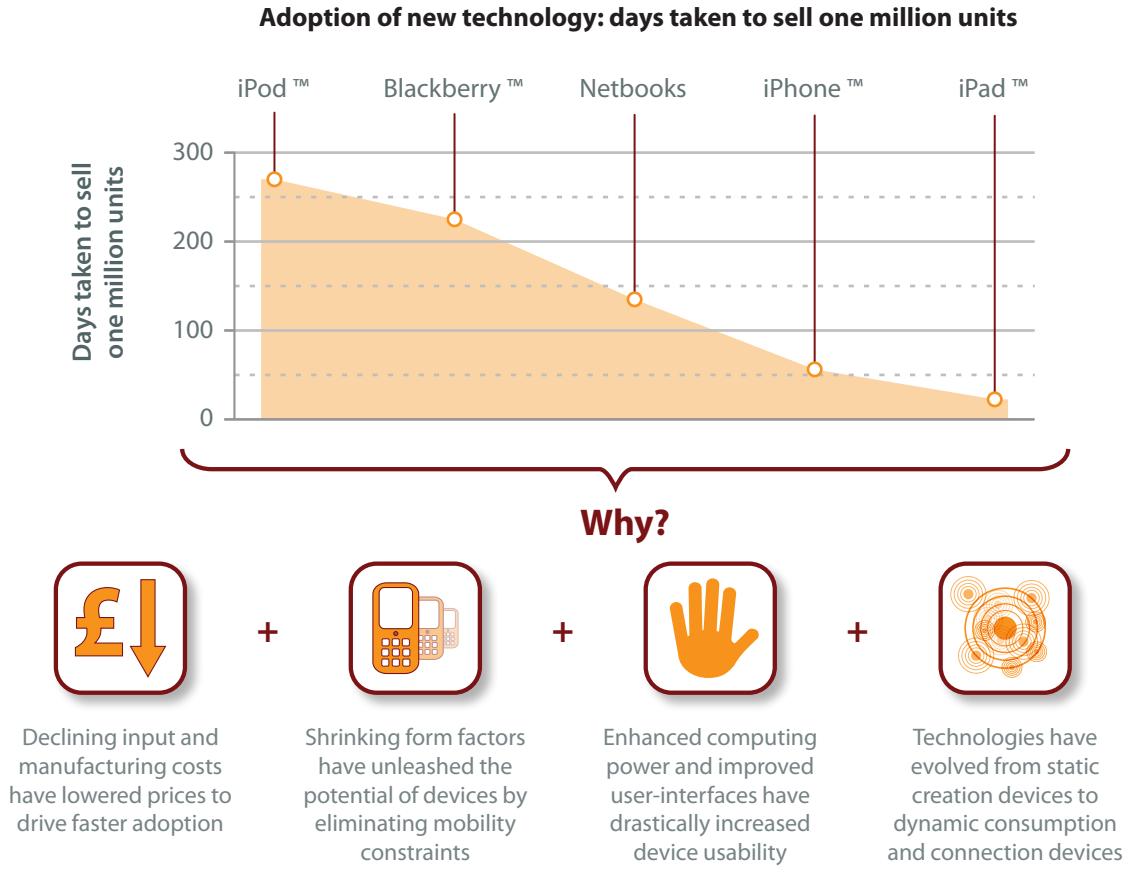
The era of accessible information

Colin Jeffrey, Multi-channel retail lead, Deloitte UK
Malcolm Dalrymple-Hay and Ben Bridgewater

Introduction

There is a radical change underway with increasing use of the internet which has widespread implications. The retail sector has been at the forefront of harnessing the web, better to serve customers and maximise benefits from these changes; in the United Kingdom in 2009 online sales accounted for £20.9 billion, approximately 8% of all retail sales (up 13.3% from the previous year). Many customers now research online before buying in store or browse in store prior to buying online. It is thought that this *multi-channel* approach (the physical store and online store being two discrete channels where customers gather information to inform their purchasing decisions) will account for more than 50% of all sales by 2014. Advances in technology leading to greater ease of use and better security are supporting these developments, and the resulting sociological change in the population is becoming increasingly understood by the retailers as they strive to gain a greater share of the market. The rate of sales of various mobile devices following their introduction illustrates this well, as shown in Figure 1.A. Newer products are being taken up much faster by consumers as a result of lower prices, better functionality and enhanced connectivity.

Figure 1.A
The pace of innovation: the functionality of new technology enables and motivates the connection to a constantly active and evolving network of customers, information, services, and commerce.



Acknowledgement to: Deloitte UK & Gartner Research (www.gartner.com)

Almost one-fifth of the United Kingdom population now owns a smartphone and retailers are leading the way in adapting their websites and services to put their online stores in the palms of our hands. The advances in this *mobile commerce* means that it is now entirely possible for a customer to be standing in one retailer's shop whilst using their smartphone to shop online with a number of competitors.

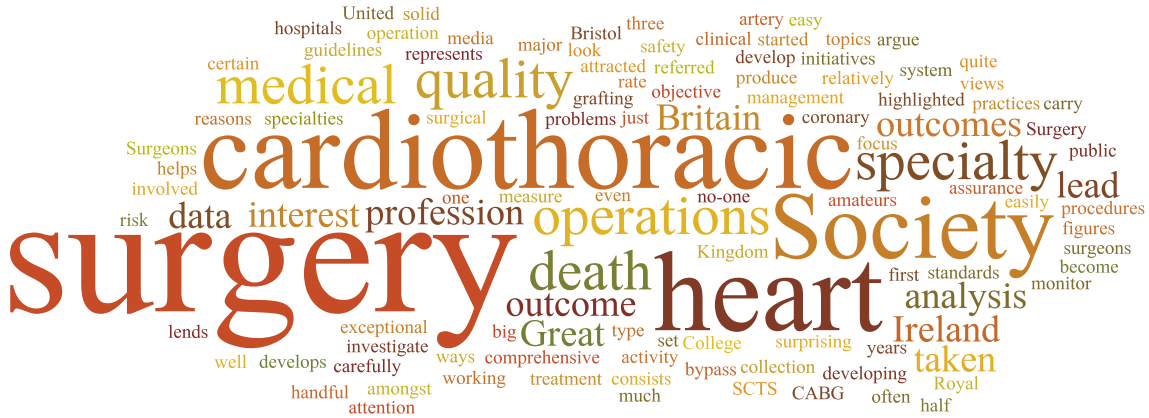
In addition, the phenomenal growth in the use of social networking technologies such as Facebook™ and Twitter™ presents both opportunities and risks for retailers and their customers. The opportunities lie in retailers harnessing these tools to enter into real time dialogue with customers providing information, answering queries and directing promotions to customers who subscribe to these services. The risks arise from the speed at which reputational damage can occur as claims of poor service or unethical practices spread unchecked across the public domain.

According to Phillipp Schindler, Vice President of Google™, the digital revolution is now at the tipping point, and the pace of change is set to accelerate further.

The SCTS

In the SCTS we believe we are a forward-thinking, patient-orientated professional society, hence our initiatives to publish results for patients and produce books such as *Demonstrating Quality* and this document. However, a recent analysis of our website (www.scts.org) using *word cloud* methodology *via Wordle*™ is displayed in Figure 1.B. This brings out the subliminal messages behind the text we put into the public domain: the more frequently we use a word, the larger and more prominently the word is displayed in the word cloud. *Surgery*, *cardiothoracic*, *society* and *heart* are all prominent. *Patients* are not. This suggests that we appear to be an inward looking profession that primarily puts information into the public domain pointing towards our members. Following this analysis we now plan to change this to target things much more towards the patient and the public, as that fits more comfortably with the way we believe professional societies should act (see page 25).

Figure 1.B
An SCTS internet word cloud



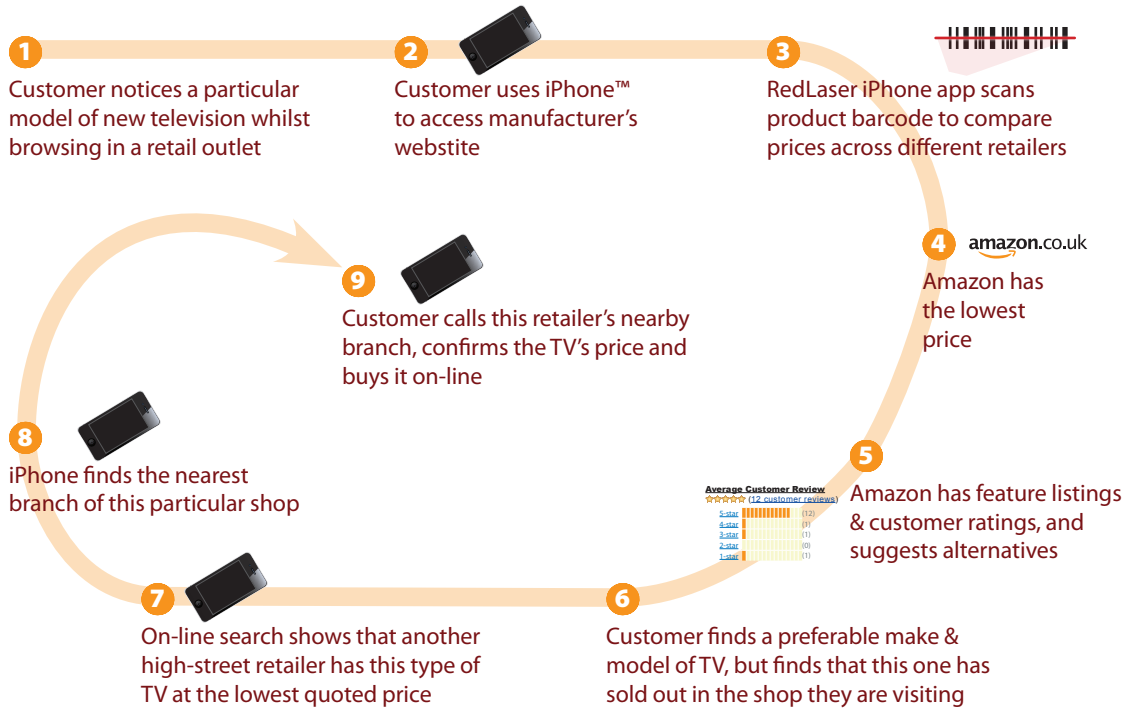
What are the implications for healthcare and the medical profession?

You can now book a flight or buy a new car through the internet from the comfort of your living room, or by using an iPhone™ or other mobile device on the way to work. You cannot have a heart operation on-line. The current retail concept of *multi-channel* as described above does, however, lend itself well to healthcare. We have described this approach to buying a new flat screen television in Figure 1.C. It is inevitable that the approach to accessing healthcare will become similar. For example:

- A patient may develop chest pain on exertion whilst walking his dog after work and access a website such as NHS choices to research the symptom as soon as he gets home.
- Believing it may be angina he could book an appointment with his GP for the following day, again using the internet or phone.
- At the consultation his GP could show him the available cardiology chest pain clinic slots using *Choose and Book* and he could make an appointment based on geography, timing and the hospital and department's reputations, which he may make judgements on from the hospital website, alongside official or unofficial reviews of the service.
- If he should go on to need coronary artery surgery, he could then choose his hospital and surgeon based on advice from his cardiologist, information on the hospital (such as the Dr Foster Good Hospital Guide), the results of cardiac surgery for the hospital and individual surgeon (www.CQC.heart.org), and ratings of the proposed surgeon from recent patients (*e.g.,* www.iwantgreatcare.com).
- After assimilating all this information he could make his choice and book his appointment and surgery.

The parallels with a multichannel shopping experience are obvious. Of course some patients will not wish to go down this route, and will be happy with the *what do you think is best, doctor?* approach, but increasing utilisation of accessible information in other sectors will inevitably drive an increasing proportion of patients to seek these types of data, and the medical profession should actively support them. The internet is obviously an uncontrolled domain, and any organisation or individual can produce reviews or comments on a hospital's services or quality, but we believe that the medical profession in general, and professional societies in particular, have an important role to play in producing authoritative, robust, suitably contextualised information for patients and their carers.

Figure 1.C
A multi-channel retail experience



What will *connected* patients be looking for?

Table 1.1 shows the criteria that customers look for in a retailer. This is taken from a survey into *top service basics by retail sector* (Gartner 2009) and it applies to clothing, grocery, convenience and department stores. We have added additional columns for health, including criteria the patients might seek and the capabilities required by the healthcare provider.

Table 1.1

Retail		Health	
Customer criteria	**Capabilities required**	**Patient criteria**	**Capabilities required**
• Product availability	Accurate demand planning and replenishing	• Available appointments / operating slots	Accurate demand- and capacity-planning
• Check availability of product	Ability to confirm product is in stock	• Check access to appointments and operating slots	Excellent internet- and phone-based booking systems
• Easy to find	A user friendly website with intuitive search functionality	• Easy to find information	A user-friendly website with useful information (including outcomes) down to departmental, and disease / procedure specific level
• Fast and secure checkout	Easy checkout process with customer details stored securely and quickly	• Fast and secure booking process	Easy booking process, Patient details stored securely and quickly
• Informed staff available	Offer consistent customer service in stores and online, product data and reviews available in store,	• Informed staff available	High-quality outpatient services, helplines manned by experts, availability of online feedback to questions, data on outcomes available
• Flexibility to buy, amend and return through any channel	Aligned Key Performance Indicators and staff incentives to serve customers	• Continuity of care through primary, secondary and tertiary care	Quality and real-time information flow across the NHS

This analysis shows we have a long way to go in healthcare. The political direction of travel has been clearly articulated in *Equity and excellence; liberating the NHS* [1], where the Coalition Government describe that they intend to bring about:

> *an NHS information revolution, to correct the imbalance in who knows what … to give people access to comprehensive, trustworthy and easy to understand information from a range of sources on conditions, treatments, lifestyle choices and how to look after their own and their family's health.*

Publication of our outcomes (see page 35) is a good start, but we must go further. Napoleon once described the United Kingdom as a *nation of shopkeepers*. Now we in the medical profession must learn from them.

1. Equity and excellence; liberating the NHS. http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117794.pdf.

The professional society in modern medicine

Graham Cooper
Society for Cardiothoracic Surgery in Great Britain & Ireland

The professional society in modern medicine

Graham Cooper, Honorary Secretary of the SCTS

Key points

- To deliver the best quality of care for patients requires strong clinical engagement.
- Professional societies, such as the SCTS, are well placed to engage their members and drive quality-improvement.
- Improving quality of care should be the fundamental aim of a professional society
- Measuring, feeding back and public reporting of clinical outcomes is the key mechanism to improve quality of care.
- This gives rise to a tension for professional societies between being a membership organisation and acting in the best interests of patients.
- This tension has to be acknowledged, but can be mitigated by professional societies being transparent about what they do and having an open commitment to raise standards.
- The SCTS has shown that this tension can be resolved: a recent survey shows that 94% of members agree with the current position, where outcomes are collected, benchmarked and published.
- Professional societies must take a leadership role in driving quality improvement, working with others to provide effective regulation and thereby assuring public trust.

Introduction

Reorganisation of the NHS has been an almost constant part of most of our professional lives. Now another reform gathers [1]. Two goals of the current White Paper; to put patients first and hold the NHS to account against clinically credible and evidence-based outcome measures are absolutely convergent with thinking within the Society for Cardiothoracic Surgery in Great Britain and Ireland (SCTS). Yet, although reorganisation of the NHS has generally had aims that doctors would fully support, there is little evidence that it has produced any improvement [2,3]. Certainly none of these reforms have fostered an environment in which *doctoring* and the new professionalism, described by Sir Donald Irvine and Frederic Hafferty on page 68, has flourished. Professional societies, like SCTS, have a crucial role in developing this culture.

Clinical engagement

That involvement of doctors is vital to the success of healthcare reform is obvious [4,5] yet doctors are often sceptical about such change [6] and are often reluctant participants [7]. Despite the huge literature on the subject, no clear mechanism for achieving clinical engagement is apparent [3]. Clinical engagement may, of course, mean different things to different people. The NHS is a bureaucracy and, in a bureaucracy, power is traditionally exerted by authority. One interpretation of clinical engagement may be that doctors will do as they are told. Doctors, however, have a collegiate heritage, which existed to maintain standards and train people in their particular craft [8]. Within collegiality, the possession of specialised knowledge or skills is the basis for power [9]. Collegiate mechanisms for exercising power rely on collective, consensual decision making rather than autocracy [8].

Modern medical professionalism

Doctoring in the 21st Century demands more than the application of expertise and maintenance of standards. Although public trust in the medical profession remains high, 78% of people believe that there is a need to carry out regular checks on doctors [10], as described in more detail on page 70. In an era of increasing transparency (see page 18) and greater accountability for public servants, the clear message is that doctors need to earn this trust [11, 12]. We will assure this by being transparent about what we do and having an open commitment to raise standards [13].

The GMC requires doctors to:

- take part in regular and systematic audit.
- take part in systems of quality assurance and quality improvement.

Doctors have a professional responsibility to:

- know what they do.
- know how well they do it.
- strive to improve their performance.

Quality-improvement in healthcare can be approached in different ways. The public release of outcomes data seems to be more effective than approaches based upon regulation or financial incentive [15]. Publication of clinical outcomes not only provides transparency to the public, and so acts to maintain public trust, but also drives quality-improvement by stimulating the providers of healthcare to improve their performance [16]. Doctors should embrace this and exert their professionalism, leadership and engagement. This, however, requires a culture where duty and self-reliance are valued, not a bureaucratic culture of policy and procedure.

The role of professional societies

There are 122 recognised professional societies; almost all of these, in their aims, have some form of words indicating that they exist to promote excellence in their specialty [16]. All are membership organisations, many are registered charities. Their total membership is around 36,000 similar to the total number of consultants in this country [18]. They are important to consultants.

As membership organisations, with a collegiate heritage, professional societies have to balance consensuality and accountability to their members with the responsibility of leading their specialty and their stated aims of advancing standards. This tension not only requires sensitive and skilful leadership but also has to be recognised as a potential conflict of interest.

This conflict must be acknowledged and addressed if professional societies are to retain the confidence of the public, patients and politicians in advancing standards. This can be achieved in three ways:

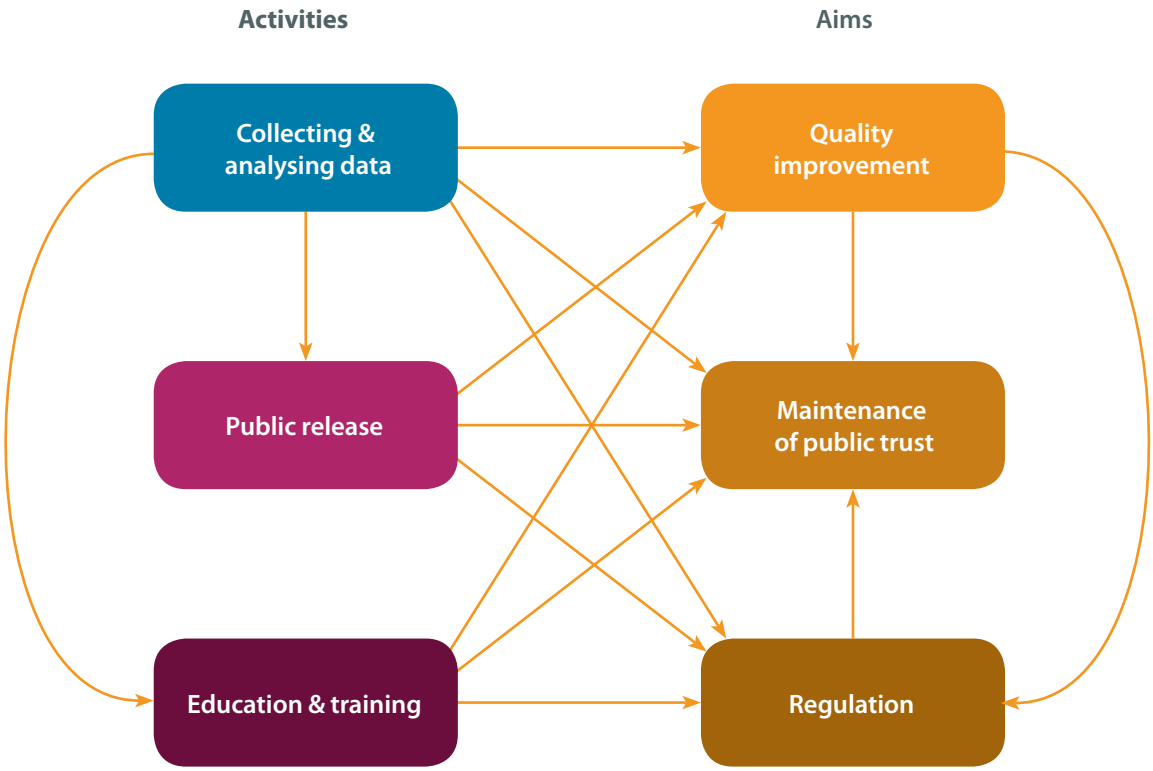
- by being overt about the standards of care they expect from their membership.
- by being transparent about how they match up to these standards.
- by benchmarking outcomes to drive quality improvement.

This is clearly not always easy or comfortable, either for the leadership of professional societies or their members. Nevertheless it is essential and we have described our view of the activities and aims of the SCTS in Figure 2.A.

Transparency will reveal variation in outcomes; some variation is inevitable, but the three principles outlined above will work to minimise this. To help ensure all doctors display satisfactory outcomes professional societies must develop their skills in the more comfortable area of education. Continuing professional development after achieving specialist status is still vaguely defined and loosely organised. We believe that CPD should be effective and be shown to be so. Educational tools such as SESATS fulfil this objective (see page 55), similar tools are available for other specialties. To support quality improvement professional societies should take the lead in establishing mechanisms to enable their members to have easy access to the best standards of practice and to share best practice amongst themselves. This philosophy underlies SCTS University which has the unique feature that members of SCTS will be both lecturers and students within it.

This approach applied to non-cardiac surgical specialties in America has reduced operative mortality by 47% over 15 years [18].

Figure 2.A
The responsibilities of a professional society – the SCTS model

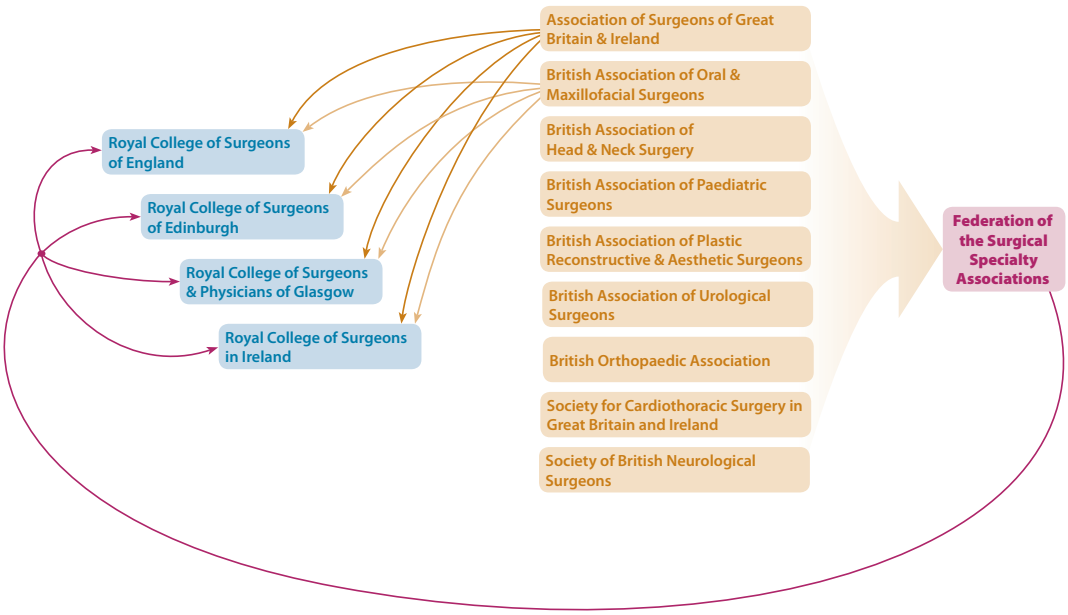


Royal colleges and professional societies

In this country there are a number of royal colleges and professional societies (see Figure 2.B). The SCTS is one of 9 professional societies representing the surgical sub-specialities. This relationship is complicated by there being four royal colleges of surgery, based in England, Edinburgh, Glasgow, and Ireland. Most surgeons are members of one of the royal colleges, but this is not necessarily geographically based; a surgeon working in England can be a fellow of a Scottish College or *vice versa*. The complexity of the relationship is increased as the majority of consultant surgeons are fellows of a royal college and also members of their professional society. Although professional societies are affiliated to a royal college they are independent bodies. In surgery the speciality-based professional societies and the Colleges of Surgery meet as the Federation of Surgical Specialist Associations (FSSA; Table 2.1 and Figure 2.B).

Table 2.1
Association of Surgeons of Great Britain & Ireland
British Association of Oral & Maxillofacial Surgeons
British Association of Head & Neck Surgery
British Association of Paediatric Surgeons
British Association of Plastic Reconstructive & Aesthetic Surgeons
British Association of Urological Surgeons
British Orthopaedic Association
Society for Cardiothoracic Surgery in Great Britain and Ireland
Society of British Neurological Surgeons

Figure 2.B
Relationships between royal colleges of surgery and professional societies



Despite the FSSA, this web of relationships is confusing and makes it difficult for organisations to exert clear leadership. It is certainly not a system that is optimally designed to achieve the declared aim of these organisations; to improve care for their patients.

The royal colleges all have slightly different constitutions. Their democratic structure means, however, that their policy is most significantly influenced by the larger sub-specialties. With increasing specialisation, the colleges have necessarily focussed on generic issues, such as the European Working Time Directive. There are, however, indications that the colleges are supporting professional societies that are developing their quality improvement agenda. The Royal College of Surgeon of England, for example, is now working in a number of ways to spread and support professionalism through audit by providing the standards by which quality may be judged, creating a forum where the best ideas may be shared across specialties and mandating audit in the revalidation process. The College's Clinical Effectiveness Unit, through it's collaboration with the London School of Tropical Medicine and Hygiene, provides practical epidemiology expertise from outside of surgery. The College already undertakes the analysis for a series of clinical audits funded by the Healthcare Quality Improvement Partnership. Finally, as the most high-profile public face of surgery in England, the College is assisting specialties to gain higher profile for their achievements in the media and with parliamentarians when results are published.

There are also a number of evolving audit initiatives from within the surgical specialties. Examples include the National Hip Fracture Database, a surgical / physician collaboration between the British Orthopaedic Association and the British Geriatrics Society, which has made significant inroads into improving emergency care for elderly fracture patients by setting out new standards and then tailoring their audit to measure them. As with the SCTS experience, the publication of data has tracked a steady improvement in the quality of care [19]. The vascular surgeons are also working steadily towards a better understanding of how specialisation can improve care *via* their National Vascular Database audit of Aortic Aneurysm repair [20] and Carotid Endartectomy [21]. The newly established National Bariatric Surgery Audit publishes its first report in February 2011 with an estimated 70% of procedures logged in its first full year of operation.

The SCTS and modern medical professionalism

In the last decade SCTS has tried to become an outward looking organisation, independent and with a clear understanding of our professional responsibility. The journey has not always been easy. On the specific issues of publication of named surgeon outcomes in adult cardiac surgery we have had long and difficult discussions in Annual Business Meetings, in our Executive Committee, in corridors, by e-mail, by phone and sometimes in anger. At times the atmosphere has been taut. Some surgeons responded to this tension by resigning from the SCTS.

Nevertheless we maintained focus on our professional responsibility. Whilst this policy may not always have been perceived as popular, a recent survey of members, summarised on page 46, shows that the majority now support our position. Our journey shows that the separate pressures of being a membership organisation, and showing professional leadership in the patient's best interest are reconcilable. The SCTS has demonstrated sustained quality improvement [22], has led international benchmarking in adult cardiac surgery [23] and public reporting [24]. Our *Explaining Divergence* methodology would have identified the problems in paediatric cardiac surgery in Bristol. If the same methods had been applied to death certificates issued by GPs they would also have identified Harold Shipman [25]. We believe that these are substantial achievements.

To meet the challenges of *Liberating the NHS* we need a culture in which *doctoring* can flourish. This is what professional societies are for. As the collegiate organisations with which doctors empathise, they must take a leadership role in driving quality improvement, providing effective regulation and thereby assuring public trust.

References

1. Department of Health. Equity and Excellence: Liberating the NHS. The Stationery Office. 2010.
2. Edwards N. The triumph of hope over experience. Lessons from the history of reorganisation. NHS Confederation 2010.
3. Oxman AD, Sackett DL, Chalmers I, Prescott TE. A surrealistic mega-analysis of redisorganisation theories. *Journal of the Royal Society of Medicine.* 2005; **98:** 563-568.
4. Dickinson H, Ham C. Engaging doctors in leadership: Review of the literature. *2008.* Academy of Medical Royal Colleges, University of Birmingham, NHS Institute for Innovation and Improvement
5. Levenson R, Dewar S, Shepherd S. Understanding doctors, harnessing professionalism. Kings Fund, 2008.
6. Gollop R, Whitby E, Buchanan D, Ketley D. Influencing sceptical staff to become supporters of service improvement: a qualitative study of doctors' and managers' views. *Quality & Safety in Health Care.* 2004; **13:** 108-114.
7. Siriwardena A. Engaging clinicians in quality improvement initiatives: Art or science? *Quality in Primary Care.* 2009; **17:** 303-305.
8. Bagwell C. Respectful Image. Revenge of the barber surgeon. *Annals of Surgery.* 2005; **241:** 872-878.
9. Waters M. Collegiality, bureaucratization and professionalism: a Weberian analysis. *American Journal of Sociology.* 1989; **94:** 945-972.
10. MORI Social Research Institute. Attitudes to medical regulation and revalidation of doctors. Ipsos MORI. 2005.
11. Cruess S, Johnston S & Cruess R. Professionalism for medicine: Opportunities and obligations. *Medical Journal of Australia.* 2002; **177:** 208-11.
12. Sullivan W. Medicine under threat. Professionalism and professional identity. *Canadian Medical Association Journal.* 2000; **162:** 673-5.
13. Royal College of Physicians. Doctors in Society. Medical professionalism in a changing world. 2005.
14. General Medical Council. Good Medical Practice: Maintaining good medical practice. 2006.
15. Leape LL, Transparency and Public Reporting Are Essential for a Safe Health Care System. Commonwealth Fund pub. *1381 Vol.* 4. www commonwealthfund.org
16. Shekelle PG, Lim YW, Mattke S, Damberg C. Does public release of performance results improve quality of care. The Health Foundation. 2008.
17. Advisory Committee on Clinical Excellence Awards. National Nominating Bodies Registered with ACCEA. 2009. http://www.dh.gov.uk/ab/ACCEA/Specialist. www.dh.gov.uk/ab/ACCEA/Specialistsocieties/index.htm
18. The Information Centre. NHS Hospital and Community Health Services: Medical and Dental Workforce Census. 2009. http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-1999--2009-medical-and-dental.
19. http://www.rcseng.ac.uk/media/medianews/biggest-ever-hip-fracture-audit-shows-improvements-in-care-but-significant-geographical-variations
20. http://www.aaaqip.com/
21. http://www.rcplondon.ac.uk/clinical-standards/ceeu/Current-work/stroke/Documents/Public-Report-July-2010-UK-Audit-of-Vascular-Surgical-Services-Carotid-Endarterectomy.pdf
22. Bridgewater B, Kinsman R, Walton P & Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
23. Bridgewater B, Gummert J, Kinsman R & Walton P. Fourth EACTS Adult Cardiac Surgical Database Report Towards global benchmarking. ISBN 1-903968-26-7. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
24. http://heartsurgery.cqc.org.uk/
25. Spiegelhalter D, Grigg O, Kinsman R & Treasure T. Risk adjusted sequential probability ratio tests: Applications to Bristol, Shipman and adult cardiac surgery. *International Journal of Quality in Healthcare.* 2003; **15:**7-13.

The importance of clinical outcomes

Ben Bridgewater, James Roxburgh & Graham Cooper

Society for Cardiothoracic Surgery in Great Britain & Ireland

The importance of clinical outcomes

Ben Bridgewater, James Roxburgh and Graham Cooper

Key points

- It has been possible to include all adult cardiac surgery operations performed in NHS hospitals in the United Kingdom in the SCTS national clinical audit database.
- The dataset collected includes pre-operative patient characteristics, operative details and post-operative clinical outcomes, particularly in-hospital mortality.
- We know that in-hospital mortality is critically dependent on casemix and pre-operative patient risk factors, and these vary between hospitals and surgeons.
- We have applied an adaptation of the ***EuroSCORE*** risk prediction model to adjust for these factors.
- We have analysed and compared in-hospital mortality outcomes by hospital and individual surgeon, after making appropriate adjustments. These adjustments mean that each hospital and surgeon's practice is compared to a standard that comes directly from the national, contemporary, peer group average.
- Within the SCTS we have devised a methodology *explaining divergence* for identifying and investigating mortality rates that are higher than expected.
- We have applied this methodology to the national dataset, for all operations undertaken since 2006. This demonstrates that over 99% of surgeons are performing to satisfactory standards.
- The results of these analyses are published for patients through a website www.cqcheartsurgery.org
- The application of this methodology has been associated with large overall improvements in risk-adjusted mortality.
- Collecting, benchmarking, analysing and feeding back data to clinical teams is associated with acceptable time commitment from the participating surgeons.
- The process of collecting and benchmarking clinical outcomes has acted to place patients and their care firmly at the centre of healthcare delivery by the multi-disciplinary team, and this is facilitating a cultural change within the profession.

Introduction

> *If you do not know what you are doing and how well you are doing it, you have no right to be doing it at all*
>
> **Professor Sir Bruce Keogh, NHS Medical Director**

The United Kingdom cardiac surgical community has a long history of collecting and benchmarking post-operative mortality outcomes, ever since Sir Terence English established the Great Britain and Ireland United Kingdom Cardiac Surgical Register back in 1977. In the early stages data collection was rudimentary, requiring only that the number of operations of each type were collected by every hospital (coronary artery surgery, aortic valve surgery, mitral valve surgery *et cetera*) along with in-hospital mortality. These data were submitted centrally for pooling and analysis. Initially data were far from complete in that not all hospitals submitted data and, for those that did, there was no real validation of the quality and completeness of the data. It quickly became apparent that there was differential mortality between the various operative groups (for example, isolated valve surgery having lower mortality than more complex procedures), and significant variation in casemix between hospitals, and these differences could easily confuse any comparisons of mortality rates. The mortality outcomes for each unit were returned to them confidentially, but the data were not published openly, nor was there any application of a governance screening process to the results to detect possible poor performance.

To create useful comparisons requires risk-adjustment, which needs more comprehensive data, and to this end Sir Bruce Keogh and Dr Peter Walton, of Dendrite Clinical Systems, initiated the SCTS Adult Cardiac Surgical Database project in the mid 1990s. A dataset was designed comprising pre-operative patient characteristics (age, gender, cardiac risk factors, comorbidities, *et cetera*), detailed operative data and post-operative outcomes including in-hospital mortality, length-of-stay and post-operative complications.

Initially only a small number of hospitals submitted data to the database, but over time more and more hospitals participated and now all NHS hospitals and a number of private providers contribute. This journey has been described in detail elsewhere [1].

Moving from the initial database to the current complete data capture took approximately 10 years. It became apparent over this time that a number of issues were important to facilitate the process:

1. There needs to be dedicated resource in each hospital for data collection and collation. This includes both IT infrastructure (hardware and software) and human resource in the form of database managers.
2. We have learnt that it is better to define a dataset centrally and then leave centres to collect that data in ways that suits them, rather than imposing a single, central data-collection system.
3. There is requirement for national infrastructure to collate and analyse data, and this needs to be compliant with data-protection legislation and patient-confidentiality principles.
4. The dataset should not be too extensive and should not be changed frequently.
5. Culture is key: those units that had a strong desire to collect the data seemed able to overcome obstacles. This was almost certainly associated with key clinical leaders in those hospitals.
6. The final stimulus to complete data collection was open publication of surgical results.
7. Including all hospitals is essential as reluctance or inability to collect and submit data has subsequently been associated with high risk-adjusted mortality rates.
8. We have accepted a model in which data is analysed and published, with an overt understanding that there may be limitations in data quality, rather than waiting for data to be perfect before it is used.

The current situation

All NHS hospitals and the majority of private providers in the United Kingdom now collect the SCTS adult cardiac surgery dataset. These data are collected in the hospitals on a variety of software systems, the majority of which are commercially available but some are bespoke in-house products. In some hospitals the data are collected by direct keyboard entry by clinical staff, in others collection is paper based with subsequent transcription on to

IT systems by support staff. We have given some further thoughts about the resource implications associated with data collection and analysis in the section on page 108.

The United Kingdom has stringent data protection legislation and patient confidentiality guidance. To comply with these there is a national data collation infrastructure for all the national cardiac audits (which also include congenital cardiac surgery, interventional cardiology, myocardial infarction, electrophysiology and pacing modules). This Central Cardiac Audit Database (CCAD) for adult cardiac surgery is based on a software system (Lotus Notes™, IBM) that provides the necessary encryption techniques. Each unit submits data on a quarterly basis to CCAD, 3 months in arrears so, for example, the data for all operations to the end of June 2010 were submitted by the end of September 2010.

In line with the principles described on page 26, the data are used for a number of purposes:

1. Local quality improvement.
2. National surveillance of mortality outcomes.
3. Central publication of comparative outcomes.
4. Comprehensive publication of trends and outcomes in cardiac surgery.
5. Research applications, including testing the efficacy of different treatments on outcome.

There are different levels of analysis applied to the data:

- Local software systems provide some degree of analysis and benchmarking to support local quality assurance and improvement, and local extracts of data are analysed in-house using a variety of analytical techniques and systems.
- The CCAD national software provides a basic level of activity analysis and benchmarking.
- An extract of data is taken for analysis for risk-adjusted benchmarking for a national governance screening process and public dissemination. The most recent analysis on data for the 3 years to the end of March 2009 was conducted at the National Institute for Clinical Outcomes Research at University College London, and was published on the Care Quality Commission website at http://heartsurgery.cqc.org.uk.
- An extract of data was taken and analysed by a data analysis team at Dendrite Clinical Systems, a commercial clinical software development and publishing company, who are long-term partners of the SCTS in data collection, analysis and dissemination. Collaboration between SCTS and Dendrite led to the publication of a comprehensive national database report [2]. This provided an in depth analysis into clinical outcomes in cardiac surgery in Great Britain & Ireland and has become a worldwide benchmark for cardiac surgical outcomes and audit. This extract was also used to contribute to the European adult cardiac surgery database report [3] through which the results of cardiac surgery in the United Kingdom have been compared to an international standard.
- A further collaboration with NW eHealth, a not-for-profit IT organisation based within Manchester University and Manchester Academic Health Sciences Centre, is producing bespoke governance and performance reports from the data, and is working toward providing more accessible information from the data to support clinical decision-making.
- We have developed an academic network to test clinical and health services research hypotheses on the data, including researchers from the University of Birmingham, James Cook University Hospital Middlesbrough, University of Manchester, University College London and University Hospitals Coventry and Warwickshire.

What about high mortality rates?

Since 2005 the SCTS, in conjunction with the organisational regulator the Care Quality Commission, has conducted an analysis of pooled data to provide named hospital and surgeon mortality rates for publication. Given the importance of operation type and comorbidities in determining hospital mortality, all outcomes are compared with those that would be expected for that hospital or surgeon using appropriate risk-adjustment methodology. The steps in this process are described in detail in Appendix 1.

We have also applied a governance screening process to these data, looking for hospitals and surgeons that display mortality rate that are higher than expected. Because the ***EuroSCORE*** methodology accounts for different operation types in its algorithm we have chosen to apply screening to each hospital and surgeon's entire adult cardiac surgical practice (excluding transplants, ventricular assist devices and cardiac trauma). For the purposes of publication we felt that patients and the public would be more interested in the outcomes for specific operative groups so we have analysed mortality rates for all cardiac surgery, isolated coronary artery surgery and isolated aortic valve surgery by hospital and all cardiac surgery and isolated coronary artery surgery by surgeon (http:// heartsurgery.cqc.org.uk). The standard we have used as the *benchmark* is based on a contemporaneous peer group average so that each hospital or surgeons' results are compared directly to the national average (see also page 71).

Once you start to measure things it is inevitable, sooner or later, that you will detect rates that are higher than expected. This may simply be due to chance alone, a quirk of casemix, or it may be due to sub-optimum performance. It soon became apparent to us that there was a need for clear responsibilities, guidelines and protocols for dealing with these instances. The SCTS has developed a methodology for this, and included in this are the six principles given in Table 3.1. We have called this methodology **explaining divergence** to emphasise that clinical outcomes that are seen to be *abnormal*, may be so due to many different causes, and detection should trigger full investigation, and not lead to precipitate action against a hospital or surgeon.

Explaining divergence

Table 3.1
The principles of explaining divergence

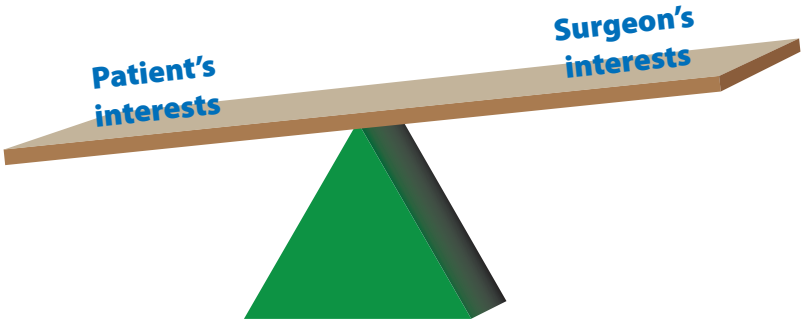
1. The process must be reasonable and proportionate
2. This process should not lead to patients who are high risk being denied surgery
3. Divergence from expected outcomes should be classified according to its level and frequency
4. Divergence is a cause for looking at the data in more detail and is not, on its own, a reason for restricting a surgeon's practice
5. The mechanisms for supporting a hospital or surgeon and explaining abnormal mortality rates must be separate
6. Explanation should proceed in four stages
    a. Analysis of the data for accuracy
    b. Analysis of the caseload to ensure that the risk stratification mechanism accurately reflects expected outcomes
    c. Analysis of institutional factors that may contribute to the divergence in clinical outcomes
    d. Analysis of the surgeon's performance

1. The process must be reasonable and proportionate.

There has been tension within the cardiac surgical community in particular and medicine in general about analysis of mortality and other clinical outcomes. To put this crudely it is about where you set the bar.

From the patient's perspective it seems reasonable to put the bar low, so that any potentially high mortality rates are investigated robustly to look for areas for potential improvement or concern. This will inevitably lead to investigation of numerous episodes that are due to chance alone, but it should mean that real concerns or opportunities for improvement are never missed.

From the surgeon's perspective (and there is some statistical validity to this view) it often seems more sensible to set the bar high, to prevent erroneous identification of outliers which may act to undermine confidence (which is an essential characteristic in a cardiac surgeon). These issues are considered further in Appendix 1 and have led to us defining divergence at 3 levels: yellow, amber and red.



Yellow is the lowest level of alert and may occur due to chance alone. It is quite likely that every surgeon will trigger a yellow alert at some stage during in their consultant career simply due to the laws of probability.

Amber is a higher level of alert and is more likely to indicate issues with a surgeon's practice.

Red is the alarm level, and in 19 times out of 20 a red trigger will indicate that mortality rates really are higher than they should be.

We believe that defining high mortality rates in this way is both fair to patients and doctors.

2. The process should not lead to patients who are high risk being denied surgery

A common argument against analysing and publishing surgical mortality rates is that it may encourage surgeons to turn down the highest risk patients, who often stand to benefit the most from successful surgery, because of concerns about high mortality rates – so-called risk-averse behaviour. There is significant anecdotal evidence that the analysis and publication of mortality rates does result in some risk averse behaviour, but there is little numerical evidence that it is an important effect. The SCTS vehemently believes that risk-adjustment is an important tool to minimise any potential risk-averse consequences from the governance initiatives. If surgeons believe that the chosen risk-adjustment methodology adequately adjusts for the highest-risk cases, then that should minimise any possible tendency to deny those patients an operation. At the current time we know that current risk models are not sufficiently good at this, and we are reviewing our methodology to see if we can find a better way.

It is also important that surgeons develop confidence in the governance processes. The SCTS has made it very clear that finding a high mortality rate should, in the first instance, trigger a rapid, supportive and non-stigmatising analysis of the data. If the cause of high mortality rates is due to a series of high-risk patients, who were appropriately offered surgery, there were no technical or system shortcomings in the delivery of care, and the high mortality rates were purely due to casemix factors, then the issues should not be worthy of further consideration; question asked – question answered! Indeed we have documented examples of exactly this circumstance. Unfortunately at the present time not all surgeons have confidence that this process will be followed and there is further need for education and reassurance on these issues, both for the surgical community and for hospital line managers, governance leads, medical directors, Trust boards and the media (see also pages 94 & 100).

A further consideration on risk-averse behaviour is that there is an inevitable human overlay in the surgeons mind from recent experiences to decision making; recent mortality in a specific type of patient may influence acceptance for surgery in another similar patient. The SCTS therefore again believes strongly that decision-making, particularly for the higher-risk patients, should be supported by an appropriately configured multi-disciplinary decision-making team, that consideration should be given to a team approach to surgery and that, when there is any doubt about suitability for surgery, patients should be offered an independent second surgical opinion. A particularly good example of this is the *Surgical Council* at Papworth, which has been described in detail in the 6th Blue Book [2].

Finally it has been reported that scrutiny of outcomes has led to skewed referral practices with the highest-risk patients landing at the door of a small number of surgeons. Whilst this may cause some tensions, it should not necessarily be seen as a negative consequence. Some surgeons as a result of their technical skill, sub-specialist interest or personality may be better suited to the higher risk cases and achieve better results. In that situation this practice could be beneficial, rather than detrimental to patients.

3. Divergence from expected outcomes should be defined according to its level and frequency

We have described above the SCTS view on the spectrum of divergence from expected outcomes, from a mild yellow alert, which is quite likely to be due to chance alone, through to a red trigger which is almost certain to be due to a significant issue with the data, case mix, process, organisation or the surgical team. In addition, we believe our approach to managing instances of high mortality rates should also be informed by whether it is a one-off, persistent or recurrent event; a one-off is more likely due to chance alone. A recurrent or persistent problem is more likely to indicate that there are real issues with one or more of the other potential causes [2]. We have combined the level of variation and frequency of occurrence into a matrix which informs subsequent actions from the SCTS as described in Table 3.2 (we have adapted this model from one originally described by the Surgical group in Liverpool).

Isolated First instance in a monitoring cycle of 3 years

Recurrent Second or more instance in a monitoring cycle of 3 years with a gap of at least 1 monitoring period

Persistent Second or more instance in a monitoring cycle of 3 years with no gap between monitoring periods.

Table 3.2

	Isolated	Recurrent	Persistent
Yellow	Letter to surgeon	Letter to surgeon and audit lead	Letter to surgeon and clinical director
Amber	Letter to surgeon and audit lead	Letter to surgeon and clinical director	**Letter to surgeon, medical director and CQC**
Red	**Letter to surgeon, medical director and CQC**	**Letter to surgeon. medical director and CQC**	**Letter to surgeon, medical director and CQC**

The national governance screening process will happen late in the day once data has been submitted, cleaned, analysed, validated and fed back. Units are also required to have local governance processes to monitor data on a monthly or 3 monthly basis, to look for evidence of concerns at an earlier stage. In addition most hospitals have regular morbidity and mortality meetings to examine cases in more detail to understand what went wrong and learn lessons to improve future care. The SCTS and the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) both recommend that all cases that do not come through surgery are discussed in detail in these meetings by an appropriately configured multi-disciplinary team.

4. Divergence is a cause for looking at the data in more detail

Abnormal outcomes are not usually, on their own, sufficient reason for restricting a surgeon's practice.

When Professor Sir Bruce Keogh took over as the Honorary Secretary of the SCTS in 1995, 1 in 10 of all cardiac surgeons in the United Kingdom had been suspended at one time or another during their professional careers. In many circumstances these suspensions were of short duration and subsequent investigations resulted in the surgeon immediately returning to operating. At that stage there was a perception amongst some surgeons that the application of a robust governance screening methodology based on clinical outcomes would lead to more suspensions, but experience has suggested that this is not the case. In recent years the number of suspensions or restrictions in practice have been less than previously, and the majority of incidences have come from local concerns, rather than the consequence of a national process. We believe that better data collection, analysis and understanding with the resultant change in culture has led to detection of potential problems at an early stage, allowing implementation of strategies to improve outcomes before any restriction of practice or suspension may be needed. We have given a real example of this process on the following pages.

Example of early intervention

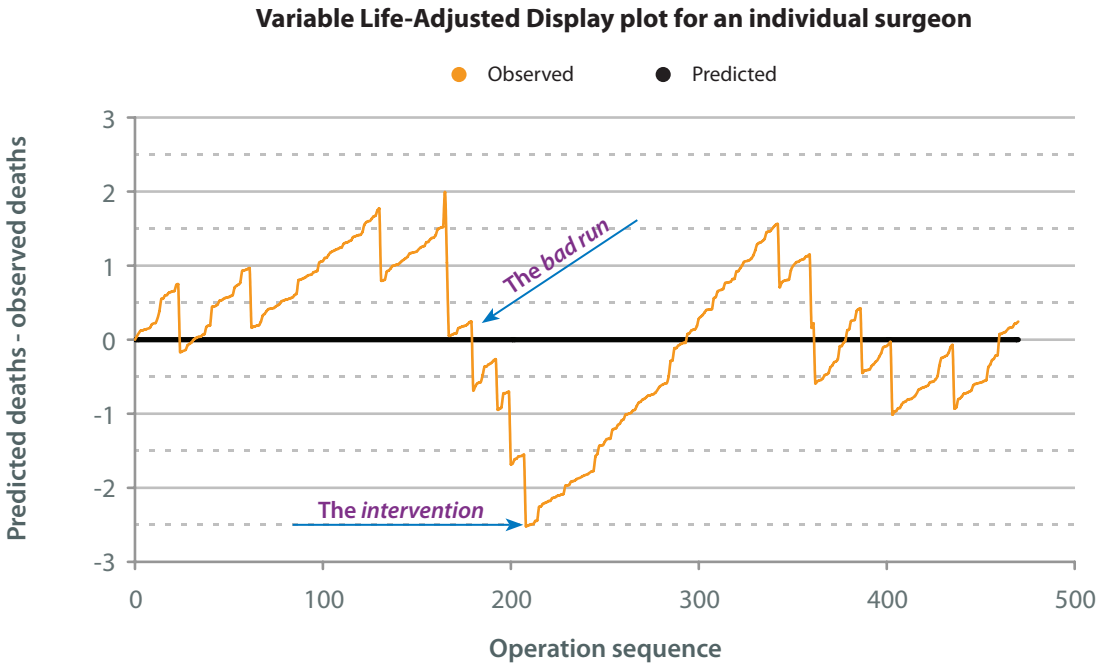
A senior surgeon with a mixed cardiothoracic practice had noticed his results had deteriorated; several patients had not survived surgery and he felt that his complication rate in recent months was higher than he was used to. He was becoming increasing uncomfortable about this and the *bad run* was affecting both his professional and non-professional life. He initiated a discussion with the clinical director explaining his concerns and asking for advice. After deliberations they agreed on the following:

1. High-risk patients on his waiting list were to be transferred to other colleagues whilst things were investigated.
2. New high-risk patients were to be referred on to other colleagues at the point of referral.
3. Support was offered for another consultant to be available if high-risk surgery was undertaken whilst he was on call.
4. He agreed to look in detail at all patients who had not survived, or who had developed complications, to extract any common themes.
5. The clinical director agreed to review his results against the accepted national risk-adjusted standard.
6. The above actions were formally documented with copies to organisational management within the Trust.

The comprehensive review of his results suggested that his overall mortality results for the previous 1 and 3 years were well within all accepted national standards, so whilst this may have been a bad run, overall performance over time was good. It also showed that he was undertaking the highest predicted risk surgery of all of the surgeons in his hospital, despite having a mixed cardiothoracic and consequently a low-volume cardiac surgical practice. The review of the mortalities and complications revealed a possible common theme of sup-optimum myocardial preservation (the processes used to look after cardiac function during the operation), and he decided to change his intra-operative techniques to that of some of his other colleagues which involved giving cardioplegia more frequently and *via* both the antegrade and retrograde routes.

His results rapidly improved and the agreement about referring on specified, high-risk, sub-specialist patients to colleagues remained in place. A *Variable Life-Adjusted Display* (VLAD) is shown opposite, which gives an indication of results over time. In these charts consecutive operations are plotted along the x-axis, and the y-axis gives is a risk-adjusted indication of mortality. For each patient that survives, the trace gets a positive inflection, the magnitude of which is dependent on the predicted risk of that patient. When a patient does not come through surgery the trace gets a positive inflection dependent on predicted risk followed by a negative deflection of -1. Good results lead to an upwards slope of the graph from left to right, poor results gives a downwards slope. In this example there is a period of *good results* followed by a period (the bad run) where is can be seen that results have deteriorated. The excess mortality over expected was, at no stage, more than 3 cases over this period. Following the intervention the VLAD plot shows that results improved, and over time there has been a gradual trend towards expected mortality.

It may be that the bad run experienced in this case was simply due to chance and a clustering of events. However, the example shows what anguish any perception of poor performance can cause in a consultant cardiac surgeon and we feel that he showed humility and professionalism in his approach to the perceived problem, and his organisation showed a supportive and functional approach which protected the patients at all times.


Variable Life-Adjusted Display plot for an individual surgeon
Observed
Predicted
Predicted deaths - observed deaths
3
2
1
0
-1
-2
-3
0
100
200
300
400
500
Operation sequence
The bad run
The intervention

5. The support mechanisms and explaining abnormal mortality rates must be separate

Cardiac surgery is a small speciality. There are less than 300 consultant surgeons in the United Kingdom and most of them know each other well. Some have trained together and have a long-standing professional bond and friendship. Others have a strong relationship based on that of trainer and trainee, or junior and mentor. These relationships cannot be ignored when considering the governance process applied to cardiac surgery audit data. Within the SCTS we have recognised these issues and have developed specific roles within the process:

1. The database committee are responsible for determining the methodology of analysis, and applying the methodology to the data to detect any evidence of high mortality rates. The database committee consists of a Chairman, 2 surgeons with expertise and interest in data and analysis, one surgeon co-opted due to his experience and role within the Care Quality Commission, and a surgeon who is an elected trustee of the SCTS.
2. The Honorary Secretary of the SCTS: a cardiac surgeon who is responsible for overseeing the process and acting as communicator between the database committee and the President of the SCTS.
3. The SCTS patient representative is involved in developing the policies and guidance, and involved in specific discussion about the actions following governance screening.
4. The President of the SCTS is responsible for communicating with surgeons who are identified as having higher than expected mortality rates. He has done this initially by telephone contact and then with a formal letter, in which he gives a detailed explanation of the nature of the process including offers of support for better understanding of data issues, and pastoral support. To help with the latter he has offered a *friend* who can be chosen from the senior officers of SCTS to offer personal support throughout the process, provide advice about other sources of support and, if necessary provide advice on the gathering of other sources of evidence to support good practice.

SCTS support mechanisms for 'explaining divergence	
Personal	Listening Advice confined to area of expertise
Other sources of support	RCS Regional Speciality Professional Advisor BMA Defence organisation National Clinical Advisory Service Occupational Health Department General Practitioner
Other sources of evidence	Provide evidence to show standards of: • Good Medical Practice (GMC) • Good Surgical Practice (RCSEng) are maintained

6. Explanation should proceed in stages

Our agreed methodology for looking at instances where high mortality outcomes are detected is based on that described by the Dr Foster organisation and is summarised in Table 3.3.

We have now developed a number of examples of working through this process and this is best illustrated by describing some of these instances in Appendix 1.

Table 3.3
Analysis of the data for accuracy
Analysis of the caseload to ensure that the risk stratification mechanism accurately reflects expected outcomes
Analysis of institutional factors that may contribute to the divergence in clinical outcomes
Analysis of the surgeon's performance

What happens when you apply the above principles?

In 2009 the SCTS, after discussion and consultation with the membership and others, agreed the methodology for examining risk adjusted mortality data described above. The most recent analysis is based on a comparison of actual mortality outcomes against those predicted for that hospital's or surgeon's case mix. The exact methodology is described in more detail in appendix 1. The methodology has been applied to 2 consecutive, 3-year data periods to the end of March 2008 and the end of March 2009.

Results

The overall mortality for 2005 - 2008 was 3.4%

2006 - 2009 was 3.2%

2005 - 2008 Outliers (total number of surgeons = 279)

Level	Number	Percentage
Yellow	15	5.4%
Amber	7	2.5%
Red	3	1.1%
All outliers	25	9.0%

2006 - 2009 Outliers (total number of surgeons = 277)

Level	Number	Percentage
Yellow	11	4.0%
Amber	7	2.5%
Red	1	0.3%
All outliers	19	6.9%

Concerns have been raised that the explaining divergence methodology would adversely affect surgeons who have a high-risk practice, or a high volume of cases (which would give the statistical *power* for significantly *high* mortality to be detected for high-volume surgeons, which would be acceptable in a lower-volume practice).

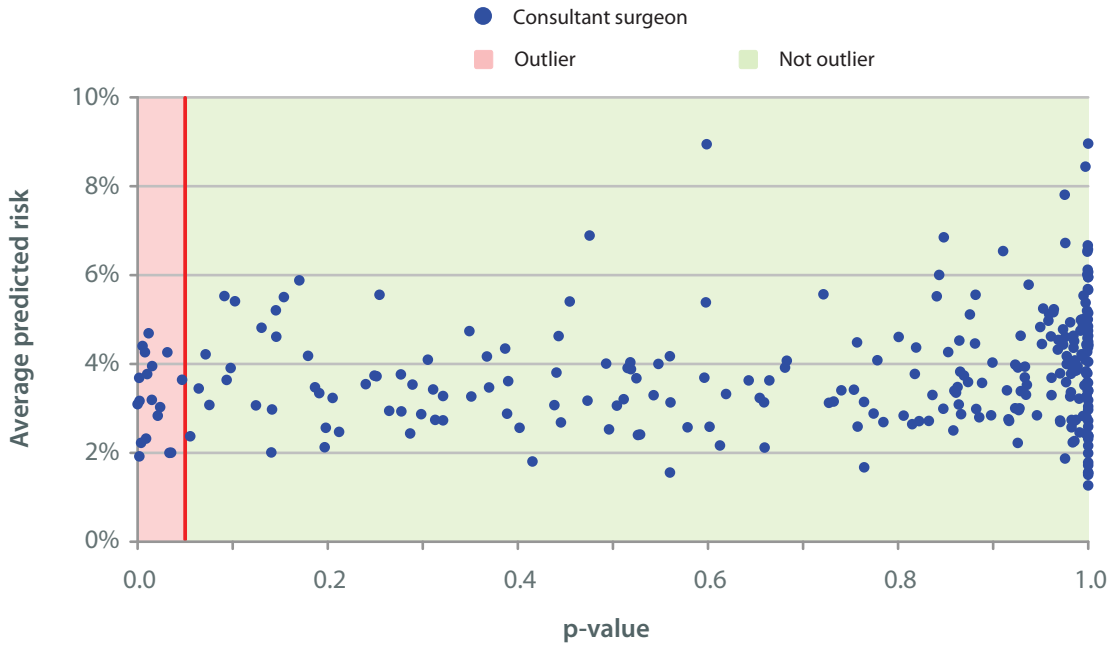
To *drill down* on these issues we have analysed the data in more detail by comparing aspects of practice for surgeons defined with high mortality outcomes (at either yellow, amber or red) compared to other surgeons.

Volume	**average over 3 years**
High-mortality outcomes	416 cases
Standard-mortality outcomes	411 cases

Predicted risk	**average over 3 years**
High-mortality outcomes	3.4%
Standard-mortality outcomes	3.6%

We also attributed a *p-value* to each surgeon that indicates the probability that the risk-adjusted mortality might have been higher than predicted due to chance alone. The following is a plot of each surgeons *p-value* against their mean predicted risk, again indicating that surgeons with high mortality are not operating on an average casemix that is higher than their colleagues.

Consultants' average predicted risk and the probability that their risk-adjusted mortality might have been higher than predicted due to chance alone



To demonstrate the magnitude of variation from expected that would be required to *trigger* under *explaining divergence* methodology we have considered the following examples of surgeons with low-risk, mid-risk and high-risk practices. We feel that this analysis shows a statistical framework, which leads to a *common sense* validation that the methodology is reasonable and sensible.

Mid-volume, mid-risk surgeon	**3 years of data**
Number of cases	435
Predicted mortality	3.2%
Predicted number of deaths	14
Yellow limit	**20 deaths (4.6%)**
Red limit	29 deaths (6.7%)
Mid-volume, high-risk surgeon	**3 years of data**
Number of cases	436
Predicted mortality	5.0%
Predicted number of deaths	22
Yellow limit	29 deaths (6.6%)
Red limit	39 deaths (8.9%)
Low-volume, low-risk surgeon	**3 years of data**
Number of cases	176
Predicted mortality	2.8%
Predicted number of deaths	5
Yellow limit	8 deaths (4.5%)
Red limit	14 deaths (8%)

Risk averse behaviour?

Some within the cardiothoracic surgical community believe that collecting clinical outcome data encourages the profession to turn down high risk patients, who potentially have much to gain from surgery. Others believe that collecting, collating, analysing and feeding back outcome data drives improvements in quality.

There are accumulating data about the latter [2, 3, 4, 5, 6, 7, 8, 9] and the data on the former is mixed: there are some surveys on the attitudes of clinicians suggesting that risk-averse behaviour does occur [10, 11] and another study that presented data suggesting that there was some *outmigration* of patients from one State in the USA that introduced publication of data to one that did not [12]. There are structured data on the statistical effects on casemix of introducing reporting that point both ways: studies from New York and NorthWest England have shown no adverse statistical effect on casemix following reporting [9,13]. Another study from the US has shown decreases in predicted risk in reporting States compared to non-reporters [14], but what seems to be important for driving quality is collecting and feeding back data [15], and experience from the United Kingdom suggests that the publication of data drives complete compliance with data collection initiatives. There is also evidence that publication in addition to data feedback may have no further contribution to improving quality [16], but this is, of course, only one factor in decisions to publish (see page 18).

Set against these arguments the SCTS does take the issue of risk averse behaviour seriously, and we have set up a working group to consider these issues in more detail to deliver a series of recommendations and actions to ensure that we minimise any unintended negative consequences from collecting and publishing outcomes data.

Comments of the membership of SCTS on the *explaining divergence* methodology

The methodology applied to the pooled national data, the *explaining divergence in clinical outcomes* principles and the actual results of applying the process to the national data have been shared fully with the entire membership of the SCTS. The executive committee conducted an online and paper-based survey of the membership's views prior to and after the annual business meeting in March 2010. A summary of the responses received is shown below in Table 3.4. Inevitably with any large membership organisation there is not complete agreement on the issues, but the results, from 110 surgeons, indicate that the general direction of travel on measuring and benchmarking clinical outcomes receives the support of the majority of cardiothoracic surgeons who responded, with an approval rating of over 93%. For specific questions on the statistical methodology of analysis, there was an approval rating of between 68% and 78%, but a further sizeable minority responded as *unsure* indicating that we have more work to do on explanation. Around 10% of surgeons disagreed with the current methods. Eighty percent felt that further refinement was required to the methodology to help to minimise the potential for risk averse consequences from the governance initiative. Whilst 110 is a reasonable sized sample for this type of survey it must be acknowledged that this still represents less than half of the total membership of the SCTS.

Table 3.4
Survey of members' view of SCTS *explaining divergence* methodology

Question	Responses (skipped)	Agree	Unsure	Disagree
• It is important for the Society to have a methodology that benchmarks surgeons' outcomes	110 (0)	103 (93.6%)	3 (2.7%)	4 (3.6%)
• It is clear that this methodology does **not conclude** that a surgeon who is identified as an outlier is performing badly, but triggers an investigation to explain the outcome data	110 (0)	90 (81.8%)	11 (11.0%)	9 (8.2%)
• It is appropriate for the Society to re-calibrate the ***EuroSCORE*** in line with contemporary cardiac surgery practice as the existing ***EuroSCORE*** is based on outcome data, which is over 10 years old	108 (2)	84 (77.8%)	13 (12.0%)	11 (10.2%)
• The statistical analysis, although complex for multiple comparisons, is fair as the number of surgeons that may trigger a red alert is very low and the risk that this is due to chance alone is 1 in 1,000	107 (3)	73 (68.2%)	26 (24.3%)	11 (7.5%)
• This methodology is supportive to members by promoting an open monitoring of performance, which can withstand public scrutiny and enhance our reputation with our patients	109 (1)	82 (75.2%)	12 (11.0%)	8 (13.8%)
• The Society should further refine the methodology to mitigate against risk averse behaviour	109 (1)	87 (79.8%)	15 (13.8%)	15 (6.4%)
• Overall, I support the adoption of this methodology for identifying surgeons that may be statistical outliers in their performance and triggering Society driven investigation and support	109 (1)	85 (78.0%)	11 (10.1%)	7 (11.9%)

The processes to collect, analyse and feedback clinical outcomes

The processes to collect, analyse and feedback clinical outcomes have evolved over many years. This initiative obviously requires a significant infrastructure for data collection, analysis and implementation. We have described the resource required and associated costs in detail on page 108.

How does the measurement of clinical outcomes contribute to modern medical professionalism?

The SCTS has been prepared to develop a system to collect, analyse and publish clinical outcomes, and implement a policy to deal in an effective and supportive way with hospitals or surgeons who display mortality rates which are higher than expected. So, to paraphrase Sir Donald Irvine's words in a later section of this report, we are not prepared to accept professional toleration of (possibly) problematic or frankly poor practice (see page 65).

However we do accept that our programme around clinical outcomes has strengths and weaknesses. We have summarised these in Table 3.5. An important aspect of this is to understand the limitations of evidence that satisfactory outcomes bring to any discussion about competence. Current methods only look at what is done and how well surgery is conducted. They do not look at whether what is done is appropriate, nor do they look at what has not been done (and this is particularly important as patients may be denied access to appropriate treatments).

Table 3.5
Strengths and weaknesses of SCTS clinical outcomes programme

Strengths
• demonstrates a level of technical ability, intra-operative performance and pre- and post-operative care that is satisfactory for each organisation and individual
• drives a cultural change that places patients and their clinical outcome at the heart of care delivery
• acts to maintain public trust in the profession through transparency of outcomes
• contributes to overall improvements in quality of care for patients
Weaknesses
• does not demonstrate up-to-date knowledge
• does not demonstrate that all procedures are appropriate
• does not demonstrate appropriate interactions with colleagues
• does not demonstrate that patients get a good experience
• looks primarily at one aspect of outcome – that of mortality [i], and does not include other important measures, such as infections or stroke rate

Summary

We have not, as yet, developed robust methodologies to ensure that all procedures undertaken are appropriate. Recent publication of the ESC / EACTS guidelines for treatment of coronary artery disease [17] summarise the evidence base for various interventions for different categories of patients, and gives clear guidance on the appropriate treatments. They suggest that decision making for these patients should happen within the domain of appropriately configured multi-disciplinary teams. We will consider assessing compliance with these guidelines as part of our programme in future. We have included a more detailed analysis of the implication of these guidelines in appendix 4.

We believe that measuring clinical outcomes, feeding them back to clinical teams & publishing results for patients should form the backbone of *new* medical professionalism, but in line with the *weaknesses* of doing that in isolation we have considered further what other aspects should ideally support outcomes measurement in the following sections in this book on *Continuing professional development, patient experience and multi-source feedback*.

i. We currently focus heavily on risk-adjusted in-hospital mortality as our chosen outcome measure. We do however publish data on prolonged length-of-stay and compliance with some best practice process measures [17]. We have also published extensive data on other measures of morbidity including use of the intra-aortic balloon pump, stroke rates, infection rates and post-operative renal intervention [2].

References

1. Bridgewater B and Keogh B. Surgical *league tables*: ischaemic heart disease. *Heart*. 2008; **94(7):** 936-4.
2. Bridgewater B, Kinsman R, Walton P & Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
3. Bridgewater B, Gummert J, Kinsman R & Walton P. Fourth EACTS Adult Cardiac Surgical Database Report Towards global benchmarking. ISBN 1-903968-26-7. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
4. Hannan EL, Kilburn H, Racz M, Shields E, & Chassin MR. Improving the outcomes of coronary artery bypass surgery in New York State. *JAMA*. 1994; **271:** 761-766.
5. Peterson ED, Jolllis JG, Bebchuk JD *et al*. Changes in mortality after myocardial revascularisation in the elderly ; the national medicare experience. *Annals of Internal Medicine*. 1994; **121:** 919-27.
6. Ghali WA, Ash AS, Hall RE & Moscowitz MA. Statewide quality improvement initiatives and mortality after cardiac surgery. *JAMA*. 1997; **277:** 379-382.
7. Grover FL, Shroyer LW, Hammermeister K, Edwards FH, Ferguson TB, Dziuban SW, Cleveland JS, Clark RE & McDonald G. A decade of experience with quality improvement in cardiac surgery using the Veterans Affairs and Society of Thoracic Surgeons national databases. *Annals of Surgery*. 2001; **234:** 464-474.
8. Keogh BE & Kinsman R. Fifth national adult cardiac surgical database report 2003. ISBN: 1-903968 09-7. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
9. Bridgewater B, *et al*. Has the publication of cardiac surgery outcome data been associated with changes in practice in northwest England: an analysis of 25,730 patients undergoing CABG surgery under 30 surgeons over eight years. *Heart*. 2007; **93:** 744-748.
10. Scheider EC, & Epstein AM. Influence of cardiac-surgery performance reports on referral practices and access to health care: a survey of cardiovascular specialists. New England Journal of Medicine. 1996; 335: 251-256.
11. Burack JH, Impellizzeri P, Homel P, Cunningham JN Jr. Public reporting of surgical mortality: a survey of New York State cardiothoracic surgeons. *Annals of Thoracis Surgery*. 1999; **68(4):** 1195-2000.
12. Omoigui NA, Miller DP, and Brown KJ. Outmigration for coronary artery bypass surgery in an era of public dissemination of clinical outcomes. *Circulation*. 1996; **93:** 27-33.
13. Hannan EL, Siu AL, Kumar D, Racz M, Pryor DB, Chassin MR. Assessment of coronary artery bypass graft surgery performance in New York. *Is there a bias against taking high-risk patients? Medical Care*. 1997; **35:** 49-56.
14. Dranove D, Kessler D, McCellan M, Satterthwaite M. Is more information better? *The effects of report cards on healthcare providers*. Journal of Political Economy. 2003; **111:** 555-588.
15. Shahian DM *et al*. Cardiac Surgical report cards; comprehensive review and statistical critique. *Annals of Thoracic Surgery*. 2001; **72:** 2155-2168.
16. Guru V *et al*. Public versus private institutional performance reporting: what is mandatory for quality improvement. *American Heart Journal*. 2006; **152:** 573-578.
17. Guidelines on myocardial revascularization. The Task Force on Myocardial Revascularization of the European Journal of European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS). *Cardio-thoracic Surgery*. 2010; **38:** S1, S1, S52.

CPD & life-long learning

Steve Livesey, Tim Graham & Chris Munsch

Society for Cardiothoracic Surgery in Great Britain & Ireland

Continuing professional development & life-long learning

Steve Livesey, Tim Graham & Chris Munsch

Key points

- Spending sufficient time in continuing professional development (CPD) is planned to be one of the keystones of professional revalidation.
- Within the SCTS we accept that a comprehensive knowledge base, and the ability to apply that knowledge to clinical situations is of paramount importance in delivering high quality clinical care to patients.
- The requirements for CPD are becoming more clearly defined, and an ideal CPD programme should be comprehensive, multi-faceted and balanced across clinical, academic and professional pursuits.
- Within the SCTS we have developed a portfolio of educational courses for trainees and consultants, including both clinical and professional topics. These are underpinned by sound adult education principles.
- We also strongly recommend to our consultant members that they should undertake a online educational / assessment tool (SESATS), as evidence for professional revalidation, which will help to ensure that all cardiothoracic surgeons are *up to date* and will demonstrate this to the public.

Continuing professional development (or CPD) for doctors is high on the agenda of the royal colleges and professional societies. Spending sufficient time engaged in CPD is also one of the keystones of the professional revalidation agenda.

In later chapters in the report we address aspects of medical professionalism (see page 64). One of the characteristics at the heart of professionalism is that having developed an appropriate expertise we should seek to maintain that expertise by having an up to date knowledge and understanding of current thinking, practices and techniques and, where appropriate, incorporate them into our own practice. To some extent, this encapsulates the difference between the technician – which for example we may be when we are solely undertaking a surgical task – and the surgeon, who needs to embody a much wider sense of professionalism by understanding the patient, their condition and customising appropriate treatments to optimise benefits for the individual.

The role of the surgeon is truly multi-dimensional whereas the technician focuses on the technical aspects of their role and so it follows that Continuous Professional Development must be about maintaining and developing all the attributes that go to make the *Compleat Surgeon*. This represents more than the term Continuing Medical Education (the historical name for CPD), which suggested a much narrower focus. As described on page 64, for surgeons professionalism must be demonstrated by maintaining their knowledge, skills and performance, ensuring the safety and quality of their work, showing that they are able to communicate effectively with their patients and colleagues by working effectively in teams and most importantly, maintaining the trust given to them by their patients. These qualities of a surgeon are, of course, reflected entirely in the domains of Good Medical Practice.

To sustain ourselves as professionals we must therefore develop and maintain our knowledge and skills in all these areas and this is indeed the vision of the GMC who have stated that *CPD enables doctors to maintain and improve their standards across all areas of their practice, including all the professional roles that they perform and those that they plan to perform in the future.* So CPD has several roles:

- It should support our current practice, *i.e.,* those things we do regularly, which do not change dramatically but do evolve over time.
- It should also encourage and help to support specific changes in our practice as a result of the introduction of new techniques and technologies, as well as enable us to develop new career roles.

- It has a vital role to play in helping doctors to keep up to date when they are not practising for whatever reason, and intend to either retain their license to practice or return to active practice.
- CPD for surgeons should support the service delivery and clinical developments of the employing organisation and, as such, the CPD plan for individuals should be signed off at annual appraisal and be subject to regular review.

Continuous professional development in 2011

One of the key features of a profession is that, as far as is practicable, it should be self-regulating and it should be able to set its own standards. The this end, the GMC, as the profession's regulatory authority, has said that as a doctor:

- You must keep your knowledge and skills up to date throughout your working life.
- You should be familiar with relevant guidelines and developments that affect your work.
- You should regularly take part in educational activities that maintain and further develop your competence and performance.
- You must keep up to date with, and adhere to, the laws and codes of practice relevant to your work. (Good Medical Practice 2006).

Many aspects of our professional lives used to be taken on trust, but as a result of several failures to maintain these standards over the last two decades we are now being required to demonstrate that trust in a much more open way (see page 70). It was, thus, inevitable that the requirements for agreeing, undertaking, recording and monitoring CPD would become much more formalised than we had been used to.

Each individual doctor is responsible for taking part in and recording their own relevant CPD activities, but it is now suggested that the framework for their CPD should be agreed at their annual appraisal and be documented and agreed in an annual Personal Development Plan – this not only places an onus on the individual to undertake the agreed CPD programme but also on the employer to facilitate the CPD by providing appropriate study leave and agreeing how the CPD is to be funded. To facilitate the organised collection of evidence of appropriate activity, together with some audit of the adequacy of an individual's programme, the Colleges and Faculties of the Academy of Medical Royal Colleges have developed CPD schemes – the four surgical colleges have collaborated in developing an appropriate template for use by surgeons.

The principles of a CPD programme

The 4 surgical royal colleges have developed a *Pan-Specialty Revalidation Group* to advise on the implementation of revalidation across surgery and ensure consistency across sub-specialties. They have drawn up some principles for an individual's CPD programme and how it should be monitored. The Academy of Medical Royal Colleges (and the GMC) has agreed these principles and have ensured that the principles behind a CPD programme are the same no matter what the discipline.

- Normally, credits given by Colleges / Faculties for CPD should be based on one credit equating to one hour of educational activity. The minimum required should be an average of 50 credits *per* year.
- Individuals have the responsibility to record CPD that has educational value.
- Self-accreditation of relevant activities and documented reflective learning should be allowed and encouraged.
- It will be the responsibility of individuals to ensure that they undertake a range of CPD that reflects the local and national needs of their practice and their own learning needs.
- CPD should include activities both within and outside the employing institution.
- CPD activities should include professional development outside narrower specialty interests.
- Surgeons should aim to achieve a balance of activities across three categories of activities (Clinical, Academic and Professional, including Managerial) and three environments (Internal, External and Personal).

- There are no minima or maxima in any category but surgeons should aim for a balanced programme that reflects their practice and development needs. A five-year programme should include CPD activity within each category and environment.
- Routine attendance at Morbidity & Mortality Meetings and at Multi-disciplinary Team Meetings would not normally count towards CPD credits.
- Participants will need to collect evidence to record their CPD activity, normally using a structured portfolio.
- A shortfall in CPD activity at the end of a fixed five-year cycle is difficult to make up. However, the use of a rolling cycle allows the average amount of activity to be maintained over five years if a shortfall occurs.

The approach of the SCTS to CPD

Cardiothoracic surgeons have a long history of being pro-active in supplying their own needs for professional development. Fifteen years ago we organized a series of lecture-based courses but since then we have undergone a revolution in the way we teach and train by accepting that there were large further benefits to be derived from utilizing the expertise inherent within the specialty alongside modern principles of adult education. By working with experts in education, members of the SCTS developed specialty specific Training the Trainers courses, teaching and refining the skills required to train cardiothoracic surgeons and developed a series of courses, initially for trainees but more recently for consultants, based on up to date knowledge and multi-modality teaching methods to communicate and reinforce key messages. Of importance these courses were developed with serious attention paid to feedback from attending surgeons, and we found that it would usually take several iterations of any course to produce what we would regard as a good educational project.

Alongside these developments a group from Birmingham also developed great expertise in running educational courses. They initially set up the Birmingham Review Course in Cardiothoracic surgery. This was, at first, intended as a revision course for senior trainees prior to their final examination, but it has now become a high quality annual contemporary review of adult and congenital cardiothoracic surgery, utilizing an expert international faculty and attracting delegates from all over the world. The course utilises a mixture of teaching techniques including small group interactive seminars, wetlabs, surgical demonstrations and structured question and answer sessions, in addition to the more formal lectured-based contributions.

More recently we have also realized that training only in the knowledge and techniques of surgery is not sufficient to produce consultants who will be as effective as they can be in the work place, so the Birmingham group, in conjunction with others, have developed courses for senior trainees and consultants on wider aspects of professional development including issues such as appearing before the coroner, medical negligence (and how to avoid it!), the structure of the NHS, medical revalidation and the role of the National Clinical Assessment Service. More recently they are developing a course to develop the specific qualities required to lead in our specialty through an SCTS Leadership course for current or aspiring clinical directors [1].

Alongside these newer developments we have also run an annual meeting for our membership for many years. This has always been a rich source of CPD for most cardiothoracic surgeons. It is primarily a forum for those involved in clinical and basic science research to present their work to their peers, but lectures from international leaders in cardiothoracic surgery also feature and there are forums for discussing the burning professional issues of the day. The Cardiothoracic section of the Royal Society of Medicine also has biannual meetings with presentations and lectures on specific topics of interest.

The SCTS University is the latest addition to this portfolio of cardiothoracic educational events. It was first run last year, the day prior to the annual meeting of the Society, and has been designed specifically to bring members up to date on many diverse aspects of our specialty, again using multi-modality teaching techniques. Certainly, a member who attended both the University and the Annual meeting would have covered the majority of their *external* CPD needs. We see this as an important contribution to maintaining contemporary knowledge and would hope that regular attendance at the SCTS University would contribute evidence to professional revalidation.

A test of knowledge?

The debate over how to demonstrate that we are keeping ourselves up to date will continue. Current recommendations from the GMC, the Academy of the Medical Royal Colleges and the colleges of surgery are that fulfilling satisfactory CPD commitments is all that is required. We are not so sure this completely fulfils the necessary evidence that a doctor is up to date. The concept of having to take a periodic exam may seem, to the outside observer, a logical way of demonstrating satisfactory knowledge, and indeed this is the approach favoured by the American Board of Medical Specialties. The stated position of the GMC is that we need to maintain our professional standards and up to date knowledge of those areas of medicine we deal with in our daily practice and not the wider area of our specialty as listed on the medical register. So for example a surgeon practising purely adult cardiac surgery will be on the specialist register in cardiothoracic surgery, but will no longer practice thoracic surgery. Ensuring that any exam is both customised to the practice of the individual and fulfils the necessary complex criteria for being a robust assessment would be a time consuming and expensive process, and may never achieve the desired aims.

However we think there is a sensible *middle ground*. In order to prepare surgeons for the examination leading to *Maintenance of Certification*, the American Board of Thoracic Surgery, requires its prospective diplomates to complete an educational package of Self-Education, Self-Assessment in Thoracic Surgery, or SESATS. SESATS is an online tool which covers all areas of cardiothoracic surgery including acquired and congenital heart disease, surgery of the lung and oesophagus, and transplantation. It presents a series of clinical scenarios which the prospective diplomate is required to work through – if they know the correct answer this is recorded, if not the package provides the relevant educational material for the candidate to work through and then re-answer the question.

We believe this is an excellent educational tool and that its successful completion demonstrates the maintenance of cognitive expertise. The Society for Cardiothoracic Surgery is working with the American Board of Thoracic Surgery to give, as a benefit of membership of the Society, access to the appropriate modules of SESATS (adult cardiac, thoracic or congenital surgery). We are aiming to make this freely available to our members. This will provide both an excellent educational tool and, by demonstrating that we are keeping ourselves up to date in the areas in which we practice, should act alongside the public presentation of our outcomes data to maintain public trust in the profession.

For the purposes of revalidation, the GMC will require documented proof of CPD as an essential component of the information needed for successful appraisal and revalidation but it is vital that CPD is much more than just a means to an end. A thoughtful, well-planned and varied CPD programme is the key to maintaining a diverse and fulfilling professional life and sustaining one's career through its various phases.

1. Bridgewater B, Kinsman R, Walton P & Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.

Thoracic surgery

Rajesh Shah, John Duffy & David Waller
Society for Cardiothoracic Surgery in Great Britain & Ireland

Thoracic surgery

Rajesh Shah, John Duffy & David Waller

Key points

- Responsibility for key decisions in thoracic surgery are largely taken in the context of multidisciplinary teams.
- This is not the case in adult cardiac surgery, although this is changing with the implementation of recent guidelines for management of patients with coronary artery disease.
- The development of the *Thoracoscore* as a risk stratification methodology for thoracic surgery makes benchmarking of risk-adjusted outcomes feasible.
- There is significant variation in resection rates for lung cancer surgery in the United Kingdom.
- Thoracic surgeons recognise that more openly recording and reporting this variation is an important step in reducing it.

Multi-disciplinary team working was implemented in cancer care in the mid- to late-1990s, with the publication of improved outcomes guidance for specific tumours as the main driver. Thoracic and cardiothoracic surgeons with significant thoracic surgical practice have led and contributed to the development of multidisciplinary team meetings (MDTs) throughout the United Kingdom. MDTs for lung cancer:

- facilitate timely treatment by a group of appropriate professionals, supporting individualised patient decisions keeping their physical, psychological and social circumstances in mind.
- enable continuity-of-care, information-provision to patients and communication between primary, secondary and tertiary care.
- promote the use of guidelines and protocols thereby supporting the practice of evidence-based medicine.
- allow data collection, audit, research, learning and development of trainees.

As part of the national peer-review programme, all lung cancer MDTs are subject to scrutiny to ensure standards are maintained. There is growing evidence that suggests multi-disciplinary care for lung cancer results in better decision-making, improved clinical outcomes and patient experience, and greater coordination of care across the patient journey. They also lead to improved quality of care which is resource efficient. Moving towards comprehensive multi-disciplinary team working in lung cancer has been a challenge, and required an enormous investment of time and effort from the thoracic surgical community.

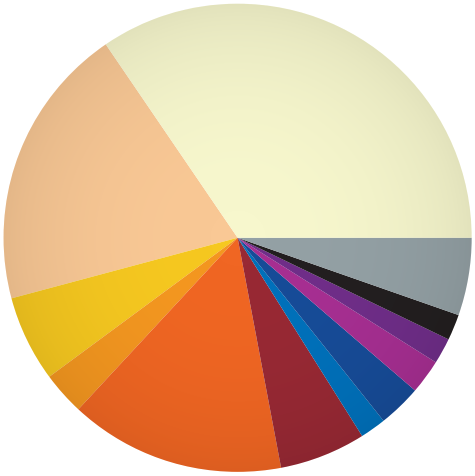
Introducing multidisciplinary team working has been the major focus of thoracic surgical energy over recent years, in contrast to the cardiac surgeon's investment in collecting clinical outcomes. Recent publication of the ESC / EACTS guidelines for coronary revascularization is now driving MDT decision making into cardiac surgery [3]. The guidelines emphasise the need for multi-disciplinary team meetings for all patients with multi-vessel coronary artery disease and the cardiac teams could possibly learn from our experiences in the introduction of MDTs for lung cancer and we have had discussions within the SCTS about these issues. Conversely, we in thoracic surgery need to learn from our cardiac surgical colleagues and implement effective systems to collect clinical outcomes data, to demonstrate the quality-of-care that we deliver and support quality improvement processes. There are some specific challenges for thoracic surgery that include:

- multiple thoracic surgery procedures with varying mortality rates making selection of the appropriate methodology to measure a surgeon's performance more difficult.
- absence of an accepted risk stratification model in thoracic surgery with fears of promotion of risk averse behaviour with the resultant impact on already low resection rates in the United Kingdom (we do now, however, have the *ThoracoSCORE*, which may be useful [4]).

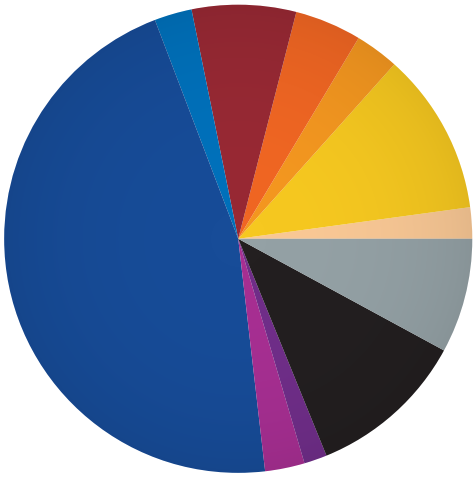
- current lack of widespread availability of local and centralised systems for data collection.
- historically we have had a protective, inward-looking culture of some surgeons.

To illustrate the first point about complexity of operative sub-groups, the following figure shows real data for casemix for a full-time cardiac surgeon, and a full-time thoracic surgeon.

Full-time cardiac surgeon (n=168)



Full-time thoracic surgeon (n=695)



CABG alone	34.5%			
AVR alone	19.6%		2.2%	Pneumonectomy
AVR & CABG	6.0%		11.2%	Lobectomy
AVR & other ± CABG	3.0%		3.0%	Wedge resection
Mitral repair	14.9%		4.6%	Pneumothorax surgery
Mitral & tricuspid repair	6.0%		7.2%	Pleurodesis & pleural biopsy
Mitral repair & CABG	1.8%		2.6%	Decortication
Mitral replacement	3.0%		46.0%	Bronchoscopy
Mitral replacement & tricuspid repair	2.4%		2.7%	Lung biopsy
Mitral replacement & CABG	1.8%		1.6%	Lymph node biopsy
AVR & mitral replacement / repair ± CABG	1.8%		10.9%	Mediastinoscopy
Other cardiac / aortic surgery	5.4%		7.9%	Other thoracic surgery

The cardiac surgery data are for April 1st 2009 to 31st March 2010; the thoracic surgical data are for 1st Feb 2010 to 31st Jan 2011. The datasets come from the practice of a full-time cardiac and thoracic surgeon respectively, who both work at the University Hospital of South Manchester NHS Foundation Trust.

There are marked differences in the two practices. The cardiac surgery practice comprises exclusively *major* operations, and each sub-group of surgery has a significant, but different, predicted mortality. The thoracic practice has a smaller number of major operations, again each of which have an important predicted mortality, but a large proportion of casemix comprises more minor surgeries.

Despite the above issues, thoracic and cardiothoracic surgeons have participated in the SCTS thoracic surgery registry, which collects data on unit procedure-based activity and mortality, since 1980. This has resulted in publication of a thoracic *Blue Book* comprehensive data report written by Richard Page in 2008. The data clearly show improvements in the open / close rates of lung cancer resection, reduction in the number of pneumonectomy operations, and a reduction in mortality for lobectomy / pneumonectomy. This reflects better outcomes for patients. There is a clear increase in national activity of thoracic surgery reported in recent years indicating that there has previously been significant unmet demand. This has been made possible by an increase in the numbers of thoracic surgical appointments around the United Kingdom, which has been driven by joint efforts of thoracic surgeons through SCTS, the Surgical Advisory Committee of the Royal College of Surgeons, the British Thoracic Society and the Department of Health with its Cancer Reforms Strategy. This again has clearly benefitted patients. However there have been some concerns raised about large variations in resection rates for lung cancer [5] and whilst we have some anxiety about the data on which this analysis was based, we must respond to the underlying themes and work to understand variations in access rates to curative surgery and systematically deal with any areas of under-provision.

There are further challenges for the thoracic surgeons to consider, which include:

- professional revalidation (and better data collection with outcome measurement will be an important subset of this).
- setting clear quality standards.
- workforce and training issues set against the introduction of the European Working Time Directive.
- developing a clear and transparent governance and communication strategy based on the needs of the patients and public.

Obviously the comments throughout this book will inform and support our developments. In line with the section on clinical outcome measurement on page 33, we are at a relatively early stage in our ability to collect comprehensive information. As described above, data collection has not been the primary focus of our attention until now, and whilst some units have prioritised implementation of the necessary IT infrastructure and medical focus, others have not. To respond to this and other issues we have recently developed a Thoracic Surgery Subcommittee within the SCTS which has 4 clear work plans:

- workforce planning
- professional revalidation
- database development
- quality improvement

Obviously all of these themes are inter-related to some extent. We have however made the following agreements through the Thoracic Subgroup and our Thoracic Surgical Forum:

- collecting data through the SCTS thoracic surgical database will be a requirement for professional revalidation.
- we have agreed a dataset, for collection, along with the appropriate definitions. Including geographical identifiers will help us to understand inequalities in care.
- we are looking to obtain funding to support local data collection for those centres that need it, along with national infrastructure to collate and analyse the data.

Cardiac surgery has clearly made significant headway in data collection, risk stratification, validation, outcome measurement / publication, benchmarking, explaining divergence and the thoughts on measuring patient experience and multi-source feedback described in this book. Paediatric cardiac surgery has developed a culture of mentoring and consultants working together in the best interest of the patients, whilst thoracic surgery has clearly led the way in developing multi-disciplinary team working. There is clearly a culture within the SCTS of sharing / learning from good practice and thoracic surgeons are now committed to narrow the gap with cardiac surgery on collecting clinical outcomes data through their commitment to revalidation. We are optimistic for the future and hope that subsequent editions of SCTS professionalism reports will have cardiac and thoracic clinical outcomes data reported as equal partners.

References

1. Blennerhassett MAJ. Patient narratives hold the evidence for MDTs. *BMJ.* 2010
2. Taylor C *et al.* Multi-disciplinary team working in cancer: what is the evidence? *BMJ.* 2010; **340:** c951
3. Guidelines on myocardial revascularization. The Task Force on Myocardial Revascularization of the European Journal of European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS). *Cardio-thoracic Surgery.* 2010; **38:** S1, S1, S52.
4. Falcoz PE, Conti M, Brouchet L, Chocron S, Puyraveau M, Mercier M, Etievent JP, Dahan M. The Thoracic Surgery Scoring System (Thoracoscore): Risk model for in-hospital death in 15,183 patients requiring thoracic surgery. *European Heart Journal.* 2010. doi: 10.1093/eurheartj/ehq277
5. http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/cancer/lung
6. http://www.ic.nhs.uk/news-and-events/press-office/press-releases/audit-of-lung-cancer-care-highlights-wide-regional-variation

Part II: modern medical professionalism

Every patient should have a good doctor

Sir Donald Irvine
Past President, General Medical Council
Chairman, Board of Picker Institute Europe

Prof. Frederic Hafferty
Mayo Clinic, Rochester, Minnesota, USA

Every patient should have a good doctor: why a modern approach to medical professionalism is essential to achieving this

Sir Donald Irvine & Professor Frederic Hafferty

Key points

- The generally good public standing of doctors has tended to obscure the fact that over a long period of time the profession, perversely, has been prepared to tolerate some very poor practice from a minority of its members through a misplaced sense of collegiality and dated ideas of professional autonomy.
- Today, the public has made it clear that it wants a 21st Century Health Service, in which patients can take the optimum performance of their doctors for granted.
- A key question is whether or not the medical profession is willing and able to adapt its traditional culture of professionalism to meet this societal expectation.
- One result is that a new framing of medical professionalism is emerging, which welcomes patient autonomy, and embraces the pursuit of excellence through knowledge, skill, service, accountability, transparency, and a collective responsibility for assuring patients through setting and demonstrating achievement with professional standards.
- The United Kingdom cardiac surgeons are travelling this road; they see their particular approach to revalidation as a socially responsible expression of their personal and collective commitment to patient-centred professionalism.

Introduction

On the 18th June 1998 the General Medical Council (GMC) found two paediatric cardiac surgeons and the medically qualified chief executive at the Bristol Royal Infirmary guilty of serious professional misconduct [1]. The doctors were held to account for allowing heart surgery on infants to continue, knowing that the death rate was twice the United Kingdom average. As the story unfolded at the GMC hearing, the nation was appalled. Parents who had placed their trust in their doctors felt that their trust had been betrayed at this much-respected teaching hospital.

Since the Second World War, the British medical profession has been on a pedestal because of the wonders of its science and the excellence of so much of its practice. Surveys of public opinion have shown generally that British doctors are highly trusted even though, as we shall show later, this rose-tinted view is subject to important qualification [2, 3]. This good public standing has tended to obscure the fact that over a long period of time the profession, perversely, has been prepared to tolerate some very poor practice from a minority of its members through a misplaced sense of collegiality (*i.e.*, we must all stick together) and dated ideas of professional autonomy. Bristol demonstrated this point in a very public way. The point was reinforced by other cases about the same time, notably the scandal involving pathologists at Bristol and Alder Hey over the retention of organs, the awful gynaecology of Rodney Ledward, and the general practitioner serial killer Harold Shipman.

These cases are significant because they marked the moment when the British public put its foot down. Through the media [4-8], the message from the public was clear:

> *Having a good doctor is vital to us. We had thought that the institutions of medicine and the NHS made sure that all doctors in Britain stayed competent and up to date. Now we have discovered that they do not. So from now on we want the system to be changed to give us that assurance. Nothing less will do.*

In 1992, the late Meg Stacey, sociologist, occasional patient and critical friend of the British medical profession, had anticipated the problem [9]. Giving an outsider's appraisal of professional self-regulation, she said:

> *Old style professionalism has had its day. The conditions in which it was created have changed out of all recognition … If medicine attempts to hang on to the old model and to preserve as many of the old sacred cows as possible, I fear that not only may professional self-regulation be swept away, but also the best of professionalism, its valuable aspects, will be lost along with those parts that need to go. The end-result could be different from anything anybody intended, and have unwanted consequences for the profession and public. Better that the profession itself should recognise the need for radical change; that medical leaders themselves should establish a new concept of profession within which the best of the old model could be preserved, while modifying the concept to fit the new circumstances.*

Prophetic words indeed. Bristol was a wake-up call for the British medical profession [10, 11]. Among the changes to come, but not yet visible, would be that doctors must recognise the reality of patient autonomy, and not play God; that patient safety must always come before professional self-protection; that pure self-regulation should be replaced by co-regulation with the public; that professional practice and regulation should be standards based; that a doctor's license to practise and specialist certification must be subject to regular evaluation and renewal through the process of revalidation; and that the managerial processes of clinical governance and the professional processes of revalidation should be closely aligned and effective [12-15].

Or so it seemed. While the process of renewal has started, progress has been painfully slow. Twelve years on revalidation is still not operational, although it is scheduled to do so in 2012. The government's new institutional regulator for the NHS, now in its third incarnation as the Care Quality Commission, has not always worked as well as it should. The NHS seems to find effective clinical governance at the workplace difficult to implement. And the medical profession continues to procrastinate because some doctors, mainly amongst the rank and file, are determined to resist attempts to introduce meaningful assessments of their practice, perhaps because they are fearful of the consequences if poor performance is revealed. Consequently the roll call of indifferent and at times bad practice continues. The toleration of poor medical and nursing practice at Mid Staffordshire NHS Foundation Trust and the appalling care given by GP *locum* Dr Daniel Ubani are recent examples [16, 17].

Professional toleration of problematic or frankly poor practice is not peculiar to British medicine; similar professional attitudes and behaviours are there across the world [18-20].

There are three inter-related reasons for lack of progress. The first is the inward-looking, self-protective culture of medicine today. Secondly, historically the NHS has had a strongly producer-orientated organisational culture which can result in the interests of staff and employers coming before the interests of patients. And the third, perhaps as a consequence of the first two, is the fact that organised medicine has been reluctant energetically to develop and use methods suitable for assessing doctors' performance and measuring the outcomes of care.

However, despite the inertia, we think things are set to change in future. Public expectations for consistent quality in the NHS are likely to become ever more insistent. Reinforcing this, far more information will be published about the performance of health professionals and health care services, giving new meaning and impetus to patient expectations of service, patient choice of doctor and healthcare team, and accountability for professional care. This looks like an unstoppable force which the health professions and governments would be wise to anticipate.

This is why we think the initiative taken by The Society for Cardiothoracic Surgery in Great Britain & Ireland (SCTS) is important. Here is a *can-do* Society whose members are exploring the practicalities of a patient-centred professional culture and expression of professionalism appropriate to early 21st-Century medicine. They are working through fresh ideas about collective responsibility and accountability for the practice of their members in the Information Age. They have applied themselves with energy and skill to develop the robust clinical standards and outcomes needed to demonstrate the effectiveness of the practice of individual heart surgeons on a continuing basis. They publish the results [21]. And they plan to make sure that their patients' experience of their care is as good as they would like it to be for their own families. Consequently, the Society sees revalidation as an opportunity for strengthening and underpinning their members' personal and collective professionalism rather than as an unwelcome bureaucratic imposition.

From their account in this book readers can judge for themselves how well they are succeeding, and what the implications for medicine might be. We see this as the way forward.

Changing ideas of professionalism

The transformation of medicine from a guild to an organisational form fully deserving of the appellation profession has been vexingly slow, inconsistently articulated, conceptually convoluted, and internally contentious – and thus remains more a chimera of unrealised potentials than a model of organizing work that stands apart from the clamour of the market place and the weightiness of bureaucratic controls [22]. And yet, there is good reason to be optimistic. For at no time in the history of medicine's journey over the last century has the dialogue between the public and the medical profession been as vigorous and visible as it is becoming now, particularly in Australia, Canada, New Zealand, the United States of America and the United Kingdom.

To understand why the medical culture is as it is, we have to look back to its roots. In 1910, when Abraham Flexner wrote his landmark Flexner Report on Medical Education in the United States and Canada (in which he drew on experiences from Europe and Britain), he captured the internal ironies and tensions around medicine's unfolding status and self-image as a profession which have influenced its behaviour ever since [23]. He describes how medicine simply assumed itself to be a profession. Practitioners who had undergone the necessary training, possessed a basic qualification in medicine, and secured registration (licensure) were therefore presumed to be professionals by both the medical community and the public. That was it. From that point on in doctors' careers, the particulars of their future practising styles, their competence, their attitude to patients and colleagues, and their altruism and service ethic were deemed to be largely a matter for individuals themselves to decide because – well – they were professionals. All was assumed; no analytical attention was given to examining the underlying assumptions. The public's and patients' views and preferences did not come into it.

This self-contained, inward looking attitude was transmitted to the individual doctors who were products of the system, and who then went on to become members of organizations like colleges, professional societies and medical trade unions. Of course there were club rules – expressed as professional etiquette – made by the members for members about things that mattered to them. The aversion to self-promotion through advertising and the ban on criticising a colleague's clinical practice, known in Britain as *disparagement,* are good examples of protective practices. It is therefore easy to see why any sense of collective self-discipline was then – and still is – difficult to achieve in those circumstances where societal interests conflicted with professional self-interest. The result was that in such situations change usually proceeded at the pace and focus of the lowest common denominator of agreement. This helps to explain why Flexner was convinced that any movement by the medical profession towards meeting societal rather than self needs would be driven mainly by the pressures of public opinion rather than by motivations arising from within medicine itself [24]. But in the first half of the 20th Century such pressures barely existed. In many ways it did not matter. Medicine at that time was safe because it was largely ineffective – nature would take its course despite anything doctors were able to do.

As we fast-forward through the second half of the 20th Century, the public standing of the profession soared with advances in the science and technologies of medicine. Now medicine had become much more effective but also much more dangerous – faulty diagnosis or the wrong treatment due to lack of knowledge, skill or care could injure or kill. Nevertheless, the underlying cultural assumptions on which this by now very successful profession had been built remained essentially unchanged. The notion of unrestricted professional autonomy – I'll do as I think fit – was still strong despite advances such as evidence-based medicine, team working, medical audit, and the quality movement in health care. Moreover, it conflicted with the emerging societal shift adjusting the power relationship between doctor and patient towards patient autonomy. This tension deepened as patients, for the first time, could access the knowledge-base of medicine independently through the internet instead of having to rely exclusively on the doctor.

On both sides of the Atlantic it was the sociologists who first began to ask questions about medicine's culture and professionalism with Eliot Freidson's 1970 conjoint publication of Profession of Medicine [25] and Professional Dominance [26], a watershed in this respect. What followed was an intense debate about whether medicine was becoming de-professionalised, proletarianised, corporatised (different sociologists used different terms) or whether it was maintaining its professional powers and privileges [27-33]. Over time there was a general feeling that medicine had become more inwardly focused and self protective rather than service oriented. Freidson, for example, found medicine self deceiving and insular with respect to its professional responsibilities [26]. With its transgressions being played out in the media, medicine was fast becoming notorious for refusing to police itself in the public's interest and to protect the public from impaired or otherwise incompetent physician-peers [34]. The resistance from within the medical profession to the principle of accountable professionalism was being successfully sustained.

We have seen this story unfold in Britain; it has been told in detail by Stacey [9], Kennedy [35], and Irvine [36]. Throughout the life of the NHS a rump of poor practice has persisted in general practice but the hospital specialties have not

been immune. Various attempts to address problem doctors through contracts of employment and incentives, and latterly through commissioning, have been relatively unsuccessful because the BMA, the doctors' powerful trade union (whose strap line is: Standing up for Doctors) has always been able to protect all but the very worst offenders. The tactics are familiar; promote excellence, support manifestly good doctors and quality initiatives which will help the profession, but keep the threshold for a minimum standard of continuing practice low to protect the livelihoods of the barely adequate. For example, in the seventies the government tried to deal with general practitioners who were known to be falling behind by giving incentive payments to all family doctors to keep up to date; but the profession's representatives insisted that no evidence of learning was required [36]. An attempt in Parliament in the eighties to deal with incompetent doctors by redefining the threshold of serious professional misconduct in the GMC's fitness to practise procedures was successfully resisted [37]. And in the early nineties, when government wanted to try and reduce unacceptable variations in NHS clinical practice by making participation in medical audit a contractual condition, the initiative was welcomed by organised medicine provided that it was to be purely educational, for improvement, with no regulatory consequences for any serious deficiencies that may be revealed [38].

Today, the challenge to properly accountable professionalism has reappeared with revalidation – the proposed system of relicensure and recertification intended to make sure that all doctors keep themselves up to date and perform well. There has been a strong, self-protective rearguard action in play to make sure that appraisal, a key component, remains purely formative and developmental; that direct evidence of competence and performance should be avoided as much as possible; and that the public should be excluded from direct involvement in individual revalidation decisions [36, 39]. Furthermore the BMA states that, as a matter of principle, knowledge testing should form no part of revalidation [40]. This position contrasts sharply with practice in the United States of America where, in the national Maintenance of Certification procedures, the assessment of medical knowledge is considered essential because of the substantial evidence that, as doctors get older, they may no longer be up to date [41-43]. And it is at odds with patients' gut instinct that a vital part of being a doctor is knowing what you are doing (see also reference to patient surveys below).

The challenge nearly succeeded when, in 2001, the GMC was persuaded to water down its originally reasonably robust proposals to an annual appraisal unsupported by direct evidence of performance [44]. The Government by its inaction seemed to agree. However, Dame Janet Smith, in her Shipman Inquiry [45], showed that this latest proposal would not comply with the new legal requirement for revalidation, and so caused the government and the GMC to return to the original evidence-based approach by means of another review completed by its Chief Medical Officer in 2005 [46].

Throughout, there have been doctors and organisations within medicine that have been prepared to challenge this self-protective stance, but they were never strong enough to change the general culture sufficiently from within. For example, several generations of general practitioners who cared about their patients and the standing of their specialty reacted to manifestly poor practice by founding a college (the RCGP) to set standards where none existed, and by developing a culture and suite of methods in the 1980s, which were the forerunners of revalidation today [47-49]. Yet over 30 years there were regular conflicts with the BMA over, for example, the need for robust entry standards to practice and the persistent problem of poor performance in some established doctors. Cardiac surgery is another good example of a specialty which has dealt with the quality problem we described earlier by taking decisive action. Most recently, in the early, often bitter intra-professional exchanges about just how robust revalidation should be, the medical royal colleges and the GMC – and at the time the BMA's GP committee – were for rigour and effective public involvement whilst the BMA specialists and their supporters favoured doing the least possible consistent with good appearances [35, 45, 46]. These divisions of opinion within the profession still persist today.

In 1988 Jean Robinson, a longtime patient advocate, got to the nub of the profession's indifference to competence issues when she said:

> *No medical profession in the developed world could have had a body of patients who are more docile and grateful than the British since the formation of the NHS … Only when a sufficiently large number of patients and their relatives had been radicalised did we begin to see change and a serious discussion of [competence] problems in the media.* [50]

So Flexner had been right all along; it would be public pressure that would change things. Now, under growing public scrutiny, medicine's traditional absence of critical self-reflection was coming to an end.

The emergence of a new professionalism

In the United States of America and, to an extent, Great Britain, a debate is now going on about the very nature of professionalism. The debate has profound implications for the shaping of future policies about the work and education of doctors and the welfare of patients.

On the one hand – often as a majority voice – are those organisations and individuals who promote a nostalgic view of professionalism [50]. This view stems largely from how the problem of professionalism has come to be understood within organised medicine. For example, medicine is said to have drifted away from or abandoned its social contract with society, and doctors are said to have lost contact with their professional roots. Therefore, it is argued, whatever has been lost needs to be re-captured. Doctors are thus being encouraged to re-discover and re-commit themselves to traditional professional ideals and values. In turn many of the subsequent professional codes, charters, competencies, and formal curricula for students have, implicitly or explicitly, come to reflect this framing. In this framing, professionalism is seen almost exclusively as a characteristic of individual practitioners and their motives rather than as a concept which also embraces settings and structures. Consequently, little thought has been devoted to how medical bodies, and the structure and organization of medical work, and medical education might facilitate and / or hinder the expression of professionalism [52].

From the perspective of a social movement, attempts to meet contemporary challenges by returning to the profession's traditional roots are both understandable, and to a certain extent necessary, as a first step strategy. Nevertheless, relying on the past as the inspiration for identifying future solutions can only court disaster over time. Solutions grounded in understandings for practices that have already proven frayed, flawed, or less than fully functional in the face of scientific, social and environmental change are more about wishful thinking than being responsive. After all, it may be said, if all had been well, how did medicine come to lose its professional moorings in the first place?

This takes us to several contemporary models of professionalism which provide a direct challenge to the more traditional approaches described above. A variety of labels have been used to describe this reframing, including civic (Sullivan [53]), democratic (Dour [54]), responsive (Frankford and Conrad [55]), activist (Sachs [56]), and the more generic new professionalism (Irvine [57-59]; Mechanic [60]). Although there are some key differences to these framings, overarching themes include:

- A recognition that doctors are both part of society and work to serve society – and so have to change with it.
- A more active involvement by patients and the public in both matters of healthcare delivery (*e.g.,* patient-centred healthcare) and in professional regulation and practice.
- Extending the concept of professionalism to include matters such as quality, evidence based medicine, patient safety, patient centeredness and revalidation.
- A shift from the professionalism of unfettered autonomy to a one of accountability.
- Recognizing the critical importance of professional leadership in promoting and sustaining patient-centred professionalism.
- A recognition, nevertheless, that professional autonomy, when properly used, enables doctors to promote patients' interests and needs in ways that employees, in reality, cannot.
- The extension of the concept of professionalism to other occupations – hence the rise of interest in inter-professionalism.

Most recently, leaders in the United States and the United Kingdom, such as Donald Berwick, Troyan Brennan, Sir Donald Irvine and Richard Horton have begun to make use of these reframings in calling for a more holistic, inclusive & collective vision of professionalism within an overall system of accountability that includes knowledge and skills, a collective responsibility for standards, transparency, and a true partnership between the public and medicine as well as the traditional emphasis on ethical practice and service [61-65]. In the United Kingdom, in 1997, Irvine illustrated this reframing when he said that the new professionalism rested on three pillars – medical expertise, ethics and service to patients [57]. He summarised some of the main characteristics of a new professionalism committed to a collective effort to maintain good medical practice for patients (see Table 6.1) [58].

That collective effort, to be completely successful, needs the professional and organisational cultures in hospitals and primary care units to resonate in harmony because they are to some extent interdependent. As Julian Hartley and Carol Rothwell point out in their respective chapters(see pages 94 & 100), an organisational culture that fosters high performance facilitates excellent clinical care whilst an organisational culture indifferent to sub-

Table 6.1
New professionalism: maintaining good practice

Doctors are most likely to maintain good practice when they work in teams which:

- Show leadership.
- Have clear values and standards.
- Are collectively committed to sustaining and improving quality.
- Foster learning through personal and team professional development.
- Care for each member.
- Have a *no blame* culture.
- Are committed to the principle of external review.
- Are open about their professionalism.

Effective teams use:

- Clinical guidelines and operational protocols.
- Good systems.
- Good data.
- Good records.
- Focused education and skills training .
- Systematic audit of performance with feedback.
- Regular, formative peer appraisal.
- Critical incident review.
- Risk management methods.

optimum performance can enable unacceptable care to flourish.

In thinking about the new professionalism it makes sense to start with patients and what they look for in their doctors. Fortunately, much more information is now available about patient expectations, their experience of and satisfaction with their doctors' care, and outcomes seen from their perspective (patient-reported outcomes).The following vignette is a fair reflection of patient expectation explained further in chapter 7 by Penny Woods and Charlotte Williamson:

> *For patients and their relatives, a good doctor is one whom they feel they can trust. They equate goodness with integrity, safety and up to date medical knowledge and skill, and an ability and willingness to form a good relationship with them. For patients, good doctors are clinically expert yet know their limitations. They make the care of their patient their first concern, listen to them, and are kind, considerate, empathetic, respectful and caring. They involve patients in decisions about their care. It is the sum of these attributes that matter because patients know that their doctors' advice and decisions can affect the outcome of their illness – even make the difference between life and death, or between enjoying a speedy recovery and suffering a serious disability.* [66]

Patients today see medical professionalism holistically, as fundamentally about the personal standards of technical knowledge and skill, ethical behaviour and service which apply to individual doctors combined with a system of professional regulation which makes sure that such standards are observed by all doctors who are licensed to practise. It was with this holistic concept of professionalism in mind that the GMC, in 1995, sought to unify the profession around a new, explicit patient-centred code of professional duties and standards which is evidence-based and constitutes Good Medical Practice [67]. In 1998 it decided that full compliance with these standards would be best achieved by embedding them in medical education, licensure, specialist certification, revalidation and contracts of employment [57-59]. This fundamental change, fully in the spirit of the new professionalism, was intended to signal a decisive break with the past by putting patients interests unequivocally first.

Recently, a poll of public opinion commissioned by the GMC has lent support for this change in direction. This showed that, whilst 86 percent of respondents were confident in their doctor's skills and knowledge, more than one in ten (14%) said they did not have confidence in the last doctor they saw [68]. More than 70% of those who were not confident about their last doctor agreed that revalidation would increase their confidence, and even

those who were already confident thought that revalidation would increase their confidence further. These figures compare with further analysis done by Picker Institute Europe on the data from the National GP Patient Survey 2009. Of the 1.6 million people asked how they would rate their confidence and trust in their doctor, just over two thirds were definitely trusting, and just under one-third had only limited trust or none at all [69]. So, in terms of absolute numbers, trust is an important issue for an appreciable minority of the population.

These findings help to explain the public support for revalidation. A 2005 Mori survey in England tells us in more detail what the public has in mind [70]. It showed that 9 out of 10 members of the public thought it important that doctors' competence should be checked every few years. Indeed, nearly half the sample thought that these assessments already happen, and that they should be every year. The people surveyed thought that it was most important to have evidence that doctors are up to date, followed by the success rates of their treatments and whether they received high ratings from their patients. In terms of aspects of their doctors' performance they would like to comment on, communication skills came first, followed by being up to date, how much doctors involve patients in treatment decisions, and whether they show patients dignity and respect.

These figures explain the real challenge to which the profession has to respond. Self-evidently, a system of professional regulation only activated by complaints or by disasters can never meet contemporary public expectations. Hence the move to revalidation.

Revalidation

Revalidation, embracing relicensure and recertification, is the process through which doctors are expected to demonstrate regularly that they are up to date and fit to practise in their chosen field. The statutory definition of revalidation is that it is an evaluation of a medical practitioner's fitness to practise [71]. It covers all doctors practising in the United Kingdom, in private practice as well as the NHS.

The current regulatory practice, introduced with the 1858 Medical Act, assumes that a licensed doctor is competent and will remain so. The public is therefore obliged to rely only on their doctors' sense of conscientiousness that they will keep up to date and practice safely. The regulatory system comes into action if something goes wrong, which in turn means that a patient may be hurt or die before any action is taken. Only then is the onus on the GMC to prove that the doctor generally is not fit to practise.

By contrast, when revalidation begins, doctors will be responsible for demonstrating to the GMC, regularly, that they are competent and perform well. So the current reactive system, activated only by some form of complaint or dire patient outcome, will be replaced by a proactive system designed to identify poorly performing doctors quickly, lead to action to protect patients, and encourage and continuously improve the practice of all doctors. Revalidation combines the principles of quality improvement and quality assurance.

Revalidation will be based on the generic and specialty professional standards set out in the GMC's Good Medical Practice [67] and derivative specialty versions produced by the medical royal colleges. It is the regulatory instrument most likely to make sure that all doctors meet their duties and responsibilities in full, because it carries potential consequences for a doctor's right to practise.

Revalidation will be based primarily on practice performance: what the doctor does. It will have a five-yearly cycle. For the vast majority of doctors working in the NHS or a private institution, there will be an annual appraisal at the workplace by a colleague. This appraisal interview will be enhanced by a folder of evidence, which the doctor is responsible for compiling, illustrating relevant aspects of his or her performance against a grid of attributes based on Good Medical Practice.

Where there is doubt about doctors' eligibility for revalidation, a final decision will be taken by the GMC after referral to its fitness to practise panels.

United Kingdom cardiac surgeons and revalidation

Against this background we now summarise what we understand to be the direction of travel on professionalism and revalidation being followed by the Society for Cardiothoracic Surgery in Great Britain and Ireland (the SCTS). In the initiatives described below, we see substantial evidence of cultural and behavioural change both in the leaders of the SCTS and in the membership as a whole. The model of professionalism described by the United Kingdom cardiac surgeons in this book fits well with the principles of the new professionalism outlined earlier, and represents significant progress towards patient-centred care for all their patients. This is why we think it so important that a wider audience hear their story.

As with all groups, opinions and ideas may differ in degree, and indeed are subject to change and refinement as the work progresses, but, as we understand it, the essentials are as follows:

1. The SCTS (and its members) sign up to revalidation. Members see it as their professional responsibility to show their patients, colleagues and managers that the practice of every cardiac surgeon, without exception, is of a consistently high standard. They themselves would willingly entrust their families to any such surgeon.
2. The SCTS is fully committed to the new professionalism embodied in the duties and responsibilities of a doctor set out in the GMC's Good Medical Practice.
3. The SCTS is the national repository of the knowledge, skills and attitudes required for the effective practice of cardiac surgery.
4. The SCTS provides national leadership on the standards of practice that United Kingdom patients are entitled to expect from any certificated cardiac surgeon. The SCTS believes that patients should expect an optimum standard of practice – the best that can be achieved in the current state of knowledge and under the current practising conditions – from United Kingdom cardiac surgeons.
5. To demonstrate that the above is indeed the case, the SCTS established the National Adult Cardiac Surgical Database, and has used this actively to analyse, benchmark and feedback clinical outcomes to its members (see page 33). The outcomes for every surgeon are benchmarked against national and international norms.
6. The SCTS regularly publishes hospital and surgeon specific outcomes.
7. The SCTS has developed an effective and supportive way of identifying outliers on the database. They aim to be able to establish possible causes quickly, and to take appropriate action when necessary before anyone – patient or surgeon – is damaged
8. In addition to outcomes, the SCTS plan to offer additional evidence of performance drawn, for example, from clinical audit, feedback from colleagues, and complaints.
9. Through these data dependant quality activities, and the discipline imposed by revalidation, the SCTS and its members are greatly adding to the strength & quality of clinical governance.
10. Evidence of continuing professional development will be offered. Specifically, members will be strongly encouraged to ensure that their essential knowledge is up to date by completing the 400-question SESATS (see page 55) assessment on-line at regular intervals.
11. The SCTS is developing strong links with Picker Institute Europe, a charity committed to patient-centred care, and through this collaboration is developing techniques to enable members to demonstrate the quality of their patients' experience regularly using near real-time feedback.
12. All the evidence above will be used for appraisal, which should become a very well informed opportunity for stocktaking, reflection, and instituting improvement. The aggregated results of the annual appraisals will be submitted for revalidation at the end of the five-year cycle.

Overall, the cardiac surgeons' use of direct evidence for assessing and demonstrating professional competence and performance is impressive. This is how revalidation should be.

What should we be aiming for?

Looking ahead, it is clear that the public and patients want a 21st Century healthcare system in the United Kingdom in which they can take the optimum standard of performance of doctors – all doctors – for granted. Given that aim, one test of achievement would be an absence of justified complaints about a doctor's clinical competence or patients' experience of care given. Another would be that, if anything goes wrong with a patient's medical care, as is bound to happen from time to time, patients and their relatives will automatically assume that it must because of something other than lack of competence or care by their doctors. After all, they will think, doctors – like airline pilots – have an exemplary track-record as a profession for being conscientious, safe and reliable.

With a high order of personal and collective professionalism, guaranteed by sensible but robust revalidation, this aim should be eminently achievable. Since so many doctors today already perform consistently well, there is no reason why the rest should not do so either, if they really make the effort (and, as taxpayers would no doubt remind us, at the moment the NHS pays good and mediocre or poorly performing doctors the same basic salary). So extending good standards of practice to all patients is primarily about clinical quality assurance and it should

be the sound foundation from which to pursue clinical excellence through continuous quality improvement.

The achievement of this aim is *likely* to be furthered in future as more of the public use the Internet to access information designed to give them a clear picture of a doctor's competence and performance (see page 18). Patients may use this information to help choose a doctor or find out more about doctors who are already treating them or their relatives, and so reinforce the pressure for accurate information. Transparency about the factual basis for doctors' professional reputations, already there in cardiac surgery in terms of outcomes, could become the new order of the day across medicine.

How do we get there?

To carry the agenda forward, we offer the following suggestions to the GMC and the royal colleges and specialist societies which together carry the main professional responsibility for implementing revalidation successfully.

1. **Be passionate about patient-centred professionalism.** Champion doctors who are proud and enthusiastic about their professionalism. They are the leaders who will transform the medical culture. They act out of belief and a profound respect for patients, not as doctors acting against their will.
2. **Tell patients what standards of practice they can expect from United Kingdom doctors.** Good Medical Practice in its latest form is excellent and should be the basis for revalidation. However, all patients need to be well informed by the GMC and the medical royal colleges in plain language about the standards of everyday practice they can use as the benchmark against which to judge their own experiences with their own doctors.
3. **Champion patient experience.** Patient experience is an element of patient care, some of which can be measured objectively, where total transparency has a huge potential to transform the quality of care quite quickly. Abandon point-in-time surveys for revalidation and replace with regular near real-time assessment. By requiring this, NHS trusts and Commissioners will be expected to provide (and pay for) this information routinely, as part of competent health services management.
4. **Promote patient-centred medical education, particularly through the leadership of medical teachers and their influence as role models of good practice.**
5. **Be obsessive about the quality of data offered by doctors for revalidation.** Raise the game on clinical outcomes. Support the principles set out in the NHS consultation document Transparency in Outcomes [72]. Aim for high standards in the quality of information to be used for revalidation. Be clear that general data quality and consistency, especially through NHS clinical governance, will not be achieved without the pressure exerted by revalidation.
6. **Be equally obsessive about transparency.** The cardiac surgeons have given a lead through the publication of surgeon specific survival rates. Consider what other information on performance could be published about the performance of individual doctors, for example on patient experience or patient-reported outcomes.
7. **Think more boldly about assessment methods.** In particular, think about very good methods already developed and in use in other countries. Reconsider the value of assessing medical knowledge in the light of what is already known about its effectiveness from studies in the USA.
8. **Support doctors in seeking a working environment which values and is supportive of professionalism in their everyday practising life.** For example, the Royal College of Surgeons is working hard to overcome the effects of the European Working Time Directive in undermining the professionalism of surgeons in training. Another example concerns utilitarian management ideas about the organisation of medical work which may make effective team working uncertain, diminish the opportunities for role modelling by trainees, and through fragmentation make it difficult to create the time needed by doctors with patients to establish a relationship, without which there can be no trust.
9. **Take responsibility for the standards of practice in your own specialty.** Help the GMC and the government by making sure that your college or society is fully fit for purpose for its standard setting and regulatory contributions.
10. **Urge no further delay with implementing revalidation.** It has already taken 12 years. A further five years before the full implementation of a measure so fundamental to patient safety is not acceptable.

The missing link – the GMC's accountability to Parliament

The GMC, as the medical licensing authority, carries the ultimate responsibility for the effectiveness of the professional system. Parliament gave it the power to license doctors, to hold the specialist and general practice registers, and to have overall supervision of all stages of medical education. Only the GMC can say who shall practise medicine in the United Kingdom and who shall not. Ultimately only the GMC can say what goodness and poorness mean, in terms of doctors' competence and performance. Therefore, the public is utterly dependant on the integrity of licensure and specialist certification.

With the best will in the world, the GMC will find it difficult to overcome residual resistance, and to maintain momentum, without itself being held to account for its management of medical regulation and medical education. The GMC needs the discipline and indeed the support that can flow from public accountability, a fact the GMC itself recognised and sought when in 2006 it responded to the CMO's report on revalidation. Subsequently, the government strengthened the reporting requirements from the GMC to the Privy Council and specified that copies of these reports should be laid before each House of Parliament.

This mechanism is ineffective and insufficient. For this reason we wish to revive a proposal put forward by one of us (DHI) in 2001 [36]. Parliament should establish a Select Committee mechanism for conducting a regular review of the GMC, rather like US Congressional Hearings, designed to hold it to account for the integrity and good performance for all regulatory functions for which it is ultimately responsible. The Committee, armed with thorough analysis of its performance prepared by an independent organization like the National Audit Office, would question the chairman and chief executive of the GMC in front of the television cameras, about the Council's stewardship of medical regulation and medical education. Ideally, there would be a transparent mechanism for letting the public ask questions also. Dame Janet Smith's methods of assessing the GMC's performance in the Shipman Inquiry give an excellent insight into how such reviews could be made to work well [i].

Through such a review, the public would be able to judge for itself whether the medical profession continues to meet expectations.

Our conclusion

Professor Mike Pringle, in concluding his 2005 John Fry Lecture on revalidation, said:

> *We have a once in a generation chance to do something that will transform the quality of patient care, protecting patients from unacceptable doctors. It is in our gift to create a new culture of health care that will maximise patient care and choice and promote a patient-centred, patient-led health care system.* [73]

We agree. The true significance of the story told in this book is that the United Kingdom cardiac surgeons have accepted responsibility, decisively, for making sure as best they can that every single patient will always receive the best possible care from every cardiac surgeon in this country. They have developed robust and rigorous methods for achieving this. Critically, they are well led and very positively motivated – no grudgingly minimalist professional attitudes here. Furthermore, they have demonstrated that their actions have resulted in a dramatic improvement in the quality of cardiac surgical care at lower financial cost to the taxpayer. Not surprisingly, they are proud of their new professionalism and what they have been able to accomplish, as we all should be. For this way lies the future.

i. A recent publication of the House of Commons Health Committee on the Revalidation of Doctors has subsequently responded to this by stating that they *intend to exercise the accountability function nominally held by the Privy Council on behalf of Parliament*. In order to do this, they expect to invite the GMC to give oral evidence on its annual report each year (House of Commons Health Committee on the Revalidation of Doctors Fourth Report of Session 2010–11. 8th February 2011).

References

1. General Medical Council. The determination of the Professional Conduct Committee in the case of Mr. James Wisheart, Mr. Janardin Dhasmana, and Dr John Roylance. London: General Medical Council, 1998.
2. Ipsos Mori Poll commissioned by the Royal College of Physicians of London. Trust in Professions. 2008. http://www.ipsos-mori.com/researchpublications/researcharchive.aspx?keyword=GP&date=2008&datefield=published.
3. Ipsos Mori Opinion of professions index: http://www.ipsos-mori.com/researchpublications/researcharchive/poll.aspx?oItemId=96&view=wide
4. Anon. The end of secrecy: new medical ethic needed. *Guardian.* 1998; 23 Nov; 17.
5. Boseley S. Untouchables in ivory towers. *Guardian.* 1998; 25 June; 2.12.
6. Anon. Cutting out the medical sham. *Independent on Sunday.* 1998; 31 May; 2.4.
7. Anon. An holistic cure: the medical profession must face up to its mistakes. *Times.* 2000; 14 June; 23.
8. Anon. Bad medicine. *Sunday Times.* 2000; 4 June; 18.
9. Stacey M. Regulating British medicine: the General Medical Council. Chichester: Wiley, 1992.
10. Horton R. UK medicine: what are we to do? *Lancet.* 1998; **352:** 1166.
11. Smith R. All changed: changed utterly. *BMJ.* 1998; **316:** 1917-18.
12. Secretary of State for Health. The NHS plan: a plan for investment, a plan for reform. London: Department of Health, 2000.
13. Chief Medical Officer for England. Supporting doctors: protecting patients. London: Department of Health, 1999.
14. The Bristol Royal Infirmary Inquiry: the report of the public inquiry into children's heart surgery at the Bristol Royal Infirmary 1984-1985. London: Stationary Office, 2001.
15. General Medical Council. Revalidating doctors: ensuring standards, securing the future. London: GMC, 2000.
16. Mid Staffs NHS Foundation Trust Inquiry. Independent Inquiry into care provided by Mid Staffordshire NHS Foundation Trust January 2005-March 2009.Chairman Robert Francis. London: Stationery Office, 2010. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH 113018
17. General Medical Council. The determination of the Fitness to Practise Panel in the case of Dr Daniel Ubani, London: GMC, 18th June 2010.
18. Campbell EG, Regan S, Gruen RL *et al.* Professionalism in medicine: results of a national survey of physicians. Annals of Internal Medicine. 2007; 147: 795-802.
19. Gibson R & Singh JP. Wall of Silence: the untold story of the medical mistakes that kill and injure millions of Americans. Washington: Life Line Press, 2003.
20. DesRoches CM, Rao SR, Fromson JA, *et al.* Physicians' perceptions, preparedness for reporting and experiences related to impaired and incompetent colleagues. *JAMA.* 2010; **304:** 187-193.
21. Bridgewater B, Kinsman R, Walton P & Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
22. Freidson E. Professionalism: the third logic. Chicago, IL: University of Chicago Press, 2001.
23. Flexner A. Medical education in the United States and Canada: a report to the Carnegie Foundation for the Advancement of Teaching. Bulletin Number Four. Carnegie Foundation, 1910.
24. Flexner A. Is social work a profession? *Research on Social Work Practice.* 1915; **11:**152-165. Page 156.
25. Freidson E. Profession of medicine: a study of the sociology of applied knowledge. New York: Harper and Row, 1970.
26. Freidson E. Professional dominance: the social structure of medical care. New York: Atherton Press, 1970.
27. Johnson T. Professionals and power. London: Macmillan; 1972.
28. Larson LS. The rise of professionalism: a sociological analysis. Berkeley, CA: University of California Press, 1977.
29. Abbott A. The system of professions; an essay on the division of expert labour. Chicago, IL: University of Chicago Press, 1988.
30. Coburn D. Canadian medicine: dominance or proletarianization? Milbank Quarterly. 1988; Suppl. 2: 92-116.

31. Riska E. The medical profession in the Nordic countries. In Hafferty FW, McKinlay JB, eds. The Changing Medical Profession: an International Perspective. New York: OUP, 1993.

32. Elliot PO. The sociology of the professions. London: MacMillan Press, 1972.

33. Hafferty FW & McKinlay JB. The changing medical profession: an international perspective. New York: OUP, 1993.

34. Light D. Health care professions, markets and countervailing powers. In; Bird CE, Conrad P, Fremont AM, Timmermans S, eds. Handbook of Sociology (6th Edition). Nashville, Tennessee: Vanderbilt University Press, 2010.

35. Kennedy I. The unmasking of medicine. London: Granada, 1983.

36. Irvine DH. The doctors' tale: professionalism and public trust. Oxford: Radcliffe Medical Press, 2003.

37. General Medical Council. Questions concerning serious professional misconduct-working party Report. Council minutes, November 1984. Appendix XIX.

38. Rivett G. From cradle to grave: fifty years of the NHS. London: King's Fund, 1998. Page 427.

39. Smith R. The GMC: expediency before principle. *BMJ.* 2005; **330:** 1-2.

40. British Medical Association. Statement of principles on revalidation 2010. www.bma.org.uk/revalidation

41. Sheldon D, Horowitz SH, *et al.* Board certification and physician quality. *Medical Education.* 2004; **38:** 10-11.

42. Choudhry NK, Fletcher RH & Soumerai SB. Systematic review: the relationship between clinical experience and quality of health care. *Annals of Internal Medicine.* 2005; **142:** 260-273.

43. Holmboe ES, Lipner R & Greiner A. Assessing quality of care: knowledge matters. *JAMA.* 2008; **299:** 338-340.

44. Majekodunmi O. GMC accepts that appraisal will do for revalidation. Hospital Doctor 26th April 2001.

45. The Shipman Inquiry. Safeguarding patients: lessons from the past, proposals for the future. London: Stationery Office, 2004: see pages 1023-1176.

46. Donaldson L. Good doctors: safer patients. A report by the Chief Medical officer. London: Department of Health, 2006.

47. Royal College of General Practitioners. Quality in general practice. Policy statement 2. London: RCGP, 1985.

48. Royal College of General Practitioners. Fellowship by Assessment. Ed. Pringle M. Occasional Paper 50 (Second Edition). London: RCGP, 1995.

49. North of England Study of Standards and Performance in General Practice. Medical audit in general practice. 1: *Effects on doctors' clinical behaviour for common childhood conditions.* BMJ. 1992; **304:** 1480-4. 11: Effects on health of patients with common childhood conditions. BMJ. 1992; 304: 1484-8.

50. Robinson J. A patient's voice at the GMC: a lay member's view of the General Medical Council. London: Health Rights, 1988.

51. Castellani B & Hafferty FW. The complexities of professionalism: a preliminary investigation. In: Wear D. Aultman JM, eds. Professionalism in Medicine; Critical Perspectives. New York: Springer Verlag; 2006, pages 3-23.

52. Hafferty FW & Levinson D. Professionalism perspective: moving beyond nostalgia and motives: towards a complexity science view of medical professionalism. *Perspectives in Biology and Medicine.* 2008; **51:** 599-614.

53. Sullivan WM. Medicine under threat: professionalism and professional identity. *Canadian Medical Association Journal.* 2000; **162:** 673-675.

54. Dour AW. Democratic professionalism: sharing authority in civic life. *The Good Society.* 2004; **13:** 6-14.

55. Frankford DM & Konrad TR. Responsive medical professionalism: integrating education, practice, and community in a market-driven era. *Academic Medicine.* 1998; **73:** 138-145.

56. Sachs J. The activist professional. *Journal of Educational Change.* 2000; **1:** 77-94.

57. Irvine DH. The performance of doctors. 1: *Professionalism and self-regulation in a changing world.* BMJ. 1997; **314:** 1613-15.

58. Irvine DH. The performance of doctors. 11: Maintaining good practice: protecting patients from poor performance. *BMJ.* 1997; **314:** 1613-15.

59. Irvine DH. Doctors in the UK: their new professionalism and its regulatory framework. *Lancet.* 2001; **358:** 1807-10.

60. Mechanic D. Managed care and the imperative for a new professional ethic: a plan to address the growing misfit between traditional medical professionalism and emerging health care structures. *Health Affairs.* 2000; **19:** 100-111.

61. Brennan TA. Physicians' professional responsibility to improve the quality of care. *Academic Medicine*. 2002; **77:** 973-980.

62. Berwick DM & Finkelstein JA. Preparing medical students for the continual improvement of health and health care: Abraham Flexner and the new Public Interest. *Academic Medicine*. 2010; **85:** 56-65.

63. Irvine DH. Everyone is entitled to a good doctor. *MJA*. 2007; **186:** 256-261.

64. Royal College of Physicians of London. Doctors in society: medical professionalism in a changing world. *Report of College Working party on Medical Professionalism*. London: RCP, 2005.

65. Horton R. Rediscovering human dignity. *Lancet*. 2004; **364:** 1081-5.

66. Irvine DH. The relationship between teaching professionalism and licensing and accrediting bodies. In: Teaching Medical Professionalism .Eds Cruess RL, Cruess SR, Steinert Y. New York: Cambridge University Press, 2009.

67. General Medical Council. Good Medical Practice. Fourth Edition. London: GMC; 2006.

68. General Medical Council. Survey conducted by Opinion Matters for the GMC in a sample of 2000 UK residents. GMC News April 2010. http://www.gmc-uk.org/news/6853.asp

69. Picker Institute Europe. Further analysis of the National GP Patient Survey 2009. http://www.gp-patient.co.uk/surveyresults/

70. Mori Social Research Institute on behalf of the Department of Health. Attitudes to medical regulation and revalidation of doctors. Research among doctors and the general public. London; Department of Health, 2005.

71. Amendment to the Medical Act (1983), in December 2002.

72. Department of Health. Transparency in outcomes – a framework for the NHS. A consultation. London: DoH, 2010.

73. Pringle M. Revalidation of doctors: the credibility challenge. London: Nuffield Trust, 2005. www.nuffieldtrust.org.uk/publications

Measuring patient experience

Penny Woods &
Charlotte Williamson
Picker Institute Europe

Measuring patient experience

Penny Woods & Charlotte Williamson

Key points

- For many patients, their experience of care is a powerful determinant of their view of the quality of care.
- Patient experience is a valid indicator of quality in its own right.
- Collecting useful data on patient experience requires effective instruments to be developed.
- For many patients, shared decision-making is a key factor for a good experience.
- Appropriate measurement of patient experience, rather than patient satisfaction, is important for improving healthcare as it allows targeted intervention where necessary.
- Newer methods of measurement should enable low-cost, convenient, repeated measurement of patient experience with easy feedback, thereby optimizing patient care.
- Routine measurement of patient experience, at the levels of the organisation, clinical teams, and individual clinicians, should be an important domain alongside clinical outcomes to assure patients and the public of the quality of healthcare delivery.
- SCTS has published clinical outcomes and Picker Institute Europe encourages them to also pioneer the collection, feedback and publication of patient experience measures. By so doing they would continue to lead the medical profession in delivering what is important to patients.

Introduction

How patients experience healthcare depends on what doctors, other healthcare professionals and staff do and say, what patients themselves say and do, the physical environment, and the rules and customs that characterise healthcare settings. The root meaning of to experience something is to put it to the test [1] . We all respond to, review and judge what happens to us, and patients, intensely aware of their predicament and of their dependence on staff, most certainly do. We all put ourselves to the test, too, in judging how we handled particular situations. Patients' judgements about what happened to them and how they reacted to it can be heard at the bus-stop outside the hospital, read in their published accounts of the care they received or did not receive, found in their complaints, and elicited through various forms of research.

Putting to the test entails judging what is happening or has happened by making comparisons with relevant criteria. Those criteria may be implicit or explicit, intuitive or carefully thought out, drawn from ordinary or from specialised knowledge, simple or complex, affected greatly or little by feelings of anxiety, fear, relief, anger, dependence, gratitude. Patients may apply a single overriding criterion to what they are judging, or balance several, perhaps conflicting criteria; a patient in an outpatient department said:

> *I don't mind how long I wait, as long as I see the consultant.*

Different patients can judge the same thing differently, using different criteria. For example, to some patients being addressed by their first name is friendly; to others, it is insulting. Patients who feel insulted feel their vulnerability and powerlessness when they are stripped of their status, as they see it, in an institution that professes to help them. Patients who like being addressed by their first name are reassured by the goodwill towards them that seems to be implied. Underlying the two different judgements, however, probably lies a common, if scarcely articulated, concern of patients: a wish to be treated as other adult persons are treated, to be respected and valued as a fellow human being [2]. When healthcare professionals respect patients, they respect their autonomy, support their freedom-of-choice and protect them from coercion. When health professionals value patients, they try to ensure their safety and to secure effective clinical care with a good outcome for them.

We sometimes look at patients as if they were entirely different from well people. But patients, after all, are merely people who happen to be in clinical relationships with healthcare professionals through seeking their help for some unwanted predicament. That predicament may be serious and cause them great anxiety. But they want everyday things as well as the special knowledge and skill of their doctors and the special carefulness with asepsis, blood transfusion, *etc.* that modern medicine requires. They want to be in clean surroundings, be comfortable and free from pain, be treated with respect and with honesty [3] . They also want to be treated with compassion and with skill [3]. These qualities are extremely important in healthcare, but not uniquely so. Above all, patients do not necessarily want to relinquish the moral agency and responsibility that makes them people, however desperate their disease, condition or disability. Many patients want to take decisions with their doctors (shared decision-making), for example, so exercising responsibility, rather than leaving all decisions to them.

Surveys

One form of research, useful for collecting valid and reliable samples of data, both during an episode-of-care and afterwards, is the survey. Surveys can give patients a collective voice about institutional systems and about clinical departments and individual clinicians. But surveys are not straightforward instruments of measurement: they demand clear and courageous thinking by those who commission them.

One reason for careful thought is the obvious one that what patients say in surveys depends in the first place on what questions they are asked. Patients are not always asked questions that investigators deem either sensitive or likely to raise patients' expectations of better care than that they are receiving. This cautiousness represses patients' ability to voice their views and holds back their interests in healthcare [2].

A second reason is that although patients can judge some things very well, drawing on a combination of criteria from everyday life, from snatches of more specialised knowledge, from subtle clues in the behaviour of staff and from their own feelings, there can be significant gaps in the knowledge that they can draw on. If, for example, patients are asked whether the amount of information they were offered about their condition, their treatment or its side effects, was *enough*, *too little* or *too much*, they may say *enough* , if they felt confident that their doctor told them everything they needed to know. But if they find out days or weeks or years later that there were things they think they should have been told, they may change their mind. Yet, they cannot change their judgement as recorded in the survey. So some near real-time surveys need follow-up surveys later on. Alternatively, some questionnaires indicate a quantitative range of possibilities or of standards that give respondents the relevant knowledge from which to derive their own criteria.

A third reason is that patients tend to temper their adverse replies out of sympathy for staff and their belief that staff are doing their best under difficult circumstances [4].

A fourth reason is that although patients put to the test the health professionals and the institution when they go into hospital, they are also putting themselves to the test, for even apparently passive and compliant patients have their own purposes and stratagems (one of which may be to be passive and compliant) whose success or failure they judge. So patients' experiences have two facets although the second one is sometimes overlooked, if patients' experiences are thought of simply as a consequence of what staff and institutions say and do to patients. Surveys should include questions about how far patients think they had achieved their own purposes in their episode of care. For example, a patient addressed by his first name by a phlebotomist asked:

> *Do you call all patients by their first name?*

She replied:

> *Yes, unless they object.*

The patient duly replied:

> *Put me down as someone who objects*

and she made a note. So he changed the nature of his experience, rescuing it both from immediate hardship and from subsequent regret at not having taken action. He also perhaps helped the member of staff to understand that expecting patients to object to something (or to put up with it in silence) is not as comfortable for herself or for them as asking them their preferences beforehand. Healthcare is above all personal and social: two people, professional and patient, interact at every stage of the patient's care and affect each other for good or ill, even when care as a whole is given by a team.

Patients' experiences are the living, vivid experiences of individual patients. *Patient experience* is a measure that can be abstracted from the collected-together experiences of patients, elicited through surveys of those individual experiences. Like all abstractions, it has limitations; but measuring patients' experiences can give a collective and indisputable voice to patients. Once expressed, this voice provides invaluable direction for many purposes, from inspiring clinicians to improve their individual performance in their daily work, to informing the design of quality standards and to formally evaluating performance as part of revalidation.

While all sources of evidence can contribute usefully to our understanding of what matters to patients and how these can affect their health outcomes, obtaining robust and reliable evidence that allows valid comparisons of the patient experience – across patient groups, care settings, service providers and commissioners, and time – means using robust and reliable research methodologies.

Data on patient experience can be used to examine the performances of individuals, teams and organisations in different ways, depending on national, local and even individuals' priorities. The data are useful to inform negotiations and decisions in commissioning, to trigger contractual payments and to guide and to prove the effectiveness of efforts to improve quality. In the context of this book, the data can potentially be integrated into clinician's everyday practice and, where areas for improvement are identified, be used as a driver for and as evidence of the efficacy of individuals' training and personal development programmes. We believe that effective measurement of patient experience should also find a role in medical revalidation procedures. Approaches to using the data include:

- longitudinal analysis: comparing patients' responses over time, including *before and after* measurements to monitor the impact of initiatives to improve quality.
- internal benchmarking: comparing data on patient experience within a single service or organisation.
- external benchmarking: comparing data on patient experience with those of peer services and organisations.
- evaluation of pathways: examining how patients experience care pathways and where pathway points and transitions succeed and fail.

Why measure patient experience, not satisfaction?

Though historically regarded as a key indicator – and still popular in some circles for eliciting overwhelmingly positive responses – *patient satisfaction* is not, alone, a reliable or useful measure of healthcare performance. There are two key reasons why not:

1. As a concept, *satisfaction* with healthcare has never been clearly defined. There is no consensus about its component parts, or about which of these are the most significant and so the most important to measure.
2. Patient satisfaction questions elicit responses that capture patients' overall evaluation of care, or of an aspect of care, without capturing any information on which to base initiatives to improve quality. Knowing, for example, that 63% of patients were 'very satisfied' provides no useful data that can be used to understand what was done well, or to improve the quality of care.

Surveys of patient experience are more akin to clinical audit; they ask people to indicate whether or not particular interactions, events or processes occurred during their episode or pathway-of-care. Responses expose the variance between what patients ought to experience, according to prevailing professional and organisational standards, and what they actually do experience.

Measuring experience thus provides:

- specific information about where and how individual and organisational performance can be improved.
- baseline and monitoring data for assessing the impact of remediation and quality improvement work.

Overall satisfaction rating questions are usually included in patient experience surveys. This provides data for statistical analyses that examine the strength of the relationship between particular aspects of the patient experience and the overall satisfaction rating. Such analyses continue to build our understanding of how different elements of the patient experience relate to each other and what matters most to patients.

Data collection: methods and principles

Methods

Patient experience surveys can be administered in a variety of ways, tailored to the requirements of patients, providers, professionals / employees, employers, regulators and commissioners. All survey methods have different strengths, costs and limitations; there is no *one size fits all*. The best method is the method that provides the most useful data and best fits the purpose of the survey, the characteristics of potential respondents and the resources available.

Self-administered paper-based surveys are a well-established method for collecting data about the experience of patients using NHS services. They reliably achieve good response rates, provide robust and reliable data, and are generally cost-effective. For the future, web-based platforms and mobile phone applications have obvious potential. Frequent feedback and real-time approaches to collecting data on patients' experiences are particularly useful for collecting service-level, team-level and individual-level information:

- Frequent feedback means that patient experience data are collected regularly and often, perhaps continuously, over a period of time. This approach is particularly useful for focusing on a specific aspect of patient experience and for monitoring the impact of initiatives to improve quality. Data can be collected on-site, using real-time technologies, or off-site using paper-based, telephone or web-based research instruments.
- Real-time surveys use dedicated digital data collection equipment to collect patient experience data at the point-of-care. Results and reports are available online, and are continuously updated and benchmarked as new data are uploaded from the data collection devices.

There is little empirical evidence available regarding the impact of different survey methods on survey response rates or patients' responses, or on the comparative costs and cost-effectiveness of different methods. This applies particularly to newer approaches to data collection, such as web-based approaches and digital real-time data collection.

There is no doubt, however, that *mode effects* can influence survey results. This means that the method of collecting patient experience data must be taken into account, and controlled for, when establishing benchmarks and making comparisons.

Principles

Whatever the purpose, and whatever the method, collecting meaningful, useful and genuinely comparable data means maximising response rates and minimising potential sources of bias in patients' participation and responses. The following principles always apply:

1. Confidentiality: patients must know that their responses are confidential and, in particular, that responses are not linked to individual records or released to healthcare professionals in an identifiable form, to ensure that honest feedback will not impact adversely on their future care.
2. The content of questionnaires must be relevant to patients and their experiences: the topics and issues covered must matter to patients.
3. The methodology used to capture data on patient experience must be:
    a. suited to the patient group whose experiences are sought; telephone interviews, for example, are less suited to elderly people.
    b. suited to the content of the questionnaires: sensitive, personal questions are best asked *via* self-completion methodologies.
    c. designed to minimise bias: most patients find it difficult to give negative information about their experience of care directly to the people responsible for that care.
4. Plans for approaching potential respondents must be:
    a. practical: sampling frames (lists with potential respondents' contact details) must be available and accessible.
    b. acceptable: the method and timing of communications with potential respondents must minimise actual and perceived intrusion. The method might include, for example, sending a preliminary communication providing information about the survey.
5. Timing of surveys :
    a. must minimise recall bias: patient experience data should be gathered as soon as reasonably practicable after the event or episode of interest.
    b. must fit sensibly with other time-frames: in particular, questions about patients' experiences cannot be asked until patients have completed the process or pathway of interest.
6. Two-way communication: patients like to know that data about their experience will be used constructively to improve the quality of care. If possible, provide information up-front about how patient experience data will be used.

The future: integration, publication, revalidation

Cardiothoracic surgeons are undoubtedly remarkable in many ways: for the purposes of this chapter they are most remarkable because they were the first (and to date remain the only) clinical specialists to publish individual clinical outcomes data.

In this, they demonstrated what is possible, what is achievable and that alarmist predictions of biased data and invalid comparisons were exactly that. They also successfully anticipated developments in healthcare policy and performance management, including a powerful emphasis on patients' choice of provider, a policy searchlight focused on the outcomes and cost-effectiveness of healthcare, a demand for international benchmarking and data comparisons, and the quality assurance of medical practice. Across the healthcare economy, services and specialisms will soon be required to follow the cardiothoracic surgeons' fine example.

As others begin to realise the demands of catching up, cardiothoracic surgeons are now well-placed to build on what they have already achieved: by moving towards the integration and publication of all data pertaining to quality. The magic triangle of safety, effectiveness and patient experience data describes clinical performance and professionalism. Integrated and published, made available, accessible, personal and service-specific, it creates the focal point that brings *patients' choice* to life, encourages peer comparison and competition, and drives quality improvement.

This is our vision, a future in which:

- patients can make a genuinely informed choice of provider because they have the information they need to identify *the best* clinical team for their care: the team most likely to provide the clinical outcomes and elements of experience that matter most to the individual.
- clinicians know and understand the clinical outcomes of the care that they provide, how patients experienced that care, and how their own performance compares to that of their peers on all the dimensions of quality.
- clinicians can and do seek appropriate and timely learning opportunities, support and remediation, as appropriate, in the best interests of their patients and of their own continuing personal and professional development.
- we can all begin properly to explore and better understand the relationship between the technical skills, communications skills and the finer points of *people skills* in clinical practice, and the contribution they make to the quality of care.
- we can, in particular, begin to understand when, whether and how patients' experiences of care and treatment affect their immediate clinical outcomes, their engagement with health & healthcare as a consequence of care, and their health status and quality of life thereafter.

And, finally, we can now be reasonably confident that the future includes medical revalidation. The role of patient feedback in assuring and improving the quality of medical practice has been one of the more contentious proposals, drawing out strongly held views about whether it is desirable, possible, practicable or useful to introduce patients' experiences of care into the revalidation process. As you would expect, the authors hold that it is all of these, and entirely necessary. Furthermore, we do not accept unfounded and alarmist predictions that publication of clinician- level data will confuse the public, cause patients to be uneasy, or demoralize and demotivate clinicians. Transparency has its challenges, but none that a determined and dedicated profession can't overcome.

In publishing individual outcomes data, cardiothoracic surgeons have demonstrated that uncertainty about what is possible and resistance to transparency is normal, arguably necessary and can be deployed constructively. We now look to the cardiothoracic surgeons to pioneer the integration and publication of outcomes and patient experience data, and the inclusion and evaluation of patients' experiences of individual clinicians as a matter of course within medical appraisal, professional development and revalidation.

References

1. Little W, Fowler HW & Coulson J. The shorter Oxford English dictionary on historical principles, Oxford: Clarendon Press. 1936.
2. Williamson C. Towards the emancipation of patients, patients' experiences and the patient movement, Bristol: The Policy Press. 2010.
3. Gerteis M, Edgman-Levitan S, Daley J & Delbanco, T. L. Through the Patient's Eyes, Understanding and Promoting Patient-Centered Care, San Francisco: Jossey-Bass Inc. Publishers. 1993.
4. Edwards C, Staniszweska S & Crichton N. Investigation of the ways in which patients' reports of the satisfaction with healthcare are constructed. *Sociology of Health & Illness.* 2004; **26(2):** 159-83.

Multi-source feedback

Ben Bridgewater
Steve Livesey
Society for Cardiothoracic Surgery in Great Britain & Ireland

The role of multi-source feedback

Ben Bridgewater & Steve Livesey

Key points

- Multi-source feedback (MSF, also known as 360° appraisal) is a widely-accepted tool in many walks of life, to encourage personal development and effectiveness.
- Within the SCTS we have experience of using MSF around the professional domains of Good Medical Practice and the NHS leadership qualities framework.
- We believe that MSF is a useful formative tool for doctors with insight, and has an important role in helping doctors in difficulty.
- We do not think that MSF as it is currently used will be effective in providing useful evidence for professional revalidation.

Introduction

The GMC document *Good Medical Practice* describes the duties and responsibilities of a doctor. It subdivides activities and behaviours into the following domains:

Table 8.1
Good clinical care
Maintaining good medical practice
Teaching, training, appraising and assessing
Relationships with patients
Working with colleagues
Probity
Health

The existing model for annual consultant appraisal usually involves a structured discussion around these domains once each year.

Much of our book details different ways of measuring achievement of a standard of Good Medical Practice compatible with that recommended by the GMC for each of these areas, and indeed robust measurement of the domains of good clinical practice is one of the challenges for the implementation of professional revalidation. The assessment of compliance with the recommendations *working with colleagues* and *probity* has to date been based largely on recording the absence of any significant concerns. As described in Sir Donald Irvine and Frederic Hafferty's chapter, there is good reason to believe this is not sufficiently robust, largely because of issues around *misplaced collegialism* (see page 64). Consequently there is considerable interest in the use of multi-source feedback for this purpose. If effective MSF can be achieved it could potentially provide evidence on most aspects of good medical practice. We have described our current thinking on the possible use and limitations of MSF on the following pages.

What is multi-source feedback?

Multi-source feedback (MSF, also known as 360° feedback or 360° appraisal) is an accepted method for collecting information about behaviours and competencies in many areas of endeavour outside medicine [1]. It is now

finding increasing application within medical training and assessment of clinicians who have had concerns raised about their practice [2,3]. The concept is that a doctor fills out a questionnaire about themselves, and their colleagues also complete a similar questionnaire (colleagues can include consultants, junior doctors, managers, non-medical clinical and administrative staff). This process should drive reflection by the individual and allow them to compare their perception of issues with the feedback of others. Usually the feedback from MSF is given by someone who has received training, to help make the process as useful as possible [4]. Historically MSF has been used for developmental purposes to improve quality and identify areas of practice or behaviour that may benefit from further consideration [3,5,6,7]. As comprehensively described by Wood *et al.* [3]:

> *When done in the right way for the right purpose, MSF systems have been shown to enhance team-working [8,9,10], productivity [11], communication and trust [12]; MSF systems are now deeply ensconced in industry: 90% of managers find them helpful [13], and almost all top companies in the United States of America now use them routinely [14,15].*

There is now significant interest in using MSF for the purposes of demonstrating a doctor's fitness to continue to practise under the planned introduction of professional revalidation [3]. The remainder of this section will consider these issues further, but will constrain itself to the use of MSF other than in assessing and developing surgical trainees.

What is the role of MSF in modern medical professionalism?

Within the SCTS we do not have extensive experience in using MSF, but we believe that any report on *modern medical professionalism* would not be complete without some consideration of the issues. We have not attempted to produce an exhaustive summary of the literature here, but we feel that the key issues are well summarised in the review by Wood *et al.* from 2006 [3]. Our thoughts at this stage are that it may have an important place in our professional life, and we see 3 distinct specific roles:

1. A general role in quality improvement, developing individuals & a lever to cultural change.
2. A specific role in supporting surgeons in difficulty, by helping them to understand the perceptions of others, and enabling access to appropriate focus and support to overcome any issues.
3. A possible role in assessing doctors for professional revalidation.

The general role of MSF

We have experience with 2 distinctly different types of MSF tools; those built around the GMC domains of good medical practice (Table 8.1), and those developed around the constructs of the NHS leadership qualities framework (Table 8.2). The former has a role in driving reflective practice around individual delivery of clinical care. The latter is designed to help make clinical managers more effective in improving systems to look after patients.

Table 8.2
The domains of the NHS leadership qualities framework

Personal qualities	
• Self belief	• Drive for improvement
• Self awareness	• Personal integrity
• Self management	
Setting direction	
• Broad scanning	• Intellectual flexibility
• Political astuteness	• Seizing the future
• Drive for results	
Delivering the service	
• Leading change through people	• Effective and strategic influencing
• Holding to account	• Collaborative working
• Empowering others	

MSF tools for measuring Good Medical Practice

There are a variety of tools available, most of which have some modest administrative costs associated with their use (*e.g.,* the University of Southampton 360 tool, SheffPat). Some Trusts already encourage the use of these tools for staff development and to feed into the appraisal process.

MSF tools for assessing the leadership qualities framework

The NHS leadership qualities framework is well-described on the NHS Institute for Innovation and Improvement website (www.nhsleadershipqualities.nhs.uk). Many consultant members of the SCTS have undergone some degree of leadership training and undertaken MSF using the NHS LQF 360º Feedback tool. This is often undertaken in conjunction with psychometric analysis of personality and behavioural type, using questionnaires such as *Myers Briggs* [16]. Feedback from MSF by skilled facilitators is thought to be the most effective way of supporting personal development [4].

A specific role in supporting surgeons in difficulty

As a speciality we also have experience of their use with doctors in difficulty (*e.g.,* as part of assessments by the National Clinical Advisory Service NCAS).

A possible role in assessing doctors for professional revalidation

We have considered the role of MSF as a routine tool for assessing behaviours and performance in our specialty (*i.e.,* as a summative tool) and have summarised what we see as its strengths and weaknesses in Table 8.3.

Table 8.3
Strengths and weaknesses

Strengths
• Encourages structured reflective practice
• Enables an understanding of the perceptions of others
• May provide a focus for areas for personal development
• Can help understanding of the importance of the *team* approach to clinical care
Weaknesses
• Currently doctors usually choose their raters leaving the possibility of *gaming* potentially minimising the prospects of accurate feedback
• The historical approach of the medical profession has been that of misplaced collegialism (see page 64) again decreasing the potential utility of MSF
• We know of no robust data to support the use of MSF as an effective tool for screening out poor performance in consultants.

Summary

We believe that MSF has an important role for developing individuals (*i.e.,* as a formative tool) and as such it should find widespread use in the medical profession to help improve care and services for patients. At present we see little evidence that has an effective role as an assessment for the purposes of revalidation. We await the development of tools by the GMC and their evaluation in practice with interest.

References

1. Fleenor, JW & Prince, JM. Using 360-degree feedback in organizations: An annotated bibliography. 1997. Greensboro, NC: Center for Creative Leadership.
2. Brutus S, Fleenor JW & London M. Does 360-degree feedback work in different industries? A between-industry comparison of the reliability and validity of multi-source performance ratings. *Journal of Management Development*. 1998; **17:**l3 177–190.
3. Wood L, Hassell A, Whitehouse A, Bullock A & Wall D. A literature review of multi-source feedback systems within and without health services, leading to 10 tips for their successful design. *Information Healthcare*. 2006; **28(7):** e185-e191. http://informahealthcare.com/doi/abs/10.1080/01421590600834286
4. Seifert CF, Yukl G & McDonald RA. Effects of Multisource Feedback and a Feedback Facilitator on the Influence Behavior of Managers Toward Subordinates. *Journal of Applied Psychology*. 2003; **88(3):** 561–569.
5. Smither JW, London M & Reilly RR. Does performance improve following multisource feedback? A theoretical model, meta-analysis, and review of empirical findings. *Personnel Psychology*. 2005; **58(1):** 33–66.
6. Brinkman WB, Geraghty SR, Lanphear BP, Khoury JC, Gonzalez del Rey JA, DeWitt TG & Britto MT. Effect of Multisource Feedback on Resident Communication Skills and Professionalism A Randomized Controlled Trial. *Archives of Pediatrics & Adolescent Medicine*. 2007; **161(1):** 44-49.
7. Violato C, Lockyer JM & Fidler H. Changes in performance: a 5-year longitudinal study of participants in a multi-source feedback programme. *Medical Education*. 2008; **42(10):** 1007–1013.
8. Dominick P, Reilly R & McGourty J. The effects of peer feedback on team member behaviour. *Group and Organization Management*. 1997; **22(4):** 508–520.
9. Garavan T, Morley M & Flynn M. 360-degree feedback: its role in employee development. *Journal of Management Development*. 1997; **13(2–3):** 134–148.
10. Druskatt V & Wolff S. Effects and timing of developmental peer appraisals in self-managing work groups. *Journal of Applied Psychology*. 1999; **84(1):** 58–74.
11. Edwards M & Ewen A. 360°Feedback: The Powerful New Model for Employee Assessment and Performance Improvement. AMACOM, New York. 1996.
12. Waldman D & Bowen D. The acceptability of 360° appraisals: a customer-supplier relationship perspective. *Human Resource Management*. 1998; **37(2):**117–129.
13. Handy L, Devine M & Heath L. 360° Feedback: Unguided Missile or Powerful Weapon?. Ashridge Management Research Group, Berkhamsted. 1996.
14. Atwater L & Waldman D. Accountability in 360° feedback. *Human Resources Magazine*. 1998; **43(6):** 96–102.
15. Ghorpade J. Managing five paradoxes of 360-degree feedback. *Academy of Management Executive*. 2000; **14:** 140–150.
16. Briggs Myers I & Myers PB. Gifts Differing: Understanding Personality Type. Mountain View, CA: Davies-Black Publishing. ISBN: 0-89106-074-X. 1980, 1995.

The Chief Executive's view

Julian Hartley
Chief Executive,
University Hospital of South Manchester NHS Foundation Trust

The Chief Executive's view

Julian Hartley, Chief Executive, University Hospital of South Manchester NHS Foundation Trust

Key points

- Culture, in relation to an organisation, describes a system of values, beliefs and behaviours which informs and influences the day to day actions of people within that system.
- Organisational culture is a key factor in the quality of healthcare delivery; the right culture can facilitate good clinical care, and *bad* culture can enable unacceptable care to flourish.
- There is a significant evidence base which defines *good* culture within healthcare, and lays down the route for effective cultural change. Many NHS organisations have an important need to change.
- Trust Boards and Chief Executive Officers have a key role to play in delivering the right organisational culture and infrastructure, and it is only within this culture that optimum medical professionalism can flourish.

I have worked as a Chief Executive in three different NHS organisations over the last eight years. During that time I have learnt much about the way NHS organisations operate and perform and in particular the way in which medical professionals relate to the organisations they work in, and the impact those organisations have on their performance, engagement and behaviour. What has left an indelible mark on me during this period is the importance of organisational culture on the performance of the people within it, particularly medical staff.

This book tackles the issue of modern medical professionalism in 2011, particularly from the perspective of the United Kingdom adult cardiac surgeons through their professional society the SCTS. They have made huge strides forward with the collection of clinical quality data and its publication for patients and that process is driving a cultural change within the profession, as described in earlier sections. But a huge influencing factor, and possibly the most important determinant of professionalism of the modern medic is the prevailing culture of the organisation they practice within. An examination of the factors which led to some of the now infamous health scandals of the last 20 years, in particular Bristol heart babies and Mid Staffordshire, both of which rocked the medical profession and the NHS, reveal that the prevailing culture of those organisations heavily influenced the catastrophic outcomes for hundreds of patients. These events have exposed culture as a key problem, both within the medical profession and within the organisations themselves, as highlighted by the Mid Staffs Inquiry Report thus:

> *The culture of the Trust was not conducive to providing good care for patients or providing a supportive working environment for staff. A number of factors contributed to this: attitudes of patients and staff, bullying, target driven priorities, disengagement from management, low staff morale, isolation, lack of openness, acceptance of poor standards of conduct, reliance on external assessments, denial.*
>
> **Francis Report 2010**

Indeed the work of Professor Michael West at Aston University demonstrates very clearly the causal link between dysfunctional healthcare teams and poor patient outcomes, in particular high mortality rates, in addition to benefits from *good* culture.

> *In a study of hospitals in England, we found strong associations between HR practices and patient mortality. The extent and sophistication of appraisal systems in hospitals was particularly closely related to lower mortality rates, but there were links too with the sophistication of training, and also with the percentages of staff working in teams* [1]

If culture does, as many MBA students are fond of repeating, *eat strategy for breakfast*, what should the response of NHS organisations be to this challenge? If culture, in the worst scenarios, can kill patients, what should be the response of NHS Boards and CEOs? Moreover, what should be the response of medical professionals and medical leaders to this challenge, particularly given their particularly powerful and influential role within healthcare organisations?

This chapter explores these questions and sets out a challenge to NHS leaders and medics alike.

We need to start by understanding the term *culture* which must be one of the most widely used, but least understood terms in organisational life. At its most basic level culture describes *the way we do things around here*, which leaves nine-tenths of the iceberg submerged. Culture, in relation to an organisation, describes a system of values, beliefs and behaviours which informs and influences the day to day actions of people within that system, and ultimately its performance and outcomes. It is easy to dismiss analysis of organisational cultures as pointless, vague, unspecific and *soft* when compared to the individual technical skills required by many medical professionals. Yet so much evidence, particularly over recent years, and particularly in relation to safer surgical practice, points to the need to change the behaviours, dynamics and teamwork within healthcare institutions. The WHO surgical checklist is one example of this approach that encourages an open, team working, communicative culture within operating theatres with direct benefits for patients.

My early experience of the NHS as a general management trainee was full of mistakes, mis-judgements and surprises. It became clear to me fairly early on that medical staff were essentially set apart from the organisational hierarchy with only a loose and optional affiliation with the institution in which they practised medicine. This contrasted sharply with other clinical staff: nurses, midwives, professions allied to medicine who had a much clearer responsibility to, and association with, the organisation they worked in. I struggled constantly as a young manager to reconcile the priorities of the organisation with those of consultant medical staff who appeared to operate to a different set of standards and to whom *the rules* simply did not apply. Examples of this included many seemingly trivial but culturally symbolic features such as the consultant's dining room, car park, coffee lounge, all of which created a sense of distance, superiority and privilege which had an impact on the behaviours of and towards consultant medical staff. At Board level, what struck me even more forcibly was the complete lack of information about, or attention to, the quality of patient care provided in the hospital. What we now widely understand as clinical outcomes and quality accounts with information to Boards on mortality rates, infection rates, pressure sores, venous thromboembolism prophylaxis, surgical checklists, patient feedback were simply not available to Boards nor were they regarded as a priority for NHS organisations whose major priorities were finance and waiting lists. The detachment of medical staff from the organisations in which they worked was, arguably, caused as much by the organisation's lack of focus on the things that matter to doctors as the inherent disaffiliation of doctors from the organisational hierarchy.

However, there is more, much more, that NHS organisations must do to ensure they create the right culture for great medicine and world class outcomes to flourish. This goes beyond the relatively recent and encouraging introduction of quality indicators and initiatives from a range of organisations including the NHS Institute *leading patient safety programme* and the Institute for Healthcare Improvement's *get board on board* programme. The latter was introduced to the United Kingdom last year by the NHS North West Leadership Academy, and has led to a transformation of many Trust Boards attitude to quality and outcomes in the North West.

What is also required for the very best patient care to become a feature of all our hospitals in the NHS is a step-change in organisational culture in the vast majority of our NHS Trusts and Foundation Trusts. It is now at last clear, and will be increasingly the case with the implementation of the White Paper [2], that an NHS Trust's performance will be judged as much on clinical outcomes as on financial and *process targets* such as 4-hour Accident and Emergency Trolley waits, and the *18-week target*. Moreover, the unprecedented changes to the commissioning of healthcare will bring a significantly greater clinical scrutiny of patient-level performance at a local level. The arguments rage about the practical implementation of the new system, but the alignment of financial and clinical performance within contracts between providers and purchasers will address the dislocation of the two, a major feature of the NHS in the 1990s. This is a necessary and welcome change but, on the journey to delivering the very best patient outcomes, it is insufficient. Back to our MBA students: we may have the strategy right, but unless we fix the culture of most NHS institutions we are in danger of missing this opportunity.

So what is the nature of the culture we need if we are to reach the holy grail of world class patient care and outcomes in a financially successful organisation with a single, shared vision and the highest levels of individual and collective fulfilment among all employees (particularly doctors)? This at a time when the NHS faces the toughest economic climate for decades.

The answer to this question is all around us, in our own organisations, if only we took the time to ask, look and listen. My own experience of this has been at turns painful and inspirational, however my starting point has always been the same: ask the people. In my last two jobs I have used the same technique: of writing personally to all consultants, managers and other key stakeholders to introduce myself and ask them to tell me what they see as the top three challenges for the organisation. I do this well before I take up post, between my appointment and start-date, this gives me time to assess and reflect on the replies, and pushes the door ajar on the culture of the place. The replies are always illuminating, not only in their content but also their style, tone, candour or indeed whether people bother replying at all. For many, I am sure, it is the first time they have been asked to consider their own response to the organisation's challenges and here is the keystone of building a successful culture: the question of the individual employee in relation to the organisation.

In the organisations I have led the underlying messages from this exercise are the same: a lack of a clear vision, a lack of a sense of engagement among employees, particularly consultant medical staff, and a criticism of *management* as ineffective, invisible, uncommunicative or all three. The impact on the culture of these organisations of these deficits, particularly in terms of engagement, were significant. The cultural features of both included a tangible sense of detachment between staff, particularly clinical staff, and the Board and senior management. An inability to describe the organisation's goals and vision or any shared sense of values and behaviours was striking. In addition, the lack of recognition of achievement and a major lack of visibility of the Board and senior management team to frontline staff was evident. The NHS faces a huge range of challenges over the next decade; these will require major changes to the way we deliver healthcare, yet our organisations capacity to manage change and engage staff in those changes are uncertain. Given that nine out of ten of the barriers to success of change programmes are people related, it is a major concern that only 15% of public sector employees regard change as well managed in their organisations (Ipsos MORI / PWC).

The practical response to this challenge is a programme of *deep employee engagement*, the steps for which are set out in a number of texts, most notably *Growing Your Own Heroes*, which offers a practical, *common sense* guide to performance improvement [3]. In my recent experience the sequence of necessary leadership actions to develop the right culture for performance to flourish are as follows:

- Diagnose the culture, agree on the problems, challenges and opportunities and communicate these back to the organisation personally.
- Personally engage senior clinical staff in the diagnosis of the culture and desired future state.
- Develop the vision, values and behaviours for the organisation based on the diagnosis, but co-create all three with as many staff as possible.
- Communicate the vision, values and behaviours to the whole organisation and capture them in an easily understood, accessible way.
- Develop a robust and rigorous programme which reinforces at every turn through both formal (appraisal / induction / corporate communication) and informal (*back-to-the-floor*, meet the CEO sessions, regular recognition) methods the agreed vision, values and behaviours.
- Formally audit the impact of these interventions and the overall embedding of the culture.

This of course represents only the *tip of the iceberg*, but for any organisation these broad steps are the necessary means by which to develop *engagement* which itself is a key ingredient in high performance [4]. The McCleod Report *Engaging for Success* commissioned by Government in 2008 offers a compelling account of the importance of these techniques and their positive impact on performance across all sectors of the economy including healthcare. The spirit of the report's conclusions and indeed of the kind of organisational culture required in the NHS for great medicine and patient care to flourish and thrive are captured here,

> *Engaged employees have a sense of personal attachment to their work and organisation; they are motivated and able to give of their best to help it succeed – and from that flows a series of tangible benefits for organisation and individual alike.*
>
> *You sort of smell it, don't you, that engagement of people as people. What goes on in meetings, how people talk to each other. You get the sense of energy, engagement, commitment, belief in what the organisation stands for …*
>
> **Lord Currie, Dean of Cass Business School**

If I draw one lesson from my eight years as an NHS CEO, it is that the numerous professional tribes, (particularly, but not exclusively, doctors), who make up any given NHS organisation need a positive, explicit, engaging culture within which to work. I am delighted to see the cardiothoracic surgeons as a professional grouping progressing their thinking and attitudes to a medical professionalism compatible with the 21st Century. Other clinical groups must do likewise, but it is only if we also attend to the cultural environments of our NHS institutions that will we truly deliver the improved outcomes for all the patients we serve.

References

1. www.cihm.leeds.ac.uk/document.../A_matter_of_life_and_death.pdf
2. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353
3. The Commonsense Way to Improve Business Performance. John Oliver and Clive Memmott. ISBN: 1-904887-06-6
4. www.bis.gov.uk/files/file52215.pdf.

Focussing on poor performance or managing for excellence?

Carol Rothwell
Managing Director, Rothwell Douglas Ltd

David Halliday
Banana Park Consulting llp

Focussing on poor performance or managing for excellence?

Carol Rothwell
Managing Director of Rothwell Douglas Ltd

David Halliday
Banana Park Consulting LLP

Key points

- There is a strong and developing scientific base for performance management, which is used extensively outside medicine.
- Performance management expertise is only utilised at a late stage of investigating or attempting to resolve performance concerns in healthcare.
- The two key underpinning and intimately related factors to high quality healthcare delivery are behaviours and performance (which may include, but should not be exclusive to, clinical outcomes).
- Great organisations outside healthcare demonstrate, without exception, a high feedback culture. This is in stark contrast to the majority of the NHS.
- The medical profession, and NHS organisations, need to move towards a model whereby they look at performance management holistically, engage clinicians in the design and define what consequences need to be in place to achieve that engagement and motivation and enhance professionalism.
- The profession should develop a behaviour-based approach linked to job planning that enables performance to be defined for every role, define the boundaries of acceptability from the patients' perspective with accompanying processes for continuous measurement and review and provide consequences for performance to reinforce the desired behaviours and address under performance.
- The profession should attempt to identify issues at an early stage by using a range of techniques including self, peer and critical incident review and address issues and concerns when they happen, rather than through retrospective review.
- Finally we believe they should listen to patient feedback and base the gold standard on the criteria that matter most to the patient.

A view from the performance management perspective

A solutions-focused approach

Of all professional groups, doctors are held in a unique position of trust: we put our lives in their hands and assume it is safe to do so. Few of us would question this assumption in the belief that the medical profession applies the relevant safeguards to ensure our trust is not misplaced. Given the responsibility doctors hold, and the issues described so comprehensively by Sir Donald Irvine and Professor Frederic Hafferty on pages 64 to 76, it is disappointing that the move towards robust revalidation of doctors has not yet generated the momentum and will to adopt what many outside medicine regard as optimum performance management techniques. We write as performance management specialists with extensive experience of working with organisations and individuals both inside and outside medicine and, particularly in healthcare, we regularly meet with resistance to proven, scientifically-derived methods of assessing and managing performance. Granted, it is uncomfortable to have your performance scrutinised and your competence questioned, but the mistrust, denial and scepticism directed at well-established techniques is equivalent to burying one's head in the sand, and does little to alleviate the discomfort. In fact, it is not only the medics who don't want to know, we also observe a degree of collusion from NHS organisations, up to the highest level, again as described in earlier sections of this book (page 65).

Given the number of high-profile cases that have hit and continue to engage the media, we question what Trust Boards and PCTs have been doing to gain assurance that doctors within their local health system have resolved any performance shortfalls that are identified. Indeed, it is often because organisations have failed in their responsibility to safeguard the public, that people like us get called in to address a long-standing performance issue. This begs the question: why is it so difficult to embed good practice into the medical culture?

When performance is measured systematically, the data demonstrate that it can differ over time, location and individual. There is however, a pattern within the variation resulting from a range of factors including:

- Cognitive ability, aptitude, knowledge and skill.
- Attitude, openness to learning and mind-set.
- Personal characteristics and behavioural preferences.
- Confidence, motivation and emotional state.

The variation might be situational and temporary, or more deep-rooted and prolonged. Organisations that introduce value systems and processes to support performance effectiveness throughout a career, will find payback in continuous quality improvement and highly-motivated, talented professionals (see page 94).

Quality experts understand the important role data play in reducing performance variation to achieve consistently high quality products or services. The behavioural scientist understands the importance of feedback and consequences to developing high performing individuals. The combination of both disciplines is the foundation of the best performance management techniques. These techniques are not new: they are routinely adopted by performance experts, sport coaches working with elite athletes, talent management specialists, *good to great* companies and quality gurus alike. These techniques are key ingredients to retaining and developing the best talent and consistently achieving upper-quartile performance outcomes when benchmarked against the industry standard.

How is performance management relevant to doctors?

To find the right solution you need to ask the right questions – and in our view, the planned implementation of medical revalidation is a case in point. The question behind its introduction was:

> *How can we tackle doctors who are failing in their delivery of patient care?*

Ask a negative question and you come up with negative solutions. The inference is that you are out-of-date and below standard unless you can prove yourself to be otherwise. The term *revalidation* says you have ceased to be valid and have to do something to regain validity. This message is likely to achieve the very opposite of what it aims to do. When you re-frame the question:

> *How can we develop the behaviours and processes that will engage and motivate all doctors to remain up-to-date, performing to accepted standards and to take ownership for reporting on their performance to benefit their patients, their Trust and the profession?*

You will find the answer points you in the right direction; to achieve a step-change in quality and performance effectiveness you need to apply the psychology of performance and behaviour change. As indicated earlier, this is the province of the behavioural scientist. Whilst a comparatively young science, significant advancements have been made over the last 60 years with a strong and impressive evidence base, which creates solid ground, both for the experts who apply it and for clinical leaders in the NHS adopting it. We have given a further reading list at the end of this section for those who may wish to explore these issues in more detail.

The science shows us that, too often, behaviour change is sought through exhorting or forcing people to do things, sending them on courses, issuing manuals, policy documents and procedures or listing values on a plaque in reception. We see all of these happen in healthcare. When these methods don't appear to work, the organisational response is to apply the threat of punishment: driving the need to bury the evidence. These approaches we know to have little impact on behavioural change, yet they remain the cultural norm within the NHS. For example, despite the supposed focus on clinical governance and patient safety, and the prospect of professional revalidation, we persistently see examples of inappropriate behaviour in response to inadequate clinical practice including intimidation of junior staff, collusion between colleagues, deflection and denial of reality and accountability.

In the same way, at both organisational and individual levels, we continue to see performance improvement being sought by setting targets. However, the evidence suggests that doing so is likely to cap performance and drive behaviours that, while perhaps delivering the target, do so at the expense of patient safety, staff engagement, motivation and sustainable long-term performance improvement.

Rather than repeating the methods that have little impact, our advice is to look again at what you are seeking to achieve and introduce up-to-date technologies that will allow you to achieve these goals.

If you apply proven scientific principles in the first place, you will introduce the right solutions.

The science of behaviour and performance

Performance, in terms of the results we deliver, is a function of what we do and our behaviours. To influence performance or change it, we need to understand behaviour: why it occurs in the way it does, and what needs to be done in order to change it to produce better results. There is no performance without behaviour. Knowledge alone does not deliver quality performance; it is how we apply the knowledge that impacts the outcomes that are delivered.

Making a minor change to how we do things can deliver a better outcome. When a whole profession adopts the behaviours that lead to high quality performance we create a cultural shift that can lead to a step change in achieving better outcomes for our patients. It is likely that this is one of the major contributions to the marked increases in quality in cardiac surgery described on pages 33 to 48.

The factors that have the greatest influence on behaviour are what happens to the individual as a result of their behaviour. The behavioural scientist refers to these factors as consequences. At a basic level there are four types of consequences:

positive or negative **reinforcement** (which **increase** the behaviour) and

positive or negative **punishment** (which **decrease** the behaviour).

If little or no attention is paid to the consequences to an individual doctor for their behaviour, you will achieve little or no behavioural change. No amount of time or investment focused on what happens before (*the antecedents*) will turn a poor-performing doctor into a competent practitioner. Consequences delivered sometime in the future are *a case of too little too late*: the damage has already been done.

So, to develop plans to change the behaviour of an individual or a team to improve their performance, or, indeed, to change the culture of an entire organisation or profession, we need to look at what consequences are currently reinforcing the behaviours we don't want. Once these consequences are identified, we must act to remove them, replacing them with those that will reinforce the higher performance behaviours we are seeking.

It must be noted that different consequences have varying levels of potency and that whether a consequence is positive or negative is very much in the eyes of the individual. We know that a key ingredient in the potency of a consequence is its immediacy and certainty: the more it can be connected to the behaviour in question, the greater the likelihood of the behaviour changing. A positive, immediate and certain consequence will change behaviour far more than a negative, future and uncertain consequence. It is for this reason that a system of annual medical appraisal and 5-yearly revalidation (even utilising outcomes data) will not drive quality improvement optimally. The organisation and the profession must get behind this to bring about sustained cultural change.

We need to accept that by doing nothing something is actually happening that has a massive impact on performance. The poor performer is effectively reinforced for what they do in the same way the high performer is reinforced. When a profession does not differentiate its high performers from its poor performers (as is largely the case in the medical profession), it deems poor performance as acceptable and often inadvertently punishes the high performers. When this happens, the profession as a whole loses credibility and risks its reputation. High performing organisations however, not only understand the psychology of performance, they recognise the benefits of building in the drivers of high performance within their performance management process.

The appropriate starting place is to analyse the behaviours that result in quality performance. In layman terms, we need to know *what good looks like* from the perspective of the patient and this is why the themes described in the earlier sections are so important (pages 72, 81 & 83). We need to analyse the behaviours that differentiate the best performers and become highly skilled at putting the consequences, consistently and continuously in place that will drive these behaviours. We also need to know what gets in the way of high performance and seek to eliminate these behaviours before they result in damage. Aligning the right consequences to the behaviour is not strictly the preserve of management. It is far better if, as colleagues and within teams, we accept the challenge

of creating a high quality performance ethos and start to embed the habits of high performers through feedback, peer review and critical incident learning.

Given the absence of a consequence for a poor behaviour equates to *getting away with it,* the effect is to legitimise and strengthen the poor performance behaviours. It is in this way that both the organisation and the profession become complicit, not just in the tolerance of poor behaviour and performance, but by abdicating responsibility to our patients to take action before a problem occurs. Every time a poor performing doctor fails a patient while his or her colleagues stand by, the profession as a whole and the employing Trust has failed that patient and their under-performing colleague. Almost every time we have looked at issues of poor performance we have seen this problem of prior absence of consequences, which fails to protect patients, and make the issues that much harder to resolve.

Applying this theory helps us to explain why both systematic quality improvement and professional revalidation have struggled to capture the imagination in most parts of the profession. The *antecedent* attempting to drive revalidation behaviour is the suggestion that your validity is no longer proven and you need to regain it. For those who may well have fallen below standard this is a threat that will prompt behaviours of denial and deflection, and for those who are on or above standard it is an insult that prompts behaviours of irritation and anger. This needs to be seen against the GMC's previous position of *disparagement* and thoughts about a culture of misplaced collegialism (see page 64). And as we know, antecedents do little to change behaviour without immediate and certain consequences.

Implementation of professional revalidation may also drive behaviours in the profession such as closing ranks, colluding, deflecting and delaying, and one could judge the information being given to the current Parliamentary Health Select Committee to look for current evidence of this. When data are produced to demonstrate there may have been under-performance, those concerned are likely to become defensive and produce additional evidence to suggest it wasn't under-performance, it was the consequence of a number of other factors (for example, with mortality rates, it will be argued that it is due to casemix, local demographics, and so on) rather than the performance of the organisation, surgeon or physician.

By focussing on continuous development rather than policing, you can apply consequences that drive performance improving behaviours such as self-reflection, disclosure, feedback, learning and innovation. Use this approach, alongside the data to determine the differentiators of performance effectiveness, *i.e.,* why some individuals, teams or entire organisations outperform others while others fail or under-perform, and you can accelerate the quality revolution, where clinical effectiveness rather than *numbers* drives everything we do.

A high feedback culture?

One of the most distinct characteristics of high performance organisations is that they are, without exception, high feedback cultures. For the most part the NHS is a no-feedback culture. We have been told by surgical trainees that they consider no feedback is excellent feedback: you will only be told if you when you are doing something wrong. Changing to a high feedback culture with a focus on behaviours in the NHS, will require clinical leaders both to grasp and practise them and to provide the conditions within the organisation for delivering sustainable cultural change and performance improvement. Again, there is ample evidence-based methodology available to apply, such as that embodied in Kotter's work on Leading Change – the Drivers for Success.

In preparation for this chapter we met with senior members of the SCTS who had been involved with reviews of performance concern, and one of the key messages drawn out was that catching under-performance is an inherently difficult task. The current approach is time consuming and sub-optimum. To date, the profession has yet to succeed in aligning the experience of patients with the ideals of a *high-performance, quality culture*.

Applying the science in practice

So what are the practical steps to applying the science, and how can we create a model relevant to the needs of clinicians, the aspirations of the profession and the over-arching principles of the NHS?

The SCTS is already leading the way, albeit at the start of a significant and brave journey, towards excellence. There are some obvious reasons (or consequences) driving this. The consequences for a surgeon with a good mortality rates are positive, immediate and certain: job satisfaction, kudos, status, possibly more work and a lead position in their profession. The connection between their behaviour (surgery) and the result (life or death) is immediate and clear. However, performance outcome measures alone cannot safeguard patients, colleagues or Trusts. We need to know what behaviours matter. We need to analyse what *good* looks like, to define the gold standard, as well as the behaviours which de-rail performance , and regularly review performance against these standards. This book is a major step along this route both towards overall quality improvement and managing

sub-optimum performance. Catch people early and you can build in the right behaviours and eliminate the bad ones before they become habitual.

Looking at performance in the holistic sense, raises the question as to whether mortality rates are the only performance measure that is relevant to cardiothoracic surgeons. For example, what do others need from the surgeons to help them to do their jobs and to what extent do they provide it? Furthermore, how does the behaviour of those surgeons connect to the performance goals of their Trust in the best interests of all patients? Building your performance management framework around revalidation and mortality data alone will be insufficient to drive the quality agenda. Regular feedback, systematic and holistic performance reviews, incorporating multi-source data (see page 88), peer review and applying the learning from critical incidents need to be built into the system for the right behaviours to be reinforced.

Most people do not come to work to under-perform, yet if we do nothing, how can they know there is a potential problem brewing, let alone do anything to correct it. From our brief survey of under-performing doctors, a number of behavioural factors were evident that were thought to play a part in the poor outcomes these doctors encountered. Most significant was a lack of self-insight. This is a behavioural trait often resulting from a lack of or inadequate feedback. Poor insight is further compounded by isolation; often cited in cases of poor performance.

Another behavioural trait associated with the doctors in difficulty was arrogance. Arrogant behaviour is more often than not a mask for insecurity, low self esteem, poor relationship skills and lack of insight. Without constructive feedback given in a skilled manner, these behavioural traits can produce the conditions where colleagues who are in a position to provide developmental support, merely avoid the individual and any problems are either ignored or go undetected.

A further piece of work we were involved in looked at the behaviours that differentiated the best surgical trainers: winners of the Silver Scalpel award (http://www.asit.org/about/roll_of_honour/silver_scalpel_winners). Again behavioural themes emerged as being consistent for the best trainers: patience, tolerance and respect for others were frequently cited by trainees. Valued trainers were prepared to have the difficult conversation and confront performance problems by listening and providing practical support. The Silver Scalpel trainers themselves recognised that poor interpersonal skills, lack of insight and the tendency to be alienated from peers (traits that can be picked up early in training) were associated with trainees who repeatedly failed an exam. The significant finding here was that the exemplar trainers took immediate steps to address these issues by mentoring the individual and helping them to gain the self-insight to avoid repeated downfalls. While the early warning signs of poor performers are often picked up in training, not all are fortunate enough to have the support of senior colleagues to help them address their difficulties. If these issues are ignored, they merely develop over time and we know that many consultants who find themselves in difficulty, had difficulties in training (*Good Doctors Safer Patients*). The principles of performance management and importance of behaviours are consistent right across a medical career.

Mentoring and coaching

Outside the traditional hierarchical structure, consultants, as independent practitioners, have historically not been accountable to anyone, nor was anyone responsible for their practice. This is changing, but mentoring and coaching in the NHS is fairly notional, and there is generally a lack of opportunity for development other than that which is self-directed. Therefore, when you reflect on the behavioural characteristics of poor performers, there is usually no safeguard in place for an individual who fails to acknowledge they have a problem. In each of the cases we explored, the failure of the Trust to intervene at an early stage, when concerns were first raised, merely reinforced the inevitable and recurrent behavioural concerns generally led to poor clinical outcomes, and it was only at this stage that an invited external review was triggered.

Managing the performance of people who do not view themselves as *belonging* to the organisation for whom they work also poses problems and this theme is explored further in Julian Hartley's section on page 94. When colleagues do not see themselves as part of a team with their goals aligned to those of their organisation, the performance becomes whatever the individual chooses. If they choose not to review or challenge their own practice, fail to update their knowledge base or refresh their skill, the consequences are experienced by the patient rather than the practitioner and as such the behaviour is less likely to change. It is only over time, as the problems mount, that the consequences are felt by the doctor, the Trust and the profession. This again is where the leadership of the SCTS is important as many consultants feel themselves as belonging to the professional society (see page 25).

Against this backdrop, we've prepared a set of principles that in our view will result in a performance management system that drives quality and can safeguard the trust patients place in their doctors and the profession.

Key principles for success

- Look at performance management holistically.
- Engage clinicians in the design.
- Define what the consequences are that need to be in place to achieve that engagement and motivation.
- Develop a behaviour based approach linked to job planning that enables performance to be defined for every role.
- Define the boundaries of acceptability from the patients' perspective with accompanying processes for continuous measurement and review.
- Provide consequences for performance to reinforce the desired behaviours and address under-performance.
- Identify issues at an early stage by using a range of techniques including self, peer and critical incident review.
- Address issues and concerns when they happen, rather than through retrospective review.
- Listen to patient feedback and base the gold standard on the criteria that matters most to the patient.

Further reading

1. Bringing out the best in people – How to apply the astonishing power of positive reinforcement. Aubrey C Daniels. McGraw-Hill. ISBN: 0-07-135145-0.
2. Leading Change. John P Kotter. Harvard Business School Press. ISBN: 0-87584-747-1.
3. Creating Culture Change: The Key to Successful Total Quality Management: Philip E Atkinson IFS Publications. ISBN: 1-85423-071-9.
4. Why should anyone be led by you? What it takes to be an authentic leader: Bob Goffee. Gareth Jones. Harvard Business School Press. ISBN:57851-971-3.
5. Creating Excellence – Managing Corporate Culture, Strategy and Change in the New Age. Craig R Hickman and Michael A Silva. Unwin Paperbacks. ISBN: 0-04-658252-5.
6. Quality without Tears. The art of hassle-free management. Philip B Crosby. McGraw Hill. ISBN: 0-07-014530-X.
7. Leadership Coaching. From personal insight to organisational performance: Graham Lee. CIPD. ISBN: 0-85292-6.996-X.
8. Managing Talent People. Getting on with – and getting the best from – your top talent. Alan Robertson and Graham Abbey. Pearson Education. ISBN: 1-843-04024-7.
9. Customer Intimacy. Fred Wiersema. Harper Collins. ISBN: 0-00-638839-6.
10. Working with Emotional Intelligence. Daniel Goleman. ISBN: 0-7475-3984-7.
11. Behavioural Coaching. How to build sustainable personal and organizational strength. McGraw Hill Professional. ISBN: 0-07-471328-0.
12. Good to Great. Jim Collins. Random House Business Books. ISBN: 0-7126-7609-0.

Part III: costings

Costings

Ben Bridgewater
James Roxburgh
Society for Cardiothoracic Surgery in Great Britain & Ireland

Costings

Ben Bridgewater and James Roxburgh

Key points

- The majority of the costs associated with SCTS model are those for local data collection and are approximately £45,000 *per* hospital *per* year.
- The resource for essential clinical input into the process is currently met from within existing allocations in most hospitals. Decreasing these allocations would threaten the current programme.
- National data collection, collation and analysis costs around £290,000 *per annum for England*.
- The total costs for measuring the quality of clinical outcomes is £1,480,000 *per annum* in England, which is less than 1% of the total NHS spend on adult cardiac surgery.
- Routine collection of patient experience and multi-source feedback data incurs minimal incremental cost.
- There are large cost saving benefits associated with improving clinical quality, and analysis about improved length of stay in the United Kingdom compared to an international standard suggests savings of over £5,000,000 *per annum* to the NHS purely for isolated coronary artery surgery.

There has previously been no clear indication about the cost of implementing the professionalism model we are describing in these pages. A number of the activities are funded as core business of NHS care delivery and others require additional resource. As pointed out in earlier sections (pages 35 and 70) it is proposed that systems to capture aspects of individual clinician competency will become routine under proposals to implement medical revalidation. We therefore feel it is of interest to itemise what we see as the costs of the working SCTS model. This includes costs of data collection and analysis, continuing professional development, multi-source feedback and patient-experience measures. There will be additional costs associated with managing sub-optimum outcomes or performance, but these are outside the scope of this report.

Table 11.1
Costs of professionalism model

Data collection
Continuing professional development
Multi-source feedback
Patient experience measures

Data collection

Local data collection

As described on page 33, data are collected in each hospital using a number of different techniques and software systems. The resource utilised is variable and we have described a typical model with the associated costs for an NHS hospital undertaking 1,000 adult cardiac operations *per* year.

Local software system	£20,000 *per annum*
Database manager	£25,000 *per annum*
Medical staff time	No additional costs

The IT requirement for data collection includes PCs, which will usually be available as part of the hospital IT network and utilised for multiple purposes. As such they will not generally incur additional costs for the purposes of data collection. The SCTS minimum dataset needs specific software for collection that is not usually available without additional payment (typically around £10,000 *per annum* with a one-off additional start up cost of around £50,000). Most hospitals have found that additional resource is required in terms of IT support and time for data validation and they employ a database manager dedicated to the project. Data collection systems vary, but require some input by medical personnel either onto paper based forms or directly by keyboard entry. For a surgeon undertaking a typical caseload of 4 operations *per* week, this would total around 40 minutes. Most consultant surgeons receive remuneration for 6-10 hours *per* week for *supporting professional activities* (SPAs), which includes audit, along with teaching, research and continuing professional development. As such we believe that the costs for this part of data collection are already met from within the manpower budget. However it is important to note in the current climate of increasing financial austerity that the allocation of appropriate time to collect these data should not be eroded in a misplaced attempt to decrease costs. In addition to collecting the data it is important that there is time taken to review the clinical outcomes, and implement actions as needed.

In general, most hospital have a rolling clinical governance programme and so, again, no additional costs would be incurred. Each hospital also usually has a *lead clinician* for audit responsible for ensuring complete and valid data entry for all patients, and they will ensure that appropriate submission are made to CCAD and that governance and publication reports are checked. This again will need to be recognised from within SPA allocations.

Total costs of local data collection £45,000 *per annum* per hospital.

National data collection

The collation, analysis and feedback of the SCTS data needs significant national infrastructure of software, hardware, programmers and analysts. This is currently funded from the resource dedicated to National Audit in England, which flows from the Department of Health *via* the Healthcare Quality Improvement Partnership, who manage the contracts. The current value of this contract for the Adult Cardiac Surgery audit is around £250,000 *per annum*. To provide complete analysis and feedback of the data has required further input from a high-level data analyst, who dedicated 6 months to the project to develop methodology and analyse the data for the national governance screening programme and publication (at an approximate cost of £20,000). This cost was met from a research grant. The data has been validated through an iterative process with hospitals and surgeons, and published for patients and the public by the Care Quality Commission (CQC), which had an initial setup cost of around £100,000 (which equates to approximately £20,000 *per annum*) and further annual costs of a part-time project manager and software development of approximately £20,000 *per annum*. It must be noted that the CQC have recently withdrawn from hosting this website and, at present, we have no available resource stream to support this important initiative. Finally the SCTS has given significant input in this process with respect to time, and this has no real costs to the taxpayer.

Total cost of national data collection, analysis & publication £310,000 *per annum*

Overall costs of data collection and analysis for England:

Local data collection £1,170,000 (26 hospitals x £45,000)

National data collection £310,000

Grand total £1,480,000 *per annum*

There are approximately 26,000 heart operations undertaken in England each year. The approximate cost of each operation is £8,000, making total revenue spend each year of £208,000,000. The cost of the data collection programme for cardiac surgery is approximately 0.7% of the total spend.

Data collection key points

- Trust spend — **£45,000 *per annum* each Trust**
- National infrastructure — **£310,000 *per annum***
- Grand total — **£1,460,000 *per annum***
- Proportion of total spend on cardiac surgery — **0.7%**

Continuing professional development

As described above, a typical cardiac surgeon will receive remuneration from their Trust for between 6 and 10 hours a week for supporting professional activities, which includes personal study.

Continuing Professional Development
Personal study
Educational meetings
SESATS

Broadly speaking, as described on pages 52 to 55, Continuing Professional Development (CPD) falls into three main categories: personal study, which has no specified costs beyond the salary already paid, educational meetings and the SESATS tool. Each Trust has an allocation for study leave for every consultant, which is probably the equivalent of around £500 *per* surgeon *per* year. This is to cover travel expenses and attendance at educational events. In addition it is not uncommon for surgeons to receive sponsorship for educational events from the pharmaceutical industry or manufacturers of cardiac devices and these events have no direct costs to the National Health Service. The SESATS tool is commercially available from the Society of Thoracic Surgeons in the US, at a cost to individuals of $375. We would like to make this available as a benefit of membership to surgeons who are members of the SCTS once every 3 years. We do not think it realistic that the costs of this would be met directly by the NHS in addition to the funds which are already allocated for continuing professional development. We also believe that it is common in other professions that some costs associated with professional licencing are met directly by the professionals themselves, and it would be unreasonable for all costs to met from the public purse. However, again we feel that it is important to emphasise that to maintain up to date knowledge and demonstrate that to the public requires the current allocation of *supporting professional activities* to consultants to continue.

Allocated costs for CPD £500 *per* consultant

Total costs for CPD in England for 200 surgeons £100,000

This equates to 0.05% of the total spend on cardiac surgery in England.

Multi-source feedback

As described on pages 88 to 90, there is as yet no freely available standard tool for collecting multi-source feedback, although we expect one to become available soon. There are many commercially available tools, such as the one produced by the University of Southampton. This is available at a rate, which depends on the number of clinicians who will be assessed, but is around £50 *per* doctor. Working on the assumption that each surgeon would undergo MSF once in a 5-year revalidation cycle, the total costs of purchasing the system would be £10 *per* surgeon *per* year. The time for the surgeons to complete self-assessment and for the *raters* to complete the questionnaire online would be met from within supporting professional activities allocations from medical staff and would have no additional attributable costs from non-medical staff. There is additional time required for feedback of the results of MSF from trained personnel which are met from the costs of purchasing the tool. We believe the medical time associated with multi-source feedback and patient experience measures could be comfortably met from within the current supporting professional activities allocation, as could the resource required to collate the evidence for appraisal and revalidation.

Cost for MSF £50 *per* consultant once every 5 years

Total costs for MSF in England £2,000 *per annum*

This equates to 0.001% of the total spend on cardiac surgery in England.

Patient experience measures

As described on page 80, there is as yet no widely accepted tool for collecting patient experience feedback. One available tool is the SheffPat questionnaire, which is available from Sheffield University. The cost for purchasing the tool and analysing feedback from 50 patients is £90. We have described fully in the relevant section the limitations in this methodology, both with respect to the questionnaire and the intermittent nature of sample, but we would regard data collected in this way once within a 5-year revalidation cycle as the baseline minimum acceptable.

Costs for patient feedback	£90 *per* consultant once every 5 years
Total costs for patient experience measures in England	£3,600 *per annum.*

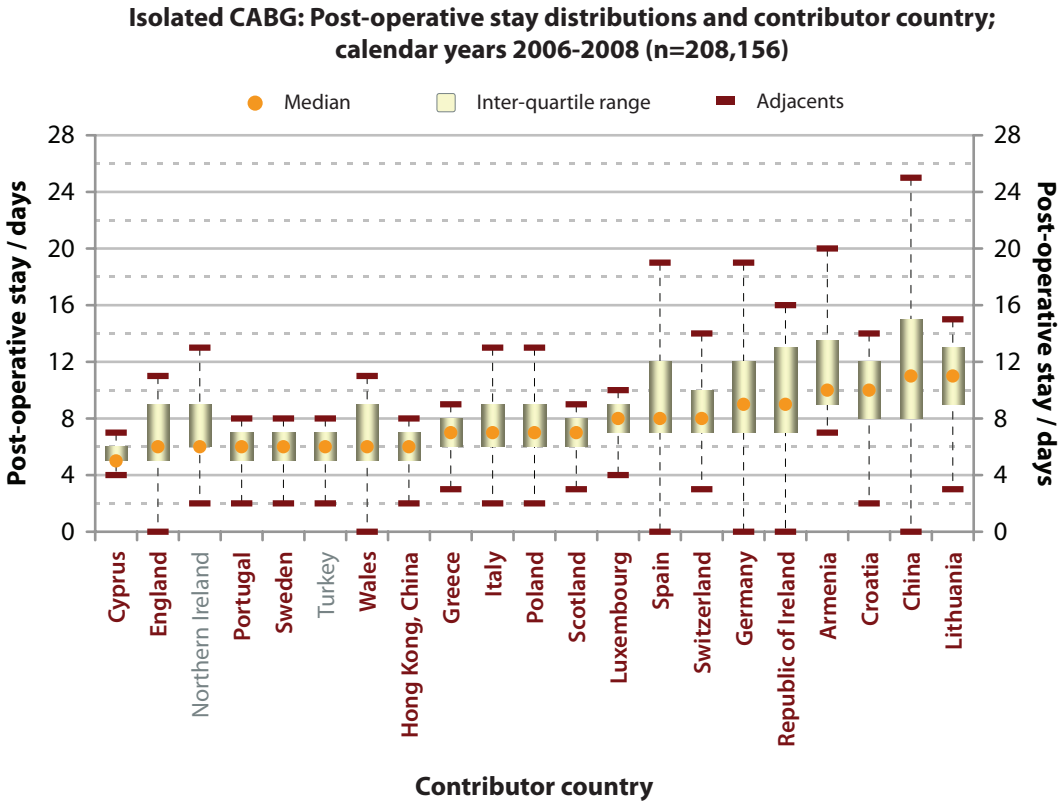
This equates to 0.017% of the total spend on cardiac surgery in England.

Other costs and potential cost-saving benefits

There are other costs associated with the model we have described, which are detailed further below, which are met from a number of different sources outside direct money for national clinical audit from the DH or resource from within NHS organisations. We also believe there are significant cost saving benefits that are derived from implementing routine process to collect, benchmark and feedback clinical quality data.

National reports: The SCTS has produced a series of high profile national audit reports (the Blue Books), which have been influential both inside Great Britain & Ireland and have also acted as international benchmarks for cardiac surgery around the world. These have been compiled by members of the SCTS in collaboration with Dendrite Clinical Systems Ltd, who have provided analytical expertise free of charge to the SCTS, along with publication and strategy expertise. Dendrite have provided the consultancy resources for collating the data, analysing the data, presenting, printing and binding the previous Blue Books, and a substantial amount of the costs of this report (the costs of printing and binding this report have been met by Picker Institute Europe). The relationship between SCTS and Dendrite has been mutually beneficial. From the SCTS perspective we have been able to progress our analyses and dissemination strategy further than we would have been able to relying purely on public funding. Dendrite are primarily a manufacturer of medical audit software and their strong relationship with the SCTS has been of commercial benefit to them, both within the United Kingdom and international cardiac surgery and non-cardiac surgical markets. We believe this relationship has been a very important contribution to the success of the SCTS database agenda.

Quality improvement and cost savings: Routine collection, benchmarking and feedback of clinical outcomes data improves clinical quality. We also believe it reduces the costs of healthcare delivery. Some of these benefits are obvious, but difficult to quantify, for example lower risk-adjusted mortality and morbidity rates almost certainly lead to reduced complaints and legal claims from patients and their relatives, and this is associated with significant cost benefits both in terms of compensation liabilities and the time spend by surgical and non-surgical personnel on dealing with problems, which can be substantial. We also believe that utilising multi-source feedback methodology and routine use of patient experience measures are likely to lead to further benefits.



It is quite hard to quantify these issues, but one example where clear benefits have been seen has recently been published in the large international cardiac surgical benchmarking exercise of the European Association for Cardiothoracic Surgery (EACTS [1]). This shows that the countries who have actively benchmarked and fed back clinical audit data have shorter length of stay following coronary artery surgery, than those who do not. A length-of-stay 1 day shorter than the international average, for CABG surgery alone is associated with large cost savings:

CABG operations in England	20,000 *per annum*
Cost of 1 day in hospital	£250
Cost savings	£5,000,000

These savings on CABG alone more than pay for several times the total coats of the professionalism model we have described.

1. The European Association for Cardio-Thoracic Surgery. Fourth EACTS Adult Cardiac Surgical Database Individual Country Report for England 2010. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.

Acknowledgements

This book was compiled by:

Mr Ben Bridgewater

Consultant Surgeon and Honorary Reader, Manchester Academic Health Sciences Centre, University of Manchester and University Hospital of South Manchester NHS Foundation Trust

Mr Graham Cooper

Consultant Surgeon, Sheffield Teaching Hospitals NHS Foundation Trust

Mr Steve Livesey

Consultant Surgeon, Southampton University Hospitals NHS Trust

Dr Robin Kinsman

Senior Analyst, Dendrite Clinical Systems Ltd

The SCTS editorial group who have shaped *Maintaining Patients' Trust*:

Mr Graham Cooper
Miss Farah Bhatti
Mr Malcolm Dalrymple-Hay
Mr David Geldard (SCTS patient representative)
Mr David Jenkins
Mr Sri Ranithanam
Mr James Roxburgh
Prof. David Taggart
Mr Graham Venn
Mr Ian Wilson

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Prof. Sir Bruce Keogh, President 2006-2008
Mr Leslie Hamilton, President 2008-2010
Prof. David Taggart, President-Elect 2010-2012, Elected Member 2005-2008
Mr James Roxburgh, President-Elect 2010-2012, Hon. Secretary 2004-2008
Mr David Geldard, SCTS patient representative 2009-date
Mr Graham Cooper, Hon. Meeting Secretary 2002-2007, Hon. Secretary 2008-2013
Mr Babulal Sethia, Hon. Treasurer 2004-2009
Mr Malcolm Dalrymple-Hay, Young Consultant's representative 2005-2008, Hon. Treasurer 2009-2014
Mr Simon Kendall, Meeting Secretary 2007-2012, Elected Member 2003-2006
Mr Peter Goldstraw, Chairman of the SAC 2002-2005
Mr Christopher Munsch, Chairman of the SAC 2005-2008
Mr Tim Graham, Chairman of the SAC 2008-2010
Mr Steve Livesey, Elected Member 2006-2008, Chairman of SAC 2010-2012
Prof. John Pepper, Elected member / Education Secretary 2007-2010
Mr Andrew Murday, Chairman of Inter-Collegiate Board 2001-2004
Mr Leslie Hamilton, Chairman of Inter-Collegiate Board 2004-2007
Mr Bob Jeffries, Chairman of Inter-Collegiate Board 2008-2012
Mr Steven Hunter, Cardiothoracic Dean 2004-2009
Mr Sean Barnard, Cardiothoracic Dean 2009-2014
Mr Sunil Ohri, Publishing & Communications Secretary 2004-2010
Mr Vipin Zamvar, Communications Secretary 2010-
Mr Jonathan Hyde, Cardiothoracic Tutor 2004-2007, Young Consultant's representative 2002-2005
Mr Freddie Wood, Representing the Republic of Ireland 2003-2009
Ms Eilis McGovern, Representing the Republic of Ireland 2003-2009
Mr Michael Lewis, Trainee representative 2002-2005
Ms Farah Bhatti, Trainee representative 2005-2008
Mr Sunil Bhudia, Trainee representative 2008-2009
Ms Betsy Evans, Trainee representative 2009-2011
Ms Tara Bartley, Nursing Representative 2006-2012
Mr Alan Faichney, Elected member 2002-2005
Mr Steven Hunter, Elected member 2002-2005
Mr Richard Page, Elected member 2003-2006, Thoracic Audit lead 2003-2011
Mr Graham Venn, Elected member 2004-2007
Mr Samer Nashef, Elected member 2005-2008
Mr Tim Graham, Elected member 2006-2009
Mr Ben Bridgewater, Elected member 2006-2009, Chair Database Committee 2008-2013
Mr Jim McGuigan, Electced member 2007-2010
Mr Neil Moat, Elected member 2008-2010
Mr John Duffy, Elected member 2008-2011
Mr Ian Wilson, Elected member 2009-2012
Mr Rajesh Shah, Elected member 2009-2012
Prof. Steve Westaby, Elected member 2010-2013
Prof. Marjan Jihangiri, Elected member 2010-2013

Appendices

Appendices

Appendix 1

Comments on methodology

The methodology used for risk prediction is based on the logistic ***EuroSCORE*** risk prediction algorithm, but because overall mortality has decreased since the ***EuroSCORE*** was initially published in 1998, it was agreed by the SCTS following extensive consultation with the membership, to use a contemporary re-calibration of the logistic ***EuroSCORE***. This is roughly equivalent to about half the mortality predicted by the initial logistic ***EuroSCORE***. The process is as follows:

- Data are extracted from CCAD.
- The data are cleaned by extracting duplicate records, ensuring mortality is appropriately attributed to the first procedure in each hospital spell, all risk factors and consultant identifiers are mapped to the exact definition in the SCTS dataset and the definitive GMC code of each surgeon.
- There is an iterative process of data validation with the submitting units to discover errors in local data, transmission process or analysis methodology.
- The cleaned data set is used to re-calibrate the risk adjustment algorithm (the logistic ***EuroSCORE*** www.euroscore.org) for contemporary practice.
- This risk adjustment is applied to each hospital and surgeon's practice.
- Observed mortality is compared to that predicted by casemix.

If you make multiple comparisons with a peer group average there will be a high chance of detecting high mortality rates due to chance alone (there are over 250 surgeons undertaking cardiac surgery in Great Britain & Ireland, and if you use the conventional statistical threshold using a p-value of 0.05, it is almost certain that several surgeons would demonstrate statistically high mortality rates purely due to chance). This statistical issue is known as the multiple comparisons effect. The above arguments also presuppose that the chosen risk-adjustment methodology is sufficiently good in all circumstances, and we know that is not the case. Surgeons have been concerned that any formal or informal investigation into their practice, which may be triggered purely due to chance, might act to undermine their self confidence, and may have adverse consequences on their professional standing, career development and livelihood.

When the SCTS first published surgeon mortality data in 2003, exact mortality rates were not given, but compliance with the SCTS standard was indicated. At that stage robust data for risk-adjustment was not available and for this reason, along with that of multiple comparisons, the statistical threshold selected as the standard was that all surgeons should fall within 99.99% confidence of the peer group average (these are very wide statistical limits). This methodology was strongly criticised by the world's foremost cardiac surgical statistician Eugene Blackstone as leaning far too heavily towards protecting the surgeons, rather than protecting patients.

We now have access to risk-adjusted data and have changed our methodology. We have defined divergent outcomes at different thresholds according to the variation of observed mortality from that predicted by the calibrated ***EuroSCORE***.

Yellow outside the 95% confidence interval of predicted mortality

Amber outside the 99% confidence interval of predicted mortality

Red outside the 95% confidence interval of predicted mortality after adjusting for multiple comparisons This equates to approximately 99.9% confidence intervals, but the exact value depends on the number of multiple comparisons, which depends in turn on the number of surgeons whose results are analysed during the time period under consideration. Using this limit in this way means that if abnormal rates are detected, only 1 time out of 20 would that finding be solely due to chance.

We have also been careful to ensure that the thresholds determined for high mortality rates seem to be clinically relevant as well as statistically robust. Examination of the data presented on page 45 suggests that this is the case.

Observations on investigation of apparently *high* mortality rates

1. When the SCTS performed the governance screening process last year, one hospital, who had been subject to some previous concerns about their overall mortality rates, came back as having an overall mortality rate much higher than predicted, and each surgeon working there displayed rates that were well outside the agreed red alarm trigger. By the time the analysis was conducted each organisation had already been asked to go through a mortality validation process on the non-risk adjusted data.

   Further scrutiny revealed the issue was due to missing data. For the purposes of the analysis the agreed field that defines outcome is that of *status at discharge* in the SCTS database. It had been previously agreed that missing data in this field were to be treated as though that patient had died, to drive complete data collection and submission. In this situation, further analysis showed that the organisation had a high incidence of missing data for this field, and the attribution of this missing data led to the high mortality rates. Failures within their organisational systems had failed to detect this issue in the previous validation processes. After correcting the data, subsequent analysis revealed both the organisation and the surgeons to all have acceptable mortality rates.

2. A second hospital had mortality rates higher in the analysis than they had measured locally, but all rates on both analyses were well within the acceptable limits. Detailed scrutiny revealed that their local data base had 3 options for the field *status at discharge*: dead, alive and died late. The accepted definitions in the SCTS database include only the first two. In the accepted analysis algorithm the local entry *died late* was mapped into missing and therefore attributed as mortality. Resolution of this issue brought the local and national analysis results together.

3. A hospital had mortality rates on the national analysis that were, again, different from their local perception; but, again, all results were inside acceptable limits and again the cause of the discrepancy was due to data definitions. In the SCTS database the categories of operation include CABG alone, CABG & valve, valve alone, and *other* operations, which may be performed in conjunction with any of the *other* groups. There is also a separate field for insertion of an intra-aortic balloon pump (IABP), which is a device used to support the circulation in the failing heart. This hospital had a local software system that automatically mapped any patient who had and an IABP inserted into the *other* operative group, resulting in the discrepancies in number and mortality. The problem was resolved by altering the local software.

4. A surgeon was identified in the national governance process as having a mortality that was higher than expected at the red alarm level. In line with principles of explaining divergence he was contacted by the SCTS President. The issues had already been identified locally and had led to an in-depth analysis of all the cases to identify trends and possible causes. The local investigation had involved input at the highest level within the organisation and had identified no issue with the quality of operative or post-operative care, and had attributed the high mortality rates as purely being due to a run of high-risk complex cases that had not come through surgery. Modification of that surgeons' casemix led to an improvement in mortality rates, which had been tracked locally, and time-sequence analysis of the data had shown overall results returning to expected levels. We would regard this as an example of good local governance.

Number of consultants for multiple comparisons adjustment

The number of independent consultant identifiers were:

- 2005 to 2008 – 314 surgeons
- 2006 to 2009 – 324 surgeons

It is accepted that these numbers are high, but careful scrutiny of the database did not allow further rationalisation of these identifiers. These totals have been used to drive the multiple comparison adjustment. For the remainder of the analysis surgeons with less than 25 cases over the 3 years of analysis were excluded.

Appendix 2: SCTS response to the GMC consultation on revalidation

Society for Cardiothoracic Surgery
in Great Britain and Ireland

These comments represent the views of senior members of the Executive of the Society for Cardiothoracic Surgery in Great Britain and Ireland. We have worked as an organisation for many years, more than any other branch of medicine, to develop a culture whereby public openness about our work and our outcomes is part of our daily lives. We believe that it is no coincidence that during this period survival rates from open heart surgery have improved from what was already a high standard. However, the clarity of message and leadership required to do this should not be under estimated and we do not believe the tenor of the GMC's proposals is clear enough to instil the change in culture the profession will need. This is all about professionalism and changing the culture to put patients and their needs at the heart of everything we do. This needs to be more overt throughout the document.

1. Amalgamation of Relicensing and Recertification. I do not think this improves the previous proposal for the following reasons.
    a. It devalues being on the specialist register *e.g.,* the doctor who just does the occasional insurancemedical has essentially the same *credentials* as a surgeon. How would such doctors indicate their field of practice.
    b. How would the process treat the specialist who fails to revalidate because of an issue with his / her specialist skills but is in every other way a good doctor – would they be left without a license?
    c. It is suggested that trainees undergo the same process but supervised by deaneries. This would require a significant strengthening of the RITA / ARCP process – certainly in practice if not in theory. COPMED and the JCST, JCMT etc must be adequately consulted about this.
2. The evaluation of a doctors' performance in the workplace is of prime importance. The Society supports the basic processes outlined in the consultation document including the proposals for monitoring CPD. Cardiac surgeons have lead the way in these aspects of performance monitoring and we would like the GMC to insist other medical specialties take similar steps. However the complexity of the systems required should not be under estimated. This will be a big change in culture for many of the professional groups involved and will require strong leadership from the GMC and Specialty Associations. Employers need to understand that they must facilitate appropriate data collection and that this will require significant resource in terms of both personnel and IT.
3. We agree that it is important that the Specialty Associations are not directly involved in making recommendations to the Responsible Officer – though they have rightly been involved in setting the standards. The Quality Assurance process should be led by the GMC with appropriate advice from Specialty Associations.
4. The Society supports the principle of patient / lay involvement in regulatory and assessment processes for doctors. However collecting and using this information is not a simple matter. There are hugely sophisticated organisations which spend a great deal of effort on refining their processes to hone the message from their patient surveys – it is much more difficult to translate this to individual patients comments about individual doctors – especially for those who do not see that many patients. This area needs more thought. Any questionnaires used should comply with GMC standards and organisations administering them must be competent to use the information gained appropriately. However, attempting to use occasional *snapshot* feedback such as the GMC proposes in unlikely to encourage the changes in culture and openness required.
5. The introduction of Revalidation is long awaited – it is a response to Dame Janet Smith's comments over ten years ago. We do not believe that a piecemeal introduction will serve the process (or the GMC, or doctors) well. It should be introduced as a *big bang* in 2011. It is our belief than our members understand what is required on their part for Revalidation, but are concerned that our employers are not yet up to speed with what will be required from them – so yes, a deadline should be set for organisational readiness. However, we believe that more than this is required – the GMC should make it clear what organisational readiness looks like and work with the DH to ensure that the essential components are in place in a timely fashion.

Steven Livesey, Revalidation Lead, Society for Cardiothoracic Surgery in Great Britain & Ireland

Consultant Cardiac Surgeon, Mailpoint 46, Southampton General Hospital, Southampton SO16 6YD

Tel: +44 2380 796234

Appendix 3: SCTS evidence to the select committee hearing on revalidation

Society for Cardiothoracic Surgery
in Great Britain and Ireland

Written Evidence to the Health Select Committee on the Revalidation of Doctors

Submission from the Society for Cardiothoracic Surgery in Great Britain and Ireland (SCTS)

Contact Graham Cooper, Secretary; graham.cooper@sth.nhs.uk

Summary

- SCTS believes that the key to delivering robust professional revalidation is routine utilization of outcomes measures, to demonstrate that performance is satisfactory.
- Collecting, analyzing, feeding back and publishing data on outcomes has been associated with major improvements in quality in our specialty with marked cost savings to the NHS and is an effective method for identifying poor performance.
- The cost of delivering a comprehensive outcomes program in cardiac surgery has been a tiny fraction of the costs of commissioning cardiac surgery, and is more than paid for by the associated cost benefits.
- It is only by collecting and feeding back clinical outcomes data, that organisations will learn how to deal with poor outcomes and performance. Our view is that it is inappropriate to wait for *organisational readiness* before revalidation is introduced; it is only by introducing revalidation that *organisational readiness* will be achieved.
- SCTS believes that CPD should be effective and be shown to be so. Educational tools such as, Self Examination, Self Assessment in Thoracic Surgery, fulfil this object.

SCTS

SCTS is a multi-disciplinary professional society whose primary aim is to encourage and promote excellence in the practice of cardiothoracic surgery. We represent almost all consultant cardiothoracic surgeons in Great Britain and Ireland along with non-medical practitioners in cardiothoracic surgery.

SCTS has been caught up in the storm surrounding clinical governance and professional revalidation ever since the events that occurred in paediatric cardiac surgery in Bristol [1]. As a professional society we have taken the recommendations in the Public Inquiry Report and Dame Janet Smith's report into Shipman [2] seriously. We have itemised our responses to these recommendations previously [3], these include collecting comprehensive clinical outcomes data by named consultant team, and publishing these openly for patients and the wider public [4]. We believe that this behaviour, which remains unique in British Medicine, should form the backbone of professional revalidation. There is significant evidence that widespread implementation of this methodology would bring benefits to patients, the medical profession and the public purse.

Evidence

1. We have collected activity along with post-operative mortality and morbidity data in adult cardiac surgery for all NHS adult cardiac surgery in the United Kingdom since at least 2002. Collecting, analyzing, feeding back this data to provider units alongside open publication of results has been associated with significant benefits, including a more than 50% reduction in risk adjusted mortality [3]. This is an enormous effect. This improvement is not because high risk patients are being denied surgery [5].
2. There is an increasing body of literature that suggests that publication of health outcomes data is the most effective way of improving quality [6]. We agree with this, and it has been backed up by our experience [3,5].
3. You can only publish data if they have been collected in the first place. This requires significant input from clinicians. By publication of outcomes data we have achieved complete compliance with data collection by clinicians.
4. Publication of outcomes data also empowers patients to make decisions about their health and healthcare.
5. The Mori poll of the public conducted as part of *Good Doctors, Safer Patients* suggested that a high proportion of those consulted wished to see success rates of treatment as part of the revalidation process [7].
6. We have defined clearly what we regard as acceptable performance; an operative mortality rate that does not differ significantly from the contemporary peer group average. We are now collecting data to broaden the outcome measures. We have defined three differing levels of divergence from the expected operative mortality. We analyse these data annually for all adult consultant cardiac surgeons. The three different levels of divergence from the peer group average mortality trigger proportionately different responses from SCTS [8]. We have taken action based upon these analyses.
7. This is a useful and tested methodology to set an acceptable standard of performance for revalidation.

8. We are putting in place a similar mechanism for thoracic surgery. Paediatric cardiac surgery and transplantation have their own national audits.
9. There are many other national audits that collect data that could be used for revalidation. In our view, the results from these audits should all be published openly. These audits include the National Joint Register, the British Society of Interventional Cardiology audit, audits of the Vascular Society and the British Society of Interventional Radiology, but there are also many more.
10. Many of these audits have problems with achieving complete data collection. This could be overcome by mandating compliance through professional revalidation.
11. In those areas who do not have a national clinical audit we believe that Hospital Episode Statistics can fulfil that role. The work of the Doctor Foster group, amongst others, has shown the potential for using these data for quality assurance and quality improvement [9].
12. Many in the medical profession believe that data should not be used for any purpose until they have been validated. We disagree. Our experience is that publishing the data and using them for professional regulation engages clinicians to improve its quality and render it fit for purpose. However, we recognise the risk associated with public release of non-risk-adjusted and validated data.
13. We believe that professional revalidation should be used to drive engagement with clinical outcome measurement throughout the medical profession.
14. The Coalition government wishes to focus on clinical outcomes. They should, in our opinion, reinforce that by driving medical professional engagement with clinical outcomes through professional revalidation.
15. In Theme 1 of their consultation response: *Ensuring that revalidation is streamlined, straightforward and proportionate*. The GMC states that *It is clear from the responses that many individual doctors and many organisations, including employers, are concerned that some aspects of the proposals are potentially too complicated and onerous.* We dispute this as it applied to measuring clinical outcomes. We have found it relatively cheap to collect excellent information for both quality improvement and revalidation [8]. Collecting this data is however a clear cultural challenge to the profession. We believe we have demonstrated that, once the culture is right, the methods will become straight forward. Revalidation must be used to drive this cultural change.
16. Theme 3 of the consultation document is about the costs of revalidation. The GMC states that *Proposals for revalidation are largely based on local systems of appraisal and clinical governance, which should already exist* we agree with this, but are sceptical that many of these processes are truly fit for purpose. We have however recently *costed* our model for collecting, analyzing and publishing complete clinical outcomes data down to individual consultant level. This model is not expensive, and equates to less than 0.5% of the money spent on commissioning cardiac surgery [8].
17. We have also looked at the cost benefits of clinical outcome measurement; in addition to the marked improvements in risk adjusted mortality rates, we believe there to be associated cost savings. This is not surprising as many people believe that better quality healthcare delivery results in lower costs of care overall. In a recent international benchmarking exercise on coronary artery surgery, England, which has the longest history of active engagement with outcome data, has an average length of stay 1.3 days shorter than the European average [10], which equates to cost savings for the NHS of over £5,000,000 *per annum* – many times the costs of the data collection initiatives (and we know that this effect is not due to casemix). It is likely that similar financial benefits would be seen across the NHS if proper engagement with clinical outcomes data was driven by professional revalidation.
18. We have one further comment on the GMC consultation exercise, which is not really developed as one of the 5 key feedback themes but is referred to in theme 3. In Question 18 of the consultation exercise they asked *Do you agree that revalidation should be introduced in areas and organisations where local governance systems are developed and sufficiently robust…?'* The feedback was that 77% of respondents agreed. We do not. We have developed significant experience and expertise in investigating and managing sub-optimum performance, because we measure our outcomes and they are made publicly available. This forces organisations to take action. We have observed that this is a big cultural challenge for both those organisations and the profession [8], despite the laudable aims of the numerous publications on governance over the years [7]. We believe that the only thing that will create *organisational readiness* is the implementation of a robust revalidation process. This should not be delayed further.
19. SCTS believes that CPD should be effective and be shown to be so. Educational tools such as, Self Examination, Self Assessment in Thoracic Surgery, fulfil this object. Similar formative assessment tools are available for other specialties; Surgical Education and Self-Assessment Programme [11], Medical Knowledge Self-Assessment Programme [12], Vascular Self Evaluation Programme [13], Pediatric Surgery Self Assessment Programme [14].

References

1. The Bristol Royal Infirmary Inquiry. http://www.bristol-inquiry.org.uk/
2. The Shipman Inquiry. http://www.the-shipman-inquiry.org.uk/reports.asp.
3. Bridgewater B, Kinsman R, Walton P and Keogh B. Demonstrating quality: The Sixth National Adult Cardiac Surgery database report. ISBN 1-903968-23-2. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
4. http://heartsurgery.cqc.org.uk/index.aspx
5. Bridgewater B, Grayson AD, Brooks N, Grotte, G, Fabri B, Au J, Hooper T, Jones MT and Keogh B. Has the publication of cardiac surgery outcome data been associated with changes in practice in Northwest England: an analysis of 25,730 patients undergoing CABG surgery under 30 surgeons over 8 years. *Heart.* 2007; **Jan 19; [Epub ahead of print]. PMID:** 17237128.
6. Leape LL. Transparency and Public Reporting Are Essential for a Safe Health Care System. Perspectives on Health Reform. Commonwealth Fund pub. 1381 Vol. 4
7. Good Doctors, Safer Patients (2006): Proposals to strengthen the system to assure and improve the performance of doctors and to protect the safety of patients. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4137232.
8. Bridgewater B. Cooper G and Livesey S. Maintaining Trust - The Society for Cardiothoracic Surgery in Great Britain and Ireland model for modern medical professionalism. Publisher Dendrite Clinical Systems. In preparation. Due for Publication December 2010.
9. http://www.drfosterintelligence.co.uk/
10. Bridgewater B, Gummert J, Kinsman R, Walton P. Fourth EACTS Adult Cardiac Surgical Database Report Towards global benchmarking. ISBN 1-903968-26-7. Published by Dendrite Clinical Systems Ltd, Henley-on-Thames, Oxfordshire, United Kingdom.
11. http://www.facs.org/fellows_info/sesap/sesap.html
12. http://www.acponline.org/products_services/mksap/14/
13. http://www.pdwe.com/main/vsep.php
14. http://www.eapsa.org/source/onlineexam/welcome.cfm?

Appendix 4: the 2010 ESC / EACTS guidelines on myocardial revascularisation

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David P Taggart, Roger Boyle, Mark A de Belder, Keith A A Fox

At the European Society for Cardiology annual meeting in Stockholm at the end of August 2010, the new joint European Society of Cardiology (ESC) and European Association for Cardiothoracic Surgery (EACTS) guidelines on myocardial revascularisation were published online [1]. These are a completely new set of guidelines which incorporate the 2006 percutaneous coronary intervention (PCI) guidelines on the management of stable angina pectoris [2] and also contain important differences reflecting advances in the clinical management of ischaemic heart disease and advocating a more formal multidisciplinary approach to intervention in such patients.

In contrast to previous guidelines for interventions in coronary artery disease produced independently by the cardiology and cardiac surgery communities, the new ESC / EACTS collaborative effort recognises the need for cohesive guidelines applicable to the management of the entire spectrum of coronary artery disease. While less severe disease can be adequately treated by lifestyle changes and optimum medical therapy, more severe disease may additionally require intervention by stenting or surgery. Accordingly, the writing committee, which was co-chaired by a cardiologist and a surgeon, consisted of 25 members in total and included nine non-interventional cardiologists, eight interventional cardiologists and eight cardiac surgeons. This is in marked contrast to the previous ESC guidelines task force which included a single cardiac surgeon among its 16 members [2]. It should also be noted that the guidelines were produced without any commercial sponsorship from the pharmaceutical or interventional or surgical device industry, who are all powerful players in the cardiovascular arena. After several revisions, the guidelines were approved by the external reviewers from the respective societies.

The ESC guidelines are based on a *comprehensive review of the published evidence* [3] with a *formal meta-analysis at the beginning of the writing phase* [4]. However, it has also to be acknowledged that, as with all guidelines, some recommendations are based on expert consensus where there are no appropriate randomised trials or studies to inform practice. Similarly, the guidelines recognise that, while randomised trials and their meta-analyses constitute the hierarchically strongest form of evidence-based medicine, patients enrolled into randomised trials may not always be representative of those encountered in routine clinical practice [5].

The guidelines are comprehensive and consist of 14 sections dealing with all aspects of coronary artery disease and an abridged version is currently available online. The wide-ranging nature of the guidelines constitutes a chronological journey from diagnosis, through treatment with lifestyle changes and medication and intervention by stents or surgery where appropriate, to secondary prevention. There are details of and recommendations for risk stratification, diagnosis and imaging, revascularisation strategies in stable and unstable disease as well as in the setting of ST segment elevation myocardial infarction (STEMI). Specific chapters describe the implications of coronary artery disease in the settings of diabetes, chronic renal disease, valvular heart disease, chronic heart failure and arrhythmias. The guidelines also describe the key procedural aspects of interventions including antithrombotic therapy, stents and coronary artery bypass grafting (CABG). Finally, strategies for secondary prevention and follow-up are recommended.

The guidelines discuss in detail and emphasise the importance of lifestyle changes and optimum medical therapy in all patients with coronary artery disease, and this will suffice in many patients. However, in patients who either remain symptomatic despite optimum medical therapy or who have an adverse prognosis because of documentation of significant ischaemia, revascularisation – either by stenting or surgery – can be recommended. While CABG is arguably the most intensively studied surgical procedure ever undertaken and has been a cornerstone of treatment of coronary artery disease for almost half a century, stenting has probably been subjected to more randomised trials in the last three decades than any other procedure. An important consideration when discussing interventions in patients is the remarkable safety and efficacy of both stenting and surgery. For example, in all 78 000 patients undergoing elective CABG in the UK in 2004-8, the hospital mortality was 1.1% [6] a figure similar to that in the 3102 patients in the Arterial Revascularisation Trial [7] and the 1974 patients who underwent CABG in the SYNTAX trial [8]. The mortality for elective stenting is even less at around 0.3%.

While there is general consensus from randomised trials [8] and large propensity matched registries [5] that CABG still offers a survival benefit in the most severe and complex coronary artery disease, CABG and stents appear to offer similar survival outcome, at least over the short to medium term, in patients with lower tercile SYNTAX score severity coronary artery disease. Despite the potential dangers of subgroup analyses of randomised trials, this appears to be supported by the most recent data to emerge from the SYNTAX trial. At 3 years, in all 1095 patients with three vessel disease, mortality was 5.7% for CABG and 9.5% for PCI (p=0.02), with a similar incidence of stroke at 2.9% and 2.6%, respectively (p=0.64) [9]. It has been postulated that differences in cardiac outcome

can be attributed in part to the different pathophysiological consequences of the two interventions; while stents directly treat the stenotic lesion(s), often located in the proximal coronary arteries, bypass grafts are placed to the mid coronary vessel and may offer additional prophylaxis against the development of new proximal disease [5]. In contrast, for all 705 patients with left main stenosis, the respective mortalities were 8.4% and 7.3% (p=0.64)10; however, in these patients with left main stenosis, the mortality was significantly lower for stents than for CABG in those with SYNTAX scores <33 while the reverse was true for those with SYNTAX scores >32. Furthermore, and in contrast to three vessel disease, for all categories of left main stenosis the incidence of stroke was higher with CABG whereas a reduction in repeat revascularisation for CABG was only seen in those with the highest SYNTAX scores.

There is one potentially contentious area in the guidelines which recommends a change in current practice. For the first time there is an individual section on the process of decision making and patient information which calls for a more formal multidisciplinary approach when recommending intervention by stents or surgery in both stable and unstable coronary artery disease (but not in evolving myocardial infarction where stenting is the treatment of choice). It is now advocated that most recommendations for intervention be made by a *Heart Team* consisting of a core of a non-interventional cardiologist, an interventional cardiologist and a cardiac surgeon and drawing on additional expertise where necessary. Although there have not been any randomised trials of a Heart Team / Multidisciplinary Team approach, there is nevertheless a consensus that this approach is attractive and certainly promotes transparency in the decision making process. Allied to this approach is the recommendation that ad hoc stenting (*i.e.,* the decision to proceed with stenting immediately after diagnostic angiography) should only be used in pre-agreed circumstances. This is outside of the context of STEMI where primary stenting is the treatment of choice and should be performed without delay.

Culprit lesion stenting in non-STEMI is reasonable when the culprit is clear and where the severity of disease elsewhere does not warrant immediate revascularisation but, in the context of significant multivessel disease, it is recommended that the patient is given the benefits of a multidisciplinary team approach prior to revascularisation. There is increasing recognition that this effectively enhances the patient's opportunity to discuss fully all treatment options, especially in the setting of multivessel disease. In contrast, there is complete agreement that primary stenting is the treatment of choice in patients with STEMI and should be performed without delay. Although many clinicians have already embraced the concept of the multidisciplinary team approach when recommending interventions, this is not universal practice and concerns have been expressed about the *gatekeeper* approach of some interventional cardiologists. This may be one of the factors behind the dramatically different ratios of stenting to CABG within different European countries, as well as within different geographical locations in the same country. Although there are concerns that the multidisciplinary team approach may be unwieldy and present logistical problems, particularly in hospitals which offer stenting but do not have cardiac surgery facilities on site, in reality many interventional recommendations can be made in an algorithmic fashion by following local protocols based on the guideline recommendations for stenting or surgery in differing anatomical patterns of coronary artery disease and do not require individual discussion by the multidisciplinary team. More complex situations will, however, still require multidisciplinary dialogue.

It is, of course, axiomatic that guidelines are simply guidelines and individual patient circumstances and preferences must be given full consideration. For example, there may be situations where, on a purely anatomical basis, surgery may be the more suitable intervention but where severe concomitant comorbidity would significantly increase the risks of operation and make stenting a better option or where the patient simply refuses the prospect of a major operation. On the other hand, there may also be situations where contraindications to the use of dual antiplatelet medication necessary for drug eluting stents might favour surgery.

We believe that the collaborative evidence-based approach of the new ESC and EACTS guidelines offers a more transparent and robust management for all patients with coronary artery disease which promotes real patient choice and genuine informed consent. Not only does the multidisciplinary team approach serve the best interests of patients with coronary artery disease (as it does for cancer patients), it also enhances and safeguards the interests of doctors. Doctors who have followed recommended guidelines are more likely to be able to defend their treatment recommendations and strategies robustly than those who do not if the treatment is subsequently challenged by patients, their relatives or other external parties. We endorse the guidelines and recommend that they become a standard by which we define and optimise best practice for patients and clinicians. The UK should lead the way in Europe by adopting the guidelines as a national standard. Please note that this article represents the views of the authors and have not yet been fully discussed within their respective societies.

References

1. Wijns W, Kolh P, Danchin N, *et al.* Guidelines on myocardial revascularization: The Task Force on Myocardial Revascularization of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS). *European Heart Journal.* 2010; **20:** 2501-55.
2. Fox K, Garcia MA, Ardissino D, *et al;* Task Force on the Management of Stable Angina Pectoris of the European Society of Cardiology; ESC Committee for Practice Guidelines (CPG). Guidelines on the management of stable angina pectoris: executive summary: The Task Force on the Management of Stable Angina Pectoris of the European Society of Cardiology. *European Heart Journal.* 2006; **27:** 1341-81.
3. Graham I, Atar D, Borch-Johnsen K, *et al;* European Society of Cardiology (ESC) Committee for Practice Guidelines (CPG). European guidelines on cardiovascular disease prevention in clinical practice: executive summary: Fourth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts). *European Heart Journal.* 2007; **28:** 2375-414.
4. European Society of Cardiology. Writing ESC guidelines. The ESC has issued recommendations for formulating guidelines. http://www.escardio.org/guidelines-surveys/esc-guidelines/about/Pages/rules-writing.aspx.
5. Taggart DP (Thomas B Ferguson Lecture). Coronary artery bypass grafting is still the best treatment for multivessel and left main disease, but patients need to know. *Annals of Thoracic Surgery.* 2006; **82:** 1966-75.
6. Bridgewater B, Kinsman R. Sixth National Adult Cardiac Surgical Database Report. Demonstrating Quality. 2008. Henley-on-Thames, UK: Dendrite Clinical Systems, 2009.
7. Taggart DP, Altman DG, Gray AM, *et al;* on behalf of the ART Investigators. Randomized trial to compare bilateral vs. single internal mammary coronary artery bypass grafting: 1-year results of the Arterial Revascularisation Trial (ART). *European Heart Journal.* 2010; **20:**2470-81.
8. Serruys PW, Morice MC, Kappetein AP, *et al;* SYNTAX Investigators. Percutaneous coronary intervention versus coronary-artery bypass grafting for severe coronary artery disease. *New England Journal of Medicine.* 2009; **360:** 961-72.
9. Mohr FW. SYNTAX 3VD: Three-Year Outcomes from a Prospective Randomized Trial of Paclitaxel-Eluting Stents Compared to Bypass Graft Surgery in Patients with Triple Vessel Coronary Artery Disease. Washington: TCT, 2010.
10. Serruys PW. SYNTAX Left Main: Three-Year Outcomes from a Prospective Randomized Trial of Paclitaxel-Eluting Stents Compared to Bypass Graft Surgery in Patients with Left Main Coronary Artery Disease. Washington: TCT, 2010.

Notes

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Maintaining patients' trust: the need for a change in medical professionalism

In this book the United Kingdom cardiac surgeons explain why they can be trusted - without exception - to give all their patients excellent surgical care. We congratulate them. This is exactly the kind of positive commitment the public would like to see from all doctors.

Katherine Murphy, Chief Executive, The Patients Association

The era of accessible information is changing the way people shop, book transport and arrange holidays. Better mobile devices are causing a revolution in the way people communicate, and the phenomenon of social networking is leading to profound changes in society. These issues, set against the backdrop of continuing failure of the NHS to assure satisfactory standards of care for patients (such as the events at Mid Staffs Hospital NHS Trust), are leading to patients demanding more accountability from the medical profession and the hospitals where they are treated.

The Society for Cardiothoracic Surgery in Great Britain & Ireland has been responding to the need for better governance and patient information by its endeavours to collect, analyse and publish mortality rates for cardiac surgery. These data are now publicly available for all hospitals in the United Kingdom, and about 85% of individual surgeons. The initiative has been associated with marked improvements in quality, such that the United Kingdom overall mortality rate for coronary artery surgery is better than the European standard. Cardiac surgeons remain the only group to publish results proactively at the level of individual consultants.

The developments in cardiac surgery have happened gradually and, as we have moved toward a more open culture with respect to our results, we have come to understand the need to put the patients and their quality of care truly at the heart of our service delivery. We have learnt the need to introduce tough but sensitive and humane processes to identify and eliminate care that is not as good as it should be, as well as supporting overall quality improvement. We have also come to realise that wider aspects of medical professionalism need to change to ensure the best quality of care for patients and maintain their trust.

We have summarised our story alongside some outside observations in this book and include thoughts on:

- The collection, analysis and publication of clinical outcomes data for patients
- The need for effective continuing professional education for doctors to ensure and demonstrate that they are up to date.
- The role of measurement of patient experience, multi-source feedback for professionals and appropriate organisational culture to support optimal medical professionalism.
- The costs of delivering this model, which suggest that the resource required to measure the outcomes is more than matched by the savings derived from better quality of care.

We hope that this report will be of interest to patients, the wider public, policy makers, and to our colleagues across medicine who are working towards a similar objective in their own fields.

The Society for Cardiothoracic Surgery in Great Britain & Ireland
at The Royal College of Surgeons
35-43 Lincoln's Inn Fields
London
WC2A 3PE
United Kingdom

Phone +44 (0) 20 7869 6893
Fax +44 (0) 20 7869 6890
email sctsadmin@scts.org

www.scts.org

Dendrite Clinical Systems
Dr Peter K H Walton
Managing Director
The Hub, Station Road
Henley-on-Thames
Oxfordshire RG9 1AY
United Kingdom

Phone +44 (0) 1491 411 288
Fax +44 (0) 1491 411 377
email publishing@e-dendrite.com

www.e-dendrite.com