



# THE QUEST FOR QUALITY: REFINING THE NHS REFORMS

A POLICY ANALYSIS AND CHARTBOOK

Sheila Leatherman and Kim Sutherland



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A POLICY ANALYSIS AND CHARTBOOK

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The fourth in The Nuffield Trust series examining the  
impact of the quality reform agenda, 1998–2008

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# Foreword

If a week can be a long time in politics, it can also be in the health policy world. The pace of healthcare reform in England over the past 10 years has been fast, the breadth wide and the financial investment significant. The core objective has been to improve the quality of healthcare for patients. But what has been the impact?

This is the subject of a unique and careful study over the last decade by Sheila Leatherman and Kim Sutherland, reported here. *The Quest for Quality* is a thorough and comprehensive compilation of key indicators over time, with an accompanying policy analysis.

The main messages are on the whole positive. There has been significant progress since 1997 and the NHS has greater capacity and infrastructure to deliver good quality care than ever before. For a service as large and as complex as the NHS this is a good achievement. Yet inevitably there are some qualifications to this verdict. As the authors point out, significant variations in quality still exist across England, it is not clear whether the gains in quality are commensurate with the financial investment made, and it is not possible to reach

conclusions as to which of the many reforms have had most impact. The authors' conclusions are surely right: that the reforms need to stay on the same broad track but be better coordinated, consolidated and evaluated. Without good evaluation, investment is at risk of being wasted.

An unspoken question which leads from the analysis is, how has the quality of care for patients changed in the NHS in England relative to that in Scotland, Wales and Northern Ireland over the same period? Should the National Health Service be truly 'national' across the UK with respect to the quality of care provided? This is the subject of ongoing analysis by the Trust, reporting next year.

The Nuffield Trust is proud to have been able to support this work. I hope that the messages are given the attention they deserve; the Trust looks forward to playing a key role in helping to realise the book's recommendations.

Dr Jennifer Dixon  
Director, The Nuffield Trust

# Preface

It has been a privilege to work on the Quest for Quality series. Commissioned by the Nuffield Trust, the series has tracked the impact of the 10-year quality agenda, which was originally articulated by the Labour government in *A First Class Service* in 1998. This fourth and final report in the series will provide an assessment of progress to date, and discuss policy and strategy options for the future. It is based on quantitative and qualitative data, drawing on a wide range of sources in England, contextualised by comparative international data and influenced by a series of interviews with expert informants. This report updates our previous work: a mid-term policy evaluation (2003) and the subsequent chartbook on quality of care (2005), and proposes a strategy for moving forward.

In the 2003 mid-term evaluation of the 10-year quality agenda, we described the plethora of reforms which had been implemented, tracking the available data on trends in quality of care and evaluating performance against government pledges, promises and targets. At that midpoint, a definitive judgement on its impact was impossible to make. We did, however, note an ‘up-tick’ in performance across a range of quality domains. We

expressed guarded optimism based on early trends in key areas – most notably significant progress in access measures and waiting times, and improvements in both process and outcome measures in priority clinical areas. We voiced the hope that such improvements augured a growing predictable capacity of the NHS for systemic performance enhancement, driven by the quality reforms.

As in our earlier work, we admit to a favourable predisposition to the NHS and admiration of its underlying values, particularly the intention to provide equitable and universal healthcare to all UK residents. However, at this juncture, we must admit to seeing a very mixed picture of quality of care in the NHS. Although we believe many of the building blocks necessary for the delivery of a world-class health service are in place, they are not yet properly aligned and integrated.

There is a striking need for concentrated attention on the articulation and organisation of a national quality programme to fully realise the potential of the NHS.

Sheila Leatherman

Kim Sutherland

# Acknowledgements

We wish to thank the many individuals and institutions who have so generously supported our work over the past decade.

First and foremost is the Nuffield Trust, which has provided us with the opportunity to work over a predictable and long time horizon and focus in-depth; a privileged situation for health services researchers. We also owe our gratitude to The Health Foundation for giving us the opportunity to amplify and expand our work on quality and to include attention to value for money and productivity in the Quest for Quality and Improved Performance (QQUIP) project. The Foundation has also supported the fruition of several of our recommendations from our 2003 work published by the Nuffield Trust, most notably with the development of an online quality database, which we have drawn on in the production of some of the charts in this book, and the funding of their Engaging with Quality programme. We also thank the Commonwealth Fund (New York), which funded the original quality chartbooks in the US, from which we have adopted methods for work in the UK.

We have benefited greatly from the advice and assistance of many individuals but would especially like to acknowledge those who gave their time and counsel as interviewees (listed in an Appendix to Section One) and those who were always there to give us valued input such as Gwyn Bevan, Peter Smith, and Nick Coyle at the London Health Observatory. We would also like to express our gratitude to Lindsey Clarke, who has supported our work in so many ways including administrative support, manuscript preparation, scheduling and editorial help.

In the end, as researchers, we are utterly dependent on accessing valid and credible data. Throughout the decade we have had exceptional support from many places, including the Department of Health, the Healthcare Commission, the Information Centre for Health and Social Care, National Audit Office, Office for National Statistics, Royal College of Physicians, National Centre for Health Outcomes and Development, London Health Observatory, Dr Foster Intelligence, and other institutions. Our thanks to them all.

S.L., K.S.

# About the Authors

**Sheila Leatherman, CBE, FRCP (Hon)** is a Research Professor at the School of Public Health, University of North Carolina at Chapel Hill and Visiting Professor at the London School of Economics. She has a broad background in healthcare management, at a State Health Department, the Veterans Administration, as chief executive of a non-profit HMO and executive of a national managed care organisation. She conducts research and policy analysis internationally, focusing on quality of care and health systems reform.

Professor Leatherman is an elected member of the Institute of Medicine of the US National Academy of Sciences (2002), where she serves on the Global Health Board, and an Honorary Fellow of the Royal College of Physicians (2005). In the UK she has been supported by the Nuffield Trust (1997–2008) to assess the impact on quality of the Government's NHS reforms, including a mid-term evaluation resulting in publication of *The Quest for Quality in the NHS* (2003) and sequel *The Quest for Quality in the NHS: a chartbook on quality in the UK* (2005). In 2007, she was awarded a CBE for her work for the NHS. Her other current research includes acting as co-principal investigator for a five-year research initiative examining quality, productivity and value for money in the NHS, and as research advisor to a four-year Gates Foundation-funded project to develop innovations to link health access programmes with microcredit in developing countries.

**Kim Sutherland, MS, MBA, PhD** is a Senior Research Associate at the Judge Business School, University of Cambridge. Her work concentrates on the interactions between research evidence, policy and clinical practice within the NHS. Her current research interests focus on quality of healthcare, and organisational change. Together with Sheila Leatherman, she has undertaken a series of studies, funded by the Nuffield Trust, evaluating the Labour Government's 10-year quality agenda for the NHS. The same team has worked on a series of chartbooks that depict quality in healthcare in England and in the UK, as well as within particular patient groups.

She is currently working as co-principal investigator in a multidisciplinary, multi-year project, funded by The Health Foundation, which seeks to monitor performance and inform efforts to improve quality and cost-effectiveness in the NHS. Her work has been published in numerous books and peer-reviewed journals.

# Executive Summary

## Background: the state of quality

Just over a decade ago, the New Labour Government came to power promising modernisation and renewal of the NHS, in a process that would install quality ‘at its heart’ (DH, 1997). What followed in England was an ambitious and wide-ranging series of reforms that sought to improve quality of care. New Government bodies were formed, explicit standards of care were set and independently monitored, services were reshaped, and new provider payment methods introduced. The information infrastructure has been developed, buildings have been refurbished and the workforce enhanced. Importantly, these reforms have been supported by substantial increases in spending on health.

Overall, it is apparent that quality has improved. What is less clear, however, is whether the gains are commensurate with investment and effort. In evaluating the NHS reforms of the past 10 years, three questions are important:

- Are the improvements seen to date as good as could have reasonably been expected, given the scale and complexity of the NHS as an institution and the sustained period of under-funding that the NHS had endured in the preceding decades?
- How much of the improvement reflects advances in medical knowledge, changes in population behaviour, or developments in healthcare delivery (also seen

internationally), rather than the specific impact of NHS reforms?

- Has a reliable capacity for system improvement been embedded in the NHS?

To obtain a well-rounded picture of the state of quality of care in the NHS since 1997, data has been collected and analysed across six key domains. The authors’ findings are summarised below.

- **Effectiveness and appropriateness:** there is now more effort in the NHS to achieve evidence-based standards of care for a number of clinical conditions; mortality rates for the major disease groups have dropped, though there are continuing deficiencies in care for a range of clinical areas.
- **Access:** waiting times for hospital admission, outpatient and cancer care have reduced significantly but ongoing problems remain with some specialties, diagnostics and community aftercare.
- **Capacity:** there have been significant increases in the number of staff, renewed and new facilities, and investments in medical technologies; some inadequacies still remain, however.
- **Safety:** progress on reducing the number of hospital-acquired infections but continuing difficulties in monitoring how safe health services are.

- **Patient-centredness:** a steady state in patient-reported experience of care.
- **Equity:** while healthcare remains available to all and largely free at the point of use, there is a widening of the gap in life expectancy and infant mortality between more deprived populations and England as a whole.

These findings should be qualified by three main observations. First, international data reveals trends – particularly with respect to indicators of health outcomes and mortality rates – that are strikingly similar to those seen in England. Such consistency is remarkable given the considerable differences in approach and levels of investment across comparable countries. Second, time series data reveals few, if any, dramatic changes in trends as a result of reforms or investment. Third, variation within England in the quality of care (unjustified by medical need) is commonly observed, most notably in the effectiveness and equity of care provided and capacity.

### **The need for a National Quality Programme**

The multitude of reforms that have been introduced over the past decade are insufficiently integrated into a coherent national strategy. What is needed now is refinement, not rejection, of the reforms through the development of a comprehensive English national quality programme. The Government has asserted that the NHS aspires to be a ‘world class’ health system. To be legitimately considered as such a health system – particularly one organised as a national health service – requires a well-defined and competently executed programme to boost quality of care. This programme should have two fundamental objectives:

1. **Developing a coherent and integrated approach to improving quality.** This means moving away from swings between centrally-driven and patchy locally-driven change towards a refined and stable reform agenda that recognises and builds upon the nationalised health system properties of the NHS. Reforms should be implemented and coordinated at four levels; nationally, regionally, within local organisations and in individual professional–patient encounters.
2. **Refining a set of reliable reforms** that use evidence, rather than ideology, to drive the quality agenda. It is now time to ascertain what works, and equally importantly, what does not. This, of course, is challenging. Rigorous evaluation of the reforms in England is scant and the evidence base emerging internationally must be applied with some caution, given contextual differences between countries. Nevertheless, available evidence can serve to inform refinements of the reforms constructively.

The principles adopted in the National Quality Programme to guide its activities should include the following:

- concentrate efforts where there is most potential to save lives, reduce illness, improve quality of life and lessen suffering
- build upon the strengths of the National Health Service; a national system where policy, resources, and execution can be aligned
- move away from an agenda dominated by national initiatives to one that focuses on regional, institutional and

patient-level actions – supported and galvanised by national leadership

- correct flaws in existing policies that may work against the improvement of quality locally
- create and sustain a balanced portfolio of reforms incorporating professional, governmental and market mechanisms
- place greater emphasis on evidence over ideology – to inform the selection and implementation of ‘levers for change’ and boost investment in evaluation of the NHS reforms.

Using these principles as the foundation for the national quality programme, suggestions for specific tasks for development over the next three-year period are outlined in the blueprint for an NHS National Quality Programme (p xvii).

## **Leadership for the National Quality Programme**

The National Quality Programme has the potential to bring together and strengthen the multiple organisations and individuals engaged in improving quality in the NHS. For the programme to succeed, it will need leadership – in the form of a steering group that is able to guide coordinated action in the pursuit of quality. The steering group should address several broad problems that currently jeopardise the formation of a coherent national quality improvement strategy:

- The duty for quality in the NHS is diffused broadly within central government and quasi-governmental bodies,

throughout regional offices and hundreds of institutions, with final accountability at the level of thousands of individual providers.

- There is no single authority able to lead the quality agenda through the processes of defining priorities, marshalling resources, leveraging the power of regulation and incentives, implementing the requisite clinical informatics and data collection and reporting capabilities, or directing the policy and implementation of public reporting. These need to be coordinated to maximise their potential for change.
- There is no single credible and independent voice to report on the state of quality of care to the nation. As a result there can be unhelpful public debates about the veracity of data, and distraction and delays in implementing much-needed actions for quality improvement.

The managerial and governance arrangements for the National Quality Programme deserve considerable study and debate. However, critical responsibilities should include:

- articulation of national goals for quality in the NHS; goals may derive from various sources, including both national priorities and detailed data illuminating problems of overuse, underuse and misuse of healthcare resources.
- agreement of an NHS-wide set of indicators of the quality of healthcare for monitoring, benchmarking and public reporting.



- publication of an annual National Quality Report to Parliament and the public that provides data measures that are consistent over time, and incorporates international data to facilitate comparisons
- the strengthening of the national clinical audit programme as a linchpin for measuring and improving quality of care in the NHS
- development of a strategy for public reporting of indicators that would focus on
  - defining the most useful content and format for multiple audiences
  - harmonising the multiple diverse public reports that currently exist
  - commission evaluation (formative and summative) of policies to improve quality and make recommendations as to how policies might be refined.

## Conclusion

Ten years ago the Government pledged to undertake an ambitious programme of reforms to make the NHS a healthcare system deserving of the confidence and loyalty of the English public. The building blocks for significant change are in place and there is no doubt that efforts have resulted in progress. We are now at the point where efforts to improve quality of care should be better coordinated and strengthened to create more solid progress in improving the quality of care for patients, and achieve more benefits for the investment made in the NHS.

## Blueprint for an NHS National Quality Programme 2009–12

- Form a national Quality Steering Group
  - articulate national goals for quality
  - agree NHS-wide set of quality of care indicators
  - submit an annual report to the nation
  - strengthen the national clinical audit programme
  - evaluate and refine the reforms for more impact on quality of care.
- Identify priorities and resources to improve the nation's health
  - identify national priorities to reduce avoidable morbidity/mortality;
  - analyse the resources required to tackle them
  - identify locally-defined priority areas.
- Standards and target-setting
  - broaden the scope of NICE
  - continue the development of care standards, such as in the National Service Frameworks
  - set targets for reducing unjustified variation.
- Data and informatics to support the National Quality Programme
  - develop a national strategy for reporting key indicators of quality
  - create a single locus for holding information on quality at the Department of Health/NHS executive
- develop electronic aids to help with clinical decision-making
- develop indicators of quality of care to support public reporting.
- Clinical leadership and professionalism
  - encourage rigorous peer review and clinical audit
  - support and develop appraisal and revalidation of professionals.
- Patient and public engagement
  - develop the 'expert patient' and shared decision-making approaches to care
  - encourage the use of patient-reported information on the outcomes and experience of their care.
- Refine incentives
  - refine payment by results and tariffs, together with GP and consultant contracts
  - introduce pay for participation, data provision and self-improvement.
- Regulation
  - distinguish the role of safeguarding and assurance from the roles of other bodies for organisational support and development.



## **SECTION ONE**

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# **POLICY ANALYSIS: THE NHS IN ENGLAND**



# CHAPTER 1

## A DECADE OF REFORMS TO IMPROVE THE QUALITY OF THE NHS

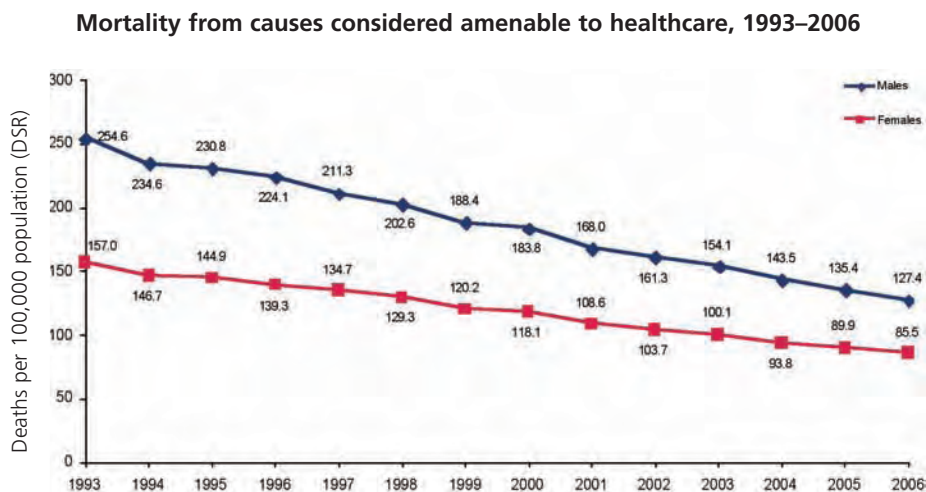
### Overview

In 2003, we reviewed England's 10-year quality agenda at its midpoint and described it as:

*the world's most ambitious, comprehensive, systemic and intentionally funded effort to create predictable and sustainable capacity for improving the quality of a nation's health care system.*  
(Leatherman and Sutherland, 2003: p.1)

We continue to believe this to be true. A further five years on, no one could justifiably deny that the past decade has seen an improvement in quality in the NHS. However, given the 10-year time horizon, the generous increase in resources dedicated to healthcare, and the ongoing goodwill on the part of the public, patients and health professionals, there are many who question whether progress has been as marked, as rapid, or as predictable as might have been expected.

Figure 1. Mortality from causes considered amenable to healthcare



Source: NCHOD (online)

Unquestionably, the last 10 years have seen significant changes in quality – changes that have made a real difference to patients and to the public. For example, between 1997 and 2006, the standardised mortality rate from diseases considered amenable to healthcare in England fell by 39 per cent, equating to 31,000 fewer deaths (see Figure 1).

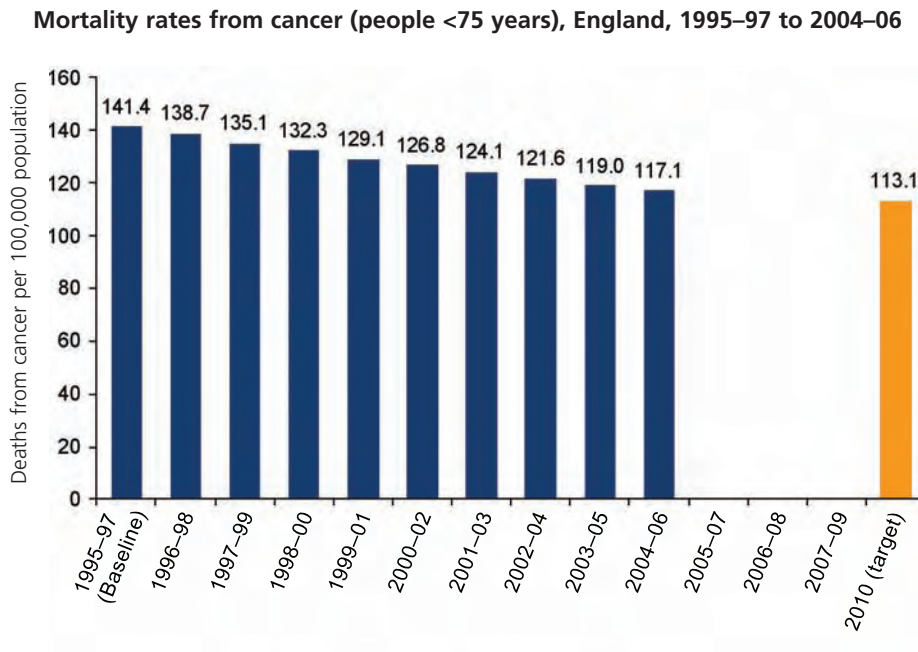
Probably the most often cited successes in England have been improvements in process and outcome measures for cancer and cardiovascular care.

### Cancer

The data shows that there has been a significant and sustained improvement in premature mortality rates from cancer (see Figure 2).

Waiting times for treatment have fallen, mitigating the pain and suffering of patients and their families. Currently, 99.9 per cent of patients with suspected cancer are seen by a specialist within two weeks of an urgent referral from their GP and 97.2 per cent are treated within two months of the decision to refer by their GP.

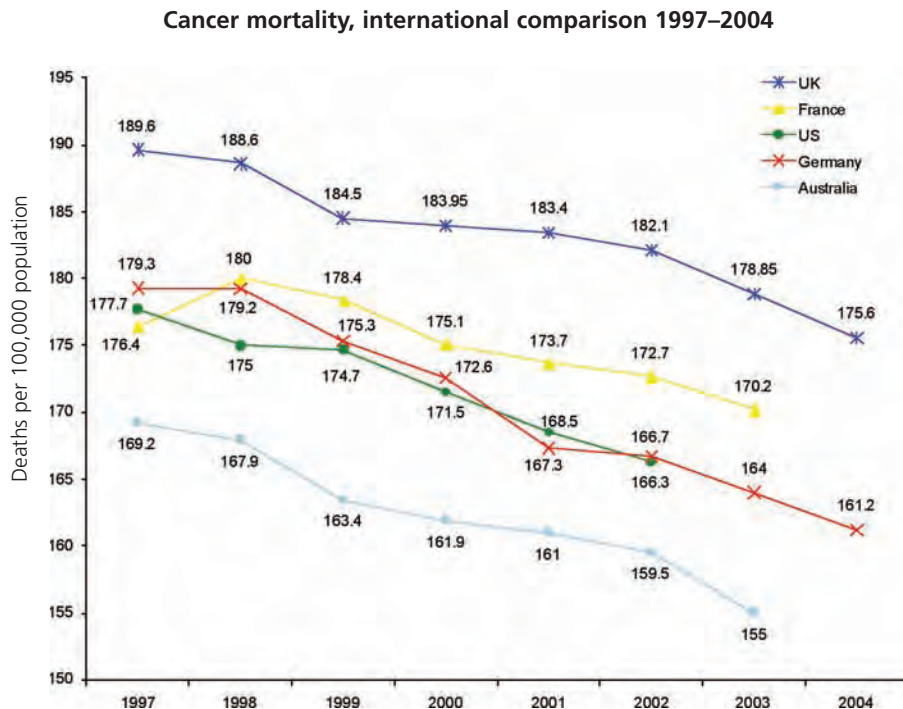
Figure 2. Premature mortality from cancer



Source: NCHOD

Putting the cancer statistics into an international context, however, raises questions about the relative scale of these achievements. Even with the significant reduction in mortality, the UK continues to lag behind other countries (see Figure 3). For the most part, the pace of improvement across comparator countries in recent years is similar to that seen in the UK – so the differential or ‘performance gap’ has remained largely unchanged. Some countries, however, are managing to achieve significant improvements over and above international trends. In cancer for example, Australia is achieving more rapid improvements, from a lower baseline mortality level.

Figure 3. International data on cancer mortality rates

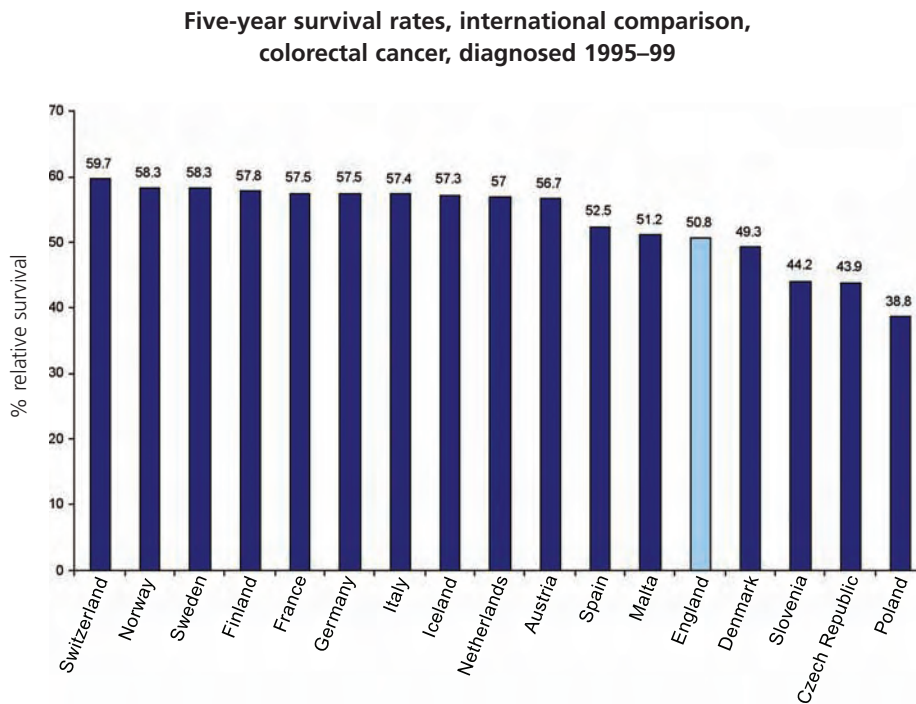


Source: OECD, 2007



Mortality rates are of course an indirect indicator of quality of care – influenced by lifestyle, economic and environmental factors that are beyond the control of the healthcare system. Survival rates provide a somewhat more direct indicator of quality, reflecting aspects of care such as speed and accuracy of diagnosis and timely access to efficacious treatment and clinical expertise. In 1989, the EURO CARE project was established in an attempt to measure and explain international differences in cancer survival in Europe. In August 2007, the latest data comparing five-year survival rates (that is, the proportion of patients that are alive five years after their cancer diagnosis) was published. England's survival rates for the most common cancers – colorectal, lung, breast and prostate – were substantially behind those in Western Europe (see Figure 4 for an example). Although there are some methodological and data collection limitations within EURO CARE, the relatively poor performance of England remains a cause for concern.

Figure 4. Five-year survival rates from colorectal cancer, European comparison

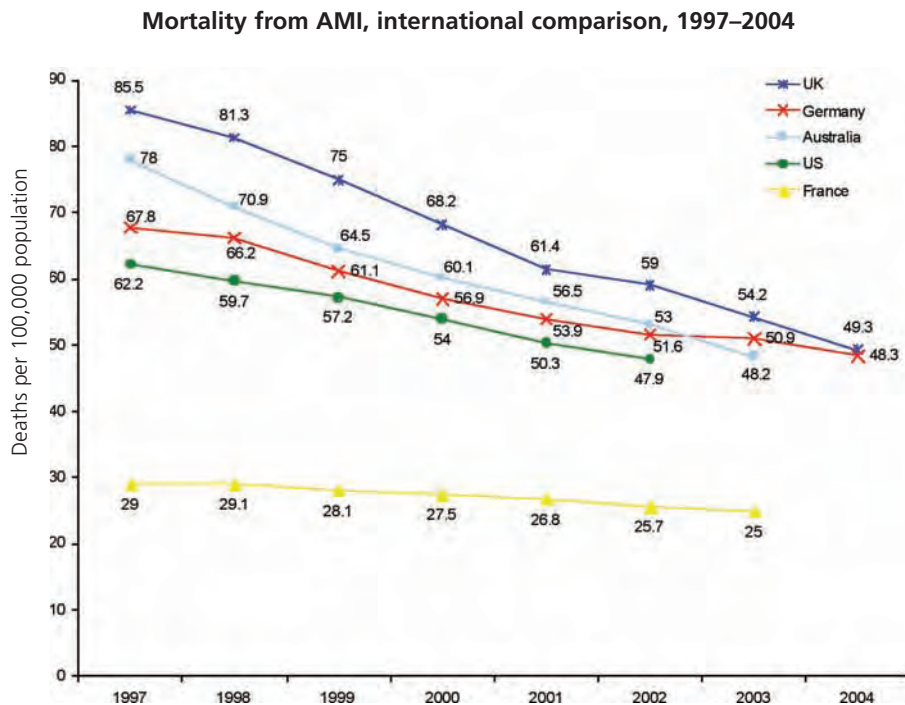


Source: Eurocare-4 (Berrino et al., 2007)

## Circulatory disease

Circulatory disease, and in particular cardiovascular disease, is widely considered to be one of the great successes of the NHS in the past decade. Across England, directly standardised mortality rates from acute myocardial infarction (AMI) were halved, from 77.69 to 38.42 deaths per 100,000, between 1997 and 2006 (NCHOD, 2008). This rate of improvement exceeds that seen in most other developed countries and UK performance is now comparable to that of Germany, Australia and the United States (see Figure 5).

Figure 5. International data on AMI mortality rates



Source: OECD, 2007

The data from these key clinical areas, cancer and circulatory disease, raises three important questions.

- Are the improvements as good as could have reasonably been expected, given the scale and complexity of the NHS as an institution; and the sustained period of underfunding that the NHS had endured prior to 2002?
- How much of the improvement – for example in mortality rates or enhanced practice (e.g. statin prescribing) – is broadly reflective of changes in healthcare delivery in many countries as opposed to being driven by the NHS reforms?
- Has a reliable capacity for systemic improvement been embedded in the NHS?

The selection of cancer and cardiovascular data offers a brief look at what are commonly used as areas of notable progress in England. Even in these exemplars, interpretation can be debated. However, inarguable is the fact that England has invested in and sustained a hugely ambitious and comprehensive reform agenda to improve the NHS.

## Early years

*The new NHS will have quality at its heart. Without it there is no fairness. Every part of the NHS and everyone who works for it should take responsibility for working to improve quality. (DH, 1997: para. 3.2)*

*The government's modernisation programme will be taken forward by putting quality at the top of the NHS agenda. The objective is to ensure fair access to effective, prompt high quality care wherever a patient is treated in the NHS. (DH, 1998: para. 1.10)*

In 1997, the Government announced its intention to craft a 'new NHS', placing quality of care as an explicit value joining the well-established aims of efficiency, effectiveness and equity. Quality became a principal design factor for modernising the NHS. Most of the key strategies employed over the past decade – National Service Frameworks, clinical governance; National Institute of Clinical Excellence (NICE), and the regulatory body currently known as the Healthcare Commission – were all outlined in *The New NHS: modern, dependable* published in 1997. A commitment to a 10-year quality agenda was made in 1998 with the publication of *A First Class Service: quality in the new NHS* (DH, 1998). The quality reforms were underpinned by a broad but somewhat ill-defined conceptualisation of quality:

*quality in its broadest sense: doing the right things, at the right time, for the right people, and doing them right – first time. (DH, 1997: para. 3.2)*

### Box 1: Priorities for the quality agenda as identified in 1998

- Clarification about the underlying assumptions regarding professional self-regulation versus government regulation
- Attention to incentives – defining importance, what exists and what needs to be defined
- Definition of clinical governance in operational terms
- Inclusion of primary care in all of the quality initiatives
- Design of a strategy to increase capacity, including data and information technology, human resources, and analytic expertise
- Engagement with the public through new communication and education capabilities

Source: Leatherman and Sutherland, 1998

In our prospective 1998 review, we identified a number of priority areas, both in terms of policy formulation and resource dedication, that would be critically important to realising the ambitions of the NHS's quality agenda (see Box 1).

Ten years on, it is sobering to note that in each of these critical areas, progress has been slow and laboured, and in various situations the implementation of programmes has been marred by serious conceptual or operational flaws. For example, doctors' incentives appear to have been based on faulty assumptions regarding existing levels of service provision, the ambitious information technology strategy is over budget and behind schedule, and primary care trusts are seriously hampered by continuous reconfigurations and arguably unrealistic expectations, particularly in terms of commissioning care and securing quality improvement across the system.

In 2003, we optimistically observed that an up-tick of performance across multiple measures could augur a growing systemic capacity for performance improvement. We noted that:

*mid-term overall performance is trending in the right direction, most particularly in those areas on which attention and effort has been focused by policy mandates, performance-reporting requirements and extrinsic incentives. (Leatherman and Sutherland, 2003: p.265)*

However, in 2008, the predictable and consistent progress which might have been expected is not clearly apparent. One view is that the capacity to improve predictably has been embedded and that continuing gains in quality are forthcoming. An alternative view is that the improvements seen to date are

discrete, explained by idiosyncratic efforts in selected areas, and that the systemic capacity for reliably better care is not yet proven.

Five years ago, we concluded the mid-term evaluation report with the observation that:

*buffering the NHS from political turbulence, continuing with planned funding increases, reducing the frequency and magnitude of unnecessary reorganisation, advancing the information infrastructure and continuing to put quality of care as central to modernisation efforts will make performance improvement more predictable, and the achievements sustainable. (Leatherman and Sutherland, 2003: p.276)*

These themes remain as topical in 2008 as they were five years ago.

## Political turbulence

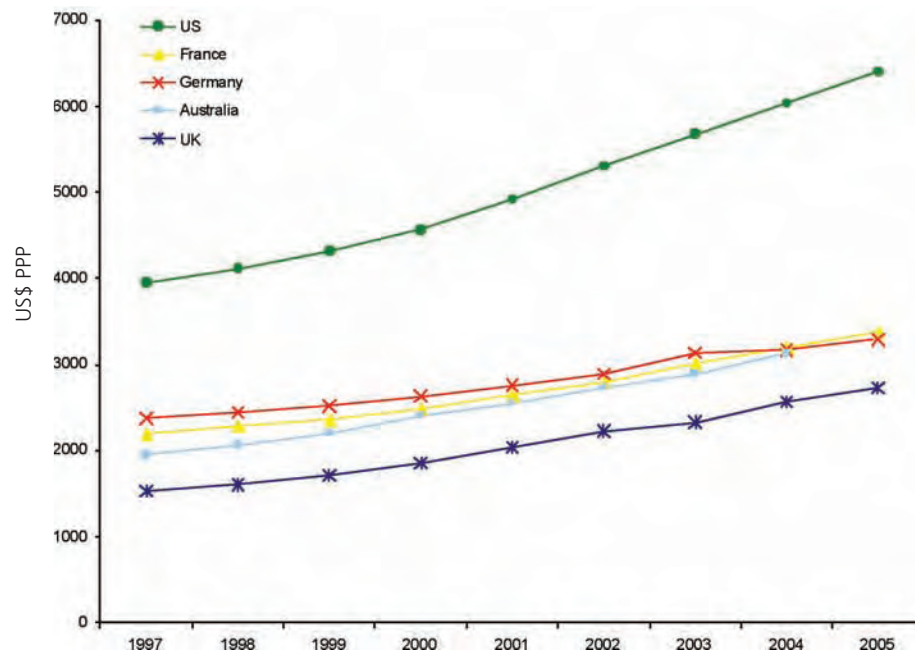
The NHS continues to be a key 'battleground' for politicians. It is entirely appropriate that there is political accountability for the health service, given that the NHS costs around £90 billion per year of taxpayers' money. In theory, robust systems of reporting and political accountability help provide a means for the public to influence the service they fund, via elected representatives. However, in practice, there are a number of problems with political interference in management of the NHS at all levels. First, because of election cycles, politicians are often overly concerned with short-term impacts rather than long-term goals. Political events interrupt continuity; for example, five different Secretaries of State for Health and a multitude of health ministers have been appointed over the past decade. Second, complex issues such as inadequacy of capacity, or rationing of healthcare services, are often oversimplified and reduced to 'soundbites' to score points off political opponents and ensure coverage in the media. Third, there is often a political imperative to reform the system, sometimes in ways that are unrealistically ambitious and costly both in terms of financial resources and staff goodwill, in order to 'make one's mark'. Too often this results in unceasing serial change with reform fatigue and subsequent cynicism in the health service. Fourth, the lack of adequate objective evaluations of reform ensures that political expediency often dominates over facts.

## Investment in the NHS

In 1997, health spending per capita in the UK was lower than in almost all other developed nations. As shown in Figure 6, Australia spent 28 per cent more than the UK in 1997; France 44 per cent more; Germany 56 per cent more and the US 159 per cent more. Around this time there was a growing consensus that sustained under-investment in the NHS had taken its toll on the service. In response, in April 2002 the Government announced a 7.4 per cent increase in expenditure in real terms each fiscal year between 2003/04 and 2007/08. This increase is reflected in Figure 6. In 2005, the UK still lagged behind other countries, but less markedly: France spent 24 per cent more; Germany 21 per cent more and the US 135 per cent more. Over the entire period, the UK had the greatest increase in expenditure (79 per cent); however, other countries also saw significant increases over the same period so that in 2005, the UK continued to lag behind.

Figure 6. Total expenditure on health per capita 1997–2005

**Total expenditure on health per capita (US\$ purchasing power parity), international comparison, 1997–2005**



	% increase 1997–2005
US	62.0
France	53.2
Germany	38.5
Australia	60.7
UK	78.6

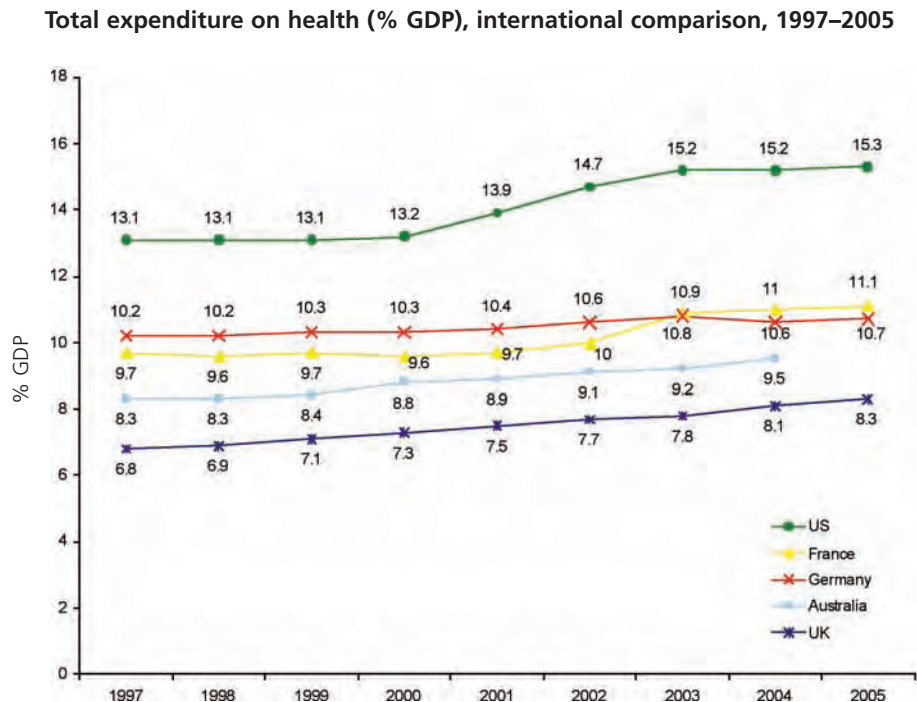
Source: OECD, 2007

Figure 7, instead of showing expenditure per capita, illustrates the percentage of gross domestic product (GDP) that is dedicated to health. It shows that between 1997 and 2005, the UK increased the percentage of GDP spent on health from 6.8 to 8.3 per cent – the largest increase across the countries shown. However, with the exception of Germany, other countries also increased the proportion of the national wealth spent on health by significant amounts, meaning that the UK in 2005 still lagged behind.

Looking at the UK in isolation, over the period 1997–2005, total spending on health increased from £55.5 billion to £101.5 billion (an 83 per cent increase).

Significant investment has been made in a wide range of areas both in terms of clinical care and bricks and mortar. For example, the Cancer Plan (DH, 2000a) pledged £570 million extra investment by 2003/04 (compared with 2000/01 baseline). In 2005/06, a total of £4.3 billion was spent on cancer services and the most recently released cancer plan promises £370 million by 2010. In some cases, buildings and technology have been improved (especially in socio-economically deprived areas). The 2007 report, *Rebuilding the NHS: a new generation of healthcare facilities*

Figure 7. Total expenditure on health (% of GDP)

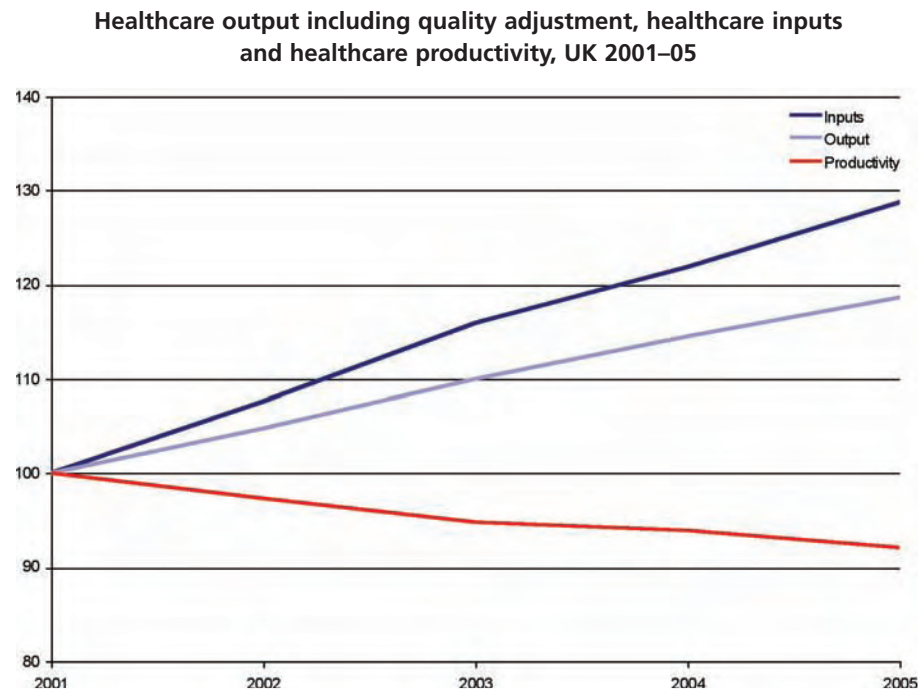


Source: OECD, 2007

(DH, 2007f) takes credit for the largest hospital building programme in the history of the NHS. Capital expenditure increased five-fold from 1997/98 to 2007/08 (£1.1 billion to £5.5 billion).

Increasingly, the value wrested from the significant growth in investment is questioned. There is evidence that the infusion of funding has not increased productivity even though capacity targets in the NHS Plan (DH, 2000b) (for example, increase surgeons by 60 per cent; finished consultant episodes increase by 5 per cent) have been met (ONS, 2008). Figure 8 illustrates this point. Drawing on an Office for National Statistics (ONS) study of productivity across the NHS between 2001 and 2005, it shows that while outputs have grown substantially, inputs have risen even more rapidly – meaning that productivity has fallen by almost 10 per cent.

Figure 8. Changes in inputs, outputs and productivity (2001 = 100 per cent)



Source: ONS (Lee, 2008)



There is widespread concern that much of the increased spending has gone to salaries which have not translated sufficiently into better services and patient outcomes. Of the £43 billion increase in investment in the five years after 2002, pay and price inflation accounted for 43 per cent (£18.9 billion) (Wanless et al., 2007). There were three major employment contracts introduced in the last five years: Agenda for Change (covering all nurses and non-clinical staff); and new contracts for hospital doctors (consultants) and general practitioners. Consultant pay under their new contract has risen by around 25 per cent, while the new GP contract has boosted average net income by 23 per cent. The cumulative additional cost of Agenda for Change from 2005/06 to 2007/08 has been around £1.8 billion. Derek Wanless, who led the study which is credited with convincing the Government to increase investment, wrote in 2007:

*what is clear is that thus far the additional funding has not produced the improvements in productivity assumed in the 2002 review – costs of providing health services have increased and there is patchy and conflicting evidence on the impact on productivity overall. (Wanless et al., 2007: p.xxxi)*

In essence, a large proportion of the extra money flowing into the NHS since 2002 has been absorbed by cost increases, rather than by an expansion or improvement in services (Appleby and Harrison, 2006; Martin et al., 2006).

## Constant flux and reorganisation

Major reorganisations are an enduring feature of the NHS landscape. Reconfiguration is distracting and costly. Significant changes have been made at primary care and regional levels. *The New NHS: modern, dependable* (DH, 1997) stated that PCTs (or primary care groups (PCGs), their forerunners) would typically serve 100,000 patients. In England this meant that around 500 PCGs took over from nearly 4,000 health authorities, fundholders, and locality commissioning groups (Rivett, 2007). The number of PCTs changed frequently and by 2006, it was announced that their number was to be reduced from 302 to 152 – approximately the level of the district health authorities that were phased out in 1999. Likewise, at the regional level, there has been considerable flux in responsibilities accompanied by reconfiguration. The number of strategic health authorities was reduced in 2006 from 23 to 10.

It is highly noteworthy that despite multiple oscillations, snapshots of the NHS structure in 1982 and 2007 are remarkable for their similarities in geographical level and number, although not function (see Box 2). One could legitimately question whether the multiple iterations of the past 25 years accomplished any benefit or merely added to expense, confusion and loss of goodwill among the NHS workforce.

### Box 2: Snapshots of NHS structure, 1982 and 2007

1982 NHS structure	2007 NHS structure
14 regional health authorities	10 strategic health authorities
192 district health authorities	152 primary care trusts
7 special health authorities	14 special health authorities

On the other hand, cynicism and fatigue about reorganisation should not deter acting on reconfiguration where evidence of patient benefit is compelling. For example, evidence suggests that some rationalisation of clinical services at the NHS trust level is needed for reducing avoidable morbidity and mortality, a situation highlighted by the review carried out by Lord Darzi and reported in *Healthcare for London* (NHS London, 2007a) which calls for greater investment in centres of excellence in order to optimise patient outcomes in major trauma, heart attack and stroke.

Moving forward, it is important to acknowledge that there are some fundamental and predictable tensions in large healthcare systems, most often manifest in controversy regarding the costs and benefits of centralising versus decentralising. Acknowledging this as an inevitable dilemma may be the most rational approach, rather than incessantly trying to resolve it by the latest organisational 'fix'.

## Challenges in developing the requisite information infrastructure

The past 10 years have seen a huge investment in information technology (IT). The National Programme for IT in the NHS (NPFIT) is the largest civilian IT programme in the world (Hendy et al., 2007), with expenditure projected to be £12.4 billion over 10 years to 2013–14 (Committee of Public Accounts, 2007a). The agency Connecting for Health is responsible for delivering the programme which has as its main features a new networking service providing broadband, electronic patient booking, electronic transfer of prescriptions, and a nationally accessible summary of patients' records.

Detailed and extensive evaluation has produced reports summarising serious concerns and deficiencies in IT. In June 2006, the National Audit Office (NAO) reported that NPFIT was facing important challenges in delivering systems to agreed timescales, ensuring involvement of NHS organisations in implementation, and gaining the support of NHS staff and the public (NAO, 2006). Following on from the NAO study, the Committee for Public Accounts released a report in 2007 which concluded that the piloting and deployment of the shared electronic patient clinical record was already running two years behind schedule. The Department of Health is unlikely to complete the programme anywhere near its original schedule. Faced with professional concerns about patient confidentiality, government ministers have accepted that elements such as the electronic record will be piloted rather than implemented across the board (Hendy et al., 2007).

Despite these difficulties, the UK does have some relative strengths in terms of IT capabilities compared to other countries. In particular, international comparisons show that the UK fares relatively well in the level of provision of IT applications for numerous essential functions, particularly in primary care (Commonwealth Fund, 2006).

## Introduction of market forces

The Government in 1997 stated that:

*the internal market was a misconceived attempt to tackle the pressures facing the NHS. It has been an obstacle to the necessary modernisation of the health service. It created more problems than it solved. That is why the Government is abolishing it. (DH, 1997: p.12, para. 2.9)*

Despite this early declaration, the past 10 years have seen market mechanisms widely utilised.

Private investment in NHS infrastructure has been introduced along with creating increased supply through the private provision of selected health services in certain locales. The Government has repeatedly claimed that the introduction of new providers, such as Independent Sector Treatment Centres (ISTCs), made a significant contribution to improving access to care – reducing both waiting list and waiting times. However, departmental evidence to the Health Committee (Health Select Committee, 2006) acknowledged that this claim could not be substantiated, even in the case of cataract surgery where a large proportion of the extra capacity has been dedicated (Wanless et al., 2007). In August 2007, health secretary Alan Johnson

announced there would be no third wave of ISTCs. Rather than adding needed capacity, they were seen to be taking work and income away from local NHS trusts. Overall, the thrust behind market forces may be moderating under the Brown government; however, in recent months there have been several announcements about increasing private sector provision of GP services.

Patient choice has become a centrepiece of reform, with the hope and expectation that patients and the public will catalyse improvements in health services through the selection of better performing providers, creating the pressure of competition to motivate substandard hospitals and physicians. International experience, particularly in the US, has shown that this hope is unlikely to be realised.

## Summing up

Plaudits are due to the Government for the will and courage to admit serious performance problems in the NHS and to pursue a bold and ambitious strategy for systemic improvement over a decade. However, the imperative to improve the quality of healthcare in England remains as critical as ever.

The “NHS systemic capacity for predictable improvement” that we augured in 2003 cannot yet be judged as definitive.

Although noting some significant successes, improvement is not commensurate with investment (Wanless et al., 2007). Money – even in very significant amounts – has not been able to overcome inadequacies of environment, culture and resource distribution.

The current health sector environment is compromised by numerous ongoing issues.

1. An ideological rift between those who believe in ‘command and control’ and those who argue for devolvement to local levels. Central direction from the Department of Health has been widely criticised, even though many of the most dramatic performance improvements have been in areas driven from the centre, such as access targets. This stand-off between central vs local must be redefined as a continuum rather than a polarity, so that initiatives appropriate for central push are identified alongside those that need more definition from local levels to co-exist harmoniously.
2. A predisposition to structural change and reconfiguration that undermines morale and produces widespread confusion.
3. A ‘flavour of the month’ tendency, where certain discrete instruments are infused with magical powers and implemented with haste as the sword that will slay the bad performance monster. Examples include the use of patient choice as a omnipotent force for driving up quality, which defies the experience and evidence base of the US; and more recently emphasis on, and what runs the risk of being blind faith in, primary care commissioning.
4. Perennial problems with coordination of care, duplication of effort and territorialism – leading to inefficiencies in the system and suboptimal care pathways.
5. Strong policy conceptualisation and articulation that is too often unmatched by the requisite competence in implementation. For example, investment in IT, local operationalisation of clinical governance, and financial incentives – all were laudable in their intent to enhance quality, but implementation continues to be challenging.
6. Data deficiencies remain problematic. Increasingly, data is available both to examine discrete quality of care issues, and to aggregate for analysis of variation patterns and benchmarking across NHS organisations. However, much of the data is collated and reported by government or quasi-governmental bodies, thus hampering the perception, and sometimes the reality, of independent, credible and reliable reporting on quality in the NHS. The contestability of the data results in debates about the accuracy of the reporting as opposed to constructive discussion of strategy for predictable improvements.

## Assessing the NHS reforms

It is a daunting task to provide a comprehensive and defensible assessment across the abundance of policies promulgated and programmes implemented in the last 10 years. Evaluation is complicated by the confluence of multiple reforms; all being pursued in parallel, thereby making attribution to individual elements impossible. In few cases was good baseline data collected prior to the implementation of change. Nevertheless, there is a wealth of data now available to underpin an attempt to evaluate the broad impact of reforms and recommend a course of action for the future. This report examines the accomplishments and deficiencies of the quality agenda in two ways. First, through policy analysis informed by interviews and by use of an analytic framework: and second, by presentation of data to evaluate quality through six key domains: effectiveness, access, structural capacity, safety, patient-centredness and equity.

England is an exemplar for other healthcare systems of the world seeking to improve performance and deliver quality care and, as such, should be subject to critical analysis and study. At this juncture, with a decade of experience, an independent and dispassionate look at the NHS quality reforms is important not only for England, but for a worldwide audience. Furthermore, the very substantial investment in NHS reforms, which has produced real benefits in some areas, can be leveraged significantly by refining the reform agenda and newly defining a coherent and comprehensive national quality programme.

## CHAPTER 2

# EXAMINING THE PIECES: CONTRIBUTIONS AND LIMITATIONS

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This chapter examines key reforms of the quality agenda, including policies, initiatives, organisations and programmes. It is titled 'Examining the pieces' to highlight a central thesis of this evaluation: namely, that the 10-year reform agenda has produced an abundance of activities but they do not necessarily cohere into an overall integrated programme. When asked to describe the quality strategy of England, the most common interviewee response was to name some of the individual policies and initiatives. This is not surprising given the fact that there is not a well-defined national quality programme – if existent at all, it is simply a composite of the many discrete activities.

The chapter draws primarily on extant commentaries, reports and publications together with a series of face-to-face interviews with key informants. The descriptive assessments in this section should be viewed alongside the quantitative data presented in the accompanying chartbook (Section Two).

Before focusing on individual reforms, however, it is instructive to review some of the most significant changes which have

occurred in the macro-environment. This is the landscape within which individual reforms flourish, languish or fail, and an understanding of the wider context aids interpretation and evaluation.

### Macro-environment

The context in which the reforms have been pursued distinguishes England from many other countries. The features of the macro-environment which have supported reform include the following.

- The **will and courage of the Government to publicly acknowledge NHS problems** in the quality of healthcare and service delivery. This distinguishes it from many countries around the world. Government White Papers issued as early as 1997 and 1998 clearly laid out the aspiration to become a 'first class service' and admitted the very significant challenges to doing so.
- **Quality was made an explicit priority**, securing its prominence alongside the values of efficiency and equity which historically had been the hallmarks of the NHS.

- **A five-year infusion of funding** committed by the Government after acknowledging that historical underfunding of the NHS was a contributor to failing performance and represented a barrier to achieving better healthcare.
- **Dramatic changes in the regulatory environment** occurred through the creation of new institutions for inspection, standards monitoring and appraisal of NHS institutions and health professionals.
- **Improvements in transparency and accountability**, as compared to previously in the UK and currently to other countries.

On the negative side of the ledger, and creating a constant drag on the momentum of the reforms, are a number of compromising factors and behaviours:

- **a crowded landscape with an excess of initiatives and organisations**, resulting in confusion, contested responsibilities and possible dilution of effect for the reforms that are working
- **system levers are perceived pejoratively** as command and control mechanisms despite credit given for influencing improvements in care
- **crises** which preoccupy leadership, cause distraction throughout the NHS and result in loss of momentum for systemic improvements, e.g. deficit requiring financial turnaround (2005–06) and the Modernising Medical Careers initiative (2007)

- **a tendency to over-promise and underdeliver**, undermining the credibility of the reform agenda, e.g. the failure to deliver IT on time; promising changes to the public such as end of mixed-sex wards; and ambitious expectations for PCTs to deliver wholesale improvement
- **technical and administrative difficulties of translating policy into practice**, illustrated by incentives and payment changes
- **clinicians disaffected and lacking confidence in reforms**. Despite the unprecedented increase in investment in the NHS and significant increases in pay, clinicians are not as engaged as needed and are disappointed with NHS reform (BMA, 2008)
- **a lack of robust evidence on impact** with few strong evaluative studies available to inform policy decisions.

## The individual reforms

The acknowledgement in the late 1990s of a faltering NHS produced a plethora of reforms which included policy promulgation, legislation, new institutions, system-wide organisational development, information infrastructure building, estate enhancements, centralised planning, standard setting and monitoring, service reconfiguration, and more recently the devolution of new responsibilities and accountabilities to localities.

Department of Health (2005, 2006a) publications have in the last few years described the current health reforms as focused on four key areas:

1. demand-side reforms – patient choice; strengthening commissioning
2. supply-side reforms – establishing plurality and diversity of providers; creating autonomous foundation trusts; private sector financing
3. transactional reforms – changes to funding flows and provider payments (Payment by Results and Quality Outcomes Framework)
4. system and regulatory reforms – includes standard setting, inspection/accreditation, licensing.

Although this retrospective characterisation of the broad health reform agenda sounds coherent, across a 10-year timeframe the landscape has often seemed unwieldy, diffuse and ever-changing. Notably, it is almost impossible to attribute causality where performance has changed, either positively or negatively, for two principal reasons: multiple reforms were introduced in parallel; and scant attention was given to rigorous measurement of effect. However, even with these caveats, it is possible to comment on some of the discrete reforms associated with conditioning the macro-environment and impacting behaviour change or system performance in particular areas.

Table 1 identifies some of the key elements of the reforms. We have organised the discrete initiatives, policies, organisations and programmes into a functional classification of eight categories in order to clarify what the primary contributions could or should be. The list aims to be indicative, not fully inclusive, of the most significant interventions.

In this section, we take a closer look at some of the discrete pieces of the reform architecture – particularly those which were implemented with an explicit intention to improve quality of care and that are likely to merit continuance in the National Quality Programme proposed in Chapter 4.

## National Institute for Health and Clinical Excellence (NICE)

NICE was introduced in the White Paper *The New NHS: modern, dependable* (DH, 1997). Its stated purpose was:

*to give a strong lead on clinical and cost-effectiveness, drawing up new guidelines and ensuring they reach all parts of the health service. (para. 3.5)*

It is distinguished as both one of the earliest emerging organisations and one having a relatively stable remit, though expansive in scope. Its debut was met with concerns regarding rationing and cost-control, but NICE has earned wide respect and is often cited as one of the reforms which has contributed most positively to the quality agenda. Acceptance and respect have been derived from its consensus processes, the evidence-based methodologies consistently and transparently utilised, as well as an overall business model serving multiple constituencies.

NICE is distinctive in being one of the best evaluated initiatives, having commissioned a number of external studies into the implementation and impact of its advice. The NICE Implementation Directorate also produces uptake reports which assess the level of compliance with guidance across the NHS.



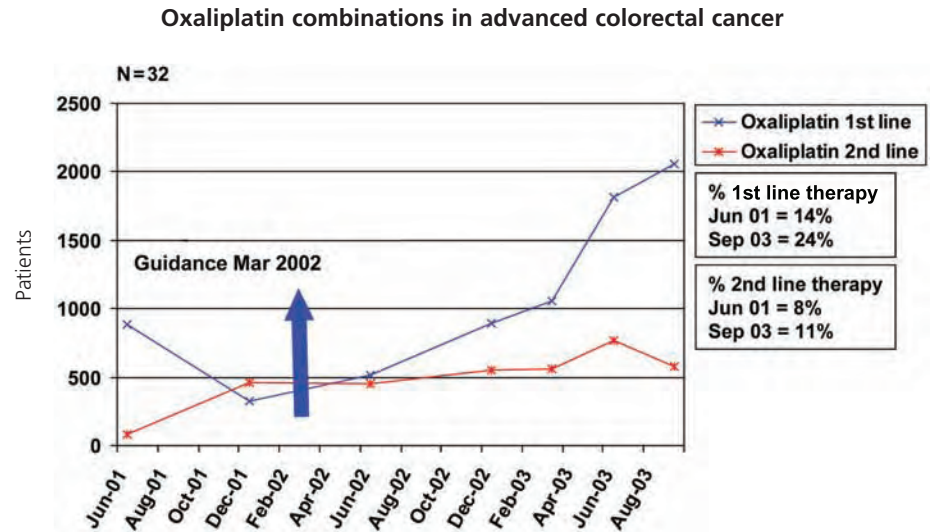
Table 1. Major functions of quality reform with selected individual interventions

Key functions	Examples of discrete reforms
Standard-setting and monitoring	National Institute for Health and Clinical Excellence (NICE) National Service Frameworks (NSF) Core and developmental standards (set by the Department of Health) Clinical audit
Target-setting	Public Service Agreements
Clinical governance	Legislation
Regulation	<p style="text-align: center;"><b>Institutional</b></p> Healthcare Commission (HCC) Monitor Audit Commission  <p style="text-align: center;"><b>Individual</b></p> National Clinical Assessment Authority General Medical Council (GMC) Appraisal and revalidation
Patient/public engagement	Patient choice of providers Expert Patient Programme Patient and Public Involvement (PPI) Patient Advice and Liaison Services (PALS)
Payment and incentives	Payment by Results (PbR) GP contract Consultants' contract Agenda for Change
Public reporting	Dr Foster League tables Star ratings (now superseded by the annual health check)
Commissioning	NICE commissioning guides

NICE guidance is driving change but at different rates for different disease areas. NICE's influence on evidence-based prescribing is illustrated by an evaluation of the impact of guidance issued on the treatment of advanced colorectal cancer. Three different recommendations were made for three different products and in each case the corresponding change in use of product has been demonstrated. Oxaliplatin was recommended as a first-line treatment and its usage as a first choice agent has increased (Figure 9). Irinotecan was recommended as a second-line agent; first-line use has declined as second-line use has increased (Figure 10). Finally, Raltitrexed was not recommended and no prescribing was detected.

In a number of areas, NICE has been highly successful in securing improvement in quality. However, in the process of its annual health check of NHS trusts, the Healthcare Commission reports that one of the most common self-declarations of non-compliance is with respect to implementing NICE guidance. NICE can guide commissioning and clinical decisions but budgetary constraints at a local level mean that it is simply not possible to fund all NICE guidance, as well as maintain existing services. This conundrum is yet to be resolved.

Figure 9. The impact of NICE recommendations on Oxaliplatin prescribing in colorectal cancer



Recommended 1st line in advanced colorectal cancer with resectable liver metastases  
 NICE-based estimate = 3,254 patients  
 Projected number of patients = 1st line: 2,057; 2nd line: 579

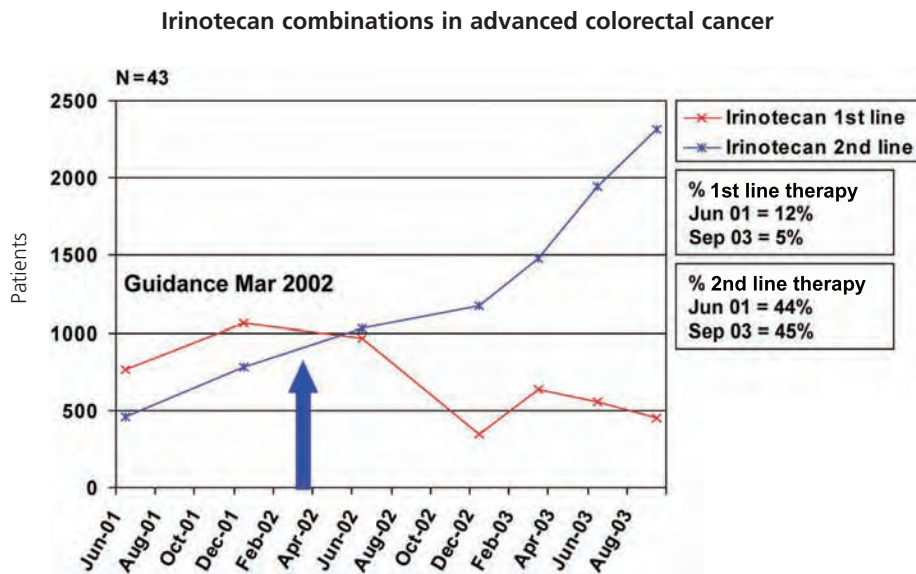
Source: NICE (Abacus International, 2005)

However, patient and professional groups as well as the pharmaceutical industry have highlighted what they regard as failings, such as the slow release of guidance and perceived unfairness in recommendations. The very nature of its role means that despite widespread acceptance and growing respect, NICE is not always insulated from controversy, even rancour, in respect to individual judgements about discrete biomedical technologies or pharmaceuticals. The decisions of NICE are often appealed with high visibility in the media.

Though supportive and complimentary of NICE, the Health Select Committee (2007a) voiced concerns in a number of areas including slowness in publication of guidance and insufficient attention to existent and cost-ineffective therapies. Of most importance may be the criticism of the threshold used to decide whether a treatment is cost-effective.

NICE occupies an enduring position in the overall quality strategy for the NHS and is attracting worldwide interest as a model, even in America, which rarely looks to the UK for policy reforms to adopt.

Figure 10. The impact of NICE recommendations on Irinotecan prescribing in colorectal cancer



Recommended 2nd line in advanced colorectal cancer after standard 5FU combination has failed. Potential 12,000 patients based upon NICE estimates  
 Projected number of patients = 1st line: 450 patients; 2nd line: 2,314

Source: NICE (Abacus International, 2005)

## National Service Frameworks

The term ‘National Service Frameworks’ (NSFs) was first used in 1997 where they were described as a means “to help ensure consistent access to services and quality of care right across the country” (DH, 1997: para. 3.5).

NSFs are long-term strategies for improving care of specific clinical conditions or targeted populations. The purpose and goals of NSFs are to modify delivery of health and social care by:

- setting national standards
- identifying strategies and key interventions for a defined service or care group
- establishing ways to ensure progress within an agreed timescale
- developing measures to raise quality and reduce unjustified variations.

*The NHS Plan* of 2000 (DH, 2000b) re-emphasised the role of NSFs as drivers in delivering the ‘Modernisation Agenda’. Each NSF was developed with the assistance of an external reference group (ERG), which brought together health professionals, service users, health service managers, partner agencies, and other advocates. This inclusive process is widely seen to have been one of the key strengths of NSFs, and to have contributed to their legitimacy and effectiveness in securing quality improvements.

The rolling programme of NSFs, launched in April 1998, covers:

- coronary heart disease
- cancer
- paediatric intensive care
- mental health
- older people
- diabetes
- long-term conditions
- renal services
- children
- chronic obstructive pulmonary disease (COPD).

NSFs are widely credited as one of the most successful reform mechanisms for quality improvement, though some NSFs have been notably more influential than others for improving quality of care. Those cited most often are the cancer NSF, which actually was a precursor of NSFs as the Calman-Hine Framework published in 1995 and published as the National Cancer Plan 2000 (DH, 2000) and the coronary heart disease NSF. Substantiating the positive role of the cancer and coronary heart disease (CHD) NSFs are improvements in access and reductions in mortality (see Section Two: Chartbook).

Other successes include mental health. A recent government report highlighted the changes in community care catalysed by the NSF (Appleby, 2007). Crucially important has been the establishment of:

- 343 crisis resolution teams (home treatment) in contact with about 100,000 patients per year – resulting in falling hospital admissions;

- 252 assertive outreach teams providing intensive support in the community to patients with complex needs (e.g. drug misuse);
- 118 early intervention teams for young people with first-time severe mental illness for rapid assessment and treatment, leading to better outcomes.

The WHO European Regional Director for Mental Health, Matt Muijen, speaking in 2006, asserted that mental health services in England are better funded, better structured, and better supported than anywhere in Europe: “No country has it all as England has” (Muijen, 2006).

NSFs have had uneven impact and influence in clinical practice, healthcare delivery and resource management. This may be grounded in the variability in the processes and substance of different NSFs. The term ‘NSF’ has tended to be used as shorthand for what is actually a set of interventions beyond a written policy document. The NSFs varied substantially in a number of characteristics, including:

1. scientific and unambiguous evidence base
2. investment in convening expert groups and consensus building
3. definition of explicit and quantifiable standards
4. attributes of appointed clinical leadership
5. aggressive publication and dissemination
6. ring-fenced funding
7. use of targets and public reporting for performance monitoring
8. alignment with incentives and payment methods.

Careful analysis is needed to understand fully the basket of interventions that constituted implementation of the various NSFs. Such analysis may explain the uneven levels of influence on practice and associated impact on quality.

Although enjoying wide support, NSFs have become a victim of the controversy and conflict surrounding centrally directed initiatives, and the label of NSF is in danger of being discarded. To damage the positive brand established in NSFs would be a mistake. Efforts should be dedicated to continuing the use of NSFs as a linchpin in the national quality strategy. Moving forward, the strategy for future development of NSFs should address the following important questions.

1. In what clinical conditions or populations is the NSF strategy best suited?
2. What are the cost–benefit implications for implementing NSFs in different clinical areas, i.e. ‘where is the biggest bang for the NHS buck?’
3. What set of supportive actions/interventions should routinely accompany implementation?
4. What are the appropriate roles for NSF design and implementation at all levels of the system: national, regional strategic health authority, local (PCT and NHS Trust) and individual practitioner?

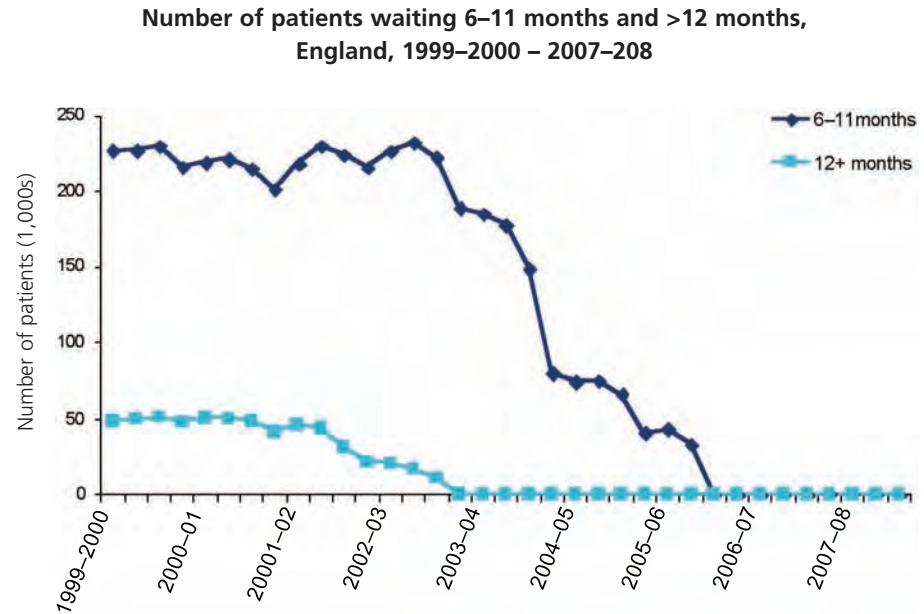
## Targets

Although targets are much maligned, they are increasingly, if somewhat begrudgingly, acknowledged to have been one of the most effective mechanisms in effecting sustained improvements for selected areas.

As powerful levers for change, it is important to balance the reliability of targets in securing some types of change, with the inevitable untoward consequences that can occur when they are used. Access and capacity are two domains where changes appear amenable to target setting (Figures 11 and 12). Notable improvements – linked to, if not caused by, targets – have also occurred in important clinical processes of care and related outcomes in conditions such as cancer, heart disease, mental health and paediatric intensive care (see for example, Figure 13).

Targets were introduced and implemented in multiple ways and at all levels of the NHS. Those with the highest visibility, and arguably the most cogency, were the Public Service Agreements (PSAs) introduced by the Labour government to articulate expected improvements in public services that would be achieved with extra investment. PSAs were first published in the HM Treasury White

Figure 11. Inpatient waits – response to target



Source: Department of Health

Paper, *Public Services for the Future: modernisation, reform, accountability* (1998), and subsequent spending reviews in 2000, 2002, 2004 and 2007 revised spending plans and set new quantifiable targets.

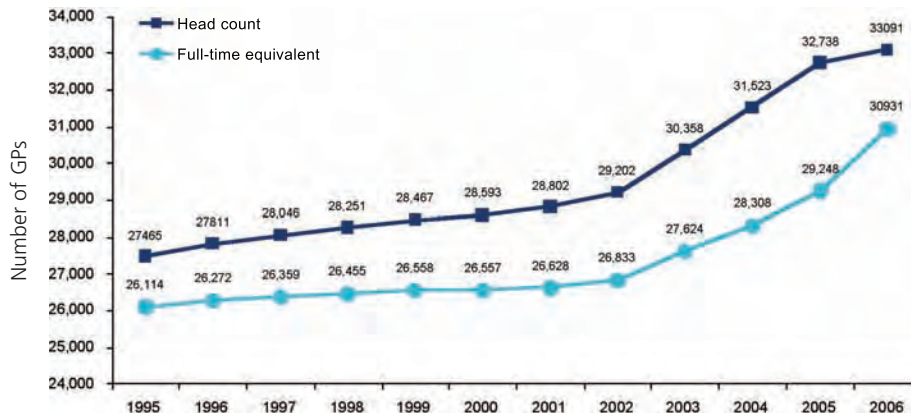
Although the PSA targets have had primacy among the reforms, there have been many other targets and pledges made over the past 10 years, such as those published by the Department of Health in *The NHS Plan* commitments (DH, 2000b) and *National Standards, Local Action: health and social care standards and planning framework 2005/06–2007/08* (DH, 2004).

Target-setting may represent the most hotly-debated reform initiative. So much controversy and conflict has been generated that the Government has repeatedly been on the defensive, backing away from the use of targets even in the face of UK experience that targets can compel positive change. This subject begs for a dispassionate look at the data on when and where have targets been associated with improvements in performance.

Table 2 illustrates progress in the PSA targets, noting what has been accomplished, whether progress has occurred, and what performance has been sustained or receded. It shows that

Figure 12. Increases in staffing in response to targets – general practitioners

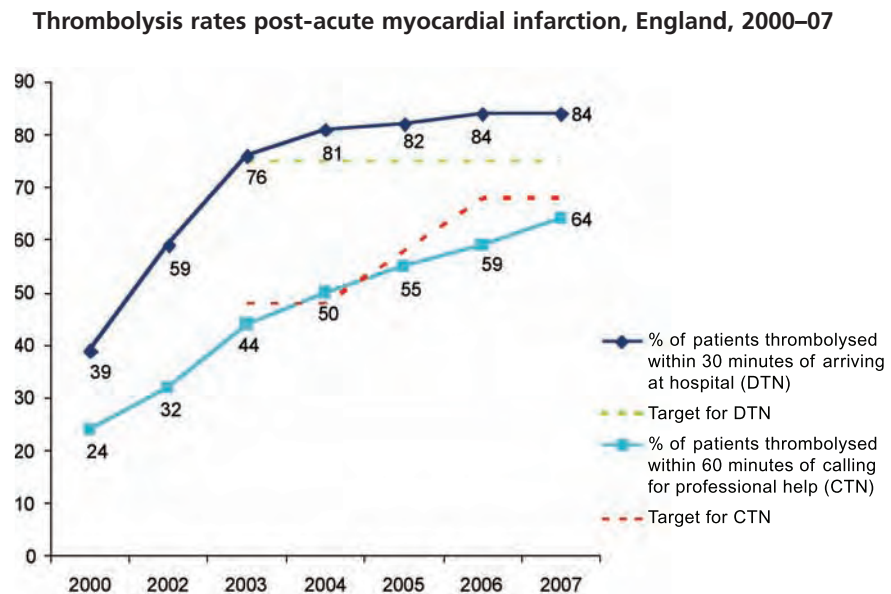
**Number of general practitioners (head count and full-time equivalent), England 1995–2006**



Source: NHS Information Centre, 2007

many of the targets have been successfully met. Inevitably, performance attainment raises questions of whether the improvement was a secular trend explained by many other variables or whether, and to what extent, the actual setting of a target was the influential agent for change. Other important questions include the independence of the data used to monitor progress; occurrence of untoward consequences; and whether the targeted level of performance was legitimate – set at levels either too ambitious or not ambitious enough. Attainment, as reflected in Table 2, seems most pervasive in areas which are amenable to central ‘command and control’ performance management such as waiting times. There has been less success in those areas where intersectoral policy and actions are needed or where complex social or behavioural change is required, such as teenage pregnancies or reducing inequalities in access and health outcomes. A caveat must be noted; the data reported is from the Government and has not been independently validated.

Figure 13. Thrombolysis targets in acute myocardial infarction



Source: Royal College of Physicians, 2007



Table 2. Summary of progress against Public Service Agreement targets

PSA target	Outcome to date
Increase life expectancy at birth in England from 1995–97 baseline of 75.0 years for males and 79.9 years for females, to 78.6 years for males and 82.5 years for females by 2010	<b>PROGRESS:</b> For 2004–06, life expectancy in England at birth was: 77.2 years for males; 81.5 years for females.
Reduce health inequalities by 10% by 2010, as measured by infant mortality and life expectancy at birth.	<b>UNDERACHIEVING TARGET:</b> Infant mortality rate among routine and manual groups is now 17% higher than in the total population. The baseline figure was a 13% difference. Relative gap in life expectancy between England and spearhead groups* in 2004–06 was 2% wider for men and 11% wider for women from baseline 1995–97 (see charts on pp.240, 242 and 243).
Substantially reduce mortality rates by 2010; from heart disease by at least 40% in people under 75.	<b>ACHIEVED:</b> In 1995–97: 141.0 deaths per 100,000 population fell to 84.2 deaths per 100,000 in 2004–06. This corresponds to a fall of 40.3% (see chart on p.114).
Reduction of 40% in inequalities gap in mortality from heart disease between the spearhead group* and the whole population.	<b>PROGRESS:</b> The inequality gap has reduced by 32%, from a baseline absolute gap of 36.7 deaths per 100,000 population in the period 1995–97 to 24.9 deaths per 100,000 population in the period 2004–06. The relative gap however has grown larger (see chart on p.246).
Substantially reduce mortality rates by 2010: from cancer by at least 20% in people under 75.	<b>PROGRESS:</b> 1995–97 baseline for those under 75 in England was 141.2 deaths per 100,000 population. By 2004–06 the rate had decreased by 17.1% to 117.1 deaths per 100,000. If the trend continues, the target will be met. (See chart on p.140)
Reduction of 6% in the inequalities gap in mortality from cancer between the spearhead group and the whole population.	<b>PROGRESS:</b> The inequality gap has reduced slightly from a baseline absolute gap of 20.7 deaths per 100,000 population in the period 1995–97 to 18.4 deaths per 100,000 population in the period 2003–05. This represents a reduction, in absolute terms, of 11.3%. The relative gap, however, remains unchanged (see chart on p.245).

PSA target	Outcome to date
Substantially reduce mortality rates by 2010; from suicide and undetermined death by 20%.	<b>UNDERACHIEVING TARGET:</b> 1995–97 baseline was 9.2 deaths per 100,000; in 2004–06 there were 8.3 deaths per 100,000 – representing a 10% decrease. If the current trend continues, the target for 2010 will not be met.
Reduce adult smoking rates to 21% or less by 2010.	<b>PROGRESS:</b> Proportion of adults smoking had fallen from 27% of the population in 2001 to 24% in 2005.
Reduce smoking prevalence among those employed in routine and manual jobs to 26% or less	<b>PROGRESS:</b> Prevalence fell from 33% in 2001 to 31% in 2005.
Halt rise in obesity among children under 11 by 2010.	<b>UNDERACHIEVING TARGET:</b> In 2002–04, the prevalence of obesity among children aged 2–10 years was 14.9%. Equivalent data for the period 2003–05 also showed a rate of 14.9%.
Reduce the conception rate for under-18s by 50% by 2010 (using 1998 as baseline).	<b>UNDERACHIEVING TARGET:</b> Between 1998 and 2005, the conception rate per 1,000 females aged 15–17 years fell by 11.4% from 46.6 to 41.3. Progress is undershooting the target trajectory.
Improve health outcomes for people with long-term conditions by offering a personalised care plan for vulnerable people most at risk; and reduce emergency bed days by 5% by 2008.	<b>ACHIEVED:</b> Between 2003–04 and 2006–07, emergency bed days decreased by 10.1%.
By end 2008 no waits of more than 18 weeks from GP referral to the start of hospital treatment or other clinically appropriate outcome (for clinically appropriate patients who choose to start their treatment within 18 weeks).	<b>PROGRESS:</b> Data for admitted patients showed that in March 2007, 48% of patients were seen in 18 weeks or less, increasing to 69% in December 2007. Data for non-admitted patients, first published in August 2007, shows that 76% of non-admitted patients waited 18 weeks or less.
Increase participation of drug users in treatment programmes by 100% by 2008.	<b>ACHIEVED:</b> The number of people receiving structured drug treatment in England increased by 130% from 1998–99 to 2006–07.

PSA target	Outcome to date
Increase year-on-year the proportion of users successfully sustaining or completing treatment programmes.	<b>PROGRESS:</b> In 2006–07, 80% completed drug treatment or were retained at least 12 weeks. This was an increase from 76% in 2005–06.
Secure sustained annual national improvements in NHS patient experience by 2008, as measured by independently validated surveys, ensuring that individuals are fully involved in decisions about their healthcare, including choice of provider.	<b>MIXED PROGRESS:</b> The aggregated figures from patient surveys suggests small improvements in survey results for adult inpatients' primary care and community mental health services. There has been a small deterioration in the quality of patient experience as determined by the outpatient survey.
Increase proportion of older people being supported to live in own home by 1% annually in 2007 and 2008. Increasing proportion of those supported intensively to live at home to 34% of total of those being supported at home or in residential care by 2008.	<b>PROGRESS:</b> The number of older people supported intensively to live at home in 2005–06 increased to 33.8% of total supported by councils in residential care and in their own homes.

\* The spearhead group is made up of 70 local authorities and 62 primary care trusts, based upon the local authority areas that are in the bottom fifth nationally for three or more of the following five indicators:

- male life expectancy at birth
- female life expectancy at birth
- cancer mortality rate in under 75s
- cardiovascular disease mortality rate in under 75s
- Index of Multiple Deprivation 2004 (Local Authority Summary), average score

Source: Adapted from Department of Health, 2007a

## Clinical governance

Clinical governance is a construct first introduced in 1997, in *The New NHS: modern, dependable*.

*Professional and statutory bodies have a vital role in setting and promoting standards, but shifting the focus towards quality will also require practitioners to accept responsibility for developing and maintaining standards within their local NHS organisations. For this reason the Government will require every NHS Trust to embrace the concept of ‘clinical governance’ so that quality is at the core, both of their responsibilities as organisations and of each of their staff as individual professionals... Chief Executives will carry ultimate responsibility for assuring the quality of the services provided by their NHS Trust, just as they are already accountable for the proper use of resources. (DH, 1997: paras 6.12 and 6.13)*

It was further defined as “a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish” (DH, 1998).

A statutory ‘duty of quality’ shared by all providers of NHS services was established in the Health Acts 1999 and 2003 with clinical governance as a principal vehicle for accomplishment. It has been described as a concept that requires recognition: that healthcare organisations have a corporate responsibility to strive for quality improvement, as well as new structures and processes to actualise the responsibility.

The Health Service Circular on Clinical Governance from the Department of Health (DH, 1999) clarified what was meant by clinical governance operationally, describing four main elements:

- clear lines of responsibility and accountability for clinical quality
- clear policies aimed at managing risks
- procedures for all professional groups to identify and remedy poor performance
- a comprehensive programme of quality improvement activities including:
  - clinical guidelines/evidence-based practice
  - continuing professional development/lifelong learning
  - clinical audit
  - effective monitoring of clinical care
  - research and development.

In order to support the policy and legislation, programmes were put in place to help operationalisation within the NHS and to monitor compliance. Among efforts launched by the Department of Health to support implementation was a Clinical Governance Support Team (CGST) (1999 to 2008) to educate, advise and exhort Trusts to assume the responsibility for quality and to promote activities such as collaboratives. In line with a general move to devolve improvement initiatives, the functions undertaken by the CGST were disbanded and (at least theoretically) dispersed to local levels. One initiative of CGST, now transferred to the Department of Health – ‘The Essence of Care’ – was introduced to support local organisations to

participate in benchmarking, with the stated intention of helping practitioners share and compare best practices and develop action plans to remedy poor practice.

Operationalising clinical governance has proved challenging for the acute trusts (hospitals) and, perhaps even more so, for primary care trusts – which must deal with clinical governance responsibilities in both the services they commission and those directly provided. Clinical governance in primary care is a dramatic departure from the historic role of GPs as independent practitioners accountable only to their own patients and to the General Medical Council (GMC). A recent National Audit Office report found that, by late 2005, most PCTs had made progress in establishing the basic structures and processes of clinical governance, but there was less evidence of the underlying cultural change needed (NAO, 2007b). Fully embracing the intent of clinical governance requires individual clinicians and teams to routinise quality measurement and improvement. While participation in clinical audit is often in place, it is not sufficient, as PCTs must exercise clinical governance not only for the services directly delivered but also for all services commissioned on behalf of their populations, requiring a much wider assessment and action portfolio.

The conceptualisation of clinical governance was groundbreaking in elevating clinical quality to a duty of trust governance (chief executives and board) as important as their fiduciary responsibility. The most significant achievement of clinical governance is that it conferred legitimacy onto quality-related activities and investment, particularly at the

trust level. Furthermore, clinical governance, in theory and increasingly in practice, eroded the previous tradition of tolerance for poor performing doctors.

## Regulation

### Institutional regulation

The regulatory environment in health is complex (Lewis and Alvarez-Rosete, 2006). A range of organisations have regulatory roles within specific areas of quality and safety, including the:

- Department of Health, which sets standards against which regulation occurs
- Healthcare Commission, with broad powers for monitoring compliance against Department of Health standards
- Monitor with responsibility for Foundation Trusts
- Medicines and Healthcare Products Regulatory Agency, to ensure that medicines, healthcare products and medical equipment are safe
- Human Fertilisation and Embryology Authority
- Human Tissue Authority
- Mental Health Act Commission
- National Patient Safety Agency, which subsumed the NCAA (National Clinical Assessment Authority), renamed as NCAS (National Clinical Assessment Service)
- General Medical Council
- Council for Healthcare Regulatory Excellence (CHRE), to coordinate and convene a number of bodies which regulate individual health professions.

Though not necessarily named in the usual line-up of regulatory authorities, there are also a number of organisations and processes that function in a quasi-regulatory role. For example, coverage of, and eligibility to, NHS services is partially regulated in the sense that the services patients can expect to receive (or the services that will be denied) are determined by the decisions of Government (including NICE guidance) and individual PCT commissioners.

### Healthcare Commission

Institutional regulation for quality has undergone significant turbulence due to changes in governmental policy. The Commission for Health Improvement was formed in 2000 and this was abolished in 2004 with the formation of its successor, the Commission for Healthcare Audit and Inspection, generally referred to as the Healthcare Commission. In turn this will be abolished in 2008–09, and merged with the Commission for Social Care Inspection in 2008–09, from when it will be known as the Care Quality Commission. The Healthcare Commission has a statutory duty to assess the performance of healthcare institutions in relation to the Government's healthcare standards and targets for the NHS (currently 24 'core' standards and 13 'developmental' standards). The results are published as the annual health check. It is also responsible for inspecting and regulating independent (private sector) providers. Alongside this work, the Healthcare Commission has contributed to the quality agenda in numerous other ways including reviews of formal complaints against the NHS, the conduct of regular patient experience surveys, presentation of an annual 'state of healthcare' report to Parliament, and in-depth reviews of

particular areas of concern within the NHS, such as maternity services or the treatment and management of heart failure.

The impact of regulatory interventions as discrete from other interventions to improve quality is difficult to evaluate. The Healthcare Commission, early on in the reforms, was recognised as an important new force for change. Today it receives more mixed reception: for example, it has been criticised for the level of bureaucratic burden it places on organisations being inspected; and for a reactive, rather than proactive, approach to quality improvement; although many have found the assessment process a beneficial force for change. In 2006–07 the Healthcare Commission (forthcoming) reported that:

- 2,204 data items and 14,000 plus comments were used in the screening process used to compile the annual health check
- 85 inspections were carried out
- progress was assessed against 33 national targets with 94 supporting indicators.

Its work requires a huge amount of information from the organisations being inspected. However, any charge of over-burdensome regulation should be balanced against findings from an HCC survey of 220 NHS trusts in 2006–07, in which 93 per cent of trusts expressed the view that the annual health check had a positive impact on patient care. About 90 per cent of respondents also stated that changes were made because of the health check – although the majority said that quite a few or most would have happened anyway. The survey did highlight frustration with significant duplication and overlap with other

regulators, concerns about follow-up inspections, and questions about the comparability of scores across trusts.

Understanding more precisely the nature and context of positive impact of the HCC is critical. It is difficult to make a judgement as to whether the HCC has been able to raise the curve of normative performance, particularly by improvements at the lower stratum. Improvement in overall ratings has mostly been at the top end, with a notable increase in the number of trusts rated “excellent” for both quality of services and use of resources, and a static number of trusts rated “weak”. High performers are predominantly foundation trusts and so improvement may well be attributable to other organisational changes, rather than regulatory impact. However, as a number of datasets in the accompanying chartbook illustrate, for individual indicators reported by the HCC, there has been a significant improvement in ‘performance laggards’ (see pp.180, 183–5).

**Monitor** was established in January 2004 to assume responsibility for the regulation of foundation trusts (FTs), which have earned the designation as FTs in recognition of their adherence to comparatively higher standards, thus earning enhanced autonomy. In essence, Monitor is responsible for initial licensing (or authorising), monitoring performance and intervening in cases where the trust is significantly breaching the terms of its authorisation. Performance of foundation trusts against healthcare standards is assessed by the Healthcare Commission – and reports are sent to Monitor which has the power to intervene in the running of a foundation trust in the event of failing performance. Monitor’s

statutory powers of intervention include imposing changes to the composition of the trust board and requiring that they comply with a specified action plan.

## Evolution of new Care Quality Commission

The Government has recently conducted a consultation on the future of regulation. *The Future Regulation of Health and Adult Social Care in England* (DH, 2007b) outlined the results of the consultation and future plans. Central to the proposed changes is the creation of a new regulatory organisation – the Care Quality Commission – constituted by the merger of the Healthcare Commission, the Commission for Social Care Inspection and the Mental Health Act Commission. According to the Department of Health, the new integrated regulator will:

- have enhanced regulatory powers to provide greater protection for patients
- increase coherence within the regulation of health and adult social care
- use a flexible approach, concentrating more resources on services where there is the biggest risk
- publish reliable information about the quality of service providers and performance of commissioning bodies.

*The Future Regulation of Health and Adult Social Care in England* (DH, 2007b) identified the following seven functions as necessary for regulation of health systems:

1. **safety and quality assurance:** setting national standards, monitoring performance and enforcement powers where patients are at risk

2. **promoting choice and competition:**  
ensuring a range of good-quality services are available so patients have choice and there is a fair playing field for providers
3. **commissioner assurance:**  
holding commissioners accountable, managing performance, and publishing comparative performance data
4. **information and performance assessment of providers:**  
collecting and assuring quality of information on performance
5. **price setting and allocation:**  
ensuring a fair and equitable allocation of funds, defining pricing and adjustment rules, and technical work to calculate actual prices
6. **stewardship of public assets:**  
safeguarding public funds and monitoring the financial position of publicly-owned providers to protect as public assets
7. **support, intervention and administration of failure:**  
ensuring, in the event of a service or provider failure, a viable alternative and continuity of service. The Department of Health has acknowledged that not all of these functions need to be carried out by

Figure 14. NHS regulatory framework

**Regulatory framework informed by consultation responses**

	Publicly-funded healthcare	Privately-funded healthcare	Adult social care			
<b>QUALITY</b> Regulation contributes to quality improvement but cannot do it alone. Every organisation and individual member of staff has a role.	<b>1. Safety and quality assurance – regulation (1)</b>	Integrated regulator	Integrated regulator	Integrated regulator	Applicable to all	
	<b>2. Promoting choice and competition</b>	SHA/PCT (3)	OFT	LA / OFT		
	<b>3. Commissioner assurance</b>	SHA Integrated regulator (4)	N/A	Integrated regulator		
	<b>4. Information/performance assessment</b>	Integrated regulator SHA	Integrated regulator Owner	Integrated regulator Owner		
	<b>5. Price setting and allocation</b>	DH	N/A	LA/provider		
	<b>6. Stewardship of public assets</b>	SHA (Non-FT) Monitor (FT)	N/A	Local authorities (2)		Applicable only to public provision, not independent sector
	<b>7. Financial distress and failure</b>		N/A			

1. This figure illustrates external assurance. Primary responsibility for safety and quality will always sit with providers and their clinical care teams.
2. Limited function because relevant only to local authority provision. Commissioner failure is picked up in commissioner assurance.
3. The Office of Fair Trading will contribute to have a role for ‘undertakings’.
4. For commissioner assurance, the Audit Commission also has a role in relation to publicly-funded health and audit social care.

Source: Department of Health, 2007b



the Care Quality Commission and has produced a schematic to map out where the different regulatory responsibilities will lie (see Figure 14).

Assurance will be strengthened using a common system of registration, compliance and enforcement that will be applied equally to NHS and independent sector providers. For the first time the new regulator will be able to close NHS services, as well as those provided by the independent sector and adult social care, if they are a threat to the safety of patients or service users.

## Professional regulation

The arena of professional regulation is characterised by controversy and debate over the principles and assumptions that underlie the multiple reform initiatives and organisations that are in constant flux. In 2007, the Government set out a programme for reform of the system of professional regulation (DH, 2007g), which named the following as fundamentals:

- **clear standards.** Responsive to the Shipman Inquiry, the GMC will develop generic standards to determine whether a doctor is or remains fit to practise. Specialty-specific standards will be drawn up by the appropriate Royal Medical College for doctors wishing to be listed on the GMC's specialist register
- **local and national coordination** to establish better arrangements for the local NHS to coordinate with national health professions regulators in cases involving doctors, dental, pharmacy or optometry primary care services delivered or commissioned by the NHS

- **national fitness to practise processes** with an independent tribunal to conduct final adjudication of fitness to practice procedures against doctors (and other health professions regulators to also establish an adjudication function).

Among the key institutions with current professional regulatory responsibilities, and presumably expected to accomplish aspects of the vision laid out above, are the following.

### General Medical Council (GMC)

The stated purpose of the GMC is “to protect, promote and maintain the health and safety of the public by ensuring proper standards in the practice of medicine”. It has four main functions, enshrined in law (the Medical Act 1983):

- to maintain up-to-date registers of qualified doctors
- to foster good medical practice
- to promote high standards of medical education
- to investigate and adjudicate on doctors whose fitness to practise is in doubt.

The GMC received criticism from the Shipman Inquiry over its proposals for revalidation, in particular its lack of rigour and reliance on a peer appraisal process.

**The National Clinical Assessment Authority** started in 2001, with a singular focus on doctors, in part a response to several cases of egregious misconduct of individual doctors. Originally freestanding, it has now been subsumed into the National Patient Safety Agency (NPSA) and renamed the National Clinical Assessment Service, where it continues to provide

confidential advice and support to NHS institutions and practitioners in situations where the performance of individual doctors and dentists is cause for concern. In the NAO report *The Management of Suspensions of Clinical Staff in NHS Hospital and Ambulance Trusts in England* (2003), Sir John Bourn, NAO Director, observed that:

*Where patient safety is considered to be at risk or there are allegations of misconduct, it is vitally important for NHS trusts to be able to exclude clinical staff from work or restrict their activities so that the situation can be thoroughly and promptly investigated... there is evidence of many cases of exclusion being allowed to drift on without resolution or proper management. This represents a serious waste of resources for the NHS and can harm the career and even personal well-being of the accused clinicians themselves. The Department of Health should now take further steps to achieve a system for managing the exclusion of clinical staff in which both staff and patients can have confidence.*

The Department of Health has sought to address these concerns with its reforms of professional regulation (DH, 2007g).

The **Council for Healthcare Regulatory Excellence** (CHRE) is an independent body established in April 2003 in response to the report of the Bristol Royal Infirmary Inquiry. The importance of professional regulation as a key part of the reforms has produced a number of new or strengthened regulatory powers, resulting in the proposal in the NHS Plan (DH, 2000b) for a UK Council of Health Regulators to coordinate and act as a forum for the particular bodies which regulate individual health professions. Its task is to promote best practice and consistency

in regulation of healthcare professionals by the following regulatory bodies:

- General Chiropractic Council
- General Dental Council
- General Medical Council
- General Optical Council
- General Osteopathic Council
- Health Professions Council
- Nursing and Midwifery Council
- Pharmaceutical Society of Northern Ireland
- Royal Pharmaceutical Society of Great Britain.

CHRE is answerable to the Westminster Parliament and is independent of the national Departments of Health.

## Public reporting

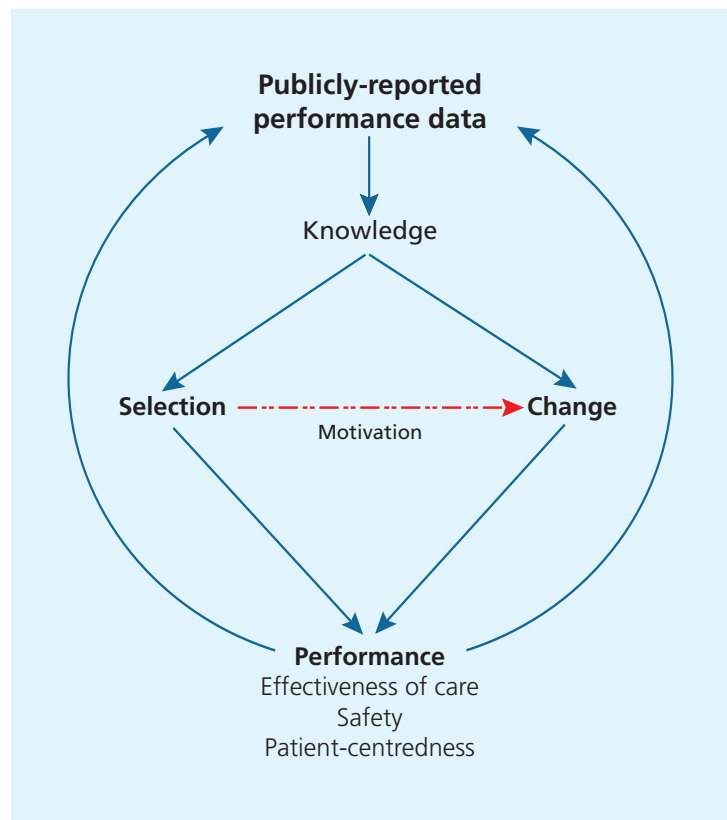
A key principle of NHS reform is the importance of publicly-available performance information as a necessary ingredient to improve quality in the health sector. There has been a strong belief that deficiencies in quality are explained in part by the lack of transparent information available to the public and the absence of routine performance feedback for healthcare providers. From the onset of the reforms in 1997–98, considerable effort has gone into providing data publicly through various efforts including Dr Foster, star ratings from the Commission for Healthcare Improvement (CHI), routine comparisons of Trust performance against targets (sometimes referred to as league tables), and comparative reporting on standards and site visits from the Healthcare Commission.

The topic of public reporting remains controversial but there is a growing evidence base which should be used to illuminate the issues of when, where and how publicly-reported data may be most pivotal. A recent systematic review (Shekelle et al., 2008) looks at evidence on the utility of publicly-released performance results as a mechanism for improving quality. It uses a conceptual framework (see Figure 15) which asserts that public reporting can improve performance (effectiveness of care, patient safety and patient-centredness) through two pathways (selection and change), which are both catalysed by motivation of healthcare providers (institutional and individual) to maintain or grow their clinical practice (or what is called market share in the US) (Berwick et al., 2003).

The selection pathway assumes that patients and the public will act as informed consumers of publicly-available data on the performance of NHS providers and choose to go to higher quality. The change pathway assumes that individual and institutional healthcare providers will use comparative data to improve the processes of healthcare delivery and clinical care. Both are relevant in the NHS context.

In theory, disclosing performance results increases the accountability of healthcare providers and motivates quality improvement activities in healthcare organisations, especially by targeting underperformance (Lansky, 2002; Marshall et al., 2003). While multiple studies do report some favourable quality improvement activity, researchers in the UK record situations where the public release of performance results may have acted as disincentives for improvement, though also contributing to the alignment of internal quality improvement objectives with national targets (Mannion et al., 2005).

Figure 15. Two pathways for improving performance through release of publicly-reported performance data



Source: Berwick et al., 2003

The strongest evidence from the systematic review is that institutions are the most reliable audience for performance data and that public release stimulates change at the level of the hospital. However, much of the attention in the UK has been providing data to the public. There is mixed evidence, with no clear signals, regarding the types of services or the format of public reporting most likely to influence consumers' selection of providers. Early studies from the US suggested that consumers, providers and group purchasers are not actually seeking out and using publicly-available data (Berwick and Wald, 1990; Hannan et al., 1997; Hibbard et al., 1997; Marshall et al., 2000; Robinson and Brodie, 1997; Schneider and Epstein, 1996). Recent data in the UK shows the public prioritises quality of care data for choice and selection lower than other types of information and communications they desire (Leatherman and Sutherland, 2007). It may be that the equivocal nature of evidence results from the tremendous variability which exists in how and what information is presented in public reporting systems. It is possible that design and implementation issues, if sufficiently improved, could increase the effect of publicly-reported performance data on effectiveness, patient safety and patient-centred care.

Without placing more emphasis than is due on the evidence, a careful reading might reasonably lead to strengthening efforts of public reporting at the institutional level of trusts, which would require additional effort in defining standardised indicators for fair comparative reporting and rigorous work to validate data sources.

## Payment reform and incentives

Though early statements of the New Labour Government commented negatively on the Conservative internal market strategy, considerable amounts of policy attention and pursuant actions have focused on the role, contributions of and methods for stimulating markets as a strategy for improving NHS care. Among the numerous market mechanisms explored, the following four have been implemented, each engendering significant controversy and discernible change:

- new financial incentives and payment methods
- private sector supply
- NHS Choice for patients
- provider–purchaser split in commissioning of health-related services.

The first, incentives, has probably been the most fundamental, wide-reaching and expensive of these changes. It is the area on which this section focuses – examining changes instituted in the GP contract; the consultant's contract and Payment by Results (PbR).

## GP contract

The General Medical Services contract (GP contract) was implemented in 2004 after a protracted period of negotiation (see Table 3). A key feature of the GP contract was the Quality and Outcomes Framework (QOF), which linked funding levels to achievements in particular quality and performance measures. The National Audit Office carried out an investigation into the negotiation and impact of the new GP contract (NAO, 2008). It compared benefits anticipated for the contract in the Department of Health business plan with realised benefits, and its findings are shown in Table 4. While the NAO found some evidence that the QOF has secured moderate improvements in patient care in asthma and diabetes, it highlighted concerns that GPs may concentrate on QOF activity at the expense of other patient needs, and that the QOF may increase inequalities.

A number of UK studies have tried to assess the impact of QOF on emergency admissions as a proxy measure, testing the claim that improved primary care (as measured by QOF) will decrease emergency admissions. Downing et al. (2007) found no association between the rate of emergency admissions and QOF scores for a range of conditions; Bottle et al. (2007) found no association between quality scores and admission rates for coronary heart disease. Shohet et al. (2007), however, did find evidence of a QOF effect in epilepsy – admissions for epilepsy were less common in GP patient populations with high QOF scores for epilepsy. These results raise questions about the QOF – are the right things being measured? Is there strong evidence for primary care processes preventing acute exacerbations of disease? Debate continues around the claim that QOF, rather

than catalysing change in clinical practice, has secured improved recording rates of the care processes delivered with little impact on patient outcomes (see also charts on pp.118, 136, 149).

Overall, however, the major criticism of the GP contract is overspending and poor value for money. This is the result of a significant underestimate of achievement levels prior to the introduction of QOF as well as the additional cost of providing out-of-hours care across the country. Although one of the stated intentions in the NHS Plan was to increase GP incomes, the scale and scope of the rise in incomes was beyond that anticipated and exceeded budget. In the first three years, pre-tax take-home pay for GPs in England (including NHS income and private sources) increased by 58 per cent (from £72,011 in 2002/03 to £113,614 in 2005/06). Practice nurses and salaried GPs have not benefited to the same extent, with their pay rises in line or even below inflation.

Given the amount of debate and conflicting data around the impact on patient outcomes that can be attributed to the General Medical Services (GMS) contract, it is useful to get a comprehensive view of progress or benefits including service redesign, changes in workforce, and patient experience of care and range of services, as seen in Table 4.

Table 3. Changes to the GP contract

	<b>Old GMS contract</b>	<b>New GMS contract</b>
<b>Contract at level of</b>	Individual GP	GP practice
<b>Funding for core services</b>	Individual GP patient list is basis for small fee per patient registered plus fee for each service provided. There was also a Basic Practice Allowance.	Each practice receives main funding for essential services via a "global sum" based on a national allocation formula (number of patients locally adjusted for age and needs). This is supplemented by a Minimum Practice Income Guarantee to ensure that new payment scheme did not have short-term dramatic effects.
<b>Quality rewards</b>	Small sums available for quality rewards e.g. payments for cervical screening. Also options for including "Investing in Primary care" schemes.	Explicit financial incentives for delivering measurable levels of quality in patient care, via the evidence-based Quality and Outcomes Framework (QOF).
<b>Out of hours</b>	GPs responsible for out-of-hours service.	The new contract defined "core hours" (8am to 6.30pm) as when practices are responsible for providing a full range of primary medical care services. Responsibility for out-of-hours urgent care was removed. Practices can opt to provide out-of-hours urgent care under a separate contract (defined as Monday to Friday 6.30pm to 8am, weekends and bank holidays).*
<b>Staffing</b>	Funding follows GP, so no incentive to develop other staff.	Incentives for activity carried out by nurses and other practice staff (through the Quality and Outcomes Framework).

\* From March 2008, this situation changed – under the 2008/09 contract, surgeries will either open until 8pm on two nights a week or between 9.30am and 11.30am on Saturdays.

Source: Adapted from National Audit Office, 2008

Table 4. Assessment of the GMS contract; progress made against benefits the Department of Health listed in its business case to HM Treasury

	<b>Expected benefits</b>	<b>Progress to date</b>
<b>Redesigning the services around patients and addressing inequities</b>	Basing allocations on local population needs with flexibility to shape services around local needs.	<b>Progress not yet demonstrated.</b> The Minimum Income Practice Guarantee assured historical funding and did not redirect funding to deprived areas. Academic commentary and other statistics (such as mortality data) suggest that QOF has not yet addressed inequalities. QOF performance is only slightly lower in deprived areas but is more pronounced in indicators such as supporting patients with mental health problems.
<b>Patient choice</b>	Greater freedom for patients.	<b>Progress made.</b> 88 per cent of patients able to book with their GP of choice, and average length of GP consultations has increased.
<b>Patient satisfaction</b>	Satisfaction to be measured and rewarded.	Current patient satisfaction remains in line with satisfaction rates recorded prior to implementation.
<b>Skill mix and job substitution</b>	Improvements in skill mix; expanded roles for nurse practitioners and healthcare assistants.	<b>Some progress made</b> in skill mix but impact on value for money or patient care not yet clear. Extent of work carried out by nurses has grown, presumably allowing GPs to see more complex cases. Practice staff report morale affected negatively by increase in workload and not receiving same financial rewards as GP partners (para 3.11–3.13).
<b>High-quality care and linking pay and performance</b>	Greater emphasis on rewarding high-quality services and outcomes. Local flexibility to further reward high performers.	<b>Some progress made.</b> Too early to conclude if QOF has led to improved patient outcomes, but some evidence suggests modest improvement has been made, e.g. controlling asthma and diabetes.
<b>Promoting clinical governance</b>	Promote clinical governance and service improvement by rewarding GP time on clinical governance, accreditation and continuing professional development.	<b>Some progress made.</b> GPs spend more time on clinical governance and continuous professional development, which is incentivised in the QOF. However, the NAO Report noted that “GP clinical governance systems are not as extensive as at PCT level”.

	<b>Expected benefits</b>	<b>Progress to date</b>
<b>Extending range of patient services</b>	Reducing pressure on secondary care services and allow for greater continuity of care through development of GP specialist services.	<b>Some progress made</b> in delivering new services. The new contract gives PCTs the necessary levers to commission locally enhanced GP services previously delivered in secondary care.
<b>Increasing NHS productivity</b>	Gross productivity gains (above a do-nothing scenario) of 1.5% in the first year, rising to 4.5% within three years and continuing for up to eight years.	<b>Progress not yet demonstrated.</b> Estimates (Office for National Statistics) suggest productivity reduced; family health services fall in productivity (adjusted for quality) of 2.8% between 2003 and 2004; and 2.2% between 2004 and 2005. Non-adjusted productivity measures increase between 2005 and 2006.
<b>Overall measure of participation</b>	Increase number of full-time equivalent GPs by 300 in first year of contract and by 550 within three years.	<b>Progress made.</b> GP numbers have increased by 2,623 (full-time equivalents) in the first three years of the contract.
<b>Recruitment and retention</b>	More progressive career structure for GPs, a return to work package and review pension arrangements.	<b>Good progress made</b> on increasing the number of GPs, but too early to say if will be sustained.
<b>Better GP satisfaction and morale</b>	Increase employment options for GPs; job-share, or time working from home.	<b>Some progress made</b> but increases in GP satisfaction have not been sustained. Satisfaction increased up to 2005 but 2007 surveys show deterioration.

Source: Adapted from National Audit Office, 2008



Karen Taylor, Director of Health Programmes of the NAO, concluded following a review of the GMS contract that “as far as the public and taxpayer are concerned, the benefits they should have been expecting to see have not materialised to the extent they should have done. From their perspective, it’s not a good deal” (Taylor, 2008). Simply stated, performance-based payments were too large because the standard of care provided at baseline proved to be higher than had been assumed (and often was on an established improvement trajectory) – making targets and payments easily achievable.

For all its detailed faults, the Quality and Outcomes Framework is an interesting example of how it has been possible to introduce a flexible framework which has put quality improvement high on the agenda for many primary care doctors in the UK. Even detractors would be likely to agree that the QOF, though flawed in its modelling assumptions and cost estimates, has indeed raised awareness of quality of care issues and is drawing attention to multiple process and outcome measures of potential import for the health and well-being of patients. It was never intended or expected that the indicators would stay static. QOF can and should develop as it becomes possible to include new areas of performance, or new evidence becomes available. Even with its shortcomings, this may be a case of ‘not throwing the baby out with the bath water’, as the basic intent and design is in place and refinements are possible.

## **Consultants’ contract**

In October 2003, the Department of Health agreed a new national contract for NHS medical consultants in England – the first major revision of the consultant contract for over 50 years. The need for a new contract was outlined in the NHS Plan (DH, 2000b) and was part of the general modernisation agenda to improve the workforce by obtaining more and better paid staff (Agenda for Change). The process of agreeing a contract took three years of negotiations between representatives of the UK Health Departments, the NHS Confederation and the British Medical Association. The Department hoped to reward those consultants who made the biggest contribution to NHS work and reduce the average number of hours worked per consultant, in exchange for increased productivity (Committee of Public Accounts, 2007b). These benefits were dependent on the introduction of a mandatory and rigorous process of workload planning for individual consultants (job planning).

According to a review by the National Audit Office (2007d), the NHS has yet to see many of the intended benefits. Over the first three years, the Department allocated an additional £715 million to NHS trusts, which was £150 million more than originally budgeted. Consultants’ pay has increased on average by 27 per cent (from £86,746 to £109,974), but measurable improvements in productivity have not been seen. In fact, the proportion of time that consultants spend on direct clinical care is less than intended, and the contract has not been used to extend and develop new services for patients.

Williams and Buchan (2006) found that consultant earnings have increased significantly, but the cost of implementation has been greater than anticipated or budgeted. This is because the funding formula was based on flawed financial and workload assumptions. Full implementation of the contract has therefore contributed to the deficits faced by some trusts. Currently, there is concern that the intended benefits in patient care are not being realised. The dominance of time and numbers of services as the measure of performance does not necessarily support improvements in clinical care and patient outcomes.

### Payment by Results

Payment by Results (PbR), introduced in 2003/04, sought to improve fairness and transparency of payment as well as to catalyse productivity and efficiency in the provision of services (DH, 2002). Under PbR, hospitals are paid for the number and type of patients that they treat, as determined by a predefined schedule of prices or ‘tariffs’. PbR replaced locally negotiated ‘block contracts’ – a fixed sum of money for a broadly specified service – and ‘cost and volume’ contracts, which attempted to specify in more detail the activity and payment. These arrangements meant that there was no incentive for providers to increase throughput, since they got no additional funding for extra activity.

There are, however, major concerns about PbR; the most pressing is that trusts will compromise quality in order to achieve efficiencies and remain financially viable. The British Medical Association (BMA) found that 53 per cent of doctors who responded to their 2007 survey thought that PbR would

worsen, or considerably worsen, patient care (BMA, 2007). PbR is a contradiction to other payment methods being introduced to encourage higher quality – the tariff rewards more activity, not better quality. Legitimate concerns also exist as to whether PbR will increase overall demand for services which may not be effectively managed by primary care trusts or practice-based commissioning. Excess of demand may further constrain resources and impact negatively on quality of care and patient outcomes.

In recent months, two substantial evaluations of PbR have been published. The first, commissioned by the Department of Health and conducted by the Health Economics Research Unit (Farrar et al., 2007), found evidence that PbR has led to reductions in unit costs of care. It found less unequivocal evidence that PbR has stimulated increases in the volume of care (or ‘spells’). In terms of quality, the study concluded that “reductions in unit costs may have been achieved without detrimental impact on quality of care” (p.23). However, the researchers stress that this finding needs to be treated with caution because of the difficulties of defining and measuring ‘quality’ in their models. They examined whether the introduction of PbR was associated with changes in in-hospital mortality, 30-day post-surgical mortality, and emergency readmissions following hip fracture – and found that PbR did not affect these measures either positively or negatively. The second study, published by the Audit Commission (2008), judged that PbR has improved the fairness and transparency of the payment system and may have contributed to (although not driven) improvements in efficiency in elective care. It disputed the claim that there has been a negative impact on quality.

## Engaging the patient and the public

A 'patient-centred NHS' has been one of the explicitly stated aims of the NHS reforms. Active engagement of and responsiveness to patients and public has been a central theme, (DH, 2000b, 2001b). Attention to this issue is largely driven by three factors:

- an acknowledgement that the NHS has been deficient in responsiveness to patient needs and preferences
- a trend among many healthcare systems worldwide to view patients and the public as having important consumer roles in healthcare markets
- a growing body of evidence that not only is it the right thing to do but that active participation of patients in their healthcare can sometimes lead to more appropriate and safer care and improve health outcomes.

There is now ample evidence that individual and collective engagement of patients or citizens can catalyse quality improvements in care delivery, increase health literacy, provide valuable performance feedback and provide valuable assistance in setting priorities for population health (Coulter and Ellins, 2007). However, in *Patient and Public Experience in the NHS: a quality chartbook* (Leatherman and Sutherland, 2007), a compilation of data shows that while there have been areas of real success in the NHS reforms such as the dramatic improvement in access to care, there are areas where improvements are still needed. Patient engagement in decision-making and self-care is one of these areas. The Healthcare Commission's large-scale surveys in England show

that only half of inpatients and 40 per cent of people with mental health problems were fully involved in decisions about their care. Fewer than half of the inpatients surveyed indicated that danger signals and medication side-effects were explained to them before discharge from the hospital (Healthcare Commission, 2007). In diabetic care, even though improved self-care is seen as a key intervention to help improve good glycaemic control, only 10 per cent of people with diabetes indicated that they had participated in education and training programmes (Healthcare Commission, 2006).

Numerous government policies have sought to elevate the importance of the patient experience through a wide range of reforms: improvements in access, offering choice of providers, improving facilities and amenities, routinely surveying patients for feedback, and creating new organisations for solicitation of opinion and giving voice to the public. The terminology of Public and Patient Involvement has been used as a policy imperative to encompass numerous activities with a variety of purposes. However, the conflation of these distinct terms – patient involvement and public involvement – may be causing some confusion about the underlying rationale, concrete goals and uncertainty about what would be effective programmes and approaches. Among the plethora of organisations and acronyms which have emerged, the following are brief descriptions of some of the most prominent.

**Patient and Public Involvement entities** have emerged and disappeared in dizzying fashion. In 2003, community health councils were abolished, having been established about three decades previously, and were replaced by overview and scrutiny

committees (OSCs – the remit of which was extended to cover healthcare), Patient Advice and Liaison Service (PALS), the Independent Complaints Advocacy Service (ICAS) and Patient and Public Involvement forums (PPIfs). PPIfs were supported by the Commission for Patient and Public Involvement in Health (CPPIH). In July 2004, less than six months after PPIfs had begun operating, the Department announced the abolition of CPPIH. At the time it said that PPIfs would remain, but in July 2006 the abolition of PPIfs was also announced to be replaced by local involvement networks (LINKs) – expected to become operational from April 2008. The Department argued that LINKs would provide better value for money and be better able to take into account the changing nature of the NHS, such as the increasing role of the private sector. The other reasons given for the abolition of PPIfs are the same as those given when community health councils were abolished: there is a wide variation in performance and they are not representative of the community, failing to attract young people and ethnic minorities. The Health Select Committee (2007b) concluded that:

*abolition of PPIfs seems to have been driven by the need to abolish CPPIH rather than a real need to start again. Once again the Department has embarked on structural reform with inadequate consideration of the disruption it causes. (p.3)*

The Committee was highly critical of the changes and concluded that the establishment of LINKs was not an evidence-based decision.

The **Expert Patients Programme** was developed to support patients with chronic and long-term conditions. A review of the

available evidence on self-management showed that the benefits of self-management include reduced severity of symptoms, significant decrease in pain, improved life control and improved resourcefulness and life satisfaction (DH, 2001b). The programme was designed to provide knowledge and skills for self-management and is delivered locally by a network of trainers and around 1,400 volunteer tutors with long-term conditions. The programme focuses on the following goals: to develop communication skills, improve ability to engage in daily activities, interact with the healthcare system, and acquire health-enhancing behaviours and new ways of coping. Independent evaluation of the Expert Patients Programme is now being conducted by the National Primary Care Research and Development Centre (NPCRDC) of the University of Manchester and the NPCRDC of the Centre for Health Economics at University of York through a national randomised controlled trial throughout England. Internal evaluation data, self-reported from approximately 1,000 Expert Patients Programme participants, indicates that the programme provides significant benefits including greater confidence that symptoms would not interfere with their lives (45 per cent) and reduced severity of symptoms four to six months after completing the course (38 per cent). There were also reductions in utilisation of health services; 7 per cent reduction in GP consultations, 10 per cent reduction in outpatient visits and 16 per cent reduction in A&E attendances, which could be important in reducing costs without jeopardising quality. More than 94 per cent of those who took part in the evaluation reported feeling supported and satisfied with the course. These results are consistent with other bodies of evidence on self-management programmes.

The efforts to date to enhance the participation of the public and support the active engagement of patients have taken many forms, with some areas of achievement as well as gaps or areas where patient and public needs have not been sufficiently addressed (Box 3).

### **Box 3: Achievements and deficiencies in patient engagement**

#### **Areas of achievement:**

- improved access to care for inpatients, outpatients and primary care
- majority of patients feeling that they are treated with respect and dignity
- cost concerns not inhibiting patients seeking medical care when needed
- systems being in place to deal with adverse events.

#### **Areas where improvement is needed:**

- more predictable access to timely and technologically advanced clinical interventions
- better engagement of patients in decision-making and self-care
- decrease disparities in population health and health outcomes
- increase patient safety, in particular prevention of hospital-acquired infections.

Clearly, the government's intention and actions to make the NHS more responsive to patients and the public has been a fundamental and much-needed change. In the past 10 years, credit is due to the NHS as it has purposefully developed policies, strategies and initiatives to support, listen to and engage with patients. A great deal has been done to reinforce the obvious commitment of the public to the institution of the NHS. One very visible area for policy attention and resources has been the provision of choice to patients for several reasons: to mitigate the real hardship posed when access is constrained, to be more responsive to patient preferences and to catalyse competition by hoping that patients will use comparative performance data to select the best providers, thereby improving quality.

### **Informatics and data capabilities**

The subject of information and communications technology (ICT) in the UK cannot be adequately addressed in this report because of its complexity, scope and scale. However, when analysing the potential to achieve the vision of the NHS as a world-class health system, there is no more critical topic than its ICT infrastructure and informatics capabilities.

### **Information systems infrastructure**

As often mentioned, the National Programme for Information Technology in the NHS is the most extensive and comprehensive IT programme in the world. The Programme, launched in 2002 with a primary goal of providing central direction of IT development, became an agency of the

Department called NHS Connecting for Health in 2005 and has broad responsibilities for infrastructure, clinical systems (including the electronic patient record, laboratory and other diagnostic systems, and electronic prescribing) as well as transactional functions such as appointment booking.

An NAO examination of the IT programme in 2006 stated that it “has the potential to generate substantial benefits for patients and the NHS. The main aim is to improve services rather than to reduce costs” (NAO, 2006: p.1). NHS Connecting for Health is generally credited with centralising procurement and successfully engaging in competitive bidding for the IT contracts; however, whether and when it will live up to the promise to improving patient care and quality remains an open question. The NAO report also states that “national leadership of engagement with NHS organisations and staff in implementing and making best use of the systems has changed a number of times and resource constraints limited the scale of engagement efforts” (p.3). In effect, engagement with and mobilisation of the NHS as a healthcare delivery system was secondary to procurement. Thus, realising the benefits in actual patient care has not yet happened at the levels anticipated, though accomplishments have occurred, such as the Quality Management and Analysis System (QMAS), which supports the new contract for general practitioners and provides a rich source of primary care data for the NHS.

## Data and information for policy and managerial decision-making

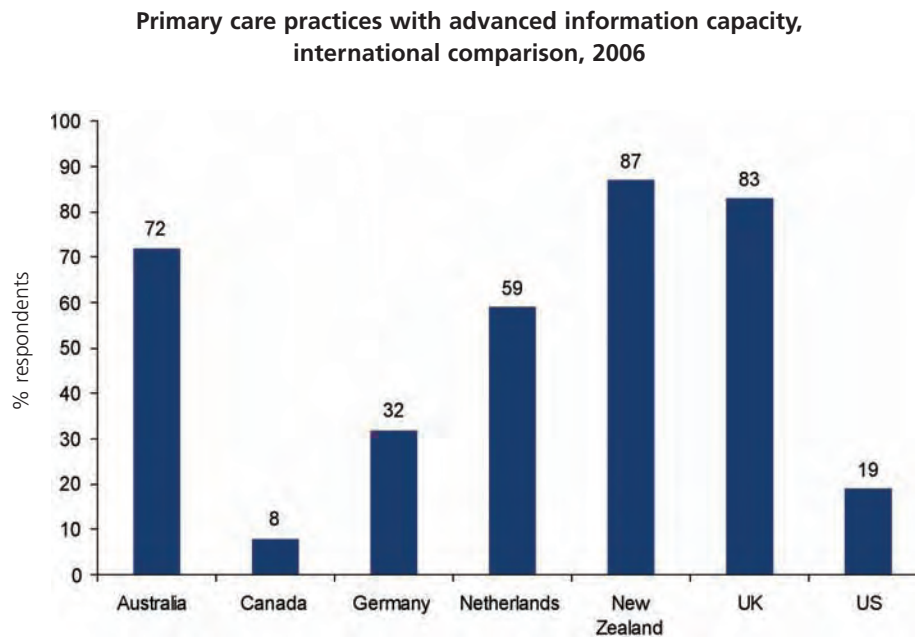
Beyond discussion of the ‘big fix’ of the IT capability, considerable concerns are warranted regarding data and informatics competencies throughout the NHS for purposes of providing effective and safe clinical care, making sound policy and managerial decisions, and being fully accountable to the taxpayer. Like all health systems worldwide, there are both strengths and weaknesses.

On the positive side, the UK is a leading country in data and informatics capabilities in primary care. A 2006 international survey conducted by the Commonwealth Fund (Figure 16) shows high use of electronic medical records (UK 89 per cent); electronic prescribing used routinely (UK 55 per cent); electronic access to patients’ test results used routinely (UK 84 per cent); patients sent reminder notices for preventive or follow-up care using a computerised system (UK 83 per cent); doctors receive an alert or prompt about a potential problem with drug dose or drug interaction via computerised system (UK 91 per cent); ability to generate easily a list of all medications taken by individual patients, including those prescribed by other doctors (UK 88 per cent).

However, many of the important and routinely used data sources for critical tasks such as policy and managerial decision-making, budget formulation and monitoring, and public health surveillance are considered sufficiently deficient as to hamper confidence in fundamental judgements. Concerns about the capabilities within the NHS to redress data and

analytic capabilities have been profound enough that decisions have been made to outsource key tasks or to partner with private sector organisations in establishing the NHS Information Centre and routinely providing performance reporting for NHS organisations through such means as Dr Foster. This may have been a pragmatic interim strategy but is controversial as an ongoing way of doing business. It is inarguable that the NHS must be able to competently design and deliver health services, supported by continuous monitoring and evaluation of performance, and routine and credible reporting to the public and Parliament for accountability. Therefore, there is a compelling argument to be made that information is a core competency that should be embedded in the NHS and Department of Health, not outsourced to external suppliers.

Figure 16. Advanced information capacity in primary care, international survey



Source: Commonwealth Fund, 2006

## Clinical informatics and decision support

The National IT Programme has been justly promoted as having tremendous promise in improving the appropriateness, efficiency, quality and safety of health services in the NHS. A rapidly emerging evidence base, synthesised in a recent evidence review of 187 articles (Shekelle et al., 2008), demonstrates that clinical IT systems can make a substantial impact on medical quality and safety in a variety of ways:

- Electronic Health Record (EHR) access can reduce treatment errors that result from gaps in patient-specific information when not available at the time of encounter
- they reduce errors of omission resulting from gaps in provider knowledge or application of the knowledge through use of automated decision-making tools in daily practice (such as appropriate prescribing, laboratory testing)
- they streamline office processes and transactions, thus improving efficiency and financial health of ambulatory/primary care practices
- EHRs facilitate routine monitoring and improving of clinical quality
- technology-based 'e-prescribing' tools improve safety and efficiency
- system connectivity and information exchange among providers is facilitated.

However, it is important to note that the authors found little relevant evidence on the issues of organisational context and process change that are critical to implementation of health IT (Shekelle et al., 2008).

## Commissioning

Commissioning refers to the process of securing healthcare services in order to meet the needs of the population within available resources. It is a complex process that includes a wide range of tasks, such as assessing population needs, prioritising health outcomes, procuring products and services, monitoring and managing service providers, and a range of strategic efforts to promote health (Ovretveit, 1995; Smith et al., 2004).

As the Government has shifted away from centralised command and control mechanisms to drive up performance and quality, commissioning has come to the fore, increasingly regarded as a critically important lever to secure systemic improvements, particularly in the context of the much lower levels of expenditure growth in coming years. Commissioning was the weak link in the internal market introduced by the Conservative government in the 1990s – and the lessons of that period have informed a number of the Labour government reforms, most notably the recent changes to PCT configurations (reducing from 303 to 152) and the introduction of practice-based commissioning.

As the NHS has embraced more market mechanisms, the market dominance of providers is viewed increasingly as problematic. The establishment of NHS foundation trusts and independent sector treatment centres has brought private sector experience and business acumen to bear. Powerful provider organisations have the potential to overwhelm and outmanoeuvre those charged with purchasing services on behalf of their population.



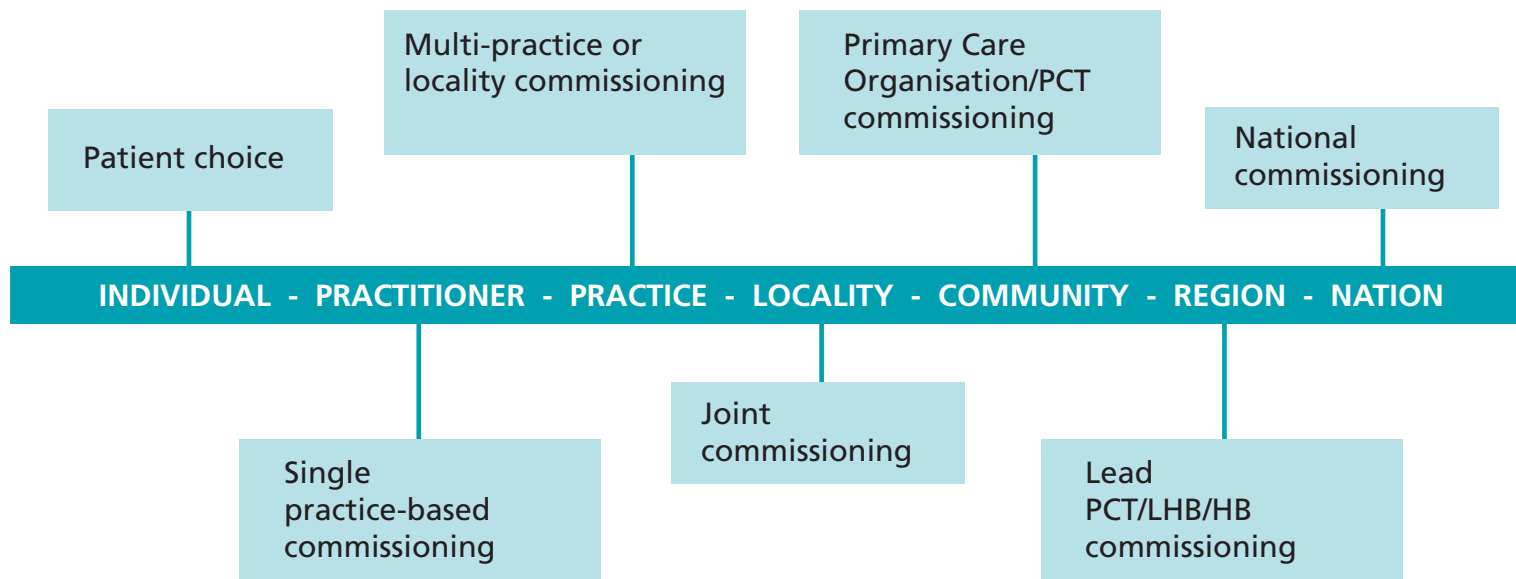
In the current policy environment, Ham (2007) has identified three challenges that commissioners are faced with:

- ensuring the PbR method of funding hospital care supports patient choice without inflating hospital activity unnecessarily
- achieving reductions in emergency bed days through a stronger focus on chronic disease management

- using the potential benefits of a contestable provider market to secure improvements in quality of care.

Concerns about the imbalance of power has led to the Department of Health investing significant effort into strengthening commissioning functions. Commissioning can be undertaken by organisations of various sizes (see Figure 17). Evidence suggests that different population bases are needed for commissioning different services.

Figure 17. The continuum of commissioning levels in the UK



Source: Smith et al., 2004

## Practice-based commissioning

The term ‘primary care-led commissioning’ appeared in the early 1990s with the development of the internal market and GP fundholding. It has been defined as:

*Commissioning led by primary health care clinicians, particularly GPs, using their accumulated knowledge of their patients’ needs and of the performance of services, together with their experience as agents for their patients and control over resources, to direct the health needs assessment, service specification and quality standard setting stages in the commissioning process in order to improve the quality and efficiency of health services used by their patients. (Smith et al., 2004)*

Smith et al. (2004) assessed the research base on the effectiveness of primary care-led commissioning and found evidence that:

- no commissioning approach has made a significant or strategic impact on secondary care services
  - primary care-led commissioning can secure improved responsiveness such as shorter waiting time for treatment and more information on patients’ progress, as was seen within GP fundholding
  - primary care-led commissioning has had greatest impact in primary and intermediate care, for example; a wider range of practice-based services, increased peer review and quality assessment, new forms of specialist primary care and new alternatives to hospital care
- highly determined managers and clinicians use the commissioning role to change longstanding working practices in the local health system
  - commissioners can effect change in prescribing practice, with financial incentives playing a key role
  - primary care-led commissioning increases transaction costs within commissioning.

Based on their review of the evidence, Smith et al. (2004) drew out a number of policy implications, particularly the need for the following factors to be present for commissioning to succeed:

- adequate levels of management support
- timely and accurate information
- real and meaningful clinical engagement
- a balance between clinical engagement and assuring appropriate public and management accountability for commissioning decisions
- commissioners must have effective strategic relationships with providers, but also the ability to shift activity elsewhere – ‘contestable collaboration’
- stability in the wider policy context – a sustained chance to prove their worth.

Whether these conditions are being met by the present government is highly debatable.

The Department of Health has recently embarked on a new programme – World Class Commissioning – which outlines the role of commissioning going forward. Its vision document states that:

*As the main healthcare commissioners, PCTs will lead the work to turn the world class commissioning vision into a reality, and to apply it in a way that ensures the needs and priorities of the local population are met. ((Department of Health 2007i, p.9)*

The Department has defined a set of core organisational competencies needed for world-class commissioning (Box 4).

While laudable in ambition, experience in the NHS has shown that the development of such broad and complex skills is extremely difficult. Some commentators have concluded that commissioning – whatever strengthening occurs – will never be effective (Ham, 2007). At the same time, there is little support for returning to centralised planning. There is, however, some support for shifting from a purchaser–provider split to a hybrid model based on developing competition between integrated systems (Davis et al., 2006; Ham, 2007; Mays and Hand, 2000; Smith et al., 2004). In this model, the roles of commissioners and providers are combined, with patients and citizens exercising choice between the integrated systems.

#### Box 4: 'World Class Commissioning' as defined by the Department of Health

##### What is World Class Commissioning?

1. World Class Commissioners are recognised as the local leader of the NHS.
2. World Class Commissioners work collaboratively with community partners to commission services that optimise health gains and reductions in health inequalities.
3. World Class Commissioners proactively seek and build continuous and meaningful engagement with the public and patients, to shape services and improve health.
4. World Class Commissioners lead continuous and meaningful engagement with clinicians to inform strategy, and drive quality, service design, and resource utilisation.
5. World class commissioners manage knowledge and undertake robust and regular needs assessments that establish a full understanding of current and future local health needs and requirements.
6. World Class Commissioners prioritise investment according to local needs, service requirements, and the values of the NHS.
7. World Class Commissioners effectively stimulate the market to meet demand and secure required clinical and health and well-being outcomes.
8. World Class Commissioners promote and specify continuous improvements in quality and outcomes through clinical and provider innovation and configuration.
9. World Class Commissioners secure procurement skills that ensure robust and viable contracts.
10. World Class Commissioners effectively manage systems and work in partnership with providers to ensure contract compliance and continuous improvements in quality and outcomes.
11. World Class Commissioners make sound financial investments to ensure sustainable development and value for money.



## CHAPTER 3

# A FRAMEWORK FOR ANALYSING AND REFINING THE REFORMS

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### Challenges in policy context

The Labour government that took office in 1997 spent its first five years strengthening centralised command and control capability. National organisations such as NICE, Healthcare Commission, NPSA and the Modernisation Agency were established, National Service Frameworks promulgated and performance targets announced. However, the pace of change seemed slow, episodes of poor performance continued to be highlighted in the media and ministers were frequently answerable for operational shortcomings within NHS organisations. This led to political pressure and, as Rudolf Klein (2006: p.410) notes, “*the command-and-control system meant the centralisation of blame*”.

As frustration and impatience for results grew in Whitehall, a sea-change occurred. By 2002, the Department of Health was convinced of the need to decentralise, thus they embarked on moving from “a politician-led NHS to a patient-led NHS” (DH, 2005). The NHS was to be a ‘self-improving’ system in which performance was driven not by ministerial fiat but by a combination of patients’ choice, money following the patient,

and competition among a diversity of providers. Even new market mechanisms – choice for patients and incentives for providers – were aggressively introduced, which represented a turnabout from Labour Party denunciations of Thatcher reforms upon taking office.

The oscillations of policy over the past decade have undoubtedly been a distraction and a call on already constrained resources. What we now have is an insufficiently evaluated hybrid of command and control mixed with decentralisation. This has led to confusion and mixed policy messages such as “the setting of separate targets for PCTs and hospitals that undermine any hope of collaboration between them” (Paton, 2006).

What is needed now – after a full decade – is to refine the reforms and by so doing, define a comprehensive English national quality programme. The major challenges are two-fold.

- 1. Building integrated and reliable system capacity from national to local levels**

The situation in England is characterised by swings between

emphasis on centrally driven and locally driven change. It is imperative to move beyond this bipolarity to a refined and stable reform agenda that recognises and builds upon the nationalised health system properties of the NHS, designing and implementing reforms at each level of the system and linking all four levels (national, regional, institutional and individual), conceptually and operationally.

## 2. Refining a set of reliable reforms

One of the few points on which consensus emerges is the assessment that there is a surfeit of reforms/interventions and that too often it has been ideology, rather than evidence, that is driving the reform agenda. It is now time to ascertain what works, and equally importantly, what does not. This, of course, is hugely challenging for several reasons; understanding the experience in the UK is difficult because rigorous evaluation has been scant and the evidence base emerging internationally remains weak and must be applied with some caution, given the contextual differences between countries. Nevertheless, available evidence, both domestic and international, can enlighten the next stage of the national reforms as they impact on quality.

Healthcare systems worldwide, although diverse in structure, resources and priorities, share the common goal to improve quality of healthcare. Defining, organising and implementing policies and programmes for predictable and systemic improvement has proved to be a difficult task but can be simplified conceptually by using a framework to guide and evaluate national reforms as they apply to healthcare quality.

In this chapter, we describe a framework which can provide a basis for proposing a blueprint for an English national quality programme, which entails:

- designing a nationwide multi-tiered approach to building system capacity
- balancing a portfolio of reforms by using three types of levers for change – government, professional and market
- understanding and applying the evidence base.

Before talking about form and substance, it is essential to be clear about the desired functions and intended outcomes. In our first report (Leatherman and Sutherland, 1998) which attempted to prognosticate the direction of the NHS reforms and their potential to impact upon quality, we described a generic set of objectives that should guide the design and implementation of any national quality programme for a country (Box 5). Over the past 10 years, the NHS reforms sought to accomplish all of these objectives but inevitably have met with highly variable success.

The first objective of designing health delivery systems and organisations for quality improvement has indeed been undertaken, though perhaps some of the most significant work is just being launched which will have to do with clinical service reconfiguration. The objective to ‘record and analyse effectiveness of interventions’ has largely been the task of NICE, which is widely hailed as one of the most successful reform initiatives. Optimising individual patient care through delivering appropriate health services is a mixed picture, as the extensive data in this book demonstrates.

### Box 5: Objectives for implementation of national quality programmes

#### Broad objectives for quality reforms

- To improve design and management of health systems, programmes or organisations
- To provide information for and allow evaluation of macro-health policies
- To optimise individual patient care by:
  - providing appropriate clinical services (i.e. diagnostic and treatment)
  - tracking individual patient outcomes of care
- To manage population health through the provision of appropriate resources and interventions
- To engage the public as informed consumers and active patient participants
- To record and analyse effectiveness of interventions for predictable improvement

Source: Adapted from Leatherman and Sutherland, 1998

Tracking of individual patient outcomes has not been part of the reforms until recently, with the exception of private sector efforts such as BUPA, but is now emerging as a high priority with the announcement by the Department of Health to require NHS providers to collect patient reported outcomes measures

(PROMs) in four clinical conditions; hip and knee replacements, groin hernia surgery and varicose vein procedures (DH, 2007d). While rhetoric has been high, the extent to which the reforms have practically and meaningfully engaged the public as informed consumers and active patient participants would generally be agreed to have been less successful to date. Managing population health has occurred for the most part only in pockets, often facilitated by NSFs or specific public health actions.

### Building tiered healthcare delivery system capacity

Capacity building for predictable systemic improvements in quality requires a multi-level approach involving a coherent overarching view, national direction and architecture, with implementation and appropriate customisation at all levels of the healthcare system. The four levels where activity need occur, applicable in almost any country and depicted in Figure 18, can be described as:

- national – minimally entailed functions are policy formulation, resourcing, infrastructure and accountability to the public
- regional – at a sub-national level, there are usually functions of rationalising national policy to the particulars of a region, macromanagement and monitoring performance
- institutional – essential functions include good governance, competent operations and management, and continuous quality improvement within organisations such as



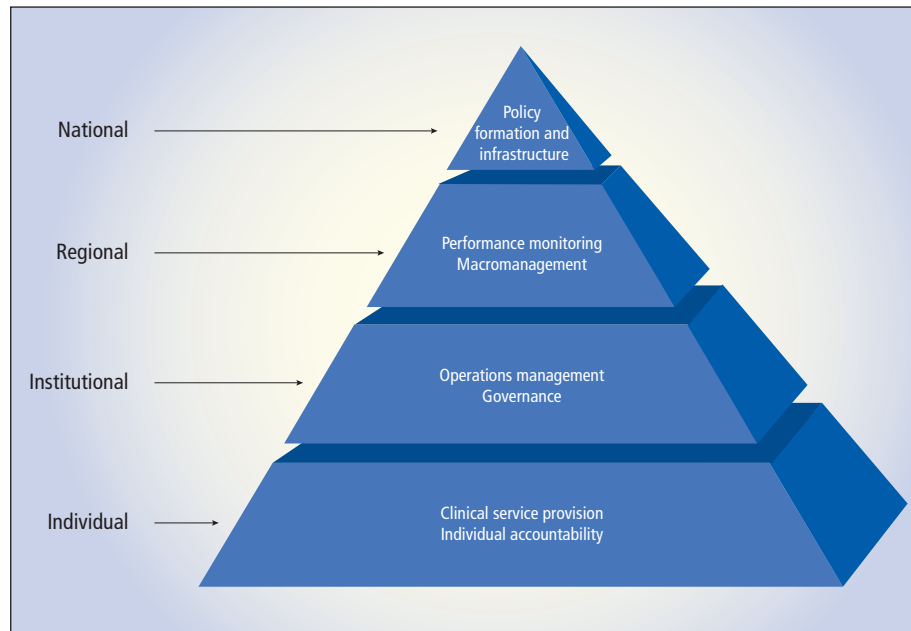
hospitals, clinics, provider networks, and nursing homes

- service or clinical – the encounter between the healthcare system and an individual patient with predictable attributes of appropriate, timely, safe and equitable care.

The issue of constructing a national strategy fully employing the four levels for programme implementation and accountability is critical in the UK, given the unending controversy and contention regarding the role of centrally-driven reforms versus bottom-up approaches from local levels.

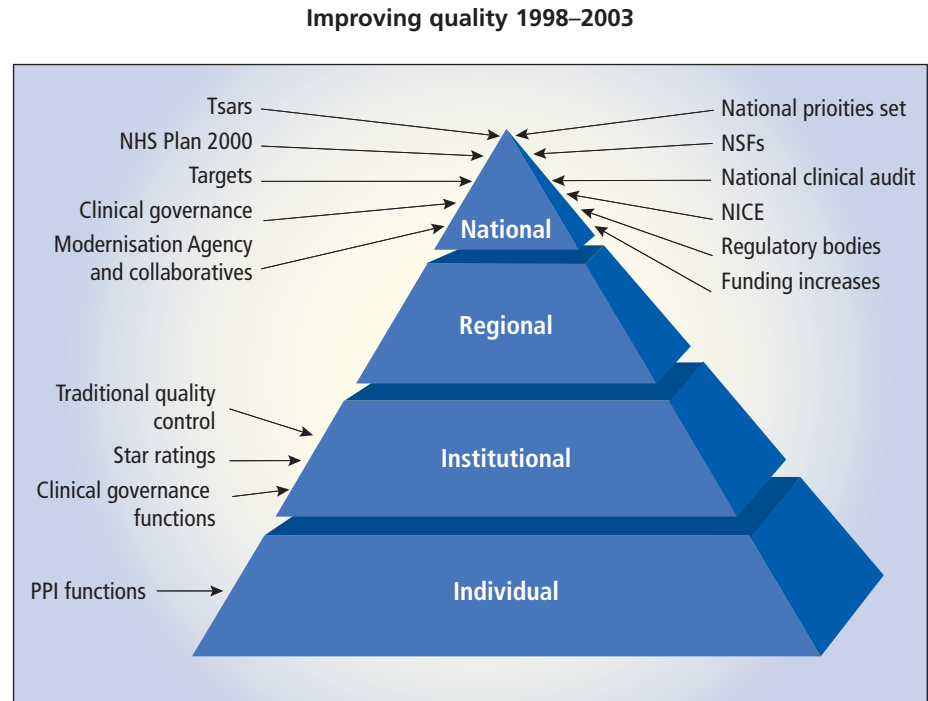
Using this multi-level model, we can illustrate two snapshots of how the national quality reforms have evolved in England. Figure 19 displays the key interventions of early reforms starting around 1997, when overwhelmingly the activity was at the national level, involving policy formulation, building organisational capacity, priority-setting and using standards and targets. This was a period of huge investment in building the national infrastructure, largely driven by and residing at the national level, even if established as arms-length bodies.

Figure 18. Multi-level model for building capacity for a national quality strategy



A second stage of development (Figure 20) largely occurred in the years following the articulation of the NHS Plan in 2000. In this period, the Government did commit to five years of dramatic funding increases accompanied by PSAs that would hold the NHS accountable. Consternation about too much centralisation – with targets as the bogeyman – fuelled the perceived need to diminish overly centralised bureaucracies and push responsibility and accountability out to the field. Manifestations of this zeal to devolve were evident in the reduction of targets, the dismantling of the Modernisation Agency with distribution to the field, and more regionalisation and adoption of a lighter touch regulatory approach by CHI/HCC. Increased emphasis was placed on healthcare markets through such policy actions as financial incentives and designating PCTs as engines of change to improve service delivery and value through commissioning.

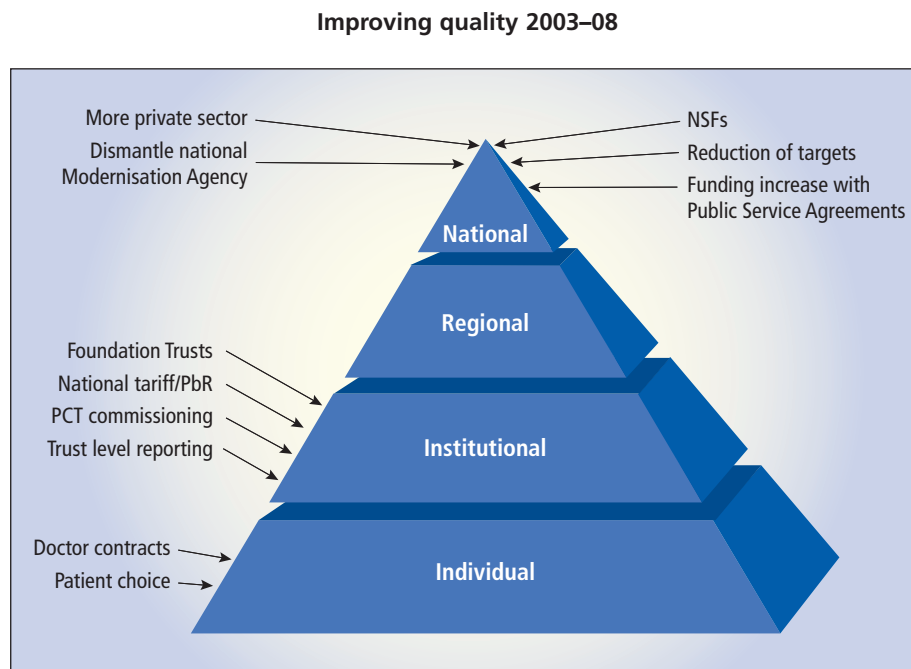
Figure 19. Quality reforms (partial list) 1998–2003, focused largely on national level



While those in charge might have argued that there was an ‘evolution’ which occurred through ‘devolution’ over the past number of years, more may have been lost than gained. Instruments which produced results, such as standards and targets, were devalued. The new currency – of choice and incentives – in fact has had as yet ambiguous or even equivocal results in terms of quality. This is not to say that choice and incentives are not important levers for change that should be employed; it is to say that the error in judgement was to see government reforms – such as standards with numerical targets, and market reforms such as incentives – as two different and conflicting theories of change rather than understanding their complementarity.

It is this complementarity which is the next focus of the framework.

Figure 20. Decentralising quality-related reforms



## A balanced portfolio of levers: achieving complementarity

Table 5 describes three different approaches to implementing systemic improvement and achieving accountability. It conceptually provides a model to guide the adoption of a balanced portfolio approach to quality improvement –

recognising the prudence of simultaneously employing professional, governmental and market levers for change (Emanuel and Emanuel, 1996). These approaches are described below.

Table 5. Three approaches to accountability and improving performance in healthcare

	<b>Mechanisms of control</b>	<b>Interventions to impact performance</b>	<b>Role of patient</b>
<b>Professional</b>	Entry to profession  Maintenance of professional status	Licensure Peer review Certification/recertification Education and training Professional liability	Recipient of professional services
<b>Economic</b>	Market forces	Market regulation Consumer choice and exit Publicly-reported data Competition/contestability Pay for performance	Consumers of healthcare commodity
<b>Governmental/ political</b>	Government actions	Legislation Regulation Public information for accountability Leverage as major payer/purchaser Infrastructure building	Citizen receiving public good

1. The **professional model**, which has historically dominated healthcare systems, is founded on the underlying assumption that healthcare is a transaction between the patient and the professional, influenced by and regulated through traditional instruments such as licensure and peer review, with newer tools emerging such as hospital credentialing and physician certification. Reliance on conventional forms of professionalism is decreasing as evidence grows of widespread quality deficiencies and less frequent, but often politically compelling, cases of individual egregious conduct.
2. The **market model** has a fundamentally different foundation, where healthcare is viewed as a commodity and relies on mechanisms that encourage competition among ‘suppliers’ for market share (individual and institutional providers). In theory, consumers act as arbiters, exercising choice and exit to improve quality and accountability. The assumption is that if competition and choice are available, consumers and payers will use their ‘purchasing power’ to discipline the healthcare system to perform better. Regulation of the market may occur through controls to maintain a ‘level playing field’, to deter unfair or anti-competitive behaviour, and requirements for mandatory publicly-reported performance metrics. Incentives play a prominent role in shaping behaviour.
3. The **governmental (or political) approach** views healthcare as primarily an essential service or public good rather than as a private good or commodity. Control is exerted via centralised organisations operating in the public

interest and on patients’ behalf. In this model, instruments to improve performance are government reforms that take various forms including legislation, regulation, infrastructure building such as IT, performance-based contracting and public policies that shape the healthcare environment.

Decision-makers need to consider the relative importance, both current and desired, of the three broad approaches to improving performance and providing accountability in healthcare systems. None of these approaches has been demonstrated to be sufficiently robust to operate alone. In the US, where reliance on market forces has been the key strategy for several decades, government at the state and federal levels is now playing a larger role through regulation. In the UK, where reliance has been historically on the government and professional approaches, market forces were introduced and nurtured under Tony Blair.

A current analysis of England, using the balanced portfolio model, might argue that government still dominates the reforms. This is not surprising given the fact that the Government is both the dominant purchaser and provider of healthcare as well as the final accountable entity to the taxpayer. Market forces are increasingly used in the form of introducing private sector suppliers, fostering consumer choice, catalysing public reporting and introducing new incentives at the institutional and individual levels. The professionally-focused and led interventions remain largely traditional, such as generalised examinations for licensing into the field, without more modern techniques of continuing certification or

revalidation. In the end, although government may look dominant in the reforms, it is the professionals who hold the greatest real power to improve quality by optimising the care they provide to each patient with whom they have contact.

## Employing the evidence base for reforms and quality interventions

The task of designing and implementing national reforms is an art which increasingly can be guided by science in the form of a growing evidence base on the effectiveness of discrete interventions. Literature from health services research, clinical medicine and social sciences refers to a huge number of interventions designed to improve quality of healthcare. The interventions vary widely in terms of underlying assumptions, resources required and the context in which they have been implemented. Although the number of publications that discuss quality improvement is huge and ever-increasing, the evidence base can be difficult to apply because it:

- emanates from just a handful of countries, and is often dominated by the US
- is often non-rigorous and equivocal in findings
- may conflict with prevailing ideologies that are influencing reforms.

Even with these caveats, a more evidence-based approach to selecting interventions to improve quality can and should be used.

The need to create conceptual coherency for the English National Quality Programme could be facilitated by developing a shared understanding among policymakers about the range of interventions available, accompanied by evidence on impact. It is possible to develop a database that will organise and synthesise what evidence currently exists, and just as importantly, allow for regular updating since the field is rapidly changing. Table 6 is a classification we developed<sup>1</sup> to display the general categories of interventions with examples of discrete reforms in each category. This allows for more intelligent and nuanced discussions than is often the case. For example, the terms regulation, accreditation, inspection are often used synonymously but actually have very different definitions and varying strengths of evidence behind them. The classification recognises that there are a number of broad categories of generic activity that are applicable worldwide.

- **Patient-focused interventions** recognise the role of patients as active participants in securing appropriate healthcare at both an individual and collective level. Specific evidence can be examined to guide reforms in health literacy, clinical decision-making, self-care, safety, access and the patient experience.

<sup>1</sup> Developed as part of QQUIP (Quest for Quality and Improved Performance) – a five-year research initiative of the Health Foundation in which the authors are co-investigators. Numerous systematic reviews of evidence have been conducted and are available at: [www.health.org.uk/qquip](http://www.health.org.uk/qquip).

- **Regulatory interventions** as a broad category can address three key functions: to improve healthcare, to guarantee minimum acceptable standards and to reassure the public about quality of care. These are not only very different purposes but call for the use of different instruments. For example, inspection may be able to establish the minimally acceptable terms of performance but is unlikely to raise the normative level to higher quality, which accreditation processes seek to accomplish.
- **Incentives** focus on various motivators to improve quality and include both rewards and sanctions. Financial and non-financial incentives are two subcategories which can be differentiated in terms of their focus on professions, patients or institutions.
- **Data-driven and IT-based interventions** seek to harness information to improve quality of care. The interventions are broadly classified into two categories:
  1. health information technology (HIT), which includes knowledge management initiatives across delivery of healthcare services, policymaking, administration and the training/education of the health sector workforce. Clinical decision support is an important subcategory
  2. performance/quality reporting systems that provide feedback to providers of care at systemic, institutional or individual levels; and information to users and payers of services for accountability and choice.
- **Organisational interventions** focus on improving managerial, professional and institutional behaviours. They include initiatives that are concerned with personnel and

institutional capacity (e.g. skill mix, staffing levels, facility layout and design); changing organisational culture and professional behaviour (e.g. opinion leaders, clinical audit, education); the use of continuous quality improvement (CQI) techniques and learning collaboratives for improved performance; the provision of reliable quality assurance and controls (such as infection control and risk management).

- **Healthcare delivery models** are innovative interventions in the resourcing, organisation and delivery of healthcare services, often focused by specific clinical condition or disease in the research literature. The evidence reviews encompass different stages along the continuum of care including prevention and promotion, acute, chronic, long-term and palliative care.

There are a number of sources which collate, synthesise, and evaluate the strength of available evidence, including:

- Cochrane Collaboration Effective Practice and Organisation of Care Group ([www.epoc.uottawa.ca](http://www.epoc.uottawa.ca))
- Agency for Healthcare Research and Quality, in particular the 'Closing the Quality Gap' programme ([www.ahrq.gov](http://www.ahrq.gov))
- University of York Centre for Reviews and Dissemination ([www.york.ac.uk/inst/crd](http://www.york.ac.uk/inst/crd))
- QQUIP Research Initiative, the Health Foundation ([www.health.org.uk/qquip](http://www.health.org.uk/qquip)).

Table 6. Classification of major categories of quality-enhancing interventions

Generic topic	Categories	Examples
Patient-focused interventions	Interventions to improve: <ul style="list-style-type: none"> <li>• health literacy</li> <li>• shared decision-making</li> <li>• self-care</li> <li>• safety</li> <li>• access</li> <li>• patient experience</li> </ul>	Patient education materials Incentives Expert Patient programmes Patient protocols for safe care Report cards; hospital, doctor
Regulatory interventions	Institutional	Accreditation Inspection Target-setting Standard setting
	Professional	Licensure Certification
	Market	Managing competition Patient protection Capacity and supply
Incentives	Financial	Monetary rewards for: <ul style="list-style-type: none"> <li>• individual clinicians</li> <li>• organisations</li> <li>• patients</li> </ul>
	Non-financial	Earned autonomy Enhanced reputation Development opportunity



Generic topic	Categories	Examples
Data-driven and IT-based interventions	Performance reporting and accountability	Public reporting Performance monitoring Feedback/benchmarking
	Information and knowledge management	Electronic patient record Decision support for: <ul style="list-style-type: none"> <li>• clinicians</li> <li>• patients</li> </ul>
Organisational interventions	Organisational change	Continuous quality improvement Culture change Professional behaviour change
	Core processes	Quality assurance Safety and risk management Performance measurement
Healthcare delivery models	Disease or population groups	Prevention Health promotion Primary care Acute care Chronic care Long-term care Palliative care

## Summary

The past decade in England has produced what might be most positively described as a comprehensive and prolific set of quality-related reforms, though a less generous characterisation would be a bewildering and overwhelming profusion of Government-imposed policies and programmes. Box 6 provides a brief overview of the transitions required from the past

piecemeal approach to a more integrated quality strategy – outlining recommendations for future refinement using the three aspects of the framework:

- multi-level quality strategy
- balanced portfolio of accountability
- evidence basis for discrete reforms.

### Box 6: Transitions to multi-level and integrated quality strategy

#### National strategy at four levels

- Past:
  - dominance of national and centrally-driven over past decade
- Future:
  - refine – not reject – centrally driven reforms
  - clarify role and contributions of regions
  - increase focus on institutional level, as evidence shows this is where interventions more predictably work; incentives, public reporting
  - increase action at patient and individual provider levels

#### Balanced portfolio

- Past:
  - heavy on government interventions, much of which was necessary
- Future:
  - clarify policy and refine market mechanisms
  - strengthen use of professionalism

#### Deployment of full universe of evidence base for interventions

- Past:
  - ideology prevails in face of evidence, e.g. reliance on informed consumerism despite weak evidence base
  - NSFs; exemplar of focus on condition-specific delivery systems
  - use of IT, informatics and data grew but still inadequate
  - incentives used liberally but with some design flaws
- Future:
  - use of evidence to inform selection and refinement of reforms

### Case study: Getting it right – what can be accomplished

The logic and utility of the framework can be demonstrated using the real case study of cardiovascular disease. The cogency of employing a national tiered approach, using a combination of government, professional and market levers – and wisely selecting evidence-based interventions – is perhaps best demonstrated by the success in treatment of heart disease, as reported recently by the Department of Health.

The recently published Coronary Heart Disease (CHD) National Service Framework (NSF) Progress Report (DH, 2008e) announced the accomplishment of meeting targets for reducing mortality from heart disease five years early – cutting deaths from cardiovascular disease (CVD) for people under 75 by 40 per cent. Several factors were described as contributing to saving more than 22,000 lives per year:

1. delivering thrombolysis more quickly for heart attack patients. In early 2001, 24 per cent of patients received thrombolysis within 60 minutes of a call for help; now it is almost 70 per cent
2. reduction of waiting times for heart surgery – no patients waiting over three months for heart surgery, compared to more than 5,500 in 2000
3. prescriptions for cholesterol-reducing statins doubling over last three years, cutting both mortality and the yearly number of heart attacks.

How were these outcomes realised? A wide-ranging combination of interventions was implemented with levers for change in the government, market and professional categories:

- commitment of resourcing by government (£735 million Capital Programme) to enhance facilities, technology (e.g. 72 additional catheter laboratories and 18 others replaced) and workforce. Latest figures show that in September 2006, numbers of cardiologists increased by 61 per cent and numbers of cardiothoracic surgeons increased 32 per cent since 1999–2000
- a process for clinical standard setting and describing a plan of action which was published in the National Service Framework for CHD (March 2000) and implemented by clinical leadership from the Department of Health, with clinical networks throughout the UK
- use of markets to provide additional capacity where necessary
- monitoring of performance against clinically valid measures
- QOF incentive for better blood pressure monitoring, and use of statins
- national clinical audit (MINAP).

This case study can also illustrate the absolute necessity that NSFs should be dynamic frameworks, constantly integrating and reflecting updated practice. The interim results of the National Infarct Angioplasty Project (NIAP) (Department of Health, 2008f) note that whilst thrombolysis is the most common method for unblocking arteries carrying blood to the heart muscle in the UK, an alternative, coronary angioplasty, is widely believed to provide superior outcomes if delivered quickly. Thus, work is underway to examine the practicalities for offering angioplasty as an emergency treatment in different medical settings and geographical locations across England. The NIAP exemplifies the use of clinical evidence to identify the most effective health services. The blueprint for the National Quality Programme is depicted in Box 8 in Chapter 4 (p.79). It is accompanied by a narrative written to identify and address some of the pivotal policy considerations for design and implementation. Though ambitious, it is possible to have the blueprint in place within the next three years (much already exists) to create an integrated national capacity for predictable improvements in quality of care.



# CHAPTER 4

## BLUEPRINT FOR A NATIONAL QUALITY PROGRAMME

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*In the best healthcare organisations in the world, the 'business plan' and the 'quality plan' are one and the same. (DH, 2006c: p.13)*

### The rationale

This section of the report proposes a concrete plan of action for a National Quality Programme in the NHS in England. It is premised on three observations.

1. The NHS aims to be a world-class health service, as articulated in the interim report of Lord Darzi (DH, 2007e), who described “a world class NHS that prevents ill health, saves lives, and improves the quality of people’s lives”.
2. There is not a well-defined quality programme in England. There are many policies, interventions and processes but they do not sum to a greater whole than the individual parts. Any world-class healthcare system requires a well-defined and highly functioning National Quality Programme.
3. To realise more fully the benefits of investment over the past decade in England, refinements are needed.

The proposed blueprint for action is not ‘a big idea’ or an ‘innovation’, but rather a reasoned set of judgements, based on quantitative and qualitative data, and made into what we hope is a coherent and compelling ‘back to basics’ endeavour.

One might reasonably ask: is there a need for a National Quality Programme, given the scale and scope of the last 10 years of NHS reform? While the original intention of ‘putting quality at the heart of the NHS’ has influenced much of the health reform agenda over the past decade, multiple gaps remain, including:

- a coherent national quality policy
- a valid and credible quality measurement strategy
- clear accountabilities from top to bottom for quality
- a mechanism for credible, unbiased and timely reporting of performance
- a sustained and dispassionate effort to understand and implement interventions with proven impact on quality
- a strategy for comprehensive monitoring and refining.

## Programme management

There is a strong evidence base and a wealth of experience from outside the health sector to guide the development of the National Quality Programme (Office of Government Commerce, 2007). There are seven generic capabilities that any programme

should deliver. Box 7 outlines these key capabilities and illustrates their potential role within the National Quality Programme.

### Box 7: Essential components of programme management

#### Programme management functions

Resource management

Monitoring and control

Information management

Risk management

Issue resolution

Stakeholder engagement

Benefits management

#### Application in healthcare quality

- Cost–benefit analyses of quality initiatives
- Cost-effectiveness studies
- Establish standards and targets against which performance will be judged
- Evaluations of efforts to improve quality
- Relevant, timely and independent data available to guide decision-making
- Accessible evidence base to inform change and quality improvement efforts
- Rigorous analysis of risks to mitigate untoward effects of changes
- Establish a consistent approach to mediate between different stakeholders and to resolve issues of contention
- Engaging professionals, managers, patients and citizens in quality
- Define objectives and delivery framework for the National Quality Programme, with measurable targets

Source: Adapted from Office of Government Commerce, 2007

## Priorities for the National Quality Programme

The National Quality Programme, in fulfilling the generic functions outlined in Box 7, should be explicit in its priorities and objectives. Candidates for consideration include the following.

1. Concentrate efforts where there is most potential to save lives, reduce illness and improve quality of life.
2. Build upon the strengths of a National Health Service; a national system where policy, resources and execution can be aligned.
3. Realign emphasis from macro to meso and micro level – with particular focus on institutions, providers and patients – but requiring national leadership.
4. Correct flaws (such as in doctors' contracts and incentives).
5. Create and sustain a balanced portfolio of reforms incorporating professional, governmental and market mechanisms.
6. Place greater emphasis on evidence over ideology – to inform the selection and implementation of levers for change.
7. Concentrate on the known and the actionable. Too much effort is spent on legitimate issues but unknowns. While it is widely argued that change in clinical culture is essential, there seems little agreement as to the mechanisms for accomplishing such an objective. Further complicating such a lofty aim is the fact that one of the most cogent instruments for securing clinical change is incentives and yet the very large investment of the NHS in raising doctors' incomes may

not have effected change in culture or even bought goodwill of the professions.

## Blueprint for action: strategy and tactics for three years

Sir Liam Donaldson, the Chief Medical Officer of England, and an internationally renowned quality expert, has stated the problem simply:

*More needs to be done to develop the quality framework and make its key elements a day-to-day reality for patients and staff. (DH, 2006c: p.1)*

Over the next three years, the focus should be on identifying a limited set of strategies and tactics to provide the enduring architecture and technology for a National Quality Programme.

We are basing the blueprint on two overarching tenets.

1. **Back to basics: no 'magic bullets' or 'big ideas'.** Change and innovation is often the political currency that drives NHS policy. The failure to predictably deliver quality is not because of a lack of 'big ideas' but rather turning attention away from the fundamentals that are associated with better health outcomes and that matter to patients and the public. There are no magic bullets in improving quality (Oxman et al., 1995). While that adage is widely quoted, there is a tendency for the NHS to have imprudent faith in the promise of certain interventions – collaboratives, incentives, clinical governance, choice. Just as these examples have predictably failed as panaceas, the next danger is that



similarly, the over-touted power of commissioning will fall short of expectations.

2. **Clinical quality of care is key.** Healthcare quality is a field prolific in the increasing amount of evidence about the efficacy (or lack) of various policy, behavioural, political and organisational interventions. Paradoxically this can be a distraction from, rather than a support for, the essential fact that clinical quality is central to improving health outcomes and quality of life.

Two fundamental tasks must be undertaken if the NHS as an institution, and the British public as the key stakeholder, are to realise the benefits commensurate with the very significant direct and indirect costs of the reform agenda.

1. **Reduction of reforms:** the task is to scrutinise which of the multiple reforms have predictably resulted in improvements to the delivery of healthcare. Then, cull those reforms that have been weak contributors or even net negative, thereby reducing 'noise' and concentrating strength among organisational and change interventions with potency.
2. **Refine – not reject** – those reforms that show the potential to reliably improve the performance of the healthcare sector in England.

The blueprint for the National Quality Programme is depicted in Box 8. It is accompanied by a narrative written to identify and address some of the pivotal policy considerations for design and implementation. Though ambitious, it is possible to have the blueprint in place within the next three years (much

already exists) to create an integrated national capacity for predictable improvements in quality of care.

## Policy and implementation considerations

The following sections provide additional details to flesh out and support portions of the blueprint for the National Quality Programme, specifically by:

- discussion of selected critical tasks
- assessing the blueprint using the conceptual framework described in Chapter 3.

## Critical tasks

### Priority-setting and resource analysis

The identification of the priorities and resources for the nation's health should be evidence-based and transparent. In 2001, the US Institute of Medicine published a groundbreaking report, of interest worldwide, clearly stating the importance of building a national quality strategy starting with articulating the aims of a healthcare system (IOM, 2001).

In effect, the NHS already has a history of doing such through mechanisms such as the central planning documents (e.g. the NHS Plan 2000) and, more specifically, the clinical and population-specific documents such as the National Cancer Plan (DH, 2000a) and NSFs. The blueprint for a National Quality Plan calls for a broadened and routinised approach to be adopted and updated annually. It could contain these four elements.

## Box 8: Blueprint for an NHS National Quality Programme 2009–2012

- Form a national Quality Steering Group
  - articulate national goals for quality
  - agree NHS-wide set of quality of care indicators
  - submit an annual report to the nation
  - strengthen the national clinical audit programme
  - evaluate and refine the reforms for more impact on quality of care.
- Identify priorities and resources to improve the nation's health
  - identify national priorities to reduce avoidable morbidity/mortality;
  - analyse the resources required to tackle them
  - identify locally-defined priority areas.
- Standards and target-setting
  - broaden the scope of NICE
  - continue the development of care standards, such as in the National Service Frameworks
  - set targets for reducing unjustified variation.
- Data and informatics to support the National Quality Programme
  - develop a national strategy for reporting key indicators of quality
  - create a single locus for holding information on quality at the Department of Health/NHS executive
  - develop electronic aids to help with clinical decision-making
  - develop indicators of quality of care to support public reporting.
- Clinical leadership and professionalism
  - encourage rigorous peer review and clinical audit
  - support and develop appraisal and revalidation of professionals.
- Patient and public engagement
  - develop the 'expert patient' and shared decision-making approaches to care
  - encourage the use of patient-reported information on the outcomes and experience of their care.
- Refine incentives
  - refine payment by results and tariffs, together with GP and consultant contracts
  - introduce pay for participation, data provision and self-improvement.
- Regulation
  - distinguish the role of safeguarding and assurance from the roles of other bodies for organisational support and development.

1. **Setting priorities** may be accomplished by various methods, usually involving the analysis of avoidable morbidity and mortality, or disease burden. The rationale for this method is to provide a common language which can be well understood by multiple audiences. This analysis can focus the goals and resources of the NHS in multiple areas (such as the top 10), but should be pragmatic in acknowledging significant limitations as to how much, and where, healthcare services can be focused most effectively.

A routine and consistent approach could produce a more transparent method for priority setting. Such an approach might have mitigated against the criticism in the NAO (2005) report on stroke, which stated that the status awarded to stroke had not been commensurate with other leading diseases, such as heart disease. Although stroke is one of the top three causes of death in England, it was a part of the Older People NSF and did not garner the same kind of attention for clinical guidelines, resource allocation, etc. as other priority areas.

2. The list of priorities should be accompanied by a **resource analysis**. One way to think of this would be an organic version of the NHS Plan produced in 2000. It is beyond the scope of this report to analyse the contribution of resource deficiencies or maldistribution to quality of care problems in the NHS. However, the point must be made that, in some cases, resourcing is a fundamental problem which must be addressed and that other quality of care interventions will fail in the face of resource inadequacies. For example, two NAO reports identified the absolute necessity of resources

as part of the quality improvement strategy; *Care for Vulnerable Babies: the reorganisation of neonatal services in England* identifies critical resource issues contributing to mortality, including nursing shortages, specialist transport services, and neonatal unit capacity constraints (NAO, 2007a); and the stroke report (NAO, 2005) identified a number of resource problems leading to poor quality including transport, skilled and equipped stroke units, and timely access to scanning, among others.

3. **A map of regional variation** in care processes and patient outcomes is important for defining the scale and scope of challenges. This would provide a focus on those geographic areas or individual institutions areas needing resource management and intensive help in quality improvement, as well as identifying best practices.
4. **Local priority setting**: each region or locality would be expected to define their priorities within the top listed national priorities, with the underlying logic that the epidemiology of populations legitimately differs and requires additional prioritisation according to local need. This should be done formally at a regularly prescribed interval, such as every two to three years.

### **Standards and target-setting**

National Service Frameworks should be maintained as a linchpin of the National Quality Programme. They have had impact, enjoy significant goodwill, and have positive brand equity – three notable assets. When optimally performing, NSFs can act as a social compact between the Government,

professions, public and patients in representing a commonly-shared understanding of best practices, resource commitments and the roles and contributions needed by all parties to achieve better health outcomes. NSFs have been largely viewed as a strategy for establishing an evidence base, resource management and delivery system design for better care around specific clinical conditions and populations. As part of a recommitment to NSFs several key questions should be examined, including the following:

- What composite of resources and interventions must accompany NSF publication to assure success?
- What are the areas of patient care most amenable to NSFs: for example, clinical conditions rather than populations?

NICE should continue as a standard-setting organisation. It is acknowledged as an exemplar internationally as countries grapple with the lack of clear, authoritative advice about clinical and cost-effectiveness, leading to conflicting clinical guidelines and unjustified variations in patients' access to care.

The Health Select Committee (2007a) unequivocally stated that "NICE does a vital job in difficult circumstances and has a key role to play" and offered the following recommendations which could guide refinements going forward, including:

- more help for PCTs to implement guidance
- better assessment of the level of uptake
- PCTs should play a larger role in the development of guidance
- better use of experts in the development of guidance

- a change in the terminology used by NICE to clarify for patients what they can and cannot expect by right from their local NHS organisation.

**Target-setting** should be an explicit element of the National Quality Programme. Contrary to what seems to be the Government's inclination to back off from the use of targets, the evidence would argue for judicious application. The challenge for policymakers is to select and implement targets judiciously. A recent review of evidence (Sutherland and Leatherman, 2006) indicates that setting targets works well when:

- the desired change is clearly defined and quantifiable
- data is routinely collected
- analysis does not require complex statistical analysis and risk adjustment
- there is clear causal effect in play
- incentives can be attached to achievement.

Refining the strategy for targets may benefit from a wide consultation before going forward. Elements of the strategy should include:

- the most suitable and defensible topics for targets
- the role of national vs local target-setting
- ways to minimise unintended consequences
- the use of targets to reduce unjustified regional variation
- public reporting that maximises constructive use.

## Informatics and data to support quality strategy

There are three integrated data and analytic capabilities needed to support a National Quality Programme – currently they are either inadequate, absent, or inconsistent in the NHS:

1. national hierarchical data collection and reporting system
2. Department of Health/NHS executive information system and quality database
3. clinical decision support and knowledge management systems.

A **hierarchy of data collection and reporting** already exists for a number of types of information and as part of the routine process of healthcare delivery in the NHS. However, there is not a hierarchical quality information system that is consistent, scientifically valid and actionable across all levels and functions of the NHS.

Three major reasons for developing a quality hierarchical system are to:

- provide easily accessible and standardised information, creating a common understanding of performance for various stakeholders
- transparently monitor progress towards priorities
- realise economies of scale by designing and implementing a unified hierarchical system; the technical and analytic skills to design and maintain this kind of reporting function require a critical mass and are not sufficiently distributed throughout the geographic scope of the NHS.

A **Department of Health/NHS executive information and quality database** is critical. Because the quality portfolio is diffused across areas of the Department and outside of the Department, there seems to be an absence of one single locus which has the authoritative, validated and credible database to report on the status of quality at any point in the NHS. Creating such a capability would require a mapping of data sources, careful selection and collation from various data sources (see Figure 21) and determination of what high-level data should be routinely maintained and updated, with linkages back to the source datasets for detailed information and statistical analysis when needed. This is a task that could be accomplished in fewer than 12 months by a properly constituted taskforce. In addition to routine data being collated and synthesised, bespoke analyses could be commissioned when critical topics emerge, with the resulting insights becoming part of the executive information and quality database, rather than one-offs, as is now often the case.

The following specific functions and capabilities are recommended:

- quality surveillance capability
- clinical intelligence, using sources such as registries and clinical audit
- comparative benchmarking and regional variation
- an evidence base (online) to describe what interventions work to improve quality.

This quality database and information capability would represent an asset of interest to the whole of the NHS, more

broadly in government and public policy arenas, and to patient groups and the wider public. Therefore, careful consideration should be given to creating an online user community for all or parts of the database.

**Clinical decision support and knowledge management systems** are of the utmost importance to assist in direct patient care and fundamentally redesign daily clinical practice (Epstein et al., 2004). HIT has been called a necessary component for transformation of health service delivery (Shekelle et al., 2008).

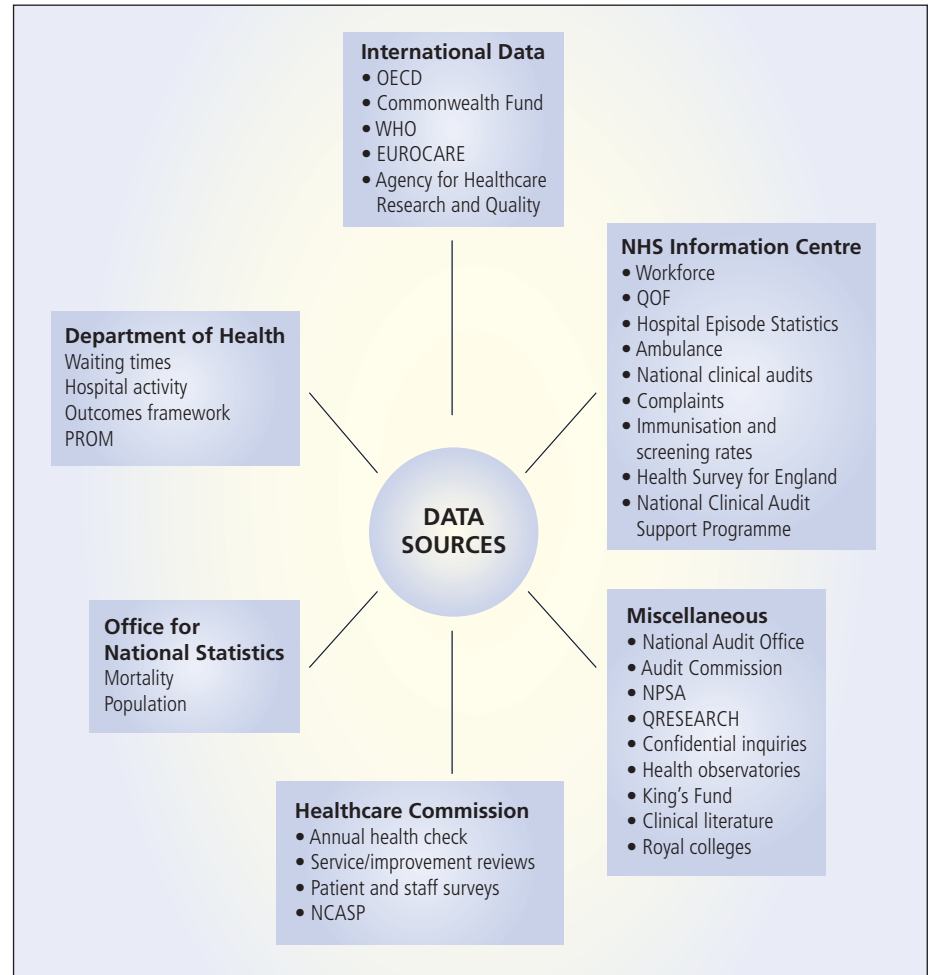
### Public reporting of comparative quality data

As described earlier, public reporting has played a very prominent role in the reforms. It has been hampered largely by several factors:

- inconsistency in defining and standardising what will be publicly reported
- lack of clarity as to purpose (audience and intended utility)
- credibility issues regarding validity and fairness.

Though the target has been largely the public, with the belief that they will act as informed

Figure 21. An abridged map of data sources for the NHS/Department of Health Executive Information System and quality database



consumers selecting the best quality providers, the evidence is simply not robust enough to support this as a prudent quality-enhancing intervention. On the other hand, the evidence is quite strong that institutions, such as hospitals, do indeed pay attention to public comparative reporting and take action to improve performance (Shekelle et al., 2008).

Hence, a reasonable refinement of the public reporting strategy in England would be to re-emphasise the target audience of trusts – acute and PCT – while refining the nature of what data is most desired by, and is useful to, patients and the public to drive up the quality of care. For data to be meaningful to the public, a number of challenges must be met – most notably designing and implementing a reporting system appropriately for that purpose. Evidence suggests that poorly constructed report cards may actually impair consumers' comprehension and cause consumers to make decisions that are inconsistent with their healthcare goals (Hibbard et al., 2000).

### **Professionalism and clinical leadership**

The notion of professional ethos, supported by intensive training and peer-led inquiries into 'fitness to practise', has long been the foundation for assuring quality in the NHS. Multiple initiatives have been implemented in England to address issues of individual poorly performing doctors as well as the constructive engagement of the clinical professions collectively to contribute, and in some cases lead, national and local quality improvement activities. Looking across the 10-year time horizon, there have been examples of successful clinical engagement – most notably in the consultation and

collaboration of the NHS Plan, in the development of the National Service Frameworks and as part of NICE processes. At the same time, there have been significant changes in regulation: both self-regulation through organisations such as the GMC and external regulation such as the Healthcare Commission, which purports to be institutionally focused, but impacts on clinical service delivery.

However, improving the quality of care ultimately requires behavioural change of individual physicians, even where and when systems can be improved (Epstein et al., 2004). Thus the fundamental and pivotal question is how to constructively engage clinicians – physicians and nurses principally – in both the national aspiration to improve the quality of care systemically and an individual commitment to improved practice.

While improvement in clinical care often has been led by individuals or small groups with determination and interest in a particular problem, there needs to be more attention given to creating an enduring and reliable infrastructure for clinical leadership and harnessing the potential power of professionalism beyond the individual cases of heroic leadership. Among ongoing developmental efforts which may be pivotal in fortifying the role and contributions of the professions are continuous peer review, participation in practice improvement and revalidation (recertification) throughout one's professional career.

#### **1. Peer review/clinical audit**

Clinical audit in the UK varies considerably in the design, validity of data, implementation and utility for improving patient care when occurring at both the national level and at local levels.

Significant debate surrounds the rigour of the process as well as the benefits of audit in the UK. However, in such fields as stroke, myocardial infarction, bone care and diabetes<sup>1</sup> there have been sentinel efforts nationwide to expose the deficiencies in care, organise the professions to address problems and monitor for improvement. The valuable role of clinical audit in improving processes of care as well as outcomes in such diseases as cancer was recognised by NAO with a call to extend clinical audit (NAO, 2004).

The generic processes of audit and data feedback are widely used internationally as a strategy to improve professional practice, with the underlying logic being that healthcare professionals will modify behaviour if given feedback that their clinical practice is inconsistent with that of their peers (normative standards) or evidence-based guidelines (gold standards). As such, clinical audit should remain a principal part of the national quality strategy as a vehicle for:

- routine quality measurement based on clinical standards
- providing meaningful and actionable data to clinicians
- creating a quality surveillance capability
- acting as a monitoring system to evaluate the impact of other interventions and reforms, such as financial incentives, regulation and clinical governance
- providing valuable data for the process of validation and revalidation.

Recognising the past contributions and most importantly, the unrealised current and future benefits, a new National Clinical Audit and Patient's Outcomes Programme (NCAPOP) was announced by the Department of Health in January 2008 with the promise of an additional £3.2 million per year. This is a consortium comprised of the Academy of Medical Royal Colleges, the Royal College of Nursing and the Long Term Conditions Alliance, which will be known as the Healthcare Quality Improvement Partnership.

At the time of the announcement the Chief Medical Officer called for the 'reinvigoration' of clinical audit, to enable the programme to deliver its full potential (DH, 2008c). The renewed commitment to, and investment in, clinical audit is a promising development and should be informed in the future by evidence which does indicate that the proven value of audit and feedback is not consistent. A Cochrane systematic review of randomised trials concluded that audit and feedback can be effective in improving professional practice, but that the effects are generally small to moderate and effectiveness is likely to be greater when baseline adherence to recommended practice is low and when feedback is delivered more intensively (Jamtvedt et al., 2006).

## 2. Appraisal and revalidation

Though the debate over appraisal and revalidation has been long and contentious in the UK, there is evidence that over time the skills and knowledge of medical professionals erode, with

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<sup>1</sup> See [www.rcplondon.ac.uk/pubs/books/strokeaudit](http://www.rcplondon.ac.uk/pubs/books/strokeaudit); [www.rcplondon.ac.uk/college/ceeu/ceeu\\_aMI\\_home.htm](http://www.rcplondon.ac.uk/college/ceeu/ceeu_aMI_home.htm); [www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/#report](http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/#report); [www.ic.nhs.uk/our-services/improving-patient-care/national-clinical-audit-support-programme-ncasp/diabetes](http://www.ic.nhs.uk/our-services/improving-patient-care/national-clinical-audit-support-programme-ncasp/diabetes)



potentially serious consequences for quality of care. In a systematic review of the relationship between experience and quality of care, more than half of the included studies (32 of 62) reported an association between decreasing performance and increasing years in practice for all the outcomes assessed. According to the authors, their results suggest that physicians who have been in practice for more years and older physicians possess less factual knowledge, are less likely to adhere to appropriate standards of care, and may also have poorer patient outcomes (Choudhry et al., 2005).

The terms used in the US are certification and recertification, both being very actively promoted, even required, by government, purchaser and professional society organisations. Most of the available evidence is associative rather than clearly causal; however, the mounting body of experience appears to support certification, rigorously conducted, as a reasonable instrument to improve quality of care. In a review of the evidence (Leatherman and Sutherland, 2006) across a range of clinical specialties, geographical locations and different permutations in the application and interpretation of regulation, there is a consistent pattern of association between certified status and higher quality of care as demonstrated by better patient outcomes and adherence to clinical standards. In the US, the American Board of Medical Specialties (ABMS) is the umbrella organisation for the 24 approved specialty boards which manage certification. In 2002, more than 85 per cent of licensed physicians in the US held a valid certificate.

Market research carried out by the Department of Health in October 2005 showed that the majority of the English public not only agreed that doctors should undergo an ‘MOT’<sup>1</sup> of this kind, but believed that this was already the case. The Shipman Inquiry was critical of the GMC’s proposals for implementing the concept of ‘revalidation’ and considered that they fell far short of what was needed to ensure that doctors were periodically assessed as ‘fit to practice’.

However, constructive recommendations have been made in the White Paper *Trust, Assurance and Safety: the regulation of health professionals in the 21st century* (DH, 2007g), stating that future arrangements will be as follows.

- All health professionals will undergo periodic reassessment of their continuing fitness to practise.
- For doctors, appraisal will include an explicit judgement of performance to the required standards. Revalidation will have two components: relicensing (against generic standards) and separate recertification for specialist professional qualifications.
- For other health professionals, revalidation will be based on existing information available to employers, supplemented by additional assessments.
- For health professionals not working as employees of health organisations (e.g. primary care contractors), the Government will support the relevant regulatory bodies in developing proportionate revalidation procedures.

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<sup>1</sup> The MOT is a compulsory annual test in the UK for older vehicles, for safety and roadworthiness. Standing for Ministry of Transport, the term is now generally taken to mean a routine periodic test for reliability and quality.

## Patient and public engagement

The NHS conscientiously conducts various polls and surveys to understand the needs and desires of the public and patients, providing the basis for examining the congruence between what the public and patients say are priorities for quality and what the Government has chosen as being most important in policy initiatives. Much of government policy attention and resources has been focused on providing choice to patients and the public with the belief that, as informed consumers, patients will choose the better performing doctors and hospitals if given sufficient comparative information, thus driving up competition and quality of care. The evidence base, even in a highly competitive market system like the US, does not support this strategy as being robust enough to rely upon (Shekelle et al., 2008). Data in England indicates that patients place choice of provider as a lower priority than a number of other topics. Survey analysis in a Picker Institute report sought to identify which of 82 aspects of care hospital patients regard as most important. It concluded that patient–professional interactions, communications and being treated as an individual are most highly valued (Boyd, 2007), and that patients rated many of the key components of the current patient choice agenda – such as choice of hospitals or admission dates – among the least important aspects of care. A synthesis of data from multiple sources (Leatherman and Sutherland, 2007) shows that patients and the public prioritise:

- information and involvement in decision-making about care
- being treated as an individual
- predictable and convenient access
- equitable treatment and health outcomes

- being safe and protected from harm in healthcare settings
- choice where it makes a difference.

To refine the reform agenda for patient and public involvement, there are several areas that deserve more policy consideration and action. First, health literacy and shared decision-making are areas for reinforcement; emerging evidence provides useful information on the design and implementation of specific interventions which can increase health literacy and shared decision-making, leading to improvements in safety and appropriateness (Coulter and Ellins, 2006, 2007). Second, a related priority is to routinise the use of patient-provided data about health outcomes and experience of care, as recommended by a recent Office of Health Economics (OHE, 2008) report. The OHE report stated that the incremental cost involved in collecting patient outcomes data is modest (£3–£6 per patient in the case of elective surgery) and should be routinely collected because it “is essential to improvements in health outcomes, provider performance and productivity” (OHE, 2008). Third, a priority is to consider complementing the significant investment in provider incentives with the use of incentives for patient behavioural change based on the evidence showing impact in very specific areas (Sutherland et al., 2008).

## Incentives

Incentives have played a central role in the reforms in the last three to four years. The broad term ‘incentives’ has largely meant new payment methods for doctors and institutions (Trusts). Unfortunately, the design and implementation has had significant flaws. Now is the time for refinement and some

evidence is available to act as a guide, comprised from both the international literature and the experience to date in England. An evidence review of provider incentives (Christianson et al., 2007) notes that although financial incentives (or what is increasingly called ‘Pay for Performance’) are increasingly widely used as a method of improving quality of care, with England and the US in the lead, the evidence of impact is not compelling. The summary of findings indicates that financial incentives are certainly not a panacea; where research does show impact, it is often small or negligible. The equivocal nature of the evidence would be prudently interpreted as a ‘go-slow’ message.

However, given the fact that England has already introduced new payment methods as incentives with some untoward consequences, action needs to be taken, with or without clear research findings, to minimise the following reputed deleterious effects: overpayment for normative standards of performance by QOF; a consultant contract that has resulted in lower activity levels; and an institutional tariff in Payment by Results that rewards hospital-based increases of activity without any commensurate increase in quality.

As attention is given to refining and ‘fixing’ troublesome aspects of the three payment mechanisms, new approaches should be considered. Perhaps the most valuable experience to understand from the US is the initiatives of the past three years, which reflect a modulated approach to the so-called ‘Pay for Performance’ movement so energetically advocated by payers over the last decade. In particular, moving forward from the remedial fixes required, a fresh start could look constructively at

the experience in the US that also is a step back from headlong forays into ‘Pay for Performance’.

- In the Medicare programme, a strategy of ‘Pay for Participation’ is being pursued, which rewards providers for the provision of data. In effect, the Quality and Outcomes Framework is a ‘pay for reporting’ scheme (with indicator level results available nationwide through: [www.ic.nhs.uk/qof](http://www.ic.nhs.uk/qof)).
- Some payer organisations have signed agreements with the American Board of Internal Medicine (ABIM) to pay physicians a bonus for participation in self-improvement clinical audits done individually and submitted online to [www.abim.org](http://www.abim.org).

## Regulation

As described in Chapter 2, the Government has recently conducted a consultation on the future of regulation (DH, 2007b, 2007g). The role of the new merged regulator will, according to the Department of Health, concentrate on the following areas.

1. *Quality and safety assurance of health and adult social care providers:*
  - registering, monitoring and assessing all providers of health and social care
  - Escalating serious service failures: leading to enforced closure of service or of the provider through deregistration if performance does not improve.
2. *Information and performance assessment:*
  - independent assessment of the performance of

commissioners and providers and publication of comparative information for accountability to Parliament and public

- ensuring that good information, to a defined quality and comparability, is available.

3. *Anti-competitive behaviour in NHS-funded healthcare:*

- handle claims of anti-competitive behaviour through appeals as a last resort.

4. *Safeguarding the rights of patients subject to the Mental Health Act:*

- to review and safeguard the rights of very vulnerable patients.

These are critically important areas; however, much of the regulation of the healthcare sector will remain outside the remit of the new regulator (see Figure 14 in Chapter 2) and this raises the important issue of coordination. Coordination has been a problem in the health regulation environment for the past decade, characterised by contested territory, authority and power and leading to confusion and unnecessary burden on the regulated organisations.

Clearly the wide-ranging consultation and review of regulation has not yet had time to be implemented and it would be premature to make any recommendations. However, in keeping with the themes of this report, it will be critical for the new regulator to adopt an integrated approach – how does regulation fit with or enhance other mechanisms of control and accountability? Regulation has the potential to act as a conceptual glue that helps bind health reforms together into a

coherent whole. It is essential that regulation is better coordinated with other elements of healthcare reform. The new regulator needs clear and well considered strategies for:

- focusing efforts on areas where there is greatest potential for impact – for example by drawing on burden of disease analyses or evidence informing the development of NSFs
- targeting areas of performance where standards are highly variable or low
- aligning different levers for change, e.g. regulation and incentives, regulation and performance management, regulation and commissioning
- optimising the use of IT in regulation
- coordinating institutional and professional regulation.

In previous White Papers there was a lack of clarity over the question of the role of regulation: was it to ensure minimally acceptable standards, or was it to drive continuous improvement in quality and performance? In response to the consultation on the future of regulation in health and social care, the Department of Health explicitly states that:

*the primary purpose of regulation is to provide an essential safeguard for patients and users of services. (DH, 2007b, p.7)*

This means that the task of encouraging, supporting and enabling NHS organisations to improve should be taken up elsewhere – through local, regional and national initiatives.

## Quality steering group

The proposed remit for the National Quality Programme has the potential to bring together and strengthen the multiple organisations and individuals engaged in improving quality in the NHS. For the programme to succeed, however, it will need strong leadership in the form of a steering group that is able to guide, monitor and galvanise coordinated action in the pursuit of quality.

The steering group should address several broad problems that currently jeopardise the ability to confidently create and execute a coherent national quality improvement strategy.

1. The duty for quality in the NHS is diffused broadly within central government and quasi-governmental entities, throughout regional offices and hundreds of institutions with final accountability at the level of thousands of individual providers.
2. There is no single authority able to lead the quality agenda through defining priorities, marshalling resources, leveraging the power of regulation and incentives, implementing the requisite clinical informatics and data capabilities, directing the policy and implementation of public reporting, etc. These need to be coordinated to maximise their potential for change but authority is diffused.
3. There is no one voice for quality that is viewed as credible and independent to report on the state of quality to the nation. This leads to unhelpful public debates about the veracity of quality of care data, and distraction and delays in

implementing much needed actions for quality improvement.

The managerial and governance arrangements for the National Quality Programme deserve considerable study and debate as to its final form and function. However, critical responsibilities should include:

1. articulating national goals for quality in the NHS; goals may derive from various sources, including the national priorities (above) as well as detailed data illuminating what the US Institute of Medicine called problems of overuse, underuse and misuse in healthcare (IOM, 2001)
2. agreeing an NHS-wide set of healthcare quality indicators for monitoring, benchmarking and public reporting.
3. publish an annual National Quality Report to Parliament and public which has consistency of metrics for longitudinal analysis and incorporating international data for benchmarking
4. strengthening and scaling-up the national clinical audit programme; clinical audit has the potential to be a linchpin for measuring and improving quality of care in the NHS. It has languished and been inconsistently funded and directed, even though there are pockets of exceptional contribution such as stroke and MINAP (Myocardial Infarction National Audit Project)
5. developing a strategy for public reporting which would focus on two issues: defining the most useful content and format for multiple audiences (see below); and harmonising the multiple diverse public reports which currently exist

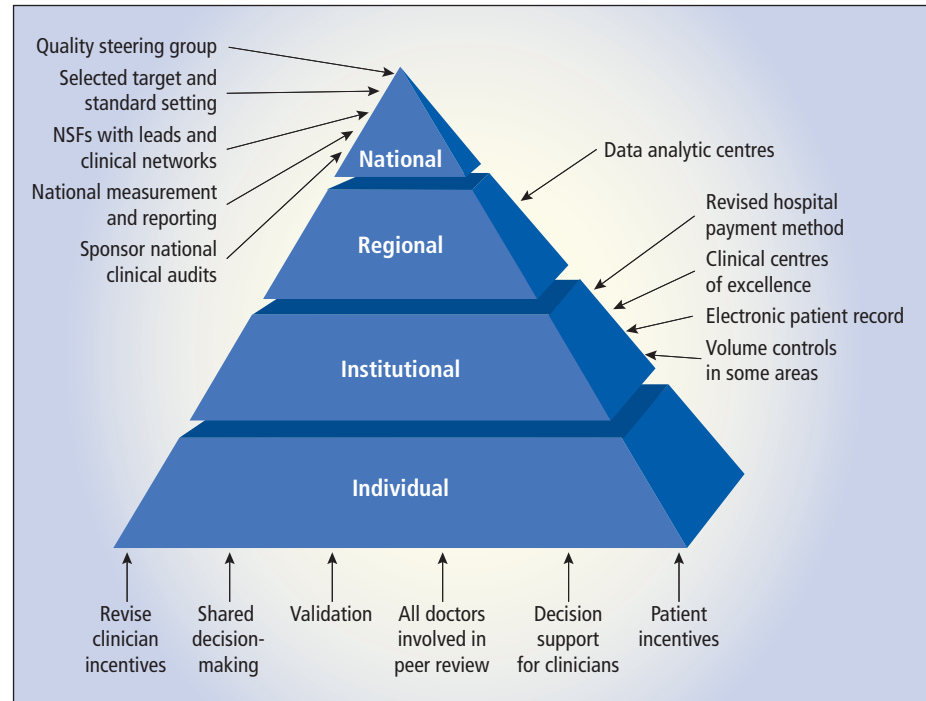
6. commissioning evaluation (formative and summative) of quality reforms and acting upon findings for continuous refinements
7. supporting approaches to improve the dissemination of knowledge related to healthcare quality to all stakeholders including the public, patients, clinicians, managers and policy-makers.

Though every country has a unique context, case studies of interest for national entities with some of the above named functions exist in a number of countries, such as Canada, Australia, the Netherlands and the US.

### Putting it all together: a strategy for system change

For implementation of the National Quality Programme as outlined in the blueprint, we return to two pieces of the analytic framework: the multilevel approach to quality-related reforms and balancing the portfolio. The National Quality Programme is designed to activate reform at all levels of the system, capitalising on experience to date in England and incorporating international evidence on the impact of interventions to improve quality.

Figure 22. Proposed English National Quality Programme

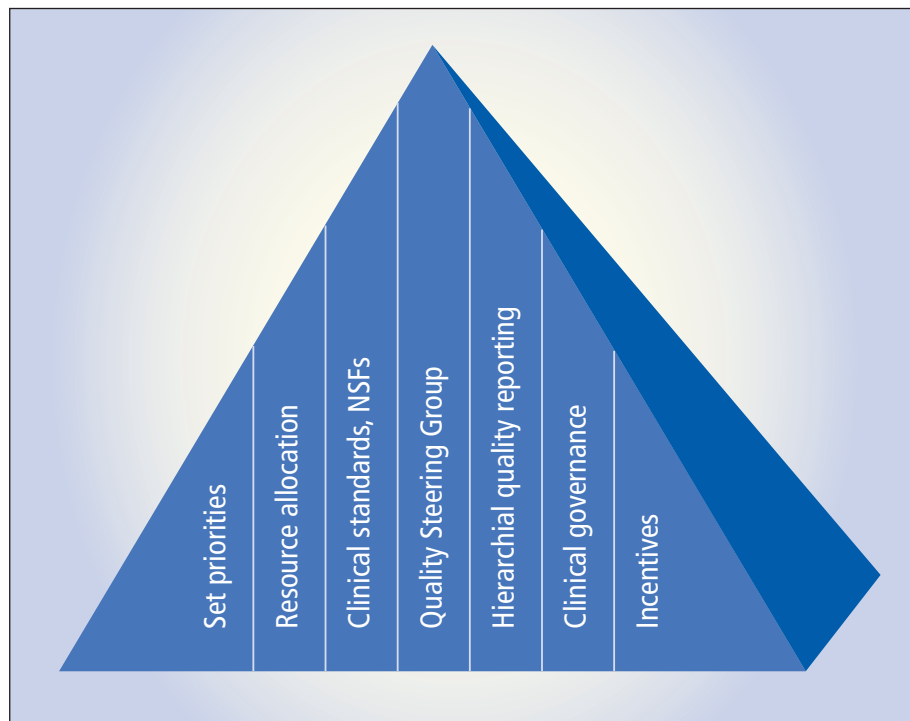


### Multi-level reforms

The NHS is frequently envied worldwide for its perceived advantage as a unified national health system with the potential to set national priorities, align resources, develop consistent standards of care, implement multi-level quality measurement and improvement and use policy to condition the environment for significant performance improvement. NHS employees, and perhaps UK citizens, understandably might regard this as an illusion. However, most would agree that there is huge potential for better aligning the aspirations, resources, operations and associated outcomes for the NHS. A key challenge for a national quality strategy is properly securing the role of the corporate entity in support of and collaboration with the delivery capacity of the NHS.

Moving forward to build a coherent National Quality Programme will require the deployment of discrete interventions which will be a combination of refinements in current initiatives and a few additions based on strong evidence or policy about current gaps, as illustrated in Figure 22. Activity will occur at the four separate levels of the pyramid. Increased attention needs to be given to the glue that integrates all activity into a coherent and leveraged national plan. Figure 23 shows those

Figure 23. Vertical integration of quality reforms



functions which might be appropriately labelled as ‘corporate’ and vertically link all levels of the national strategy conceptually and operationally: setting priorities nationally and locally, resource allocation, clinical governance, the National Quality Council, hierarchical measurement and reporting, and incentives.

### Balancing the portfolio of levers

As previously argued, a national quality strategy must employ a balanced portfolio, using levers for change that derive from government, market forces and professionalism. Table 7 shows how implementation of the blueprint for the National Quality Programme is reflective of such a strategy. The interventions and reforms listed are a composite based on refining what already exists in some form, using the emerging evidence base, and proposing additions only where needed to coordinate the disparate interventions and create the necessary infrastructure for supporting a National Quality Programme.

### Realising the promise of the National Health Service

Ten years ago, the Government pledged to undertake an ambitious and comprehensive programme of reform to make the NHS a healthcare system which was deserving of the confidence and loyalty of the British population. There is no doubt that efforts have been sincere and in the right direction. Today, the intention remains strong, many of the building blocks are in place, and the successes which have occurred indicate that the aspiration for wider and more predictable improvements in quality is attainable.

Table 7. A balanced portfolio of Government, professional and market levers

<b>Government</b>	<ul style="list-style-type: none"> <li>Articulate national priorities</li> <li>Standard-setting</li> <li>Selective use of targets</li> <li>Inspection/external review; focus on assuring minimum standards</li> <li>Encouraging private sector supply where needed</li> <li>Providing essential infrastructure; including funding, policy, IT</li> <li>Public reporting on NHS quality</li> </ul>
<b>Professional</b>	<ul style="list-style-type: none"> <li>Leadership in standard setting and monitoring</li> <li>Rigorous peer review and clinical audit</li> <li>Comparative benchmarking</li> <li>Self regulation, including initial licensing and revalidation</li> <li>Education and training</li> <li>Continuing professional development</li> </ul>
<b>Market</b>	<ul style="list-style-type: none"> <li>Patient choice – where choice affects outcomes and patients want it</li> <li>Financial incentives (refined)</li> <li>Comparative performance data on institutions</li> <li>Public involvement in governance</li> <li>PCT commissioning</li> <li>Private sector supply of selected services</li> </ul>





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## Appendix 1: Nuffield Trust 10-year review, interviewees

Martin Bardsley, Healthcare Commission

Carol Black, The Nuffield Trust

Nick Black, London School of Hygiene & Tropical Medicine

Roger Boyle, Department of Health

Mark Britnell, Department of Health

Will Cavendish, Department of Health

Harry Cayton, Council for Healthcare Regulatory Excellence

Anita Charlesworth, formerly HM Treasury

Paul Corrigan, London Strategic Health Authority

Angela Coulter, Picker Institute

Anna Dixon, The King's Fund

Jennifer Dixon, The Nuffield Trust

Ian Dodge, Department of Health

Liam Donaldson, Department of Health

Nigel Edwards, NHS Confederation

Martin Else, Royal College of Physicians

Martin Fletcher, National Patient Safety Agency

Pam Garside, NewHealth

Ian Gilmore, Royal College of Physicians

Chris Ham, University of Birmingham

Bruce Keogh, Department of Health

Rudolf Klein, Emeritus Professor of Social Policy, University of Bath

Julian Legrand, London School of Economics

Andy McKeon, Audit Commission

Jonathan Masters, Monitor

Nick Mays, London School of Hygiene & Tropical Medicine

Bill Moyes, Department of Health

Una O'Brien, Department of Health

Martin Roland, University of Manchester

Richard Smith, United Health Group Europe

Simon Stevens, former No. 10 Health Adviser

Matthew Swindells, Department of Health

Karen Taylor, National Audit Office

Stephen Thornton, The Health Foundation

Andrew Vallance-Owen, BUPA

Anna Walker, Healthcare Commission

Tim Wilson, PricewaterhouseCoopers

Nancy Wolstenholme, Healthcare Commission

## SECTION TWO

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# A CHARTBOOK ON QUALITY IN THE NHS



# INTRODUCTION

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In the past decade, as concerns about quality of care have come to the fore, there has been a concerted effort across healthcare systems to measure quality in a meaningful way. Quality in healthcare is a multifaceted concept, interpreted by a wide range of stakeholders with different priorities, perspectives and values. Quality of care is not amenable to a single performance measure or simple metric. However, a growing consensus about the key domains of quality in healthcare, and relevant measures and indicators to populate those domains, has emerged in recent years (AHRQ, 2003; IOM, 2001; OECD, 2002). Informed by international efforts, and consistent with previous books, the authors have used six key domains of quality to evaluate and monitor quality of care in the NHS over the past 10 years (Leatherman and Sutherland, 2003, 2005). Those domains are:

- effectiveness
- access and timeliness
- capacity
- safety
- patient-centredness
- equity.

Table 1 summarises the principles underlying the six domains, which have been used as an organising schema for the chartbook, and provides illustrative measures and indicators.

The data contained in the chartbook is configured to illustrate various aspects of performance including:

- longitudinal time series to track changes over time
- one-off ‘snapshots’ to gauge performance at a single point in time (often against pre-defined standards)
- international comparisons to contextualise performance
- a balance of process, outcome and structural measures
- variation charts to illustrate variability of performance within the healthcare system.

The chartbook focuses primarily on quality of care in the NHS of England. However, for some indicators data is only available at a more aggregated level, such as the United Kingdom, Great Britain or England and Wales.

The criteria used to determine which indicators to include in the chartbook were:

- relevance: indicators are clinically meaningful or important to patient experience
- methodological rigour: the data has credence and validity and the indicators are based on a sound evidence base
- balance: the data contributes to a multifaceted picture of quality in stroke care
- timeliness: the data provides an up-to-date assessment of quality.

Links to source material and to metadata are provided in the Appendix to this section.

Table 1. Six domains of healthcare quality

Quality domain	Principle	Examples of measures
Effectiveness	Healthcare services should be based, as far as possible, on relevant rigorous science and research evidence	<ul style="list-style-type: none"> <li>● Mortality rates</li> <li>● Compliance rates with evidence-based guidelines</li> </ul>
Access and timeliness	Healthcare services should be timely and provided within the appropriate setting with access to necessary skills, expertise and technology	<ul style="list-style-type: none"> <li>● Waiting times</li> <li>● Provision of emergency care</li> <li>● Availability of specialist services</li> </ul>
Capacity	Healthcare systems should be sufficiently well resourced, and with adequate distribution to enable delivery of appropriate services	<ul style="list-style-type: none"> <li>● Staffing levels</li> <li>● Number and distribution of scanners</li> <li>● Specialised stroke units</li> </ul>
Safety	Patients should not be harmed by the care that they receive or exposed to unnecessary risk	<ul style="list-style-type: none"> <li>● Nosocomial infections</li> <li>● Medication errors</li> <li>● Falls</li> </ul>
Patient-centredness	Healthcare should be: <ol style="list-style-type: none"> <li>1. based on a partnership between practitioners and patients (and where appropriate, their families)</li> <li>2. delivered with compassion, empathy and responsiveness to the needs, values and preferences of the individual patient</li> </ol>	<ul style="list-style-type: none"> <li>● Patient reported outcomes</li> <li>● Patient survey data on experience of care</li> </ul>
Equity	Healthcare should be provided: <ol style="list-style-type: none"> <li>1. on the basis of clinical need, regardless of personal characteristics such as age, gender, race, ethnicity, language, socioeconomic status or geographical location</li> <li>2. in such a way as to reduce differences in health status and outcomes across various subgroups</li> </ol>	<ul style="list-style-type: none"> <li>● Comparisons of care provided across different sub-populations (for example, older people versus entire population)</li> <li>● Mortality rates by socioeconomic status</li> <li>● Variation in access</li> </ul>

# EFFECTIVENESS

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## Introduction

*... shift the focus onto quality of care so that excellence is guaranteed to all patients, and quality becomes the driving force for decision-making at every level of the service. (DH, 1997: para. 2.4)*

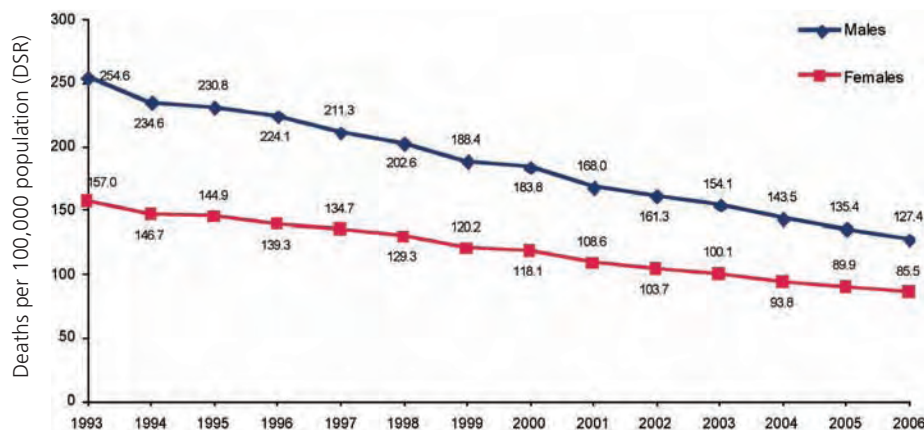
Effectiveness of healthcare services is at the centre of quality. In this chartbook, we review the available data on trends in appropriateness of care and health outcomes, focusing on the following disease groups:

- circulatory disease
- cancer
- diabetes
- maternity services
- trauma/emergency services
- mental health.

## Mortality from conditions considered amenable to healthcare – England

Measures of avoidable mortality are used to gauge the extent to which healthcare services save lives and contribute to population health. Avoidable mortality refers to the number of deaths (under age 75) that should not occur in the presence of effective and timely healthcare (Nolte and McKee, 2004). Causes of death are included in this indicator if there is evidence that they are amenable to healthcare interventions. Healthcare interventions include those aimed at preventing disease onset as well as treating disease. This chart provides a time series of mortality rates in England and shows between 1993 and 2006 a 50 per cent drop in rates for males and a 46 per cent drop for females.

Mortality from conditions considered amenable to healthcare, England, 1993–2006



Note: data includes ischaemic heart disease.

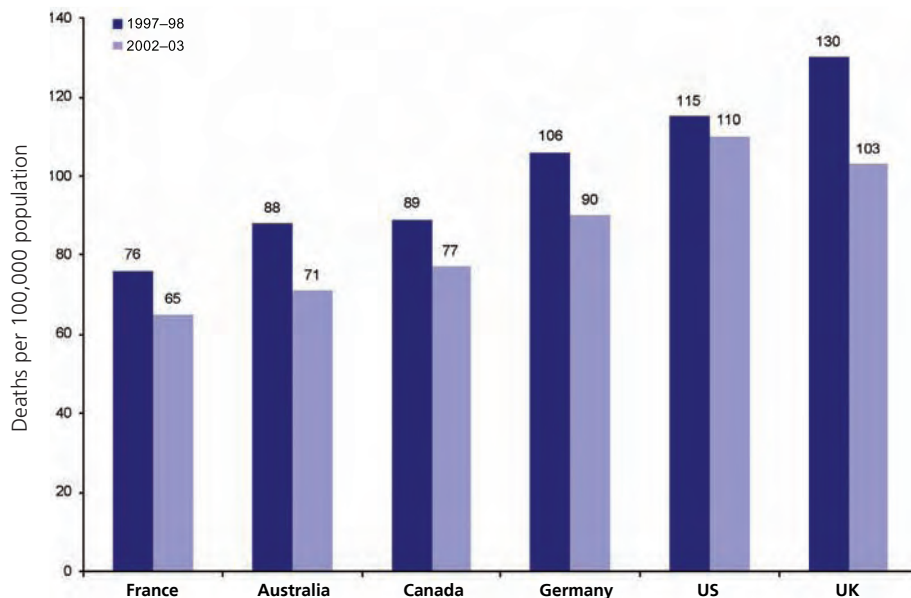
Source: NCHOD

## Mortality from causes considered amenable to healthcare – international

Nolte and McKee (2008) have drawn on World Health Organization (WHO) mortality data to compare performance across countries in terms of premature mortality (under age 75) from causes that are potentially preventable with timely and effective healthcare. The results for a subset of the 19 countries studied are illustrated in the chart and show that the UK, starting from the highest rate, has made the most progress in tackling mortality rates. Nevertheless, the most recent data shows that UK rates remain considerably higher than those in most comparator countries.

	% decrease 1997–98 – 2002–03
France	14.5
Australia	19.3
Canada	13.5
Germany	15.1
US	4.3
UK	20.8

Mortality amenable to healthcare, international comparison, 1997–98 – 2002–03



Source: Nolte and McKee, 2008



## Circulatory disease

The circulatory system moves blood around the body and is composed of the heart, arteries, capillaries and veins.

Circulatory disease includes hypertension, coronary heart disease, acute myocardial infarction (heart attack), heart failure and stroke. According to the Office for National Statistics (ONS), circulatory diseases have been the most common causes of death in the UK for almost all of the last century. In 2005, circulatory disease accounted for almost 184,000 deaths in England and Wales, which equated to 36 per cent of all deaths (ONS, 2006, DH2 series). Mortality rates are higher for males than for females: in 2005, age standardised mortality rates per million population were 2,597 for males and 1,643 for females.

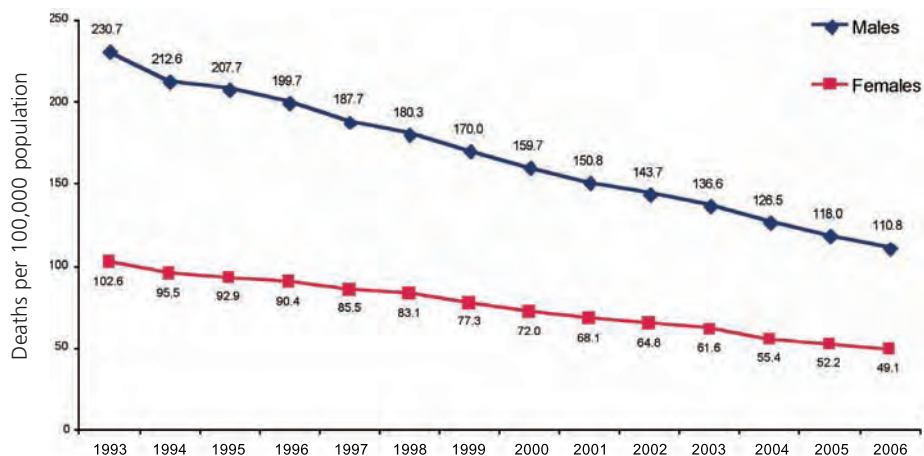
In this section, data is provided for three major types of circulatory disease:

- coronary heart disease and acute myocardial infarction (AMI)
- stroke
- heart failure.

## Deaths from circulatory disease

Circulatory disease, which includes both heart disease and stroke, is the most common cause of death in the UK. The highest mortality rates are for those aged 85 years and over. This chart illustrates a marked decrease in rates of premature death (among those aged under 75). Between 1993 and 2006 there was a 52 per cent decrease in mortality rates for both males and females. The data for the UK should be interpreted in the light of international figures which show other countries having a similar trend, or better rate of improvement.

Deaths from circulatory disease (aged under 75 years), England, 1993–2006



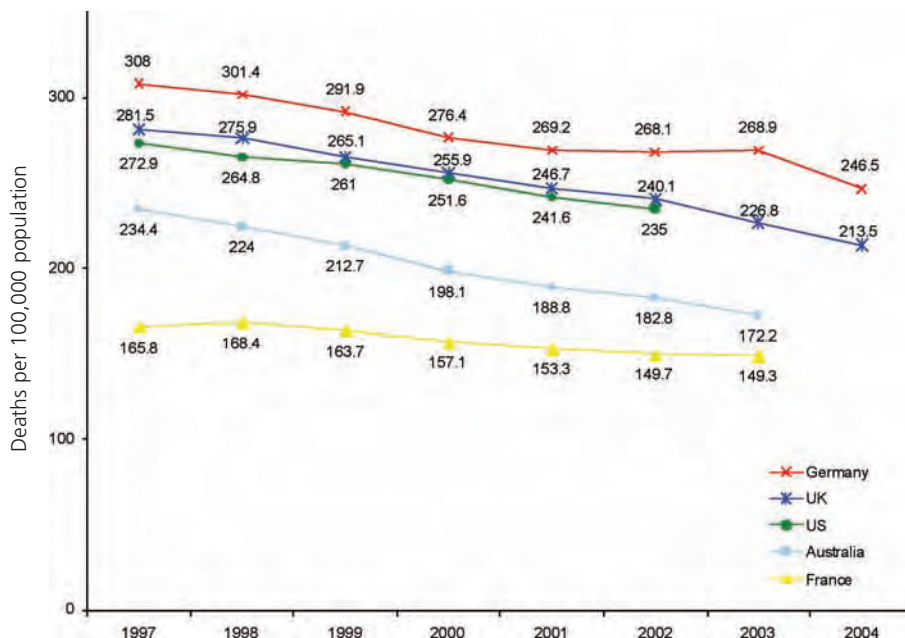
Source: NCHOD

## Circulatory disease mortality – international

Deaths from circulatory disease, which includes stroke and heart disease, have been falling in developed countries in recent years. The latest data shows that the UK has made significant improvements in recent years with a 24 per cent decrease in mortality rates between 1997 and 2004. However, it still significantly lags behind countries such as Australia and France.

	% decrease 1997–2004
Australia	26.5
France	10.0
Germany	20.0
UK	24.2
US	13.9
Australia and France to 2003; US to 2002	

Mortality rates from circulatory disease, international comparison, 1997–2004



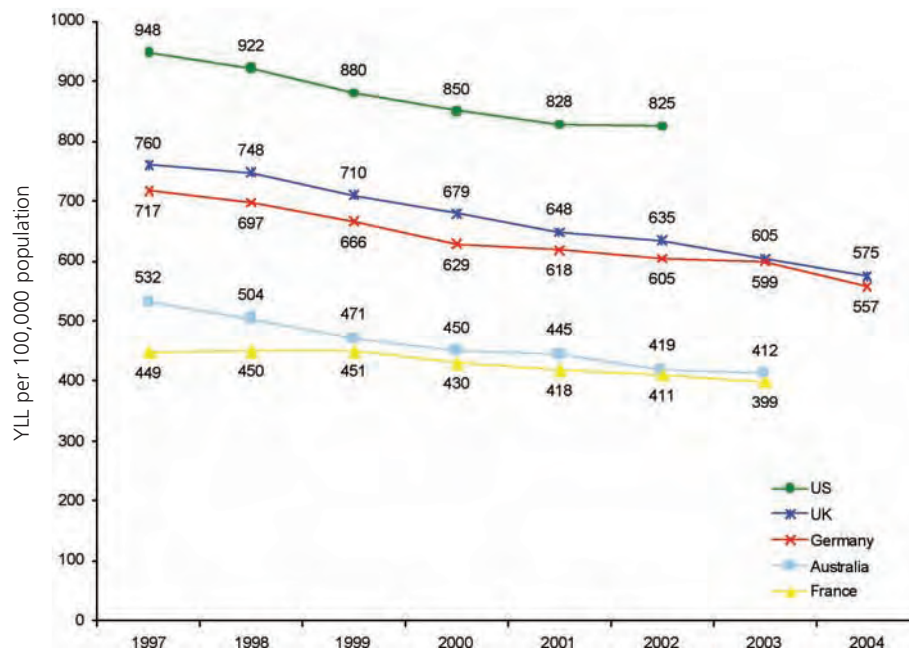
Source: OECD, 2007

## Years of life lost to circulatory disease – international comparison

Potential Years of Life Lost (YLL) is a summary measure of premature mortality. The calculation of YLL involves summing the deaths occurring at each age and multiplying this with the number of remaining years of life up to a selected age limit (which, in the case of this OECD data, is 70 years). The chart shows that although the UK has seen the steepest decrease in the number of years of life lost to circulatory disease since 1997, it still lags behind countries such as Australia and France.

	% decrease 1997–2004
Australia	22.6
France	11.1
Germany	22.3
UK	24.3
US	13.0
Australia and France to 2003; US to 2002	

Potential years of life lost due to circulatory disease, international comparison, 1997–2004

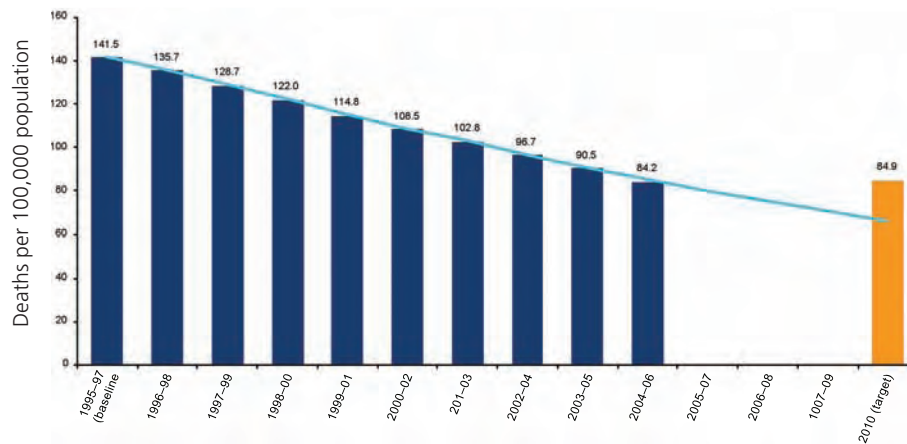


Source: OECD, 2007

## Mortality rates from circulatory disease – progress against a target

Circulatory diseases (which include heart disease and stroke) have been the most common cause of death in England over the last 90 years. Circulatory disease accounted for 183,997 deaths in England and Wales in 2005, some 36 per cent of all deaths (ONS, 2006, DH2 series). *Saving Lives: our healthier nation* (DH, 1999) set a target to reduce the death rate from circulatory disease among people under 75 years of age by at least 40 per cent by 2010, using 1995–97 as a baseline. The target reduction was achieved ahead of schedule in 2004–06.

Mortality rates from circulatory disease (aged under 75 years), England, 1995–97 – 2004–06



Source: NCHOD

## Coronary heart disease

Coronary heart disease (CHD, also known as ischaemic heart disease) is the single most common cause of premature death in England. A preventable disease, CHD kills more than 110,000 people in England every year. More than 1.4 million people suffer from angina and 275,000 people have a heart attack annually. CHD is caused by narrowing of the arteries that supply the heart. When the coronary arteries become narrowed or clogged by cholesterol and fat deposits, insufficient oxygenated blood reaches the heart, causing chest pain (or angina). If the blood supply to a portion of the heart is completely blocked, the result is a myocardial infarction, or heart attack.

The burden of CHD is not distributed equally across the population. Mortality rates are higher in males than in females; higher in manual workers than in non-manual workers; and higher in South-Asian groups (particularly those of Pakistani and Bangladeshi origin) compared to England as a whole (Erens et al., 2001). In 2006, some 235 million prescriptions were issued for circulatory disease in England at a cost of £1.9 billion. This compares to 105 million prescriptions in 1995, at a cost of £940 million (NHS Information Centre, 2007a).

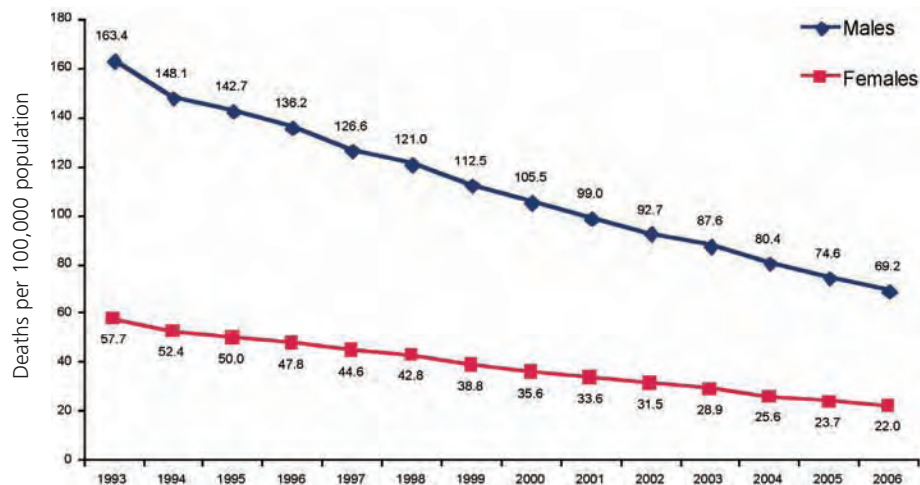
Risk factors for CHD include:

- age (45 years or older for men; 55 years or older for women)
- family history of early heart disease
- high total blood cholesterol
- smoking
- hypertension
- diabetes
- obesity
- physical inactivity.

## Mortality from coronary heart disease

This chart illustrates the rate of premature deaths from coronary heart disease in England between 1993 and 2006. Over the period displayed, there was a marked drop in mortality rates for both males (58 per cent) and females (62 per cent). This data becomes more meaningful when viewed alongside comparative data from other countries, which shows improvements at least as impressive as those in England and lower death rates.

Mortality from coronary heart disease (aged under 75 years), England, 1993–2006



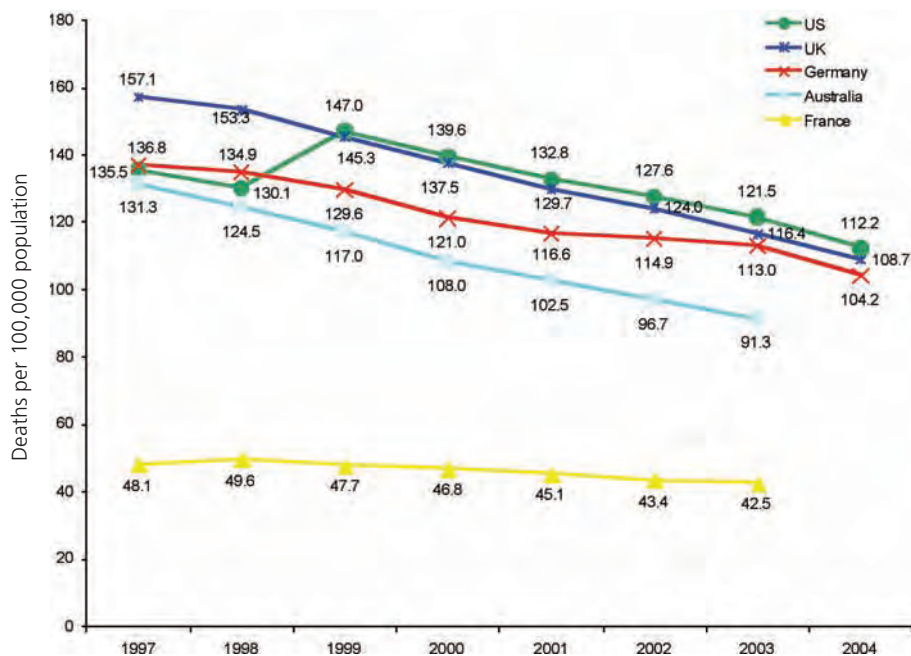
Source: NCHOD

## Mortality from coronary heart disease – international

Deaths from CHD have been falling in developed countries in recent years. The latest data shows that the UK has made significant improvements in recent years, with a 31 per cent decrease in mortality rates between 1997 and 2004. However, it still significantly lags behind countries such as Australia and France.

	% decrease 1997–2004
Australia	30.5
France	11.6
Germany	23.8
UK	30.8
US	17.2
France and Australia to 2003	

Mortality from coronary heart disease, international comparison, 1997–2004



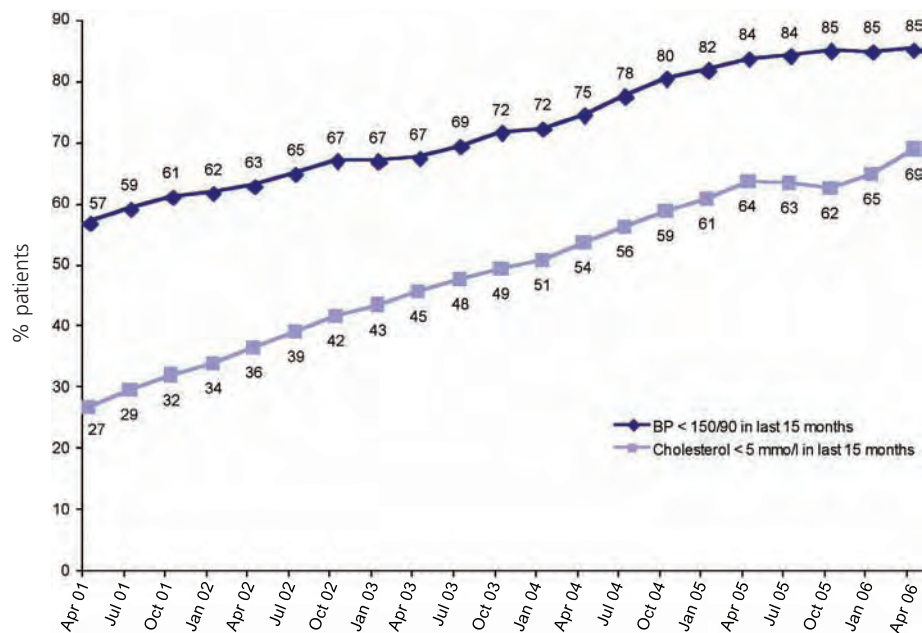
Source: OECD, 2007



## CHD indicators – time series, blood pressure and cholesterol

QRESEARCH, an organisation with a large consolidated database of general practice clinical records, conducted time series analyses of quality data from 498 GP practices in England between 2001 and 2006, covering a population of 3.4 million patients. The QRESEARCH data is valuable because it provides information on the quality of CHD care provided by general practice both before and after the introduction of the Quality and Outcomes Framework (QOF) in 2005. This chart illustrates data on the control of blood pressure and cholesterol in CHD patients – it shows in both cases a marked improvement over time, but no significant change in trajectory is apparent since the introduction of QOF.

Percentage of CHD patients achieving blood pressure and cholesterol targets, England general practice, 2001–06



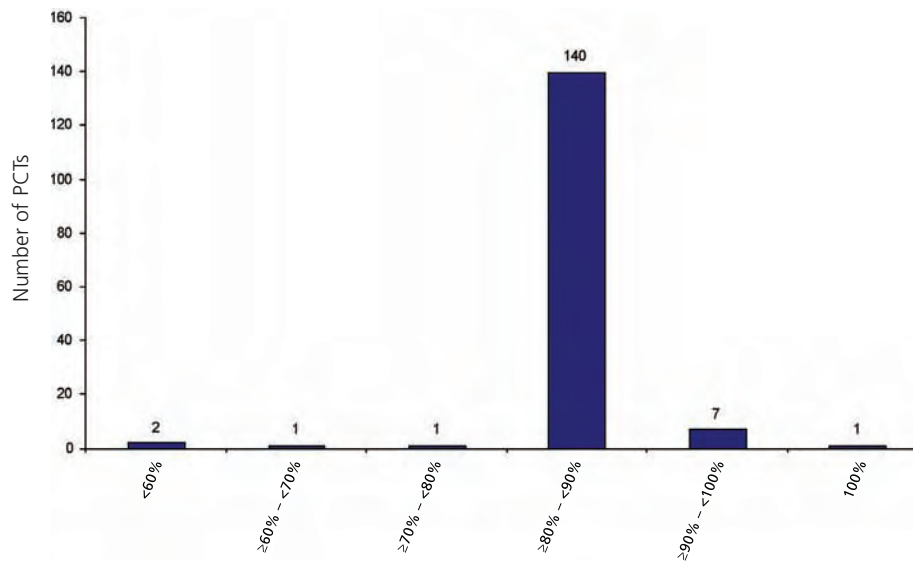
Source: Hippisley-Cox et al., 2007



## CHD prevention, blood pressure and cholesterol control – variation within England

Hypertension (high blood pressure) and hyperlipidaemia (high cholesterol) are risk factors for heart disease and for stroke. Effective treatment is primarily drug therapy, supported by lifestyle changes including diet and exercise. Management of blood pressure and cholesterol saves lives, helps to avoid unnecessary hospitalisation and can contribute to better use of NHS resources. This chart draws on Healthcare Commission annual health check data which compiles QOF returns from primary care trusts (PCTs) and illustrates the variation in the proportion of CHD patients within each PCT who had their blood pressure and cholesterol under control in the previous 15 months. For blood pressure, the average across all PCTs is 85 per cent of patients; two PCTs reported that fewer than 60 per cent of CHD patients had their blood pressure under control and one PCT reported that 100 per cent of their patients did so.

Percentage of CHD patients with BP 150/90 or less in previous 15 months, PCT histogram 2006–07



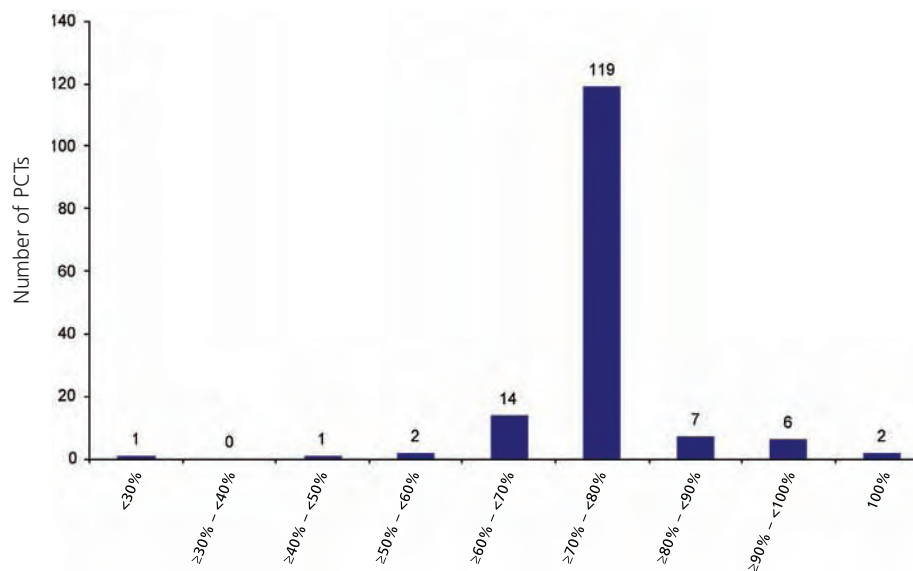
\* Data is not case-mix adjusted.

Source: Healthcare Commission

## CHD prevention, blood pressure and cholesterol control – variation within England continued

For cholesterol, the average across all PCTs was 74 per cent of patients. Two PCTs reported that fewer than half of their CHD patients had their cholesterol under control and two PCTs reported that 100 per cent of their patients did so.

Percentage of CHD patients whose last measured cholesterol in previous 15 months was 5mmol or less, PCT histogram 2006–07



\* Data is not case-mix adjusted.

Source: Healthcare Commission

## Coronary heart disease – acute myocardial infarction

An acute myocardial infarction (AMI) or heart attack occurs when a clot or thrombus suddenly develops within an artery that supplies the heart muscle. If the blood supply is not restored quickly, the heart muscle suffers permanent damage. The restoration of blood supply via thrombolysis (clot-dissolving drugs) or via revascularisation (the use of surgical procedures) has been proven to be effective treatment for AMI.

After a patient has had a heart attack, there are several drugs that have been shown in large clinical trials to reduce the risk of another attack. This treatment, called secondary prevention, includes:

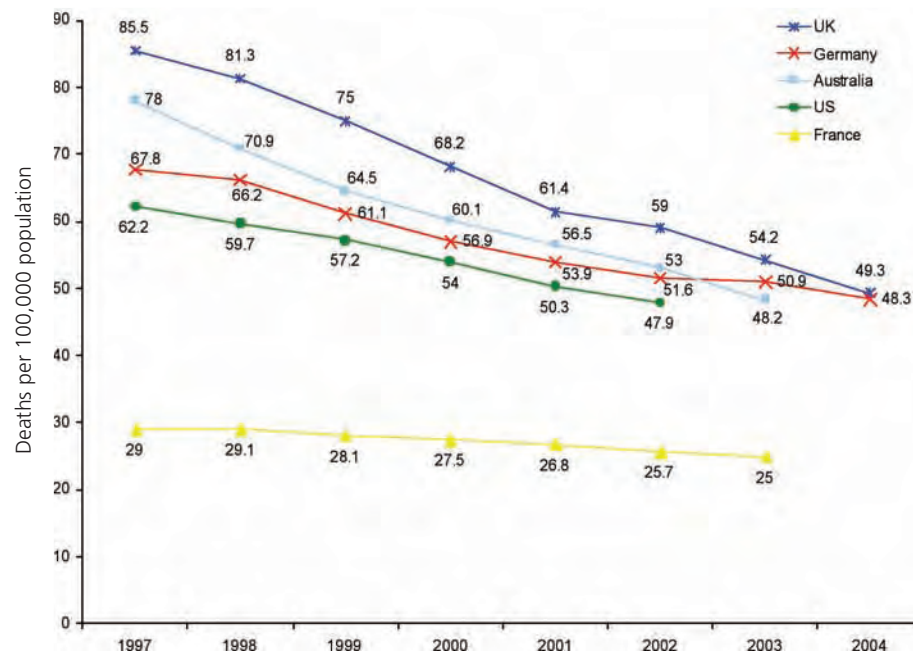
- aspirin, which helps to prevent the blood from clotting
- beta-blockers, which slow the heart rate and lower blood pressure
- angiotensin-converting enzyme inhibitors (ACE inhibitors), which block an enzyme in the blood that causes blood vessels to tighten, thereby relaxing blood vessels and lowering blood pressure
- statins, which reduce both total cholesterol and low-density lipoprotein (LDL or 'bad') cholesterol levels in the blood, reducing the relative risk of coronary events.

## Mortality from acute myocardial infarction – international

Mortality rates from AMI have been falling across most countries of the world in recent years. The chart shows that, of the countries shown, the UK has seen the most marked decrease in recent years, with a 42 per cent fall.

	% decrease 1997–2004
Australia	38.2
France	13.8
Germany	28.8
UK	42.3
US	23.0
Australia and France to 2003; US to 2002	

Mortality from AMI, international comparison, 1997–2004

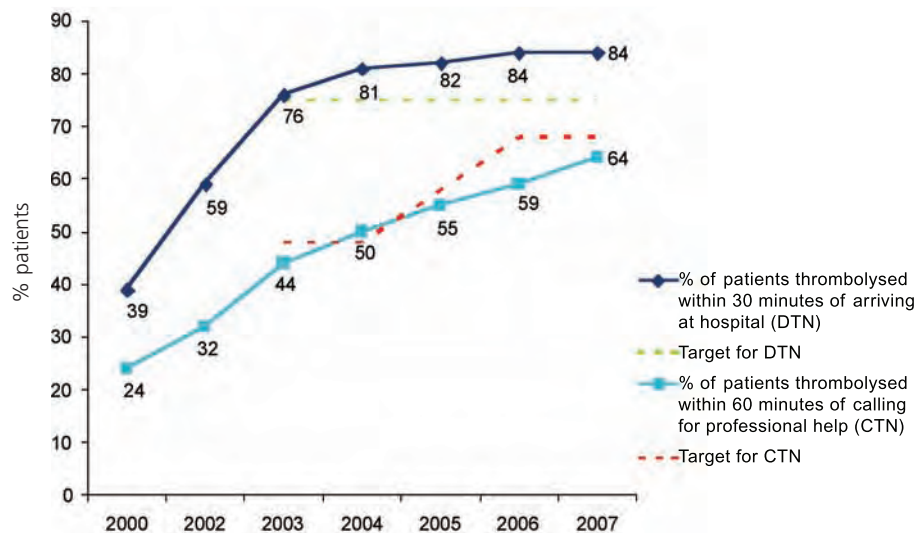


Source: OECD

## Thrombolysis rates post-AMI

This chart illustrates the percentage of heart attack patients who received thrombolysis (clot-busting drugs) within 30 minutes of arriving at hospital (the door-to-needle or DTN time) and within 60 minutes of calling for help (the call-to-needle-time or CTN). In 2000, the National Service Framework (NSF) standard for DTN stated that 75 per cent of eligible patients should receive thrombolytic drugs within 30 minutes of arriving at hospital. In April 2003, the target was reduced to 20 minutes. To provide longitudinal data, the Myocardial Infarction National Audit Project (MINAP) continues to collect data on the 30-minute time limit. In 2000, 39 per cent of patients were treated within 30 minutes of arriving at hospital. By 2007, this figure had risen to 84 per cent. The proportion of people being thrombolysed within one hour of calling for professional help, which is clinically more meaningful, was 24 per cent in March 2000 and 64 per cent in 2007.

Thrombolysis rates post-acute myocardial infarction, England, 2000–07

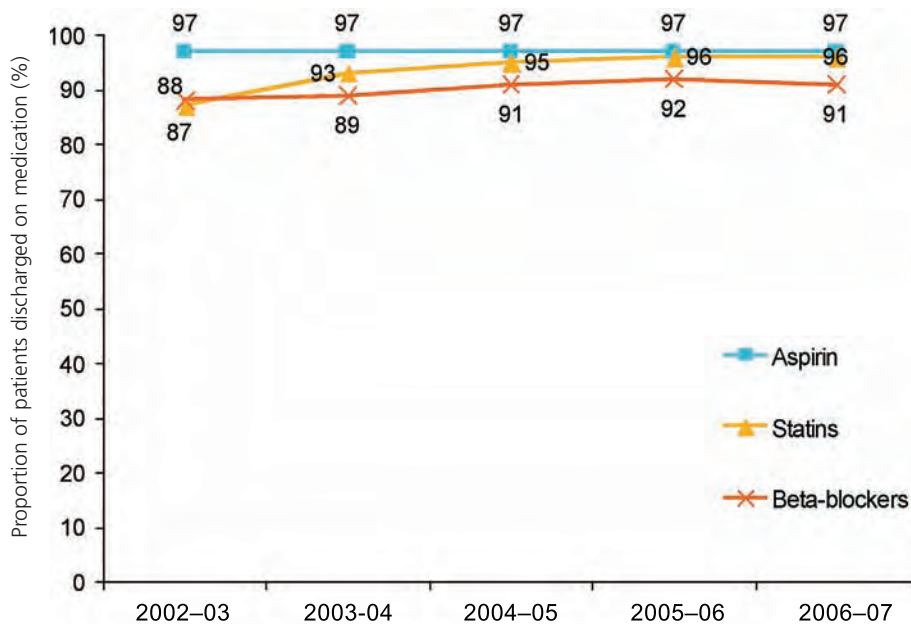


Source: Royal College of Physicians, MINAP

## Secondary prevention – AMI

MINAP was established in 2002 to monitor hospitals' performance in England against National Service Framework (NSF) standards for treatment of AMI. The NSF standard for secondary prevention is that 80 to 90 per cent of patients discharged from hospital following a heart attack should be given secondary prevention drugs (e.g. aspirin, beta-blockers, statins). The 2007 audit (RCP, 2007a) found that the proportion of heart attack patients in England prescribed secondary prevention medication on discharge from hospital exceeded the targets: 97 per cent for aspirin, 91 per cent for beta-blockers and 96 per cent for statins.

Proportion of patients discharged on secondary prevention medication, 2002–03 – 2006–07



Source: Royal College of Physicians, MINAP



## Heart failure

Heart failure is a clinical condition characterised by symptoms such as breathlessness and fatigue, and signs of fluid retention such as swollen ankles. It is caused when the heart is unable to pump enough blood fast enough to meet the needs of the body. It develops over time as the pumping action of the heart grows weaker. Most cases are due to coronary heart disease and damage following a heart attack. One-third of cases are caused by high blood pressure, which causes the heart's muscular wall to thicken, making it less flexible and unable to pump blood properly. Heart failure affects around 1 per cent of people in England, increasing steeply with age to about 7 per cent in men and women over 75 to 84 years and 15 per cent of those aged 85 and above. The number of patients with heart failure will rise in the next 20 years, due to the combined effects of improved survival after a heart attack and an ageing population.

It is difficult to determine the number of deaths caused by heart failure. Guidance given on death certificates specifies that heart failure is not a cause but a mode of death, discouraging doctors from recording heart failure as the underlying cause of death. This means that alternative descriptors, such as coronary heart disease, are more commonly given as the cause of death.

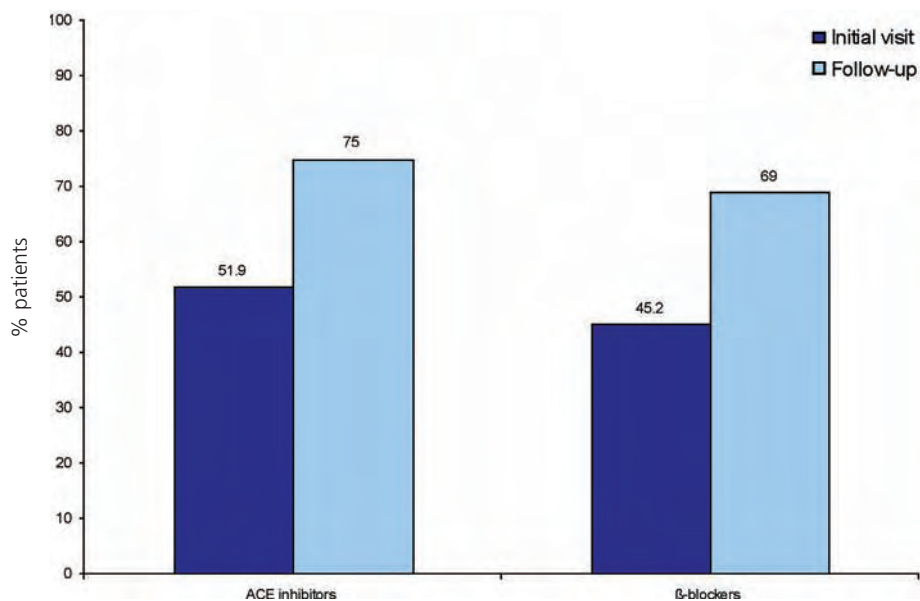
Heart failure accounts for about 5 per cent of all medical admissions to hospital, and rates of readmission are also among the highest for any common condition in England. Heart failure poses a high risk of sudden death. Survival rates are worse than for breast and prostate cancer, with annual mortality ranging from 10 per cent to 50 per cent depending on severity. Quality of life may be compromised, with over one-third of sufferers experiencing severe and prolonged depressive illness. Providing services to patients with heart failure costs the NHS an estimated £625 million each year. Research indicates that care provided by effective multidisciplinary teams can have a positive impact on health outcomes and quality of life (Healthcare Commission, 2007a; NHS Information Centre, 2007b).

Heart failure was therefore made a priority in the Department's Planning and Priorities Framework for 2003–06, which set a target to improve the management of patients with heart failure in line with the clinical guideline from NICE, and set local targets to reduce the number of patients admitted to hospital with a diagnosis of heart failure.

## Heart failure – appropriate prescribing

People with heart failure due to left ventricular systolic dysfunction need to receive optimal doses of certain drugs to improve symptoms, enhance life expectancy and help reduce hospital admissions. Key drugs include ACE inhibitors, diuretics and beta-blockers. Appropriate prescribing is a key element of the NSF and NICE guidelines. This chart illustrates data from a pilot national clinical audit and shows prescribing patterns in hospital patients admitted with heart failure. Not only are the prescribing rates of concern but it is important to point out that the quality of recording was deficient – records were available for only 31 per cent of heart failure cases from the initial visit and 50 per cent from follow-up, so a large proportion of patients are unaccounted for. Further insight is provided by the Healthcare Commission's acute hospital portfolio review of admissions management (2005–06), which included a survey of patients discharged with a diagnosis of heart failure. This indicated that, nationally, only 33.4 per cent of patients discharged alive with a diagnosis of heart failure were prescribed beta-blockers, with rates varying from 11.1 per cent to 66.7 per cent across acute trusts (data not shown). Clearly, this leaves considerable room for improvement.

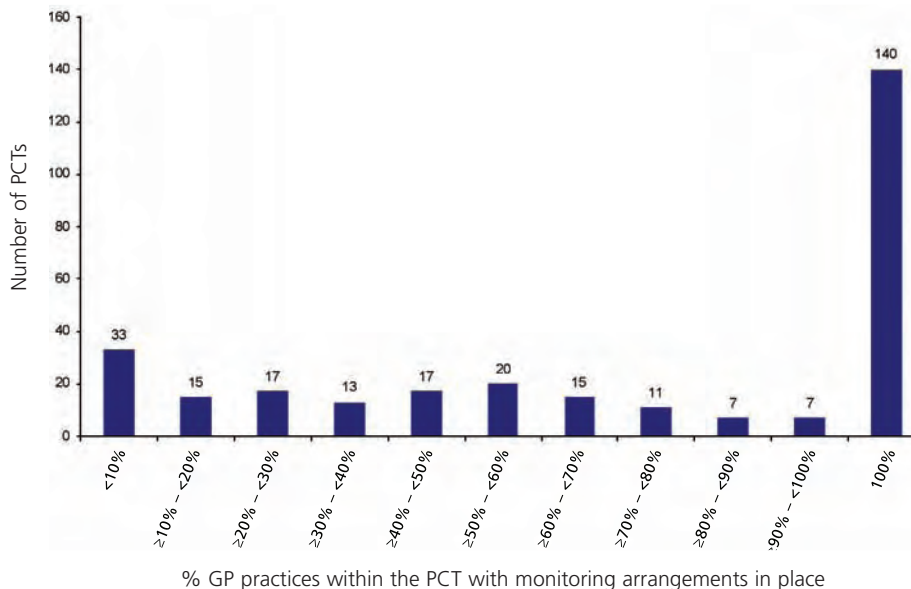
Prescribing for heart failure, England, 2007



## Arrangements for monitoring heart failure

The clinical condition of patients with heart failure may fluctuate considerably. Patients therefore need to be well monitored to reduce the likelihood of deterioration or co-morbidity and prevent repeated admissions to hospital. NICE guidance recommends a maximum interval between reviews of no more than six months for patients with a proven diagnosis who are stable, and no more than two weeks for patients whose clinical condition or medication has changed. The Healthcare Commission's review of health failure services found that as of 31 March 2006, 66.5 per cent of organisations had local guidelines on monitoring intervals, which were consistent with the recommendations from NICE (2003). The mere presence of written guidelines does not necessarily mean that all patients are being monitored effectively and there is no data available to show the extent to which patients receive a routine review. The chart illustrates the level of variation across PCTs in terms of utilisation of systems to recall stable patients with confirmed heart failure for six-monthly review. It shows that out of a total of 295 PCTs, 140 reported that all their practices had mechanisms to review heart failure patients in place, and that 33 PCTs reported that fewer than 10 per cent of their GP practices had such arrangements.

Proportion of GP practices with mechanisms to recall stable heart failure patients, PCT histogram, 2006

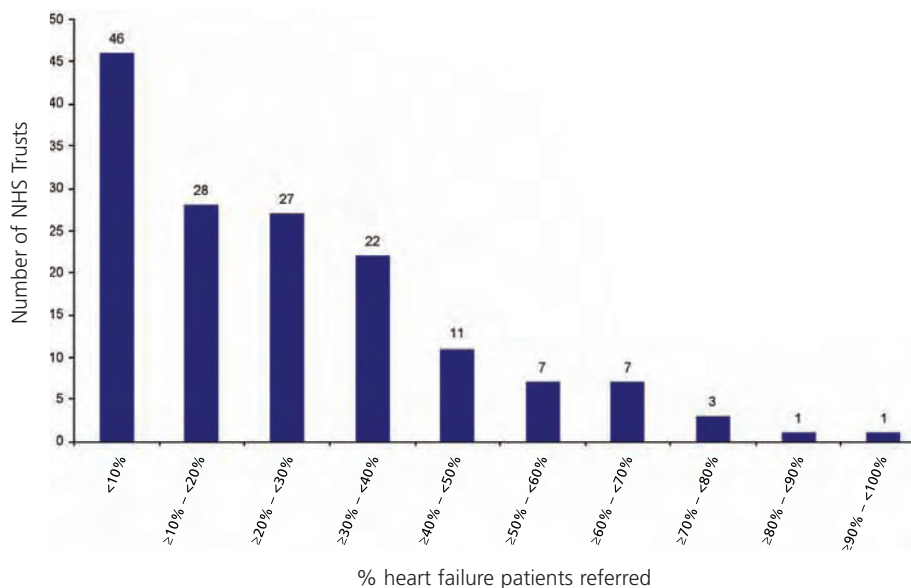


Source: Healthcare Commission, 2007

## Follow-up care – heart failure

The Healthcare Commission's service review of heart failure found that more than 80 per cent of communities have some access to specialist heart failure nurses in primary or secondary care. However, this chart illustrates variation across NHS trusts in the proportion of patients who were admitted to hospital with heart failure, that were referred to a heart failure service on discharge. Out of a total of 153 NHS trusts, 46 referred fewer than 10 per cent of patients to a heart failure service, and only one trust referred more than 90 per cent of its patients. Across all trusts, an average of 24.4 per cent of patients were referred to a heart failure service. This data suggests that while many communities have some specialist staff, few of the patients admitted to hospital as a result of their heart failure get access to them. This may be due to limited capacity and the criteria allowing access to services.

Proportion of patients referred to heart failure service on discharge, NHS trust histogram, 2006



Source: Healthcare Commission

## Stroke

A stroke, also known as a cerebrovascular accident (CVA), is “the brain equivalent of a heart attack” (NAO, 2005). A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain either gets blocked by a clot (an ischaemic stroke) or bursts and bleeds (a haemorrhagic stroke). As a result, the area of the brain supplied by that blood vessel is damaged or dies. The severity and consequences of stroke vary dramatically, from a limited episode known as a transient ischaemic attack (TIA) or ‘mini stroke’ with no persisting harm, to a severe incident that causes death or permanent disability.

Stroke is a disease which has a marked impact on the length and quality of many people’s lives. In England each year there

are more than 110,000 strokes – one-quarter of these affect people under the age of 65. About 300,000 people are living in England with moderate to severe stroke disabilities, making stroke the leading cause of severe adult disability.

In December 2007, the Department of Health released its National Stroke Strategy which lays out a 10-year plan to improve stroke services (DH, 2007a).

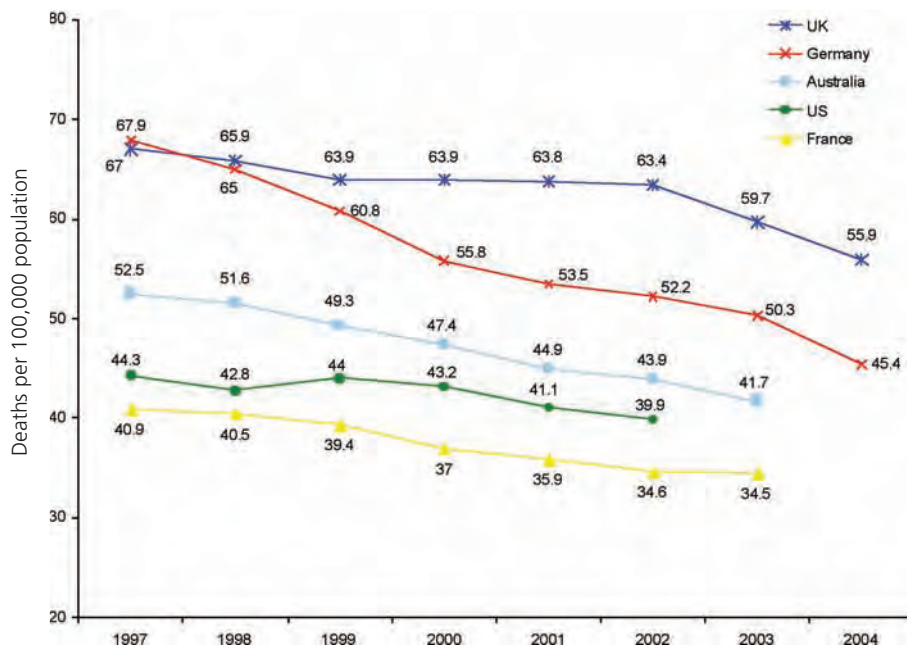
A chartbook, focused exclusively on stroke, has recently been produced by the authors (Leatherman et al., 2008) and is available at [www.health.org.uk/qquip](http://www.health.org.uk/qquip).

## Cerebrovascular disease mortality – international

Cerebrovascular disease (CVD) involves the blood vessels within or supplying the brain. CVD makes it more likely that a stroke will occur, either through a sudden blockage or a rupture of a blood vessel within the brain. The blockage may be due to a blood clot forming in the cerebral arteries (a thrombosis) or by a fragment of material (blood clot, piece of tissue, cholesterol or various other substances) travelling in the blood stream (an embolism). The chart shows that, internationally, mortality rates from CVD have been falling steadily. The UK saw a 16 per cent fall in mortality rates between 1997 and 2004; however, over the same timeframe, and with a similar starting rate in 1997, Germany saw a 33 per cent reduction: twice the improvement of the UK. The UK still has a significantly higher mortality rate relative to comparator countries.

	% decrease 1997–2004
Australia	20.6
France	15.6
Germany	33.1
UK	16.6
US	9.9

Mortality from cerebrovascular disease, international comparison, 1997–2004

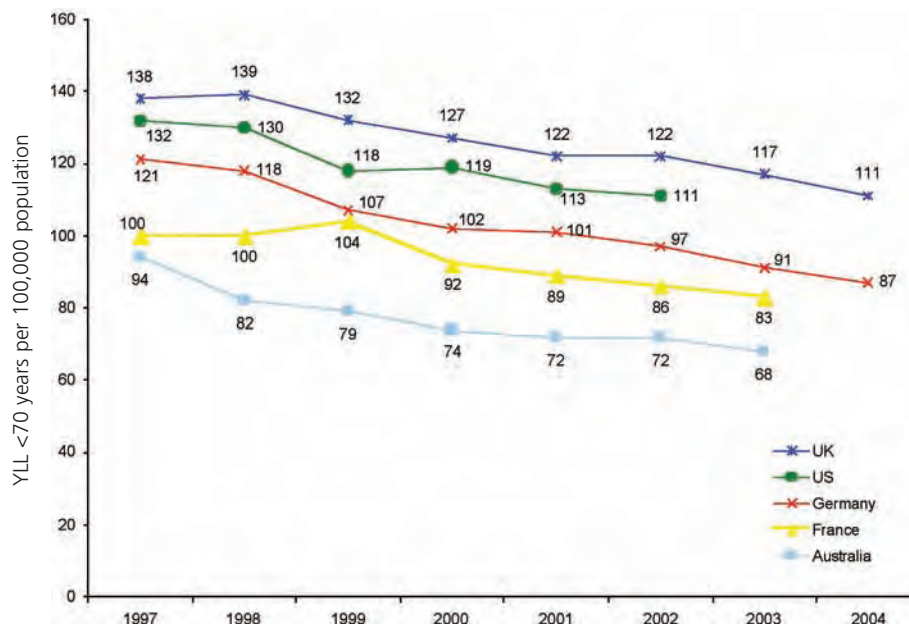


## Potential years of life lost to cerebrovascular disease – international comparison

YLL is a summary measure of premature mortality and is calculated by totalling the deaths from cerebrovascular disease occurring at each age and multiplying this by the number of remaining years of life up to a selected age limit (which, in the case of this OECD data, is 70 years). The chart shows that the most marked improvements were achieved by Germany and Australia, with a 28 per cent reduction in YLL. Of the countries shown, the UK performs worst (despite a reduction of 20 per cent), with the most potential years of life lost to cerebrovascular disease.

	% decrease 1997–2004
Australia	27.7
France	17.0
Germany	28.1
UK	19.6
US	15.9
Australia and France 2003; US 2002	

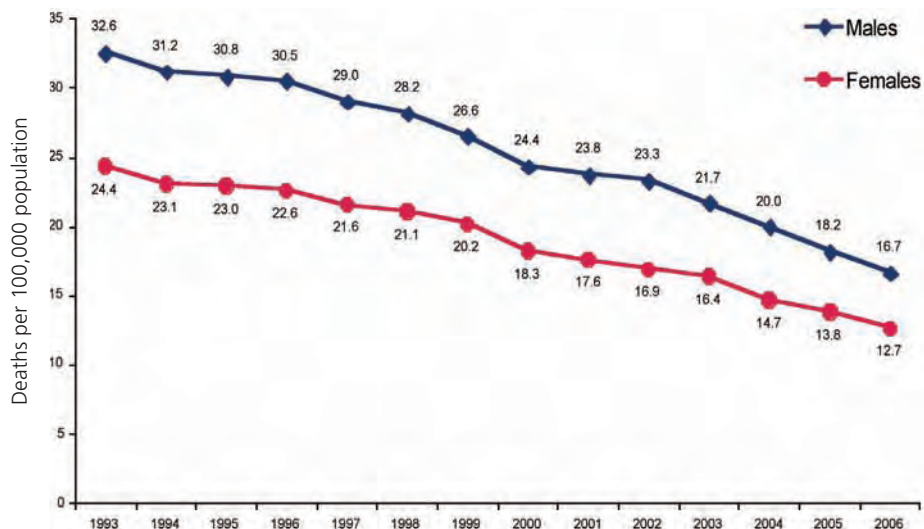
Potential years of life lost due to cerebrovascular disease, international comparison, 1997–2004



## Mortality rates from stroke

Stroke is the third biggest cause of death in England and a leading cause of adult disability. Each year more than 110,000 people in England have a first stroke. This chart shows that in people aged less than 75 years, mortality rates from stroke in England between 1993 and 2006 declined in males by 49 per cent and in females by 48 per cent. This improvement should be interpreted in the light of international trends in stroke mortality, which show that the UK has higher mortality rates than comparator countries.

Mortality rates from stroke (aged under 75 years), England, 1993–2006



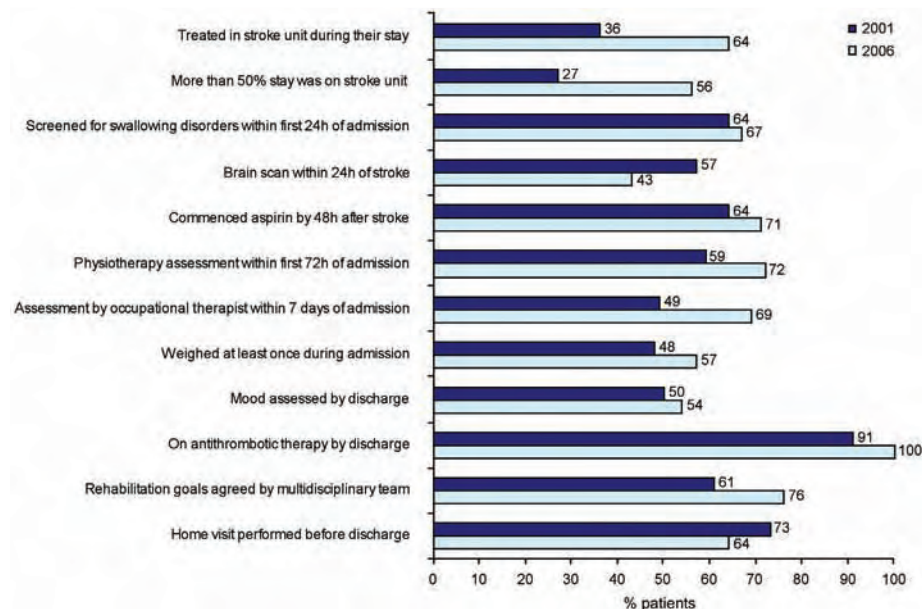
Source: NCHOD



## Key indicators for stroke care

The Royal College of Physicians' Sentinel Stroke Audit collects data retrospectively from patient records (RCP, 2002, 2005, 2006). It gauges performance against 12 key standards of care derived from research evidence and agreed by experts in the disciplines involved in the management of stroke. The chart illustrates performance in England against these standards in 2001 and 2006 and highlights a general improvement in all areas, although for most indicators, one-third (or more) of patients did not receive the recommended care.

Key indicator scores, Sentinel Stroke Audit, England, 2001 and 2006



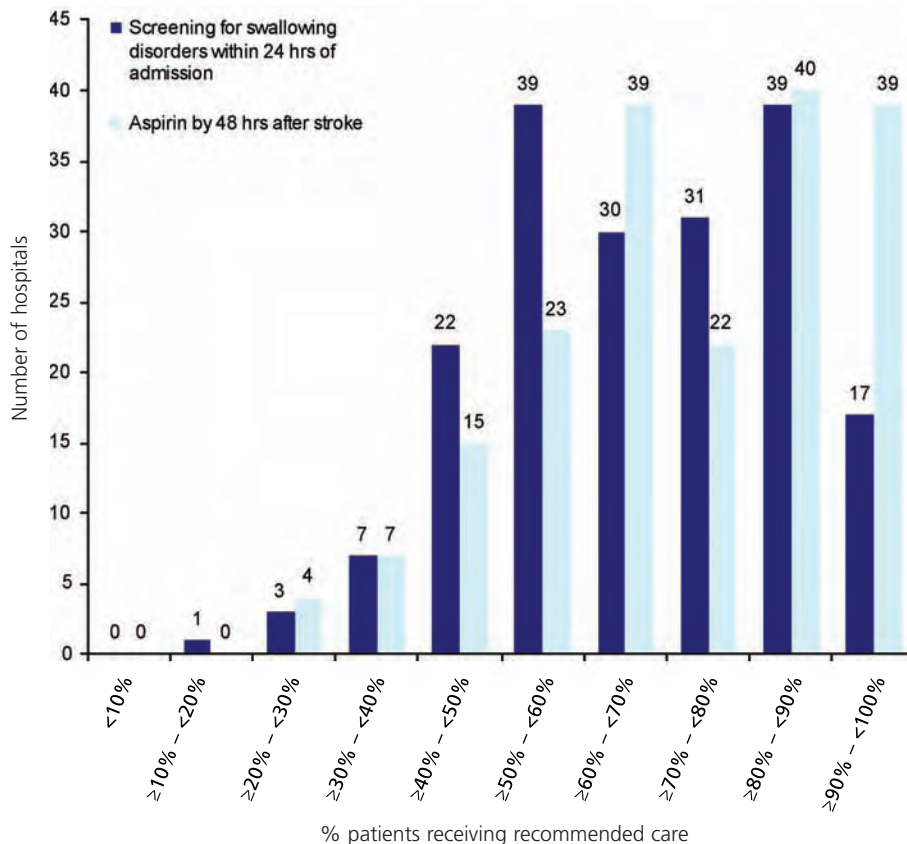
Note: The criteria for appropriate brain scan within 24 hours changed between 2001 and 2006 so that for a greater proportion of patients, scans were regarded as appropriate care. The standard has therefore become more stringent.

Source: Royal College of Physicians

## Variation within key indicators of stroke care effectiveness

The Sentinel Stroke Audit collects data retrospectively from patient records. The chart on the previous page shows achievement levels across England for 12 key process indicators. This chart shows the level of variation within England for two of those 12 indicators: the proportion of patients that are screened for swallowing disorders within 24 hours of admission, and the proportion given aspirin within 48 hours of their stroke. For screening for swallowing disorders, one hospital reported that fewer than 20 per cent of its patients were screened; at the other end of the spectrum, 17 hospitals reported that more than 90 per cent of their patients were screened (with one hospital reporting 100 per cent). For aspirin, results were generally better, with 39 hospitals reporting that more than 90 per cent of their patients were given aspirin (with five hospitals reporting 100 per cent), but still improvement is needed among the poorer performers.

Variation in key acute indicators, hospital histograms, England, 2006

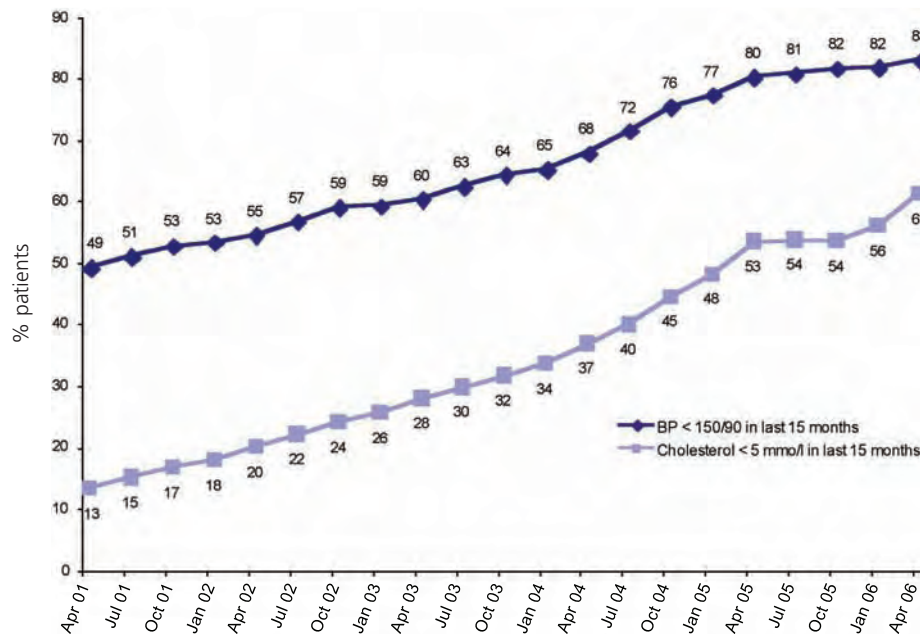


Source: Royal College of Physicians

## Prevention – Quality and Outcomes Framework indicators for stroke

This chart illustrates findings from an analysis of records from 498 general practices in England (overall registered population 3.4 million) conducted by QRESEARCH, a large consolidated database of general practice clinical records. It illustrates changes in the achievement of quality indicators for stroke patients. This data is valuable because it provides a picture of quality in stroke care both before and after the introduction of QOF in 2005. For both indicators, there has been a marked improvement over time, but no discernible upturn in trajectory as a result of the introduction of QOF.

Percentage of stroke patients achieving blood pressure and cholesterol targets, England general practice, 2001–06



Source: Hippisley-Cox et al., 2007

## Cancer

Cancer is a group of diseases characterised by uncontrolled growth and spread of abnormal cells. Each year, more than 230,000 people in England are diagnosed with cancer. In 2005, there were 126,246 cancer deaths in England, and the disease accounted for about one in four of all deaths (ONS, 2006, DH2 series). Cancer is primarily a disease of older people. Seventy-six per cent of cases occur in people aged 65 years and over. Mortality from four cancers – lung, large bowel, breast and prostate – account for almost half of all cancer deaths.

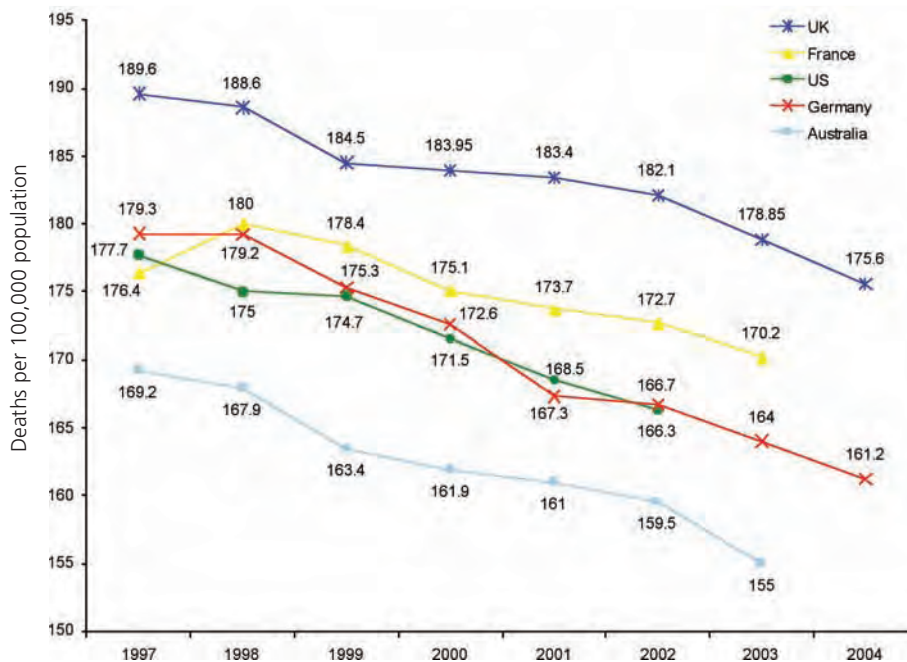
The NHS Cancer Plan was released in 2000 with a stated goal of improving England's cancer care over a 10-year period to become among the best in Europe. Although improvements have been made, this goal has not been achieved. In December 2007, the Department of Health released a new cancer strategy, supported by an investment of £370 million by 2010 (DH, 2007b). The Cancer Strategy includes a focus on prevention, faster treatment, extended screening, fast-track drug approval and extended services for the increasing numbers of people surviving cancer.

## Cancer mortality – international

Comparisons of mortality rates can give some indication of quality of healthcare, but should be interpreted carefully because many other factors, such as lifestyle, genetics and behaviour, also contribute to mortality rates. However, comparative data can give insight into the extent to which deaths may be amenable to healthcare or preventable. The chart shows that over the period 1997–2004, the UK has consistently had the highest mortality rates. While progress has been made in reducing these figures, both Germany and Australia have made more rapid progress.

	% decrease 1997–2004
Australia	8.4
France	3.5
Germany	10.1
UK	7.4
US	6.4
Australia and France to 2003; US to 2002	

Cancer mortality, international comparison, 1997–2004



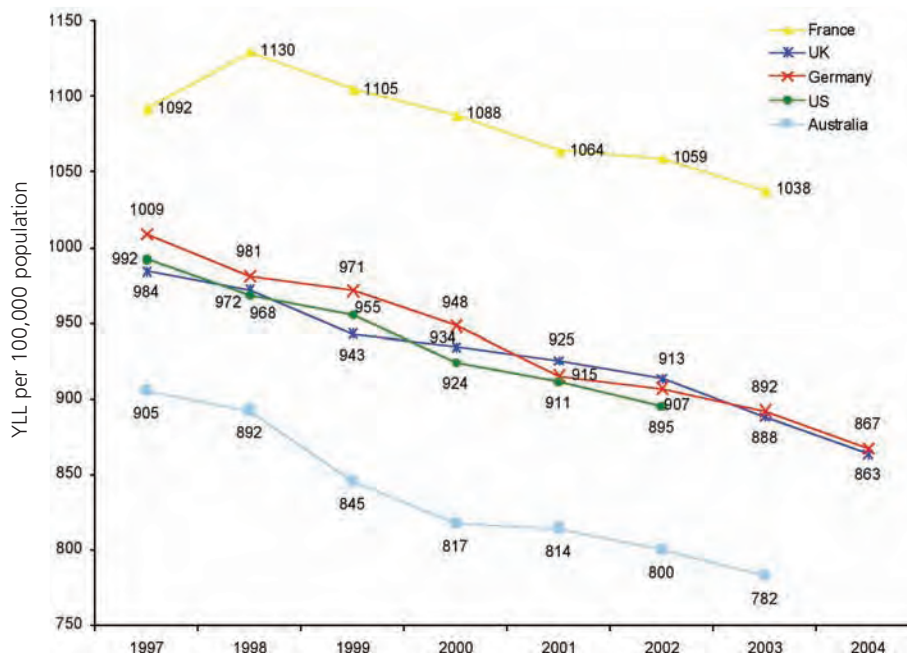
Source: OECD, 2007

## Potential years of life lost to cancer – international comparison

YLL (years of life lost) is a summary measure of premature mortality. It is the sum of deaths from cancer occurring at each age, multiplied by the number of remaining years of life up to a selected age limit (which, in the case of this OECD data, is 70 years). The chart shows that the most marked improvement was achieved by Germany and Australia, with a 14 per cent reduction in YLL between 1997 and 2004. The UK saw a 12 per cent reduction over the same time period.

	% decrease 1997–2004
Australia	13.6
France	4.9
Germany	14.1
UK	12.3
US	9.8
France and Australia 2003; US 2002	

Potential years of life lost to cancer, international comparison, 1997–2004

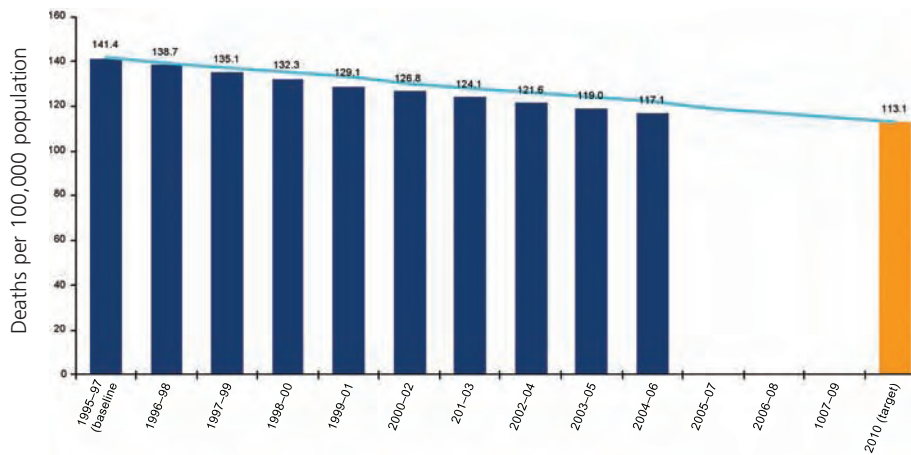


Source: OECD, 2007

## Mortality from cancer – progress against a target

The Government set a target in 1999 to reduce by 20 per cent the death rate from cancer in people under age 75 by 2010, using 1995–97 data as a baseline. As of 2004–06, an 18 per cent reduction in the rate of deaths had been achieved and so the target should be achieved. The chart on p.138 shows that a decline in cancer mortality rates has been seen across all developed healthcare systems.

Mortality rates from cancer (aged under 75 years), England, 1995–97 – 2004–06



Source: NCHOD

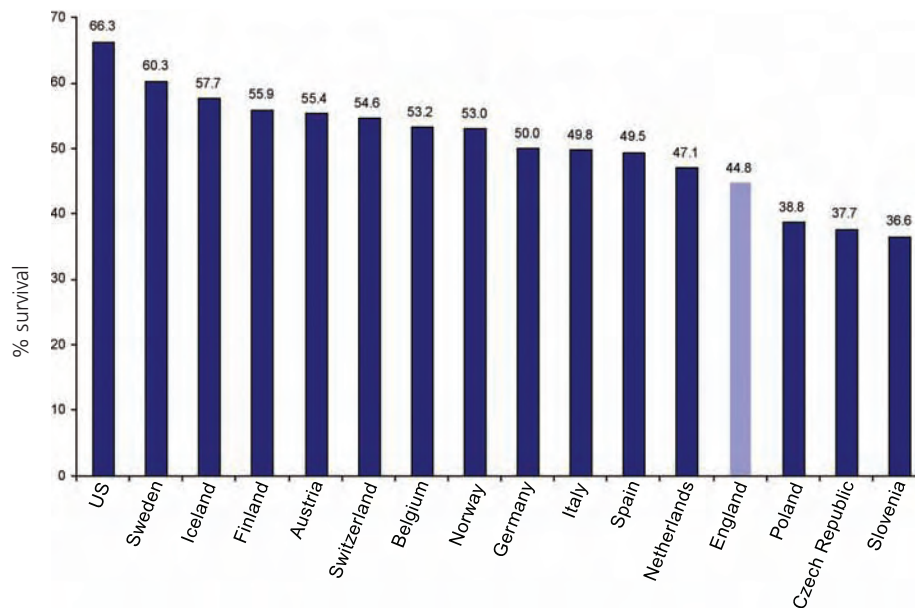




## Cancer survival rates – international comparison

In 1989, the EUROCARE project was established in an attempt to measure and explain international differences in cancer survival in Europe. In August 2007, the latest data comparing five-year relative survival rates (that is, the proportion of patients that are alive five years after their cancer diagnosis) was published. England's survival rates for the most common cancers – colorectal, lung, breast and prostate – were substantially behind those in Western Europe (see for example p.6 in Section One). The charts right illustrate further analysis of the EUROCARE-4 data, focusing on survival rates of patients diagnosed more recently, between 2000 and 2002. The variation in survival rates is more marked in males than in females. In both males and females, England has low relative survival rates.

Age-adjusted five-year relative survival, all malignancies, males diagnosed 2000–02

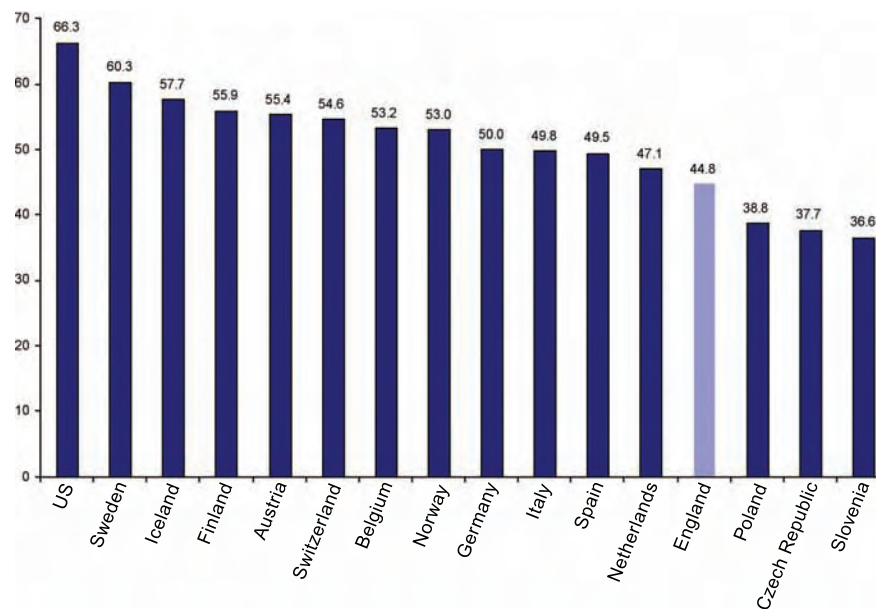


Note: US data taken from Surveillance, Epidemiology and End Results (SEER) group of 13 registries, provided for comparison.

Source: Verdecchia et al., 2007

## Cancer survival rates – international comparison continued

Age-adjusted five-year relative survival, all malignancies, females diagnosed 2000–02



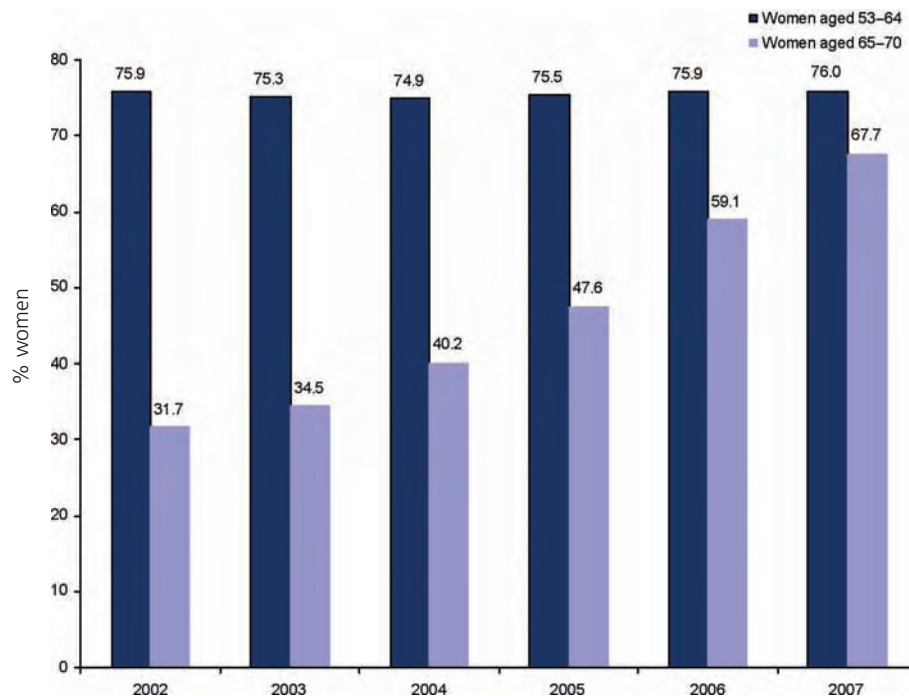
Note: US data taken from Surveillance, Epidemiology and End Results (SEER) group of 13 registries, provided for comparison.

Source: Verdecchia et al., 2007

## Breast cancer screening

The WHO's International Agency for Research on Cancer (IARC) evaluated the available evidence on breast cancer screening and found a 35 per cent reduction in mortality from breast cancer among screened women aged 50–69 years old. According to the Department of Health (DH, online a), out of every 500 women screened, one life will be saved. The breast screening programme in England, set up in 1988, originally covered women aged 50–64 but was phased in for women aged 65–70 from April 2001. Just under 1.64 million women aged 50–64 were invited for screening in 2006–07. Uptake (that is, the proportion of women invited for screening who attend) for this age group was 74 per cent in 2006–07. This chart illustrates coverage data (that is, the proportion of women who have been screened at least once in the previous three years) for two age groups, 50–64 and 65–70 years, and shows the result of widening the programme to older women.

Breast cancer screening coverage, England, 2002–07



Source: NHS Information Centre

## Diabetes

Diabetes mellitus is a disease in which the body does not produce, or properly use, insulin. Insulin, a hormone produced by the pancreas, is needed to convert sugar, starches and other food into energy. Insulin deficiency results in the high blood sugar levels characteristic of diabetes. There are two main forms of diabetes: type 1 results from the body's failure to produce insulin, and type 2 results from insulin resistance (suboptimal use of insulin). Type 2 diabetes is much more common – 90 per cent of diabetics have type 2 disease. Diabetes is associated with serious chronic ill-health, disability and premature mortality. Long-term complications include heart disease, stroke, blindness, kidney disease and amputations, and they make a substantial contribution to the costs, both personal and financial, of diabetes care. Life expectancy is reduced, on average, by 23 years in people with type 1 and by up to 10 years in people with type 2 diabetes (DH, 2007c). Many of the long-term effects of diabetes could be avoided with effective control of blood pressure and blood sugar levels (UK Prospective Diabetes Study Group, 1998).

There are an estimated 2.46 million people, almost 5 per cent of the population, with diabetes in England. Incidence and prevalence differs markedly across ethnic and socioeconomic groups. Some 20 per cent of people of South Asian origin and 17 per cent of African Caribbean origin have type 2 diabetes, as compared to 3 per cent of the population as a whole (Watkins et al., 2003). People living in the most deprived areas are about 40 per cent more likely to have diabetes, compared to those living in least deprived areas (YHPHO, 2006).

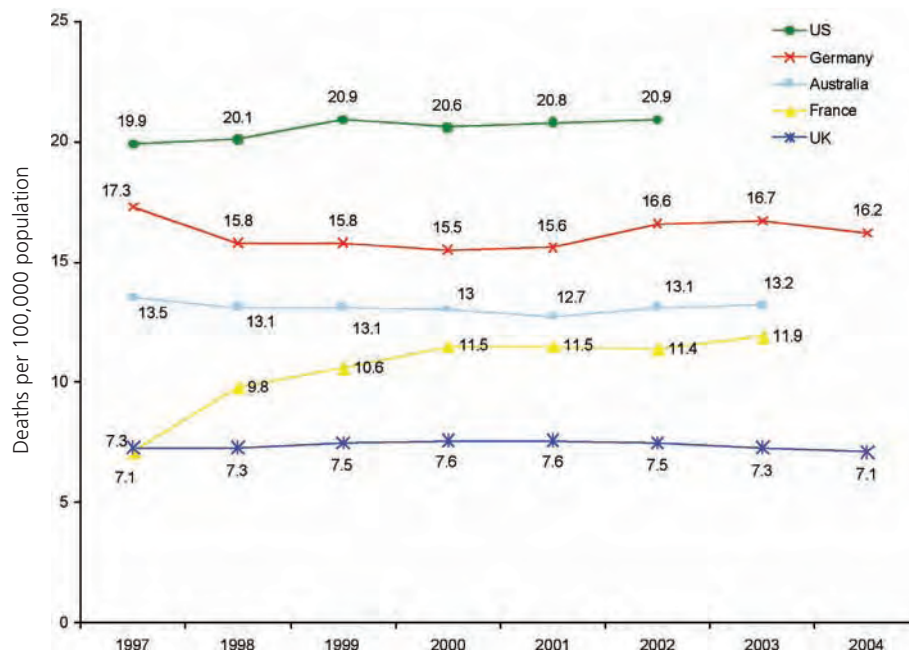
The economic costs of diabetes are substantial. Almost 10 per cent of the NHS budget is spent on the care of people with diabetes (NHS Information Centre, 2006).

## Diabetes mortality – international comparison

Mortality rates from diabetes are much lower than those from cancer or heart disease, despite high levels of incidence and prevalence. It is known that there is significant under-recording of diabetes as an underlying cause of death, because deaths in diabetic people are often coded to the secondary complications associated with diabetes. The extent of under-reporting may vary geographically and over time and so the data should be interpreted with care. The chart shows that the UK has a relatively low mortality rate from diabetes. It has been estimated that in 2005 there were 20,760 excess deaths among people with diabetes between the ages of 20 and 79 years in England. This equates to 8.5 per cent of all deaths in this age group (YPHO, 2006).

	% change 1997–2004
Australia	-2.2
France	67.6
Germany	-6.4
UK	-2.7
US	5.0
Australia and France to 2003; US to 2002	

Mortality from diabetes mellitus, international comparison, 1997–2004

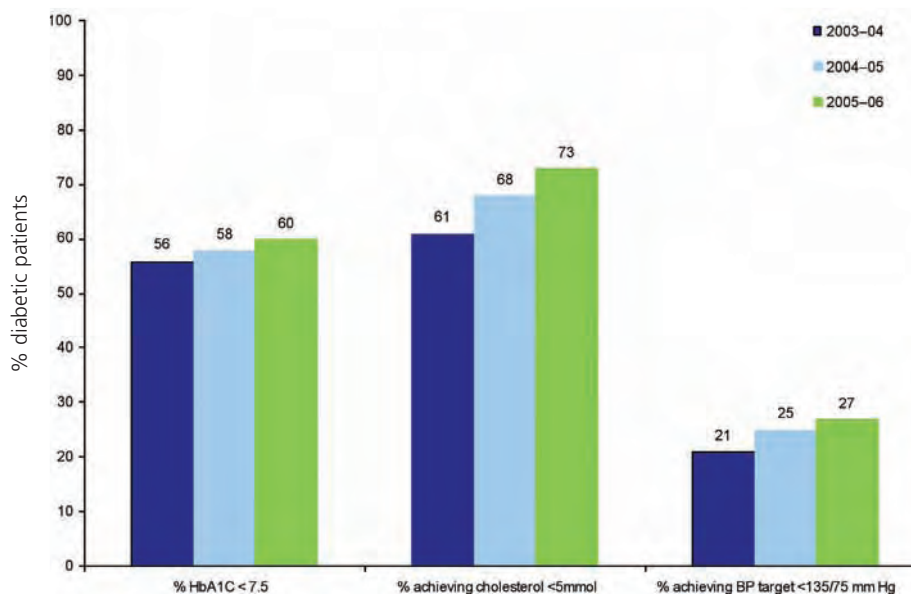


Source: OECD

## Effective management of diabetes

The *National Service Framework for Diabetes* (DH, 2001: standard 4) stated that: “All adults with diabetes will receive high-quality care throughout their lifetime, including support to optimise the control of their blood glucose, blood pressure and other risk factors for developing the complications of diabetes.” NICE guidelines recommend that the HbA1c level should be less than 7.5 per cent; cholesterol should be less than 5 mmol/litre; and blood pressure less than 135/75mm Hg. In 2005–06, the National Diabetes Audit found that 60 per cent of adult diabetic patients achieved HbA1c levels of less than or equal to 7.5 per cent; 73 per cent were reported to have achieved the cholesterol target level of less than 5 mmol/litre, and 27 per cent achieved the blood pressure target (less than or equal to 135/75 mm Hg). The longitudinal data shows year-on-year improvement.

Effective primary care, diabetes 2003–04 – 2005–06

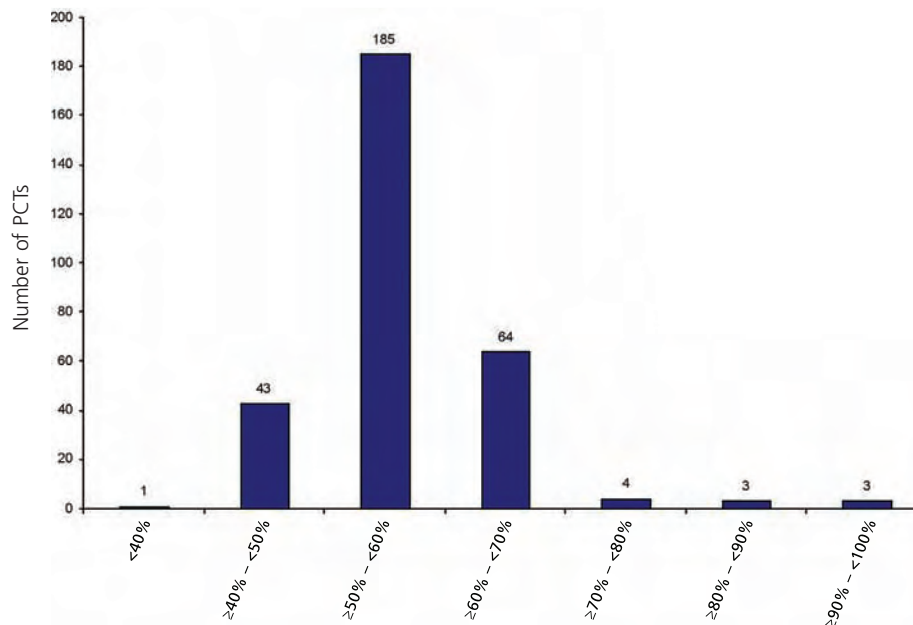


Source: National Diabetes Audit

## Diabetes control – PCT variation

Two landmark studies, the Diabetes Control and Complications Trial (DCCT, 1993) and the United Kingdom Prospective Diabetes Study (UKPDS), have demonstrated the beneficial effects of maintaining good glycaemic control on the development and progression of diabetic complications in type 1 and type 2 diabetes. HbA1c provides a measure of average blood sugar over the 60–90 days preceding the test and so is a good indicator of glycaemic control. NICE guidelines recommend that HbA1c levels should be less than 7.5 per cent. This chart draws on QOF data and shows the variation across PCTs in the percentage of diabetic patients with good glycaemic control. Across all PCTs, an average of 56 per cent of diabetic patients had HbA1c of under 7.4 per cent. Three PCTs reported that more than 90 per cent of their diabetic patients were maintaining good control of their blood sugar.

Percentage of diabetes patients with last HbA1c of 7.4 per cent or less in previous 15 months, histogram PCTs, 2005–06



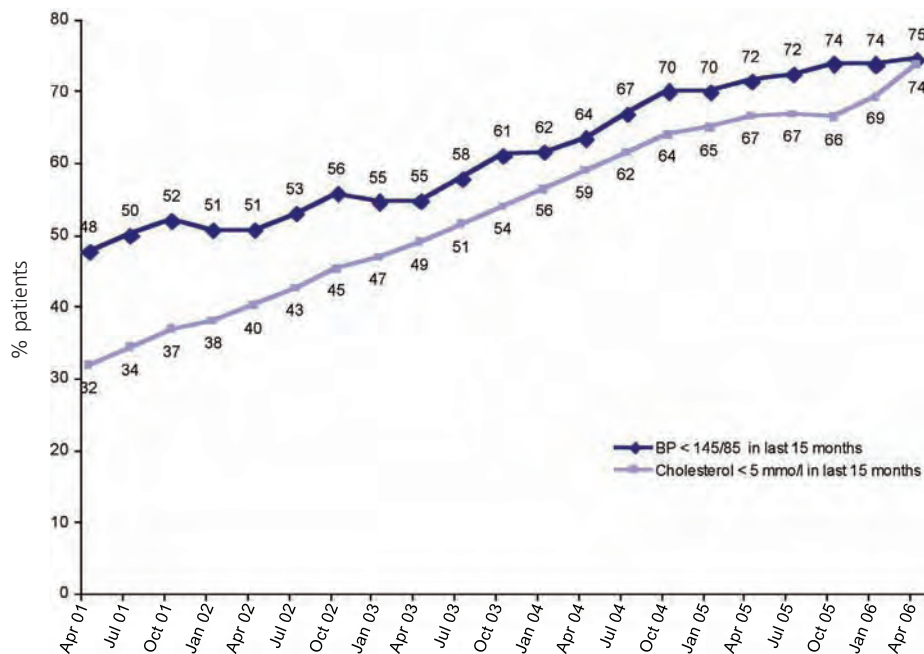
\* Data not case-mix adjusted.

Source: Healthcare Commission, QOF

## Diabetes indicators – time series, blood pressure and cholesterol

This chart illustrates findings from a large analysis of records from 498 general practices in England (overall registered population 3.4 million) conducted by QRESEARCH, a large consolidated database of general practice clinical records. The data provides a picture of quality in diabetes care both before and after the introduction of the QOF in 2005. The chart illustrates data on the control of blood pressure and cholesterol in diabetes patients – showing in both cases an impressive improvement over time, but no marked upturn in trajectory following the introduction of QOF.

Percentage of diabetes patients achieving blood pressure and cholesterol targets, England general practice, 2001–06



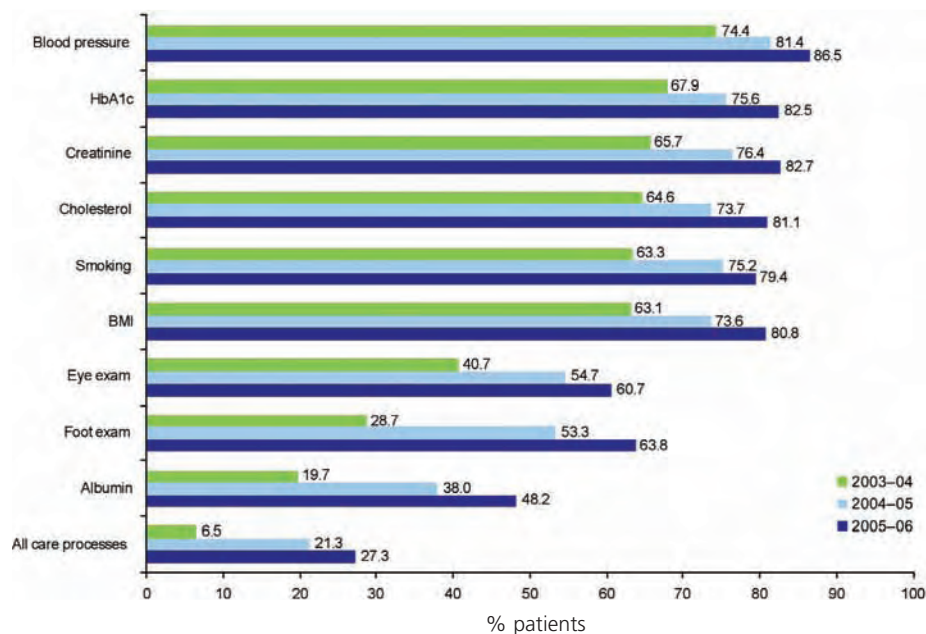
Source: Hippisley-Cox et al., 2007



## Provision of recommended care processes

There are a number of key care processes in diabetes that are associated with better control of the disease, and subsequent improvements in long-term outcomes and quality of life. The National Diabetes Audit monitors the delivery of these key processes. The chart illustrates that there have been year-on-year improvements in provision; although fewer than one-third of patients receive all of the recommended interventions.

Provision of recommended care process in diabetes, England, 2003–04 – 2005–06

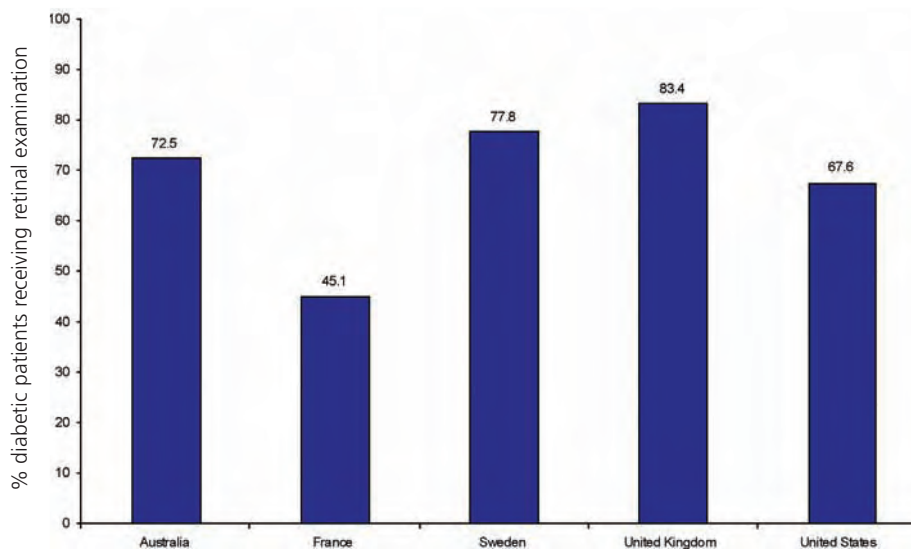


Source: National Diabetes Audit

## Retinal examination – international comparison

Retinopathy poses a serious threat to vision. In the US, diabetes is responsible for 8 per cent of legal blindness, making it the leading cause of new cases of blindness in adults 20–74 years of age. Nearly all patients who have type 1 diabetes for 20 years or so will have evidence of diabetic retinopathy. Around one-fifth of people with type 2 diabetes have retinopathy when first diagnosed with diabetes, and most type 2 diabetics will eventually develop some degree of retinopathy. In patients with manifest retinopathy, treatment can delay progression and can reduce the risk of blindness by 95 per cent. Patients may develop retinopathy without experiencing any symptoms, so retinal examinations are important in management of the disease. The chart draws on data collected by the OECD as part of its *Healthcare Quality Indicators Project* (2006), and shows that the UK is performing relatively well.

Retinal examination in diabetics, international comparison, c. 2004

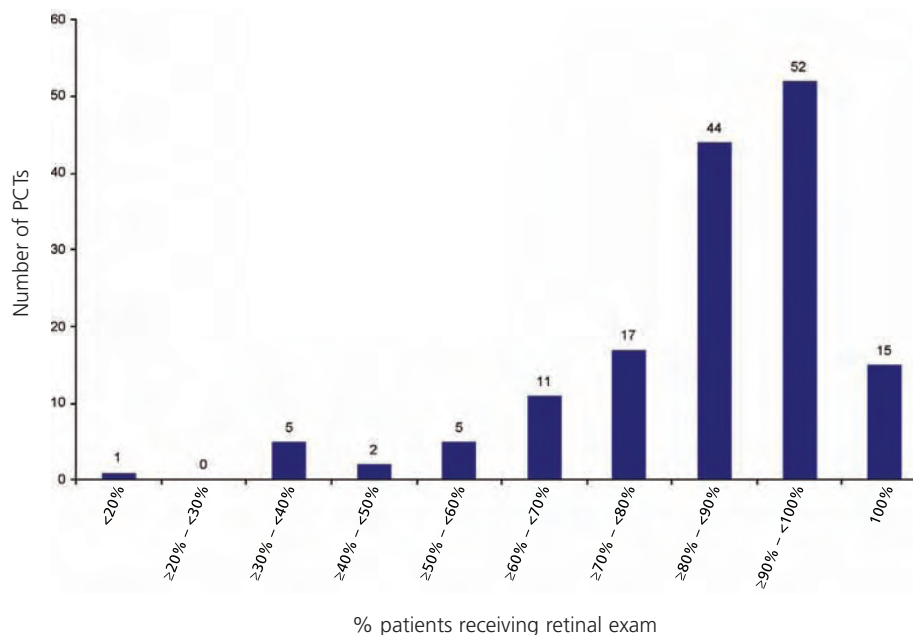


Source: OECD, 2006

## Retinal examination – variation across PCTs

In the document National Standards, Local Action (DH, 2004a) the government promised that a minimum of 80 per cent of people with diabetes were to be offered screening for the early detection (and treatment if needed) of diabetic retinopathy by March 2006, and 100 per cent by 2007. This indicator is calculated by dividing the number of people with diabetes offered screening for the early detection of diabetic retinopathy (in the fourth quarter of 2006–07) by the number of people with diabetes identified by the practices in the PCT (the third quarter of 2006–07), expressed as a percentage. Out of 152 PCTs, eight screened fewer than half of their diabetic patients; 15 PCTs achieved the target of screening 100 per cent of their patients. Across all PCTs, the average score was 84.1 per cent.

Retinal examination – variation across PCTs



Source: Healthcare Commission, QOF

## Maternity and infant care

Each year more than 635,000 babies are born in England. In July 2005, Sir Ian Kennedy, Chairman of the Healthcare Commission, warned of growing evidence that some maternity services “are not as good nor as safe as they could be” (Healthcare Commission, 2005). In the previous two years the Commission had conducted three investigations of maternity units with high death rates. Their analysis identified five factors that suggest a maternity unit may represent increased risk for patients:

- weak risk management with poor reporting of incident and handling of complaints
- poor working relationships and working in multidisciplinary teams
- inadequate training and supervision of clinical staff
- poor environment with services isolated geographically or clinically
- shortages of staff coupled with poor management of temporary employees.

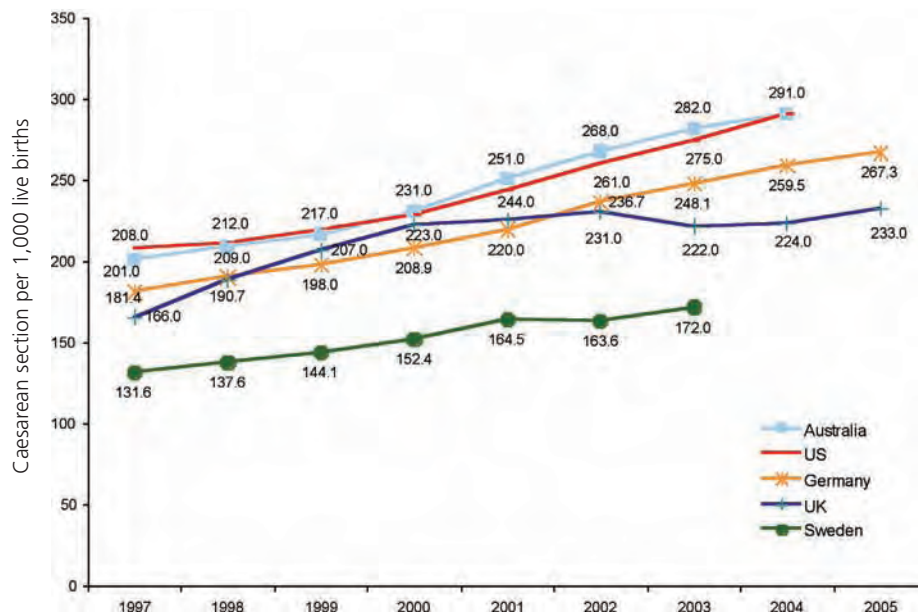
Concerns about maternity services were heightened by the deaths of 10 women during or after childbirth at Northwick Park Hospital in London between 2002 and 2005. A Healthcare Commission (2007b) investigation found that problems such as inadequate staffing and failure to respond quickly to problems during labour contributed to nine of the 10 deaths. The Healthcare Commission embarked on a programme of assessments of maternity care in each NHS trust in England and ranked:

- 26 per cent (38 trusts) as ‘best performing’
- 32 per cent (47 trusts) as ‘better performing’
- 22 per cent (32 trusts) as ‘fair performing’
- 21 per cent (31 trusts) ‘least well performing’.

## Caesarean section rates

The public health community has been concerned for many years about the increasing rate of caesarean sections. The World Health Organization has stated that national caesarean section rates should be between 5 per cent and 15 per cent of births (WHO, 1999a). NHS Direct (2008) reports that the risk of death is three times greater for a Caesarean section than for a vaginal delivery. The chart illustrates time series data from five developed healthcare systems. The UK with a caesarean section rate of 23 per cent in 2005 performs better than countries such as Australia, the US and Germany.

Caesarean section rates, international comparison, 1997–2005

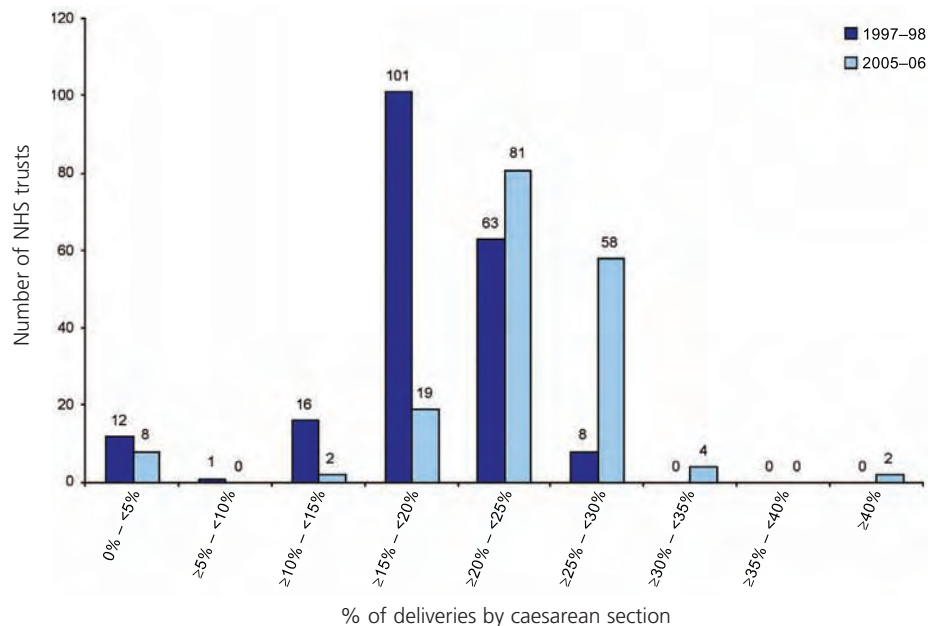


Source: OECD, 2007

## Caesarean section rate – variation across NHS trusts

In 2005–06, 23.5 per cent of deliveries in England were carried out by caesarean section compared to 18 per cent in 1997–98 (NHS Information Centre, 2007d). In 2006–07, across NHS trusts the percentage of deliveries that were caesarean ranged from 0 per cent (eight trusts) to 100 per cent (two trusts), with a mean of 23.6 per cent and a median of 23.7 per cent. In 1997–98, percentages ranged from 0 per cent (eight trusts) to 29 per cent (one trust) with a mean of 17.4 per cent and median of 18.0 per cent. The data illustrates a generalised increase in c-section rates and that variability across provider organisations has increased over the last decade.

Caesarean section rates, NHS trust histogram, 1997–98 and 2005–06

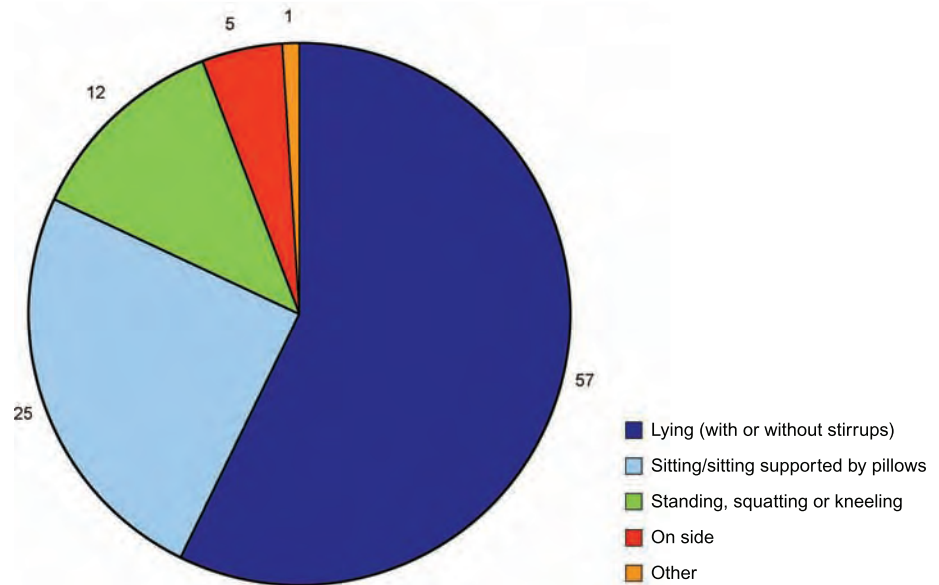


Source: NHS Information Centre

## Complying with evidence-based recommendations – birth positions

Recently published guidelines from NICE recommend that women should be discouraged from lying down to give birth and helped to squat, stand and move about during labour. This chart draws on data from the Healthcare Commission's survey of maternity patients and shows that more than one-half of respondents gave birth in the non-recommended lying position.

Delivery positions (%), maternity patient survey, England, 2007



Source: Healthcare Commission

## Perinatal mortality rates – international comparison

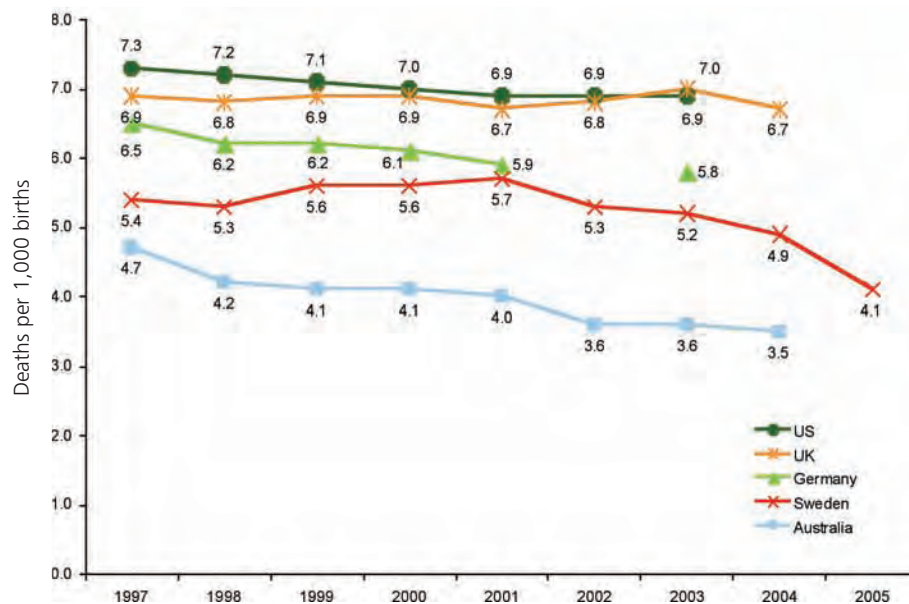
The OECD defines perinatal mortality as the ratio of deaths of children within one week of birth (early neonatal deaths) plus foetal deaths of a minimum gestation period of 28 weeks or minimum foetal weight of 1,000g, expressed per 1,000 births.

Risk factors for perinatal mortality include:

- low birthweight: stillbirth rates for the low birthweight (under 2,500g) group are 300 times higher than the normal birthweight group
- age of the mother: stillbirth rates for women aged below 20 years or over 35 years have a higher risk
- multiplicity of pregnancy: risk of stillbirth is approximately three times higher for multiple deliveries compared to singleton deliveries
- region of maternal residence (see chart on p.159)
- social class: reflected in regional differences; rates are higher among lower classes

*Continued over...*

Perinatal mortality deaths, 1,000 total births, international comparison, 1997–2005



Note: variations exist in the definitions between countries, particularly of foetal deaths, and as such care should be exercised when making comparisons between countries.

Source: OECD, 2007



*Perinatal mortality rates – international comparison continued*

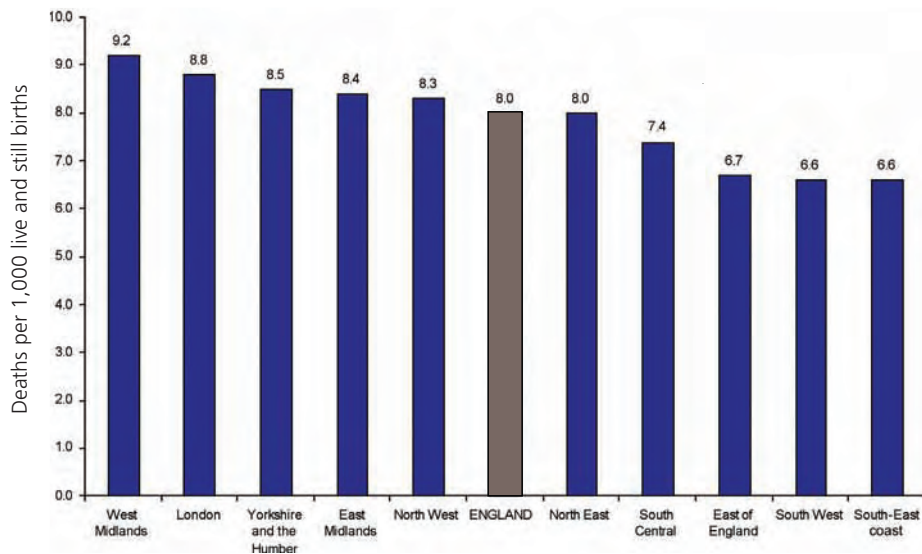
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- maternal country of birth: rates are 30 per cent higher among ethnic minority mothers born outside the UK compared to UK-born mothers
- gestation/prematurity: risks increase with lower gestation
- sex: trends show that stillbirth rates are predominantly higher among males compared to females
- method of delivery/perinatal interventions: forceps and breech deliveries show the highest rates. High-risk babies have improved outcomes with improved obstetric and paediatric care (including staffing, departmental organisation, interpartum intervention, neonatal intensive care units, special care baby units).

## Perinatal mortality – regional variation

Perinatal mortality includes stillbirths and early neonatal deaths (deaths under seven days of life). The perinatal mortality rate is indicative of perinatal and neonatal care, as well as living standards, maternal health, and medical intervention and care. This chart shows the extent of variation across English regions in perinatal mortality rates. The highest rate, recorded in the West Midlands, was 39 per cent higher than that recorded in the South West and South-East coast.

Perinatal mortality rates, England regions, 2006

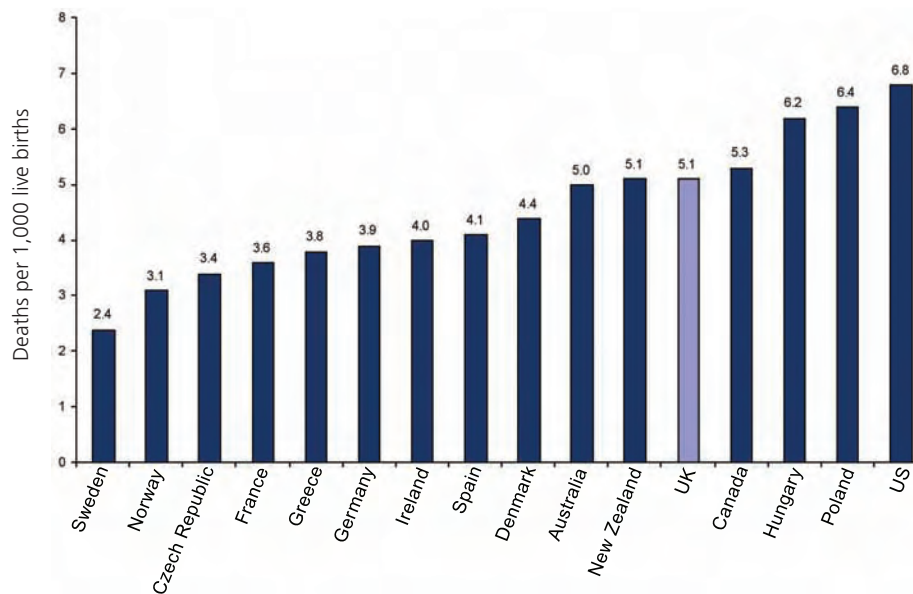


Source: ONS

## Infant mortality – international comparison

Infant mortality refers to deaths in children under one year of age. It is a sensitive measure of the overall health of a population as the causes of infant mortality are likely to influence the health status of whole populations, such as their economic development, general living conditions, social well-being, rates of illness and the quality of the environment (Reidpath and Allotey, 2003). The charts below show the UK's relatively high rate of infant mortality and low birthweight babies in comparison with other OECD countries. An accompanying chart illustrates the association between infant mortality and socioeconomic deprivation in England (see p.240).

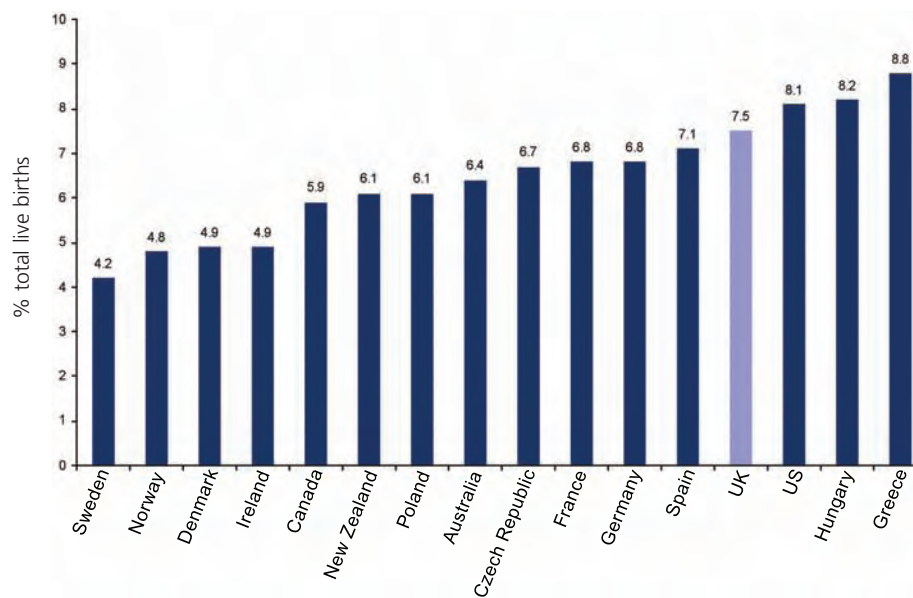
Infant mortality, international comparison, 2005



Source: OECD, 2007

## Infant mortality – international comparison continued

### Low birthweight, international comparison, 2005

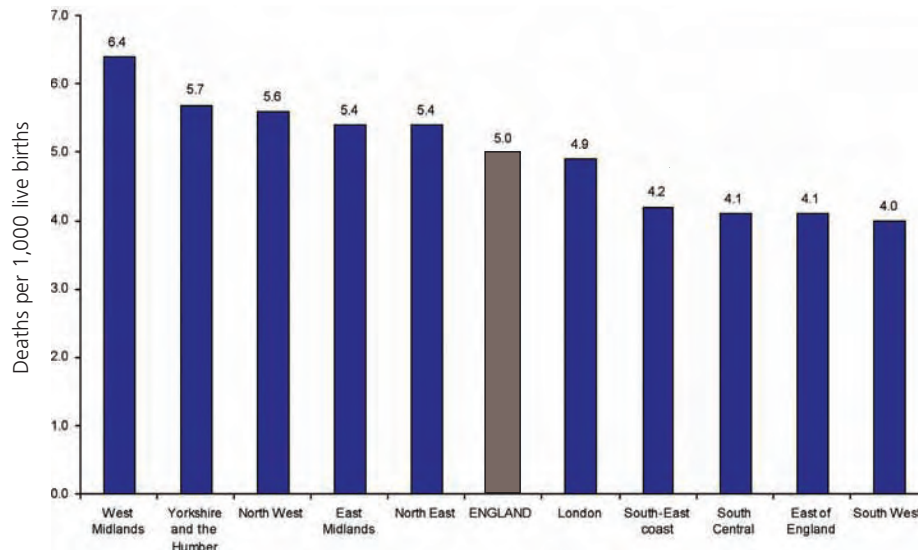


Source: OECD, 2007

## Infant mortality – regional variation

Infant mortality refers to the number of deaths under the age of one year per 1,000 live births. It consists of two components: the neonatal mortality rate (deaths occurring during the first 28 days of life) and the post-neonatal mortality rate (deaths between 28 days and one year). This chart shows the extent of variation across English regions in infant mortality rates. The highest rate, recorded in the West Midlands, was 60 per cent higher than that recorded in the South West.

Infant mortality rates, regional variation, England, 2006



Source: ONS

## Mental health

One in six people in England experiences mental health problems at some stage in their lives. A significant number of patients do not receive services of a high standard that meet their individual needs. The World Health Organization predicts that depression will be the leading global cause of disability by 2020. Besides the personal and social impact of mental health disorders, the financial costs are high. A 2004 Cabinet Office Social Exclusion Unit report into mental health and social exclusion calculated that mental health problems cost the UK an estimated £77 billion a year (Healthcare Commission and Commission for Social Care Inspection, 2007) .

Specialist community mental health services in England have received £1.5 billion since the launch of the National Service Framework for Mental Health in 1999 (Appleby, 2007). This

National Service Framework provided the infrastructure to support the transition from predominantly hospital-based secondary care to services based in the community. The investment has helped to deliver new models of care in the community, such as the establishment of assertive outreach and crisis resolution home treatment teams.

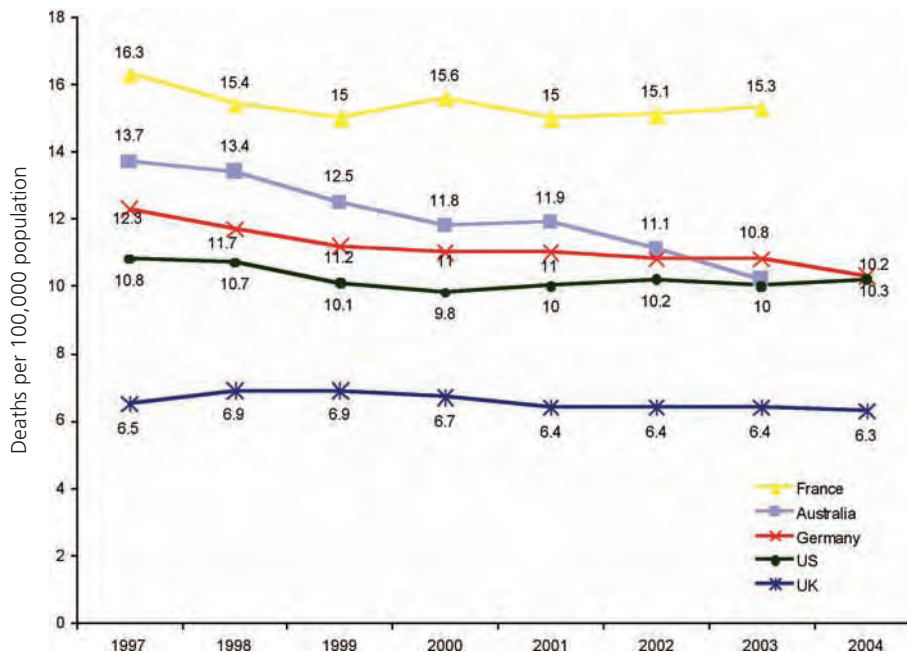
Many of the policy documents relevant to mental health in England emphasise the importance of patients being involved in the planning of their own care and in decisions about their treatment – data on this critically important element of quality in mental health is provided in the section on patient-centredness (see pp.224).

## Suicide rate – international comparison

The WHO estimates that mental illness represents 23 per cent of the burden of disease in developed countries (WHO, 1999b). This chart shows that suicide rates in the UK are relatively low compared to other countries. Australia has experienced the greatest reduction in suicide rates over the time period, with a 25 per cent fall in rates between 1997 and 2003.

	% decrease 1997–2004
Australia	25.5
France	6.1
Germany	12.2
UK	3.1
US	5.6
Australia and France to 2003	

Mortality from international self-harm, international comparison, 1997–2004

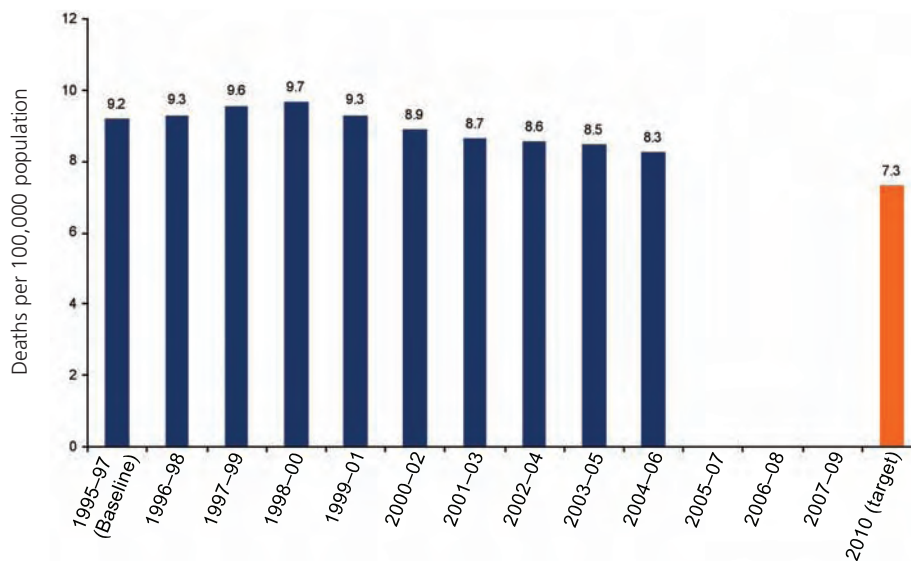


Source: OECD, 2007

## Suicide rate – progress against a target

Suicide represents the ultimate failure of the health system, and society, to help an individual in need of medical and psychosocial care and community support. *Saving Lives: our healthier nation* (DH, 1999) set a target for 2010, to reduce by 20 per cent the suicide rate, using 1995–97 as a baseline. The chart illustrates some progress; by 2004–06, a 10 per cent reduction had been achieved.

Mortality from suicide and injury undetermined, progress against target, England 1995–97 – 2004–06



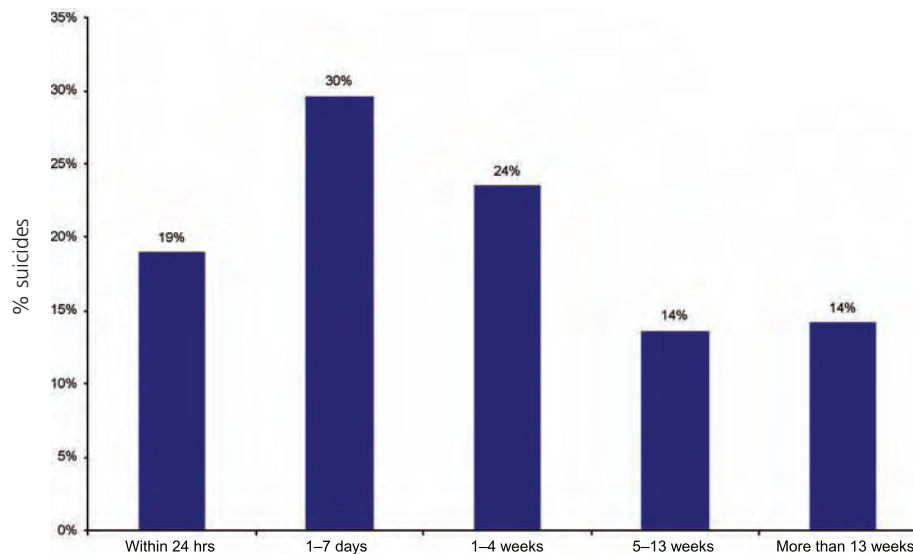
Source: NCHOD; ONS



## Suicides and last contact with health service

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2006) collects detailed clinical information on patients of mental health services who die by suicide. The chart shows data on the last contact that suicide victims had with the healthcare services. The inquiry found that 19 per cent (1,153) of suicides were in contact with the mental health services 24 hours before deaths, and 49 per cent in the week before death. In 74 per cent of cases the contact was routine rather than urgent.

Inquiry suicide cases: timing of last contact with mental health services, England, 2006



Source: National Confidential Inquiry

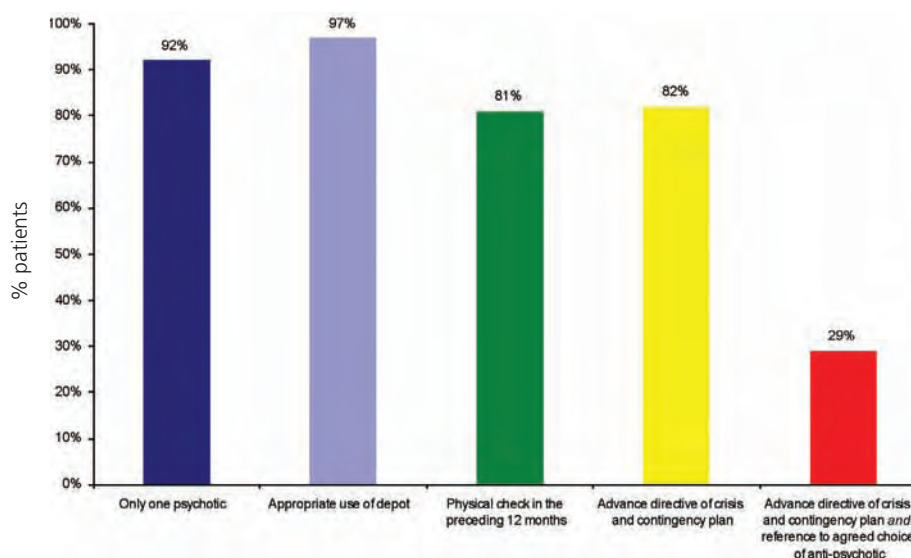
## Adherence to NICE guidelines for schizophrenia

NICE (2002) guidelines for the treatment of schizophrenia make a number of recommendations:

- only one antipsychotic medicine should be prescribed at a time, unless the prescription is being changed from one medicine to another
- the 'depot' (long-acting injection) method for taking medication should be used only to ensure compliance or patient preference
- regular physical health checks should be conducted
- advance directives regarding the choice of treatment should be developed and documented in individuals' care programmes *and* for those whom it is applicable, there should be reference to the agreed choice of antipsychotic.

The chart illustrates national data on adherence to these recommendations.

Adherence to NICE guidelines for schizophrenia, England, 2006

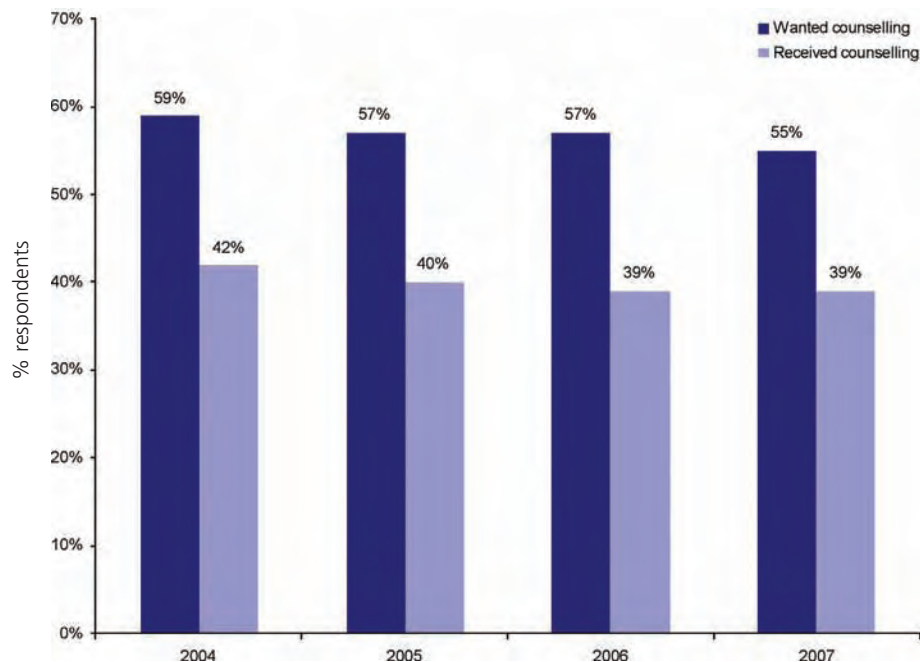


Source: Healthcare Commission/CSCI

## Mental health patients – talking therapies

The NICE (2004) guidelines for depression and anxiety disorders have shown that psychological interventions, such as cognitive behavioural therapy (CBT) and interpersonal therapy, are clinically and cost-effective. The Healthcare Commission has recently conducted patient surveys with users of community mental health services in each of the past four years, asking whether respondents had received counselling such as talking therapy in the previous 12 months. The chart illustrates the responses and shows a slight fall in the demand for counselling but a relatively unchanged gap of unmet demand. The Department of Health embarked on a programme called Improving Access to Psychological Therapies (IAPT) in 2007–08.

Access to counselling (talking therapies), England, 2004–07

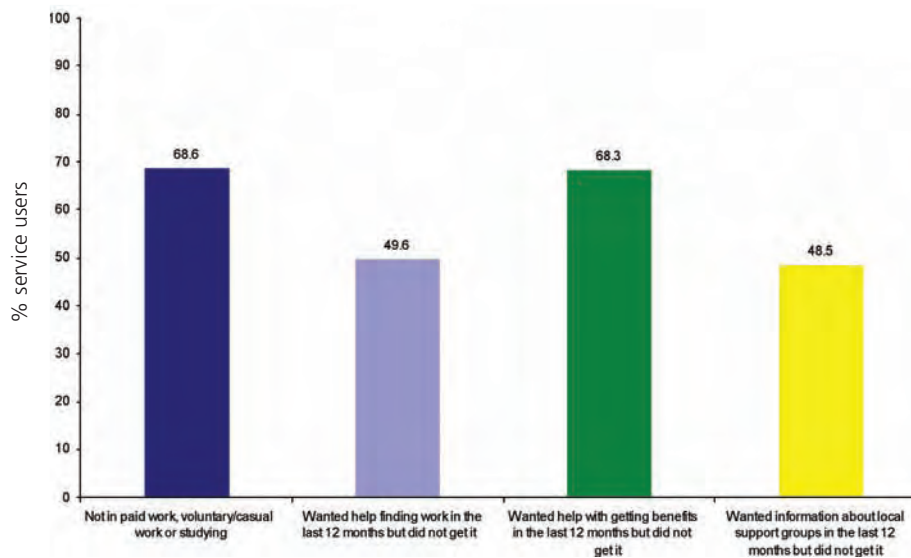


Source: Healthcare Commission

## Occupational and benefits help

People with mental health problems often face exclusion from important areas of life, such as jobs, personal security, family support, and community involvement. Effective community mental health services can help to break this cycle of social exclusion. The Healthcare Commission conducts surveys of community mental health service users which routinely ask about the extent to which service users who wanted help finding work, applying for benefits or accessing information about support groups, receive that help. The results for England are shown in the chart and illustrate a deficiency in care.

Occupational and benefits help, England, 2007



Source: Healthcare Commission

## Emergency and trauma care

Patients admitted as an emergency can be among the sickest that are cared for in hospital. In 2006–07 there were 18.9 million attendances at A&E departments in England (DH, 2008). Emergency care has been an area of significant policy concern; early on in the 10-year reform agenda, policymakers and managers focused on improving coordination of care and waiting times. More recently, the focus has shifted towards establishing regional trauma centres – so that patients who are critically ill will not be taken to their nearest hospital but to specialist centres with necessary equipment, knowledge and experience (DH, 2007d).

Trauma is the fourth leading cause of death in western countries and the leading cause of death in the first four decades of life. The incidence of trauma is particularly high in the younger population; an average of 36 life years are lost per trauma death. Trauma is also a major cause of debilitating long-term injuries. For each trauma fatality, there are two survivors with serious or permanent disability (NCEPOD, 2007b).

Trauma is, therefore, not only a leading cause of death but also a large socioeconomic burden. In 1998, the estimated cost to the NHS of treating all injuries was £1.2 billion per year. Reducing injuries is therefore a key government objective. By 2010, the Department of Health aims to have reduced the incidence of accidents by at least 20 per cent from the 1996 baseline. In 1988, the working party report by the Royal College of Surgeons of England highlighted serious deficiencies in the management of severely-injured patients. Following this

report, there was increased focus on the care of trauma patients in the UK and consequently the fatality rate of trauma patients reduced. However, most of the improvement in the outcome of trauma patients occurred prior to 1995, with no significant change occurring between 1994 and 2000. A lack of continued improvement in outcome is coupled with concern that the quality of care in hospital is not of a consistently high standard across the UK, despite the availability of guidelines that indicate referral pathways for optimum triage, management and specialist care. The organisation of trauma services in the UK remains highly topical. A recent report by the Royal College of Surgeons in England (2006) confirms that high quality trauma care is not consistently available within the NHS. Recent public debate and government statements reflect the continuing controversies regarding the optimum system of delivering trauma services within the present resource constraints.

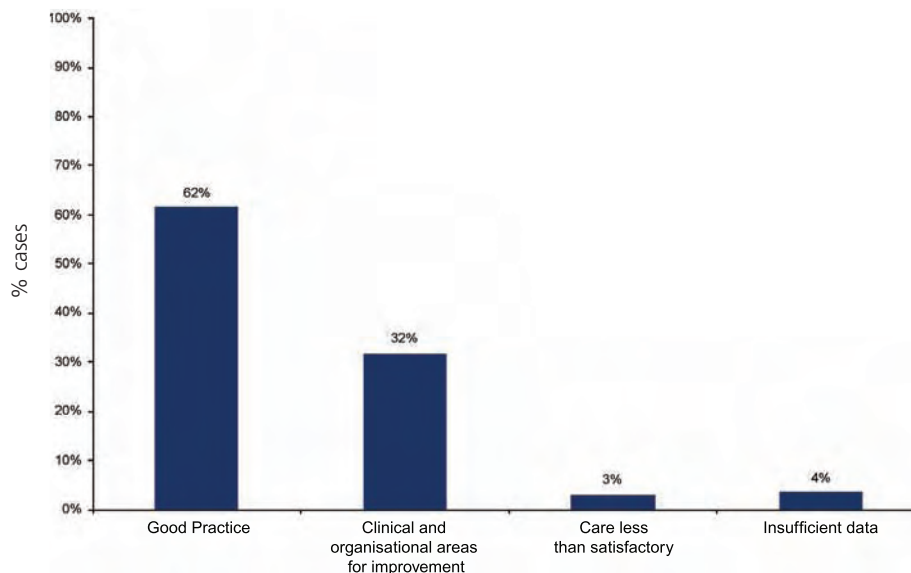
## Emergency care

The National Confidential Enquiry into Patient Outcomes and Death conducted a review of emergency admissions in England, Wales and Northern Ireland (NCEPOD, 2007a). The review focused on care provided to seriously ill patients that were admitted to hospital as an emergency and either: died on or before midnight on day 7 (following admission); or were transferred to adult critical care on or before midnight on day 7; or were discharged on or before midnight on day 7 and subsequently died in the community within seven days of discharge. A multidisciplinary group of advisers, which included physicians, surgeons, emergency department physicians, intensive care physicians and nurses, was recruited to review case notes from 1,275 patients and accompanying questionnaires.

The chart illustrates the advisers' overall assessment of care, with 62 per cent of cases judged to have been managed in accordance with best practice.

*Continued over...*

Emergency care assessed, England, Wales and Northern Ireland, 2006



Source: NCEPOD. England hospitals: 175/192 (91% of sample)

### *Emergency care continued*

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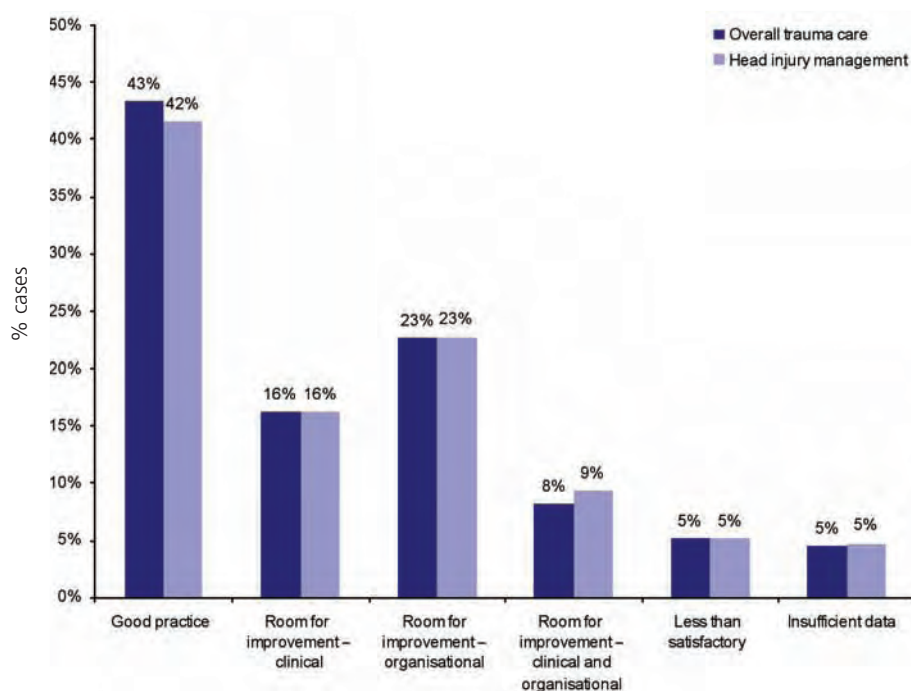
The deficiencies identified included the following:

- 7.1 per cent of cases had an initial assessment that was assessed, by the advisers, as poor or unacceptable
- 15.1 per cent of emergency assessment units included in the study did not provide access to 24-hour CT scanning
- 12.4 per cent of cases lacked documentary evidence of patients being reviewed by consultants following admission to hospital
- 6.8 per cent of patients did not receive adequate clinical observations, both in type and frequency.

## Appropriate trauma care

The National Confidential Enquiry into Patient Outcomes and Death conducted an evaluation of trauma care in England, Wales and Northern Ireland (NCEPOD, 2007b), collecting data between 1 February and 30 April 2006. The study convened upon a multidisciplinary group of advisers, including specialists from emergency medicine, anaesthetics, general surgery, intensive care medicine, maxillofacial surgery, neurosurgery, nursing, paediatrics, plastics, orthopaedics and vascular surgery, which reviewed the case notes of 795 patients. For each case reviewed, the advisers completed an assessment form, indicating whether the care delivered had been in accordance with best practice. The chart illustrates the findings for trauma care overall and for a subset, head injuries. In both cases, more than half of the patients reviewed did not receive optimal care. The NCEPOD report found that the organisation of pre-hospital care, the trauma team response, seniority of staff involvement and immediate hospital care were deficient in many cases.

Expert assessment of trauma care, England, 2006



Source: NCEPOD. England hospitals 155/176 (88% of sample)





# ACCESS

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## Introduction

The issue of access to healthcare has long been a key concern in many countries around the world. In 2000, The NHS Plan asserted that “the public’s top concern about the NHS is waiting for treatment”.

The concerns about waits were widespread and included primary care, inpatient care, and A&E departments. In recent years there has been a significant decrease in waiting times for elective care in the NHS. Moving beyond measures of generic waiting time to disease and population-specific indicators provides more insight into issues of access and timeliness.

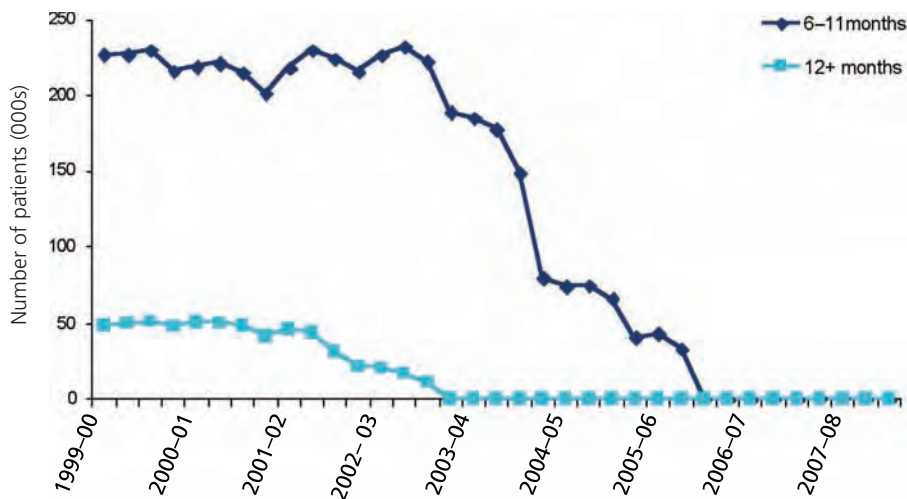
The charts in this section focus on:

- generic inpatient and outpatient waits
- access to specialist care, diagnostic tests and treatments.

## Inpatient waits

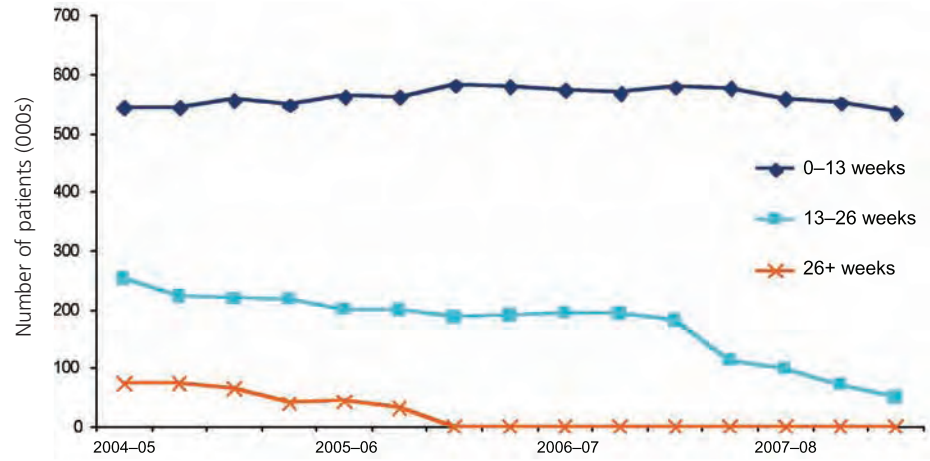
The number of people waiting excessively for admission to hospital in England has decreased markedly in recent years. At the end of the first quarter of 1999–2000, 275,621 patients had been waiting more than six months for admission; and 48,687 had been waiting more than 12 months. The charts depict waits from scheduling of surgery to admission; the first chart illustrates the magnitude of the improvement over the decade while the second looks only at the pattern of waiting times during the past two years. At the end of December 2007, 91 per cent of patients on the waiting list (536,858 patients) had been waiting less than 13 weeks.

Hospital admission waiting times, England, 1999–2000 – 2007–08



Source: Department of Health

Hospital admission waiting times, England, 2004-05 – 2007-08

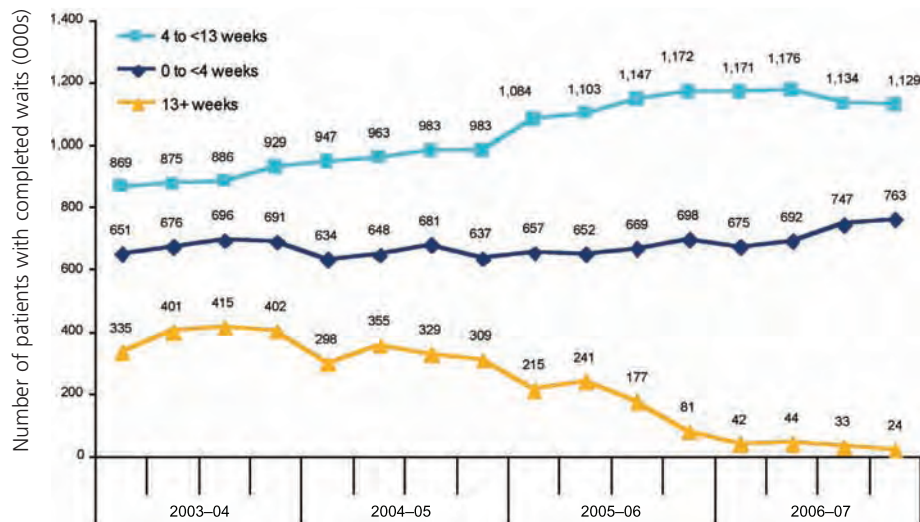


Source: Department of Health

## Outpatient waits

Outpatient wait figures represent the length of time that patients wait between GP referral and seeing a consultant (specialist). This chart illustrates the fall in the number of patients waiting more than 13 weeks seen in recent years. However, these data represent only part of patients' total waiting time; inpatient waits and waits for diagnostic tests also contribute to total waiting time. The Government has pledged that by the end of 2008 the entire waiting time from GP referral to treatment will be less than 18 weeks.

Waiting times from GP referral to first outpatient appointment, England, 2003-04 – 2006-07



Source: Department of Health

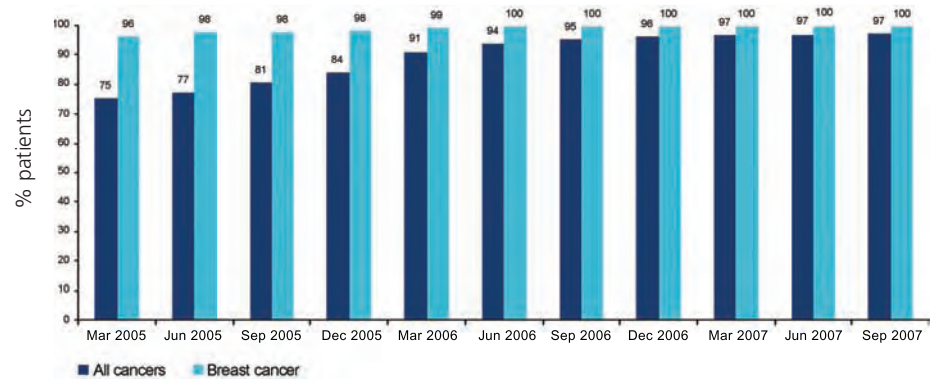
## Cancer waits

The NHS Cancer Plan (DH, 2000a) set a number of targets to improve access to cancer care. The most significant wait, that is, from GP referral to commencement of treatment, was subject to two pledges:

- a maximum two-month wait from urgent GP referral to treatment for breast cancer (target date of 2002)
- a maximum two-month wait from urgent GP referral to treatment for all cancers (target date of 2005).

This chart illustrates the improvements that have been achieved in providing timely treatment for cancer, with the vast majority of patients receiving treatment within two months of an urgent GP referral.

Percentage of patients treated within the two-month (62-day) target, all cancers and breast cancer, England, March 2005–September 2007



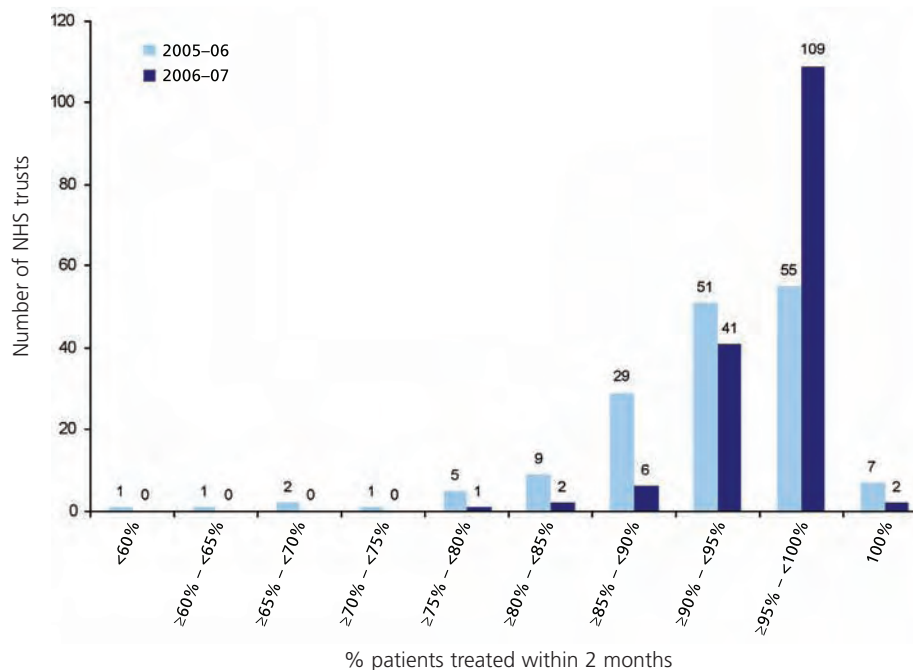
Source: Department of Health

## Two-month cancer waits – variation

The NHS Cancer Plan (DH, 2000a) set the goal that no patient should wait longer than two months (62 days) from a GP urgent referral for suspected cancer to the beginning of treatment (unless clinically indicated). The chart illustrates variation across NHS trusts in complying with the target in 2005–06 and 2006–07. There has been a clear reduction in the extent of variation and an overall improvement in compliance.

	2005–06	2006–07
mean	0.9191	0.9567
median	0.9408	0.9597

Two-month cancer wait (urgent GP referral to treatment), NHS trust histogram, 2005–06 – 2006–07

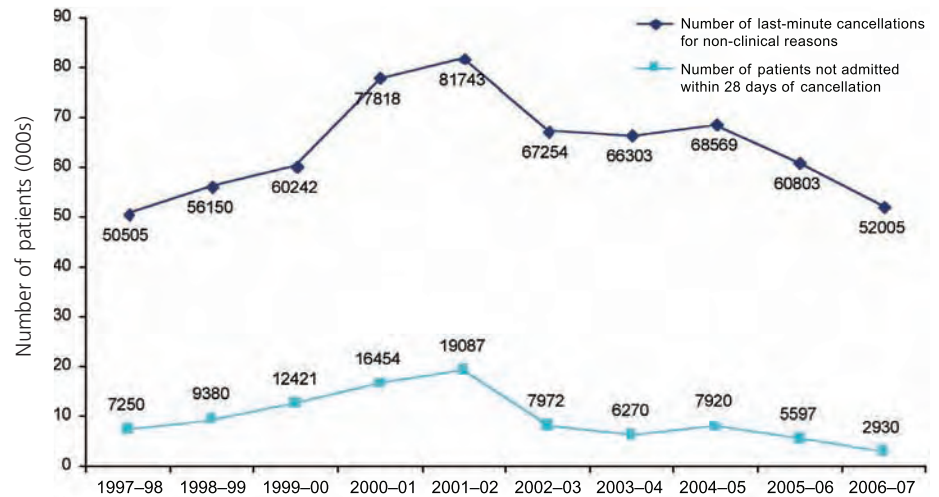


Source: Healthcare Commission

## Cancelled operations

The cancellation of operations at short notice is distressing and inconvenient for patients and their families. *The NHS Plan* (DH, 2000b) pledged that, from 2002, when a patient's operation is cancelled, the hospital must offer another binding appointment rescheduling the surgery for within 28 days or fund the patient's treatment at the time and hospital of the patient's choice (either public or private). This measure is important because it acts as a disincentive to the artificial reduction of waiting lists by offering a date for operation, subsequently cancelling it for non-clinical reasons, and, in so doing, 'resetting' the waiting clock. The number of last-minute cancellations in 2006–07 was 3 per cent higher than in 1997–98. The number of patients whose cancelled operations were not rescheduled for within 28 days has fallen from a peak of 19,087 in 2001–02 to 2,930 in 2006–07.

Last-minute cancellations for non-clinical reasons, England, 1997–98 – 2006–07



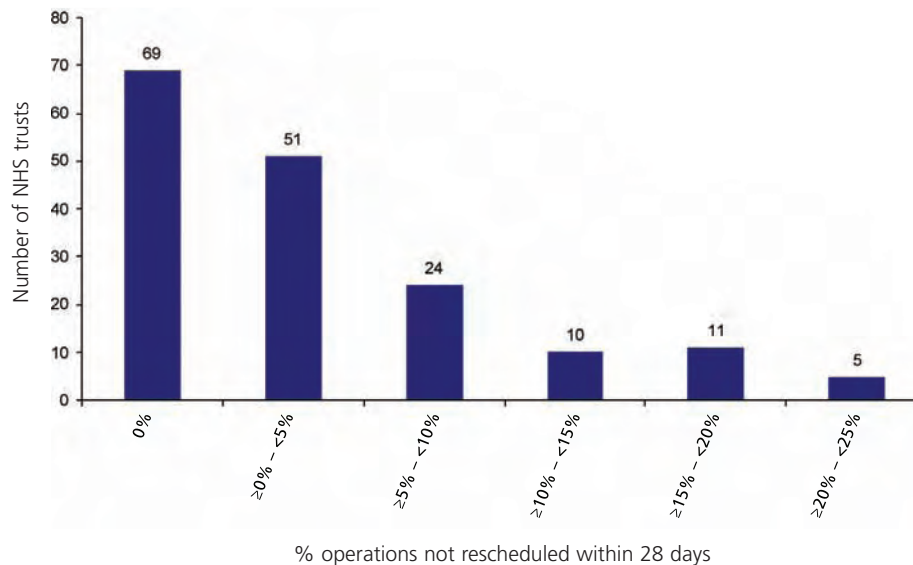
Source: Department of Health



## Cancelled operations not rescheduled – local variation

The previous chart showed data for England on rescheduling cancelled operations. This chart shows how performance varies across NHS trusts in England. Sixty-nine trusts (41 per cent) had no patients waiting longer than 28 days for rescheduled surgery and at the other end of the scale, five trusts reported that more than 20 per cent of patients affected by a cancelled operation were not rescheduled within 28 days.

Cancelled operations not rescheduled within 28 days, NHS trust histogram, 2006–07

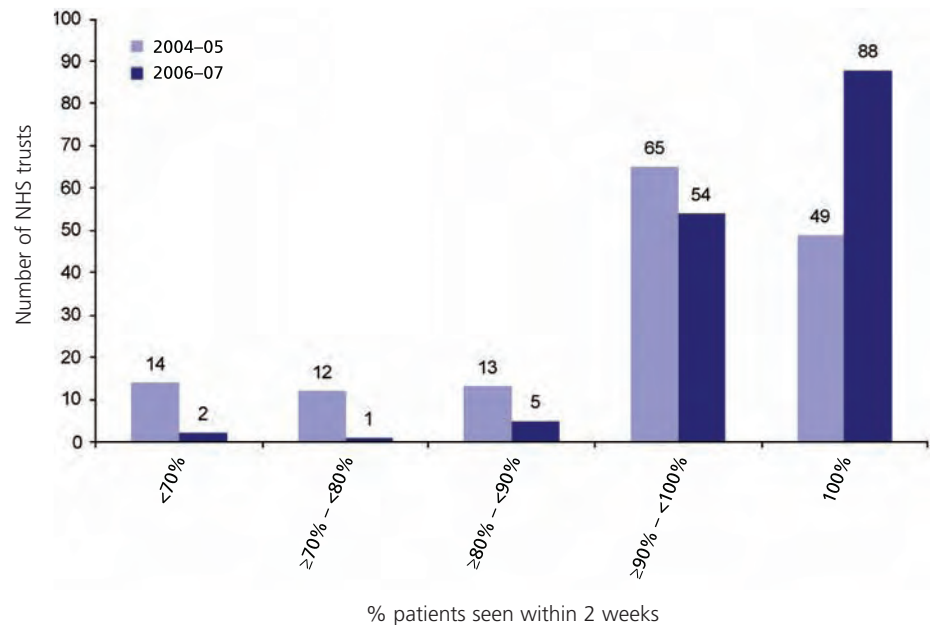


Source: Healthcare Commission

## Rapid-access chest pain clinic two-week waits – variation

All patients referred by their GP to a rapid-access chest pain clinic should be seen within two weeks. This indicator only applies to those patients whose referral was received by the clinic within 24 hours of the GP deciding to refer. The chart illustrates variation across NHS trusts in complying with the target in 2004–05 and 2006–07. There has been a clear reduction in the extent of variation and an overall improvement in compliance.

Rapid-access chest clinics: patients seen within two weeks, NHS trust histograms, 2004–05 and 2006–07



Note: Rapid-access chest pain clinics should work under protocols set up by a cardiologist or GP with special interest in cardiology, Staff should be able to call on a cardiologist/GP with special interest in cardiology but consultant may not be present at all times.

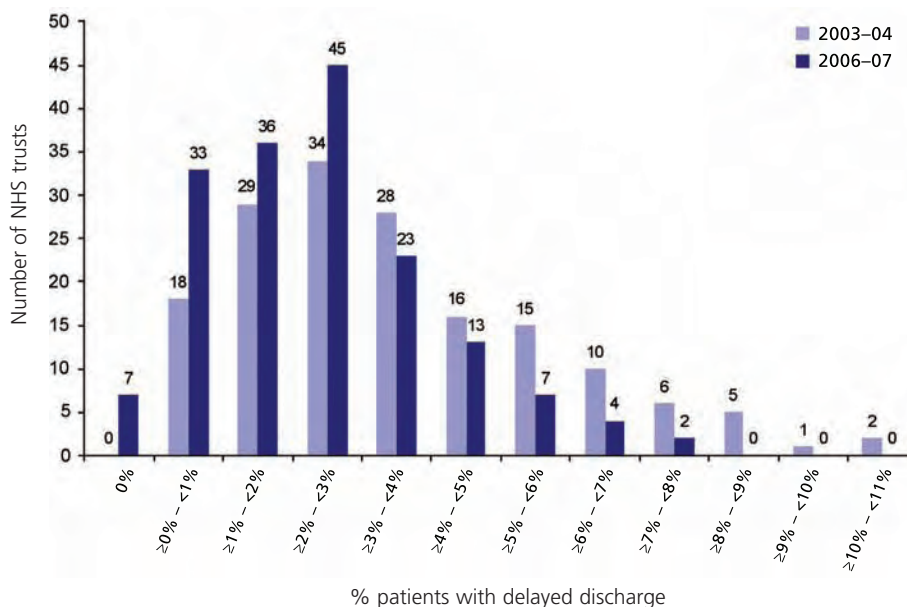
Source: Healthcare Commission

## Delayed transfers of care – variation

Delayed discharges are important as they have a direct and negative impact on the quality of care of individuals. Older people, for example, are at risk if kept in acute hospital once their medical needs have been met – they lose their independence, mobility and social networks, and are at risk of falls and infection. For patients with confusion or dementia there are additional risks of losing capacity and of premature entry into a care home. The chart shows that there has been a clear reduction in the extent of variation and an overall decrease in delayed discharges across NHS trusts between 2003–04 and 2006–07.

	2003–04	2006–07
mean	3.5%	2.3%
median	3.0%	2.1%

Delayed discharges, NHS trusts: histogram, 2003–04 – 2006–07

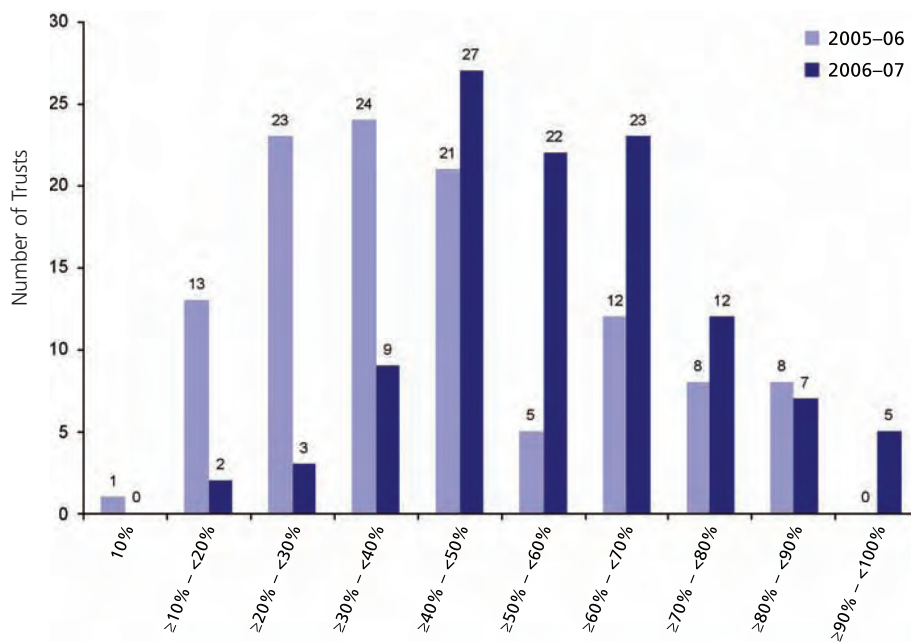


Source: Healthcare Commission

## Access to GUM clinics

Annual numbers of sexually-transmitted diseases diagnosed in genito-urinary medicine (GUM) clinics in England rose by 43 per cent between 1996 and 2002, with an overall increase in clinic workload of 79 per cent for the same period (Healthcare Commission, 2007). The White Paper *Choosing Health: making healthier choices easier* (DH, 2004b) made a commitment to improve access to GUM clinics, with a target that no-one should wait more than 48 hours for an appointment by 2008. The chart shows that while there has been a generalised improvement in access, it seems unlikely that the target will be met.

Percentage of GUM patients seen within 48 hours, NHS trusts: histogram, 2005–06 and 2006–07



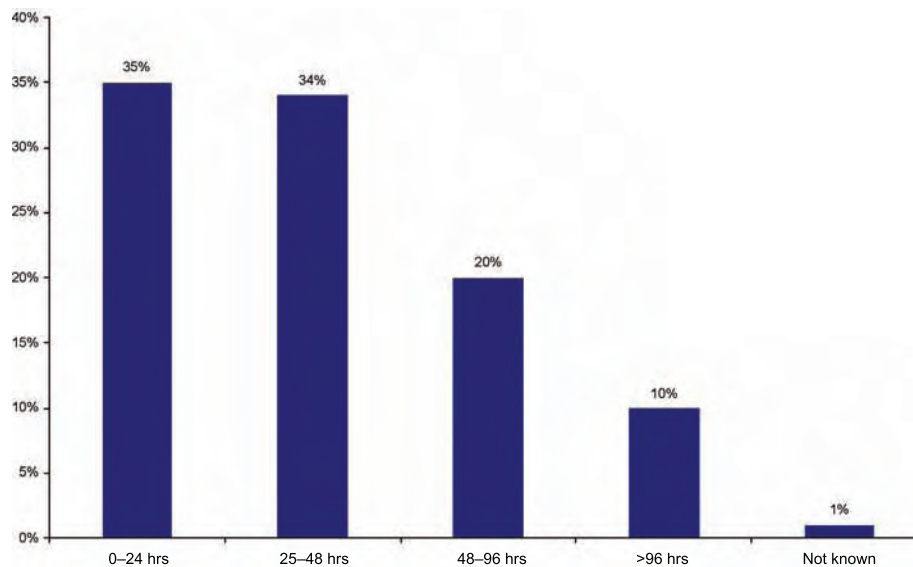
Note: The target of 100 per cent relates to the offer of an appointment for the patient to be seen within 48 hours of contacting the service rather than an offer of an appointment that is made within 48 hours of contacting the service but to be seen at a later date.

Source: Healthcare Commission

## Time to operation after hip fracture in older patients

In 2007 the Royal College of Physicians published a national clinical audit on the care received by older patients who have fallen and sustained a fragility fracture of the hip, wrist, humerus, pelvis or vertebra. Evidence-based guidelines state that following hip fracture, patients should be operated on as soon as possible (within 24 hours) if their medical condition allows. The chart shows that almost two-thirds of patients did not receive timely care.

Hours from registration to operation for hip fracture, England, 2007



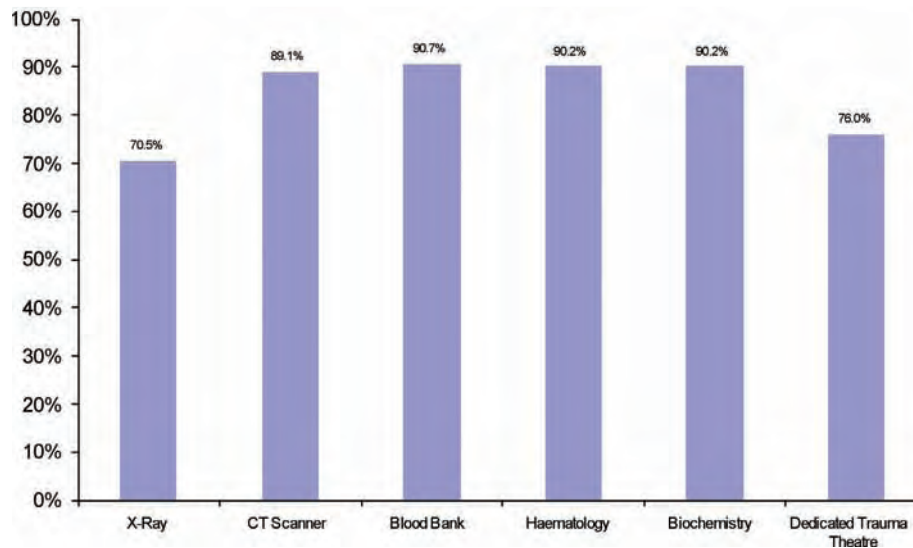
Source: Royal College of Physicians, 2007



## Trauma patients – access to diagnostics and consultant review

The National Confidential Enquiry into Patient Outcomes and Death (NCEPOD, 2007b) conducted a case note-based review of trauma services in England, Wales and Northern Ireland. Among the access indicators reviewed were the availability of 24-hour diagnostic and theatre services, and the availability of consultants early in the patient pathway. Many trauma patients present to the emergency department out of hours and require immediate treatment. The first chart shows the proportion of patients that were cared for in a facility with 24-hour access to a range of clinical support functions.

24-hour access to X-ray, CT scanners, blood bank, haematology, biochemistry and dedicated trauma theatres, 2006

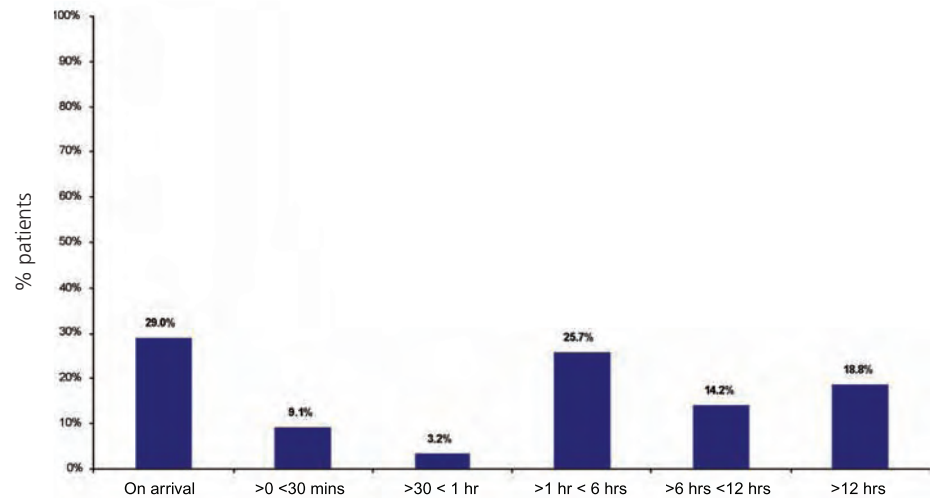


Source: NCEPOD. England hospitals 155/176 (88% of sample)

## Trauma patients – access to diagnostics and consultant review continued

The chart on the right illustrates the timeliness of first consultant review for each patient. In the case of severely injured patients, consultant presence in the emergency department has been shown to reduce the mean time to operating theatre (44 minutes vs 109 minutes;  $p < 0.05$ ), and led to fewer missed injuries and inappropriate workups (Porter and Ursic, 2001). It is therefore a concern that a number of severely injured patients experienced significant delays before consultant involvement.

Time to first consultant review, England, Wales and Northern Ireland, 2006



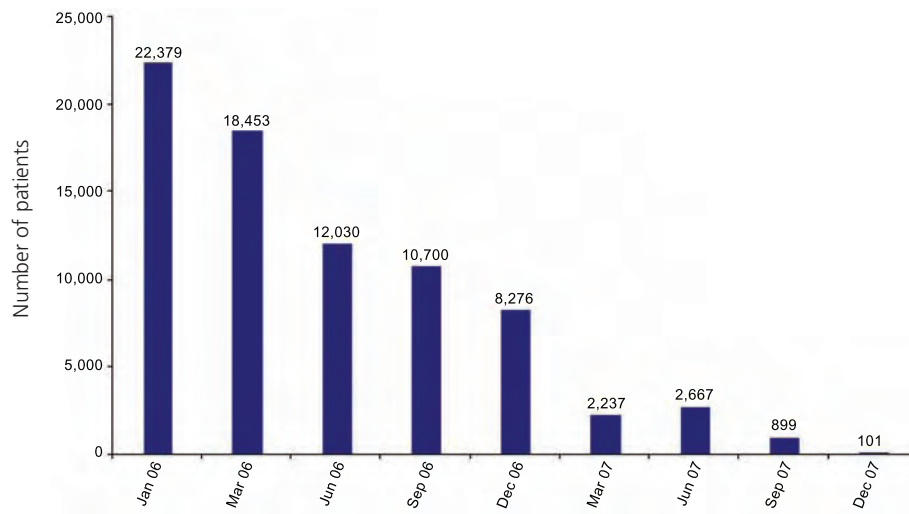
Source: NCEPOD. England hospitals 155/176 (88% of sample)



## Heart failure – waits for echocardiography

The National Service Framework for Coronary Heart Disease (DH, 2000c) stated that doctors should arrange for people with suspected heart failure to be offered appropriate investigations (e.g. electrocardiography, echocardiography) that will confirm or refute the diagnosis. For those in whom heart failure is confirmed, its cause should be identified – the treatments most likely to both relieve symptoms and reduce their risk of death should be offered. Echocardiography is a technique which uses high frequency sound waves (ultrasound) to detect structural and/or functional abnormalities of the heart. The chart shows that there has been a dramatic drop in the number of people waiting more than 13 weeks for echocardiography since January 2006.

Patients waiting over 13 weeks for echocardiography, England, 2006–07



Source: Department of Health

# CAPACITY

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## Introduction

The NHS Plan stated that:

*The NHS has suffered from decades of underinvestment... UK spending on healthcare has consistently lagged behind other developed countries... As a consequence the NHS has been left with insufficient capacity to provide services the public expect. England has too few hospital beds per head of population compared with most other health systems. The NHS lacks sufficient doctors, nurses and other skilled staff... the backlog of maintenance in the NHS now stands at £3.1bn. (DH, 2000b: p.31)*

Inarguably the NHS has received dramatic new levels of investment. More controversial is the assessment of what gains have been realised for the additional expenditure in recent years.

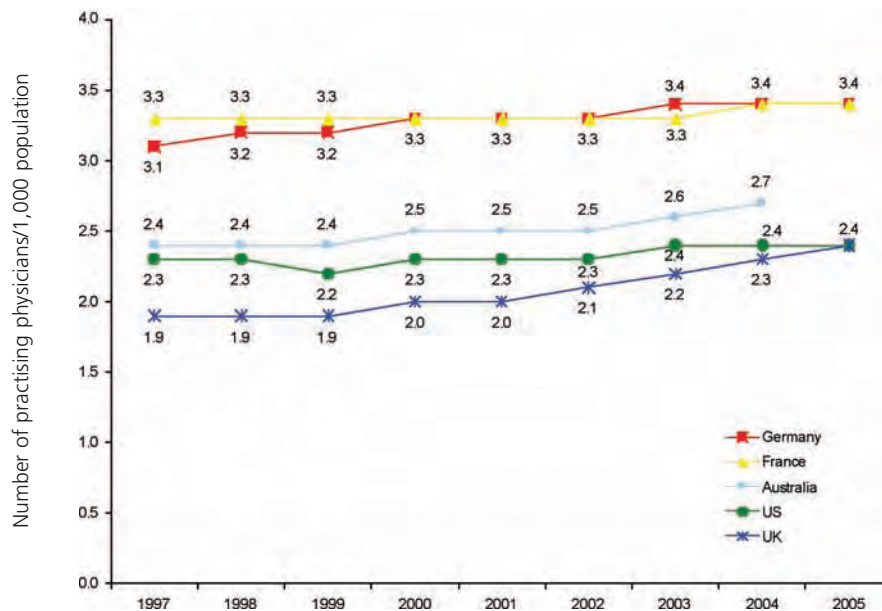
This section presents selected data illustrating the way in which that funding has been used to increase capacity in terms of workforce, facilities and technology. Though the link between inputs, outputs and health outcomes is tenuous in some areas of resourcing, the data presented here is that most often featured in the public discourse and the political arena.

## Practising physicians per 1,000 population

*The NHS Plan* (DH, 2000b) identified shortages in staff as the biggest constraint facing the NHS and made a series of commitments to increase staff numbers. This chart displays the number of practising physicians per 1,000 population (where physician is used as a generic term for doctor). Between 1997 and 2005, the number of practising physicians in the UK increased by 26 per cent. UK numbers remain below those of the usual Western European comparator countries, particularly France and Germany, but increased to parity with the US.

	% increase 1997–2005
Australia	12.5
France	3.0
Germany	9.7
UK	26.3
US	4.3

Practising physicians per 1,000 population (headcount), international comparison, 1997–2005



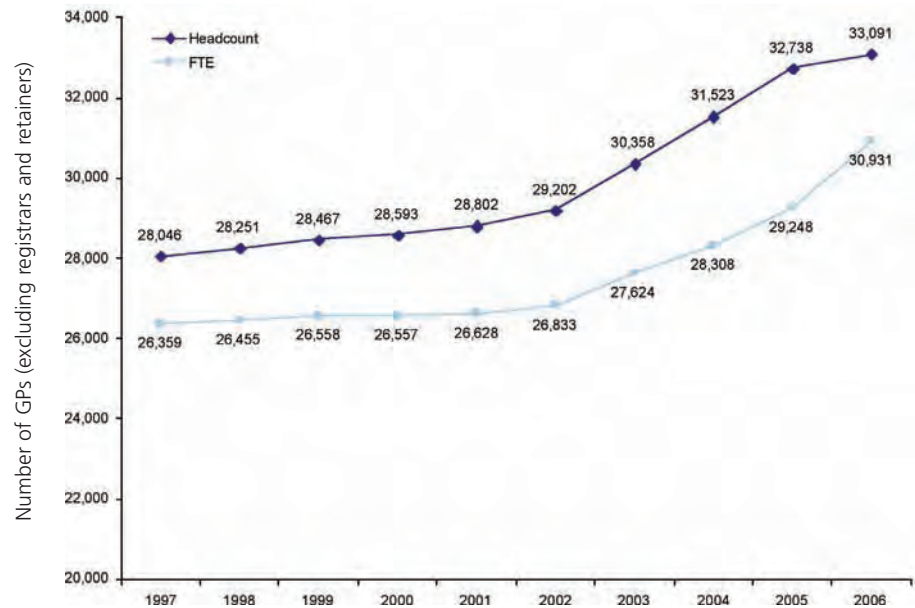
Source: OECD, 2007

## Number of GPs

The number of GPs employed by the NHS has seen a marked increase in recent years. Full-time equivalent (FTE) data shows that between 1997 and 2006 there was a 17 per cent increase in the number of GPs from 26,359 to 30,931. FTE is determined by converting numbers of part-time positions into an equivalent number of ‘full-time’ positions and adding to the tally of actual full-time staff numbers. *The NHS Plan* (DH, 2000b) set a target for 2000 additional GPs (head count) by 2004, which was met.

	% increase 1997–2006
Headcount	18
FTE	17

Number of GPs, England, 1997–2006

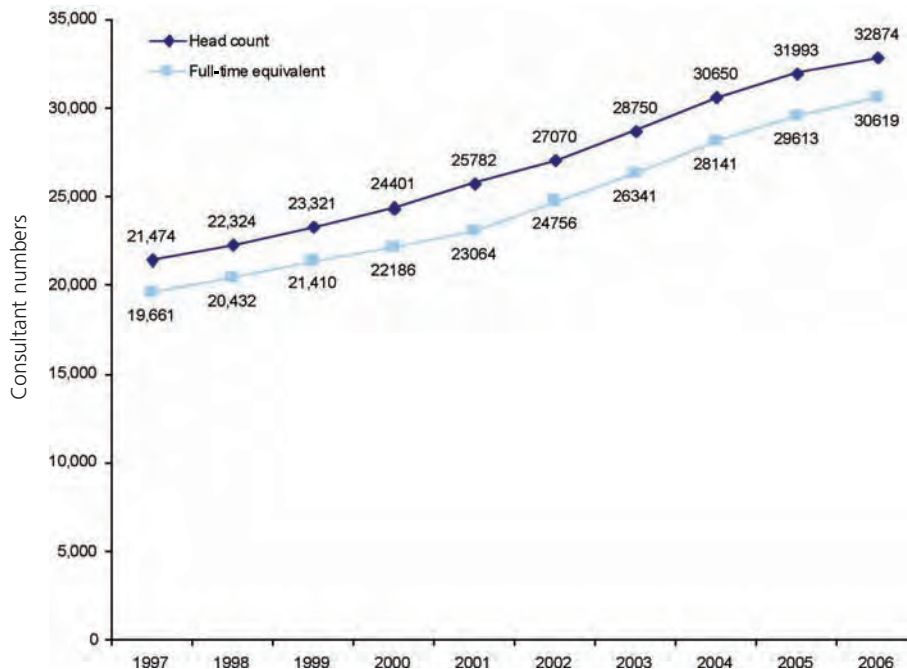


Source: NHS Information Centre

## Number of consultants

*The NHS Plan* (DH, 2000b) identified shortages in staff as the biggest constraint facing the NHS and pledged to employ an additional 7,500 consultants by 2004. This chart shows the number of consultant physicians employed by the NHS in September each year, both in terms of head count (the total number employed, including part time) and full-time equivalent (where numbers of part-time positions are converted into an equivalent number of ‘full-time’ positions and tallied with full-time staff numbers). The NHS Plan target was narrowly missed. However, between 1997 and 2006, the number of consultants increased by 11,400 (a 53 per cent increase).

Consultant numbers (including directors of public health), England, 1997–2006



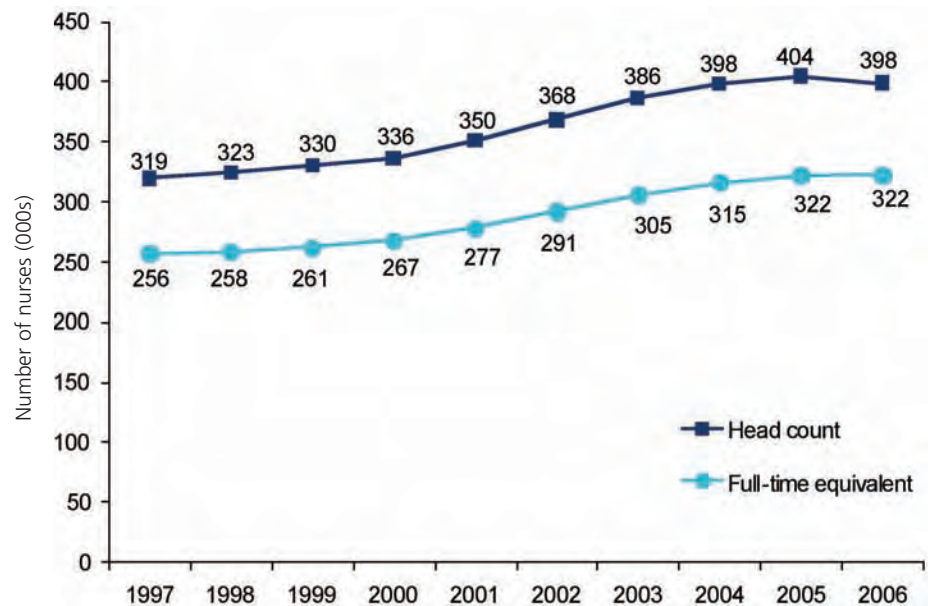
Source: NHS Information Centre

## Number of nurses

In 2000, the NHS Plan pledged to employ an additional 20,000 nurses by 2004 – this target was met. Data for FTE figures (where numbers of part-time positions are converted into an equivalent number of ‘full-time’ positions and tallied with full-time staff numbers) shows that between 1997 and 2006 there was a 26 per cent increase in the number of nurses, from 256,093 to 322,063. In terms of headcount figures, last year saw a small drop in total numbers but overall between 1997 and 2006 there was a 27 per cent increase.

	% increase 1997–2006
Head count	27
Full-time equivalent	26

Number of qualified nurses, England, 1997–2006



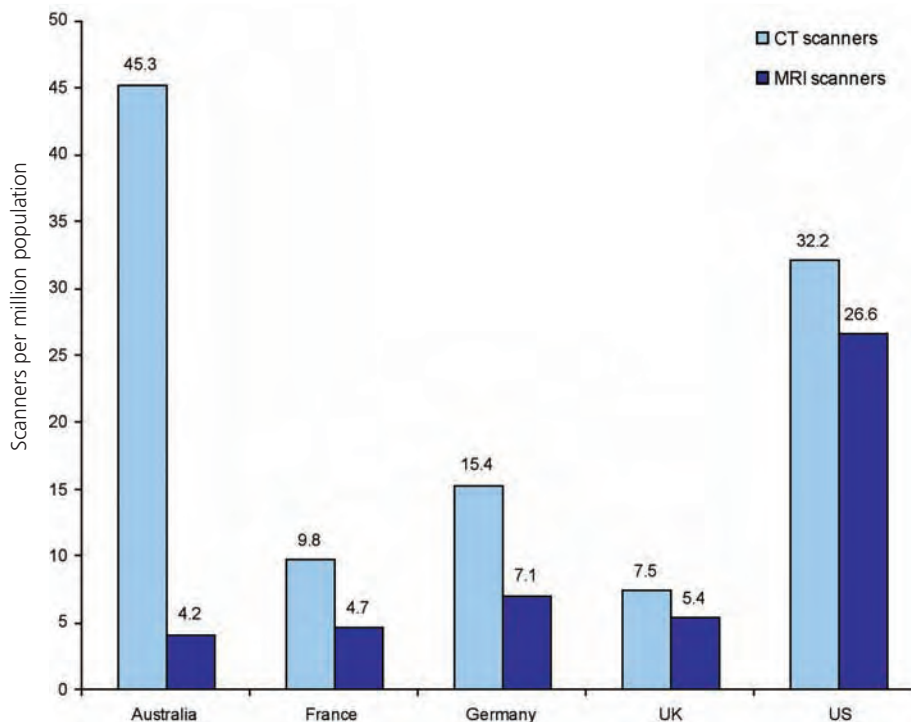
Source: NHS Information Centre

## Number of scanners

Diagnostic tests such as scans are a potential source of bottlenecks in system throughput, leading to increased waits and delaying onset of treatment, in some cases with potential risk to patients. The chart shows the number of CT (Computerised Tomography) and MRI (Magnetic Resonance Imaging) scanners per million population in 2004–05; with the UK reporting low numbers for both. Over the five-year period 2000–05, the number of CT scanners increased by 67 per cent in the UK. However, over the same time period, MRI scanners increased by just 15 per cent in the UK, compared to 20 per cent in Australia; 81 per cent in France; 45 per cent in Germany.

	% increase 2000 – 2005	
	CT	MRI
Australia	73.6	20.0
France	3.2	80.8
Germany	21.3	44.9
UK	66.7	14.9
US	28.3	72.7

Scanners per million population, international comparison, 2004–05

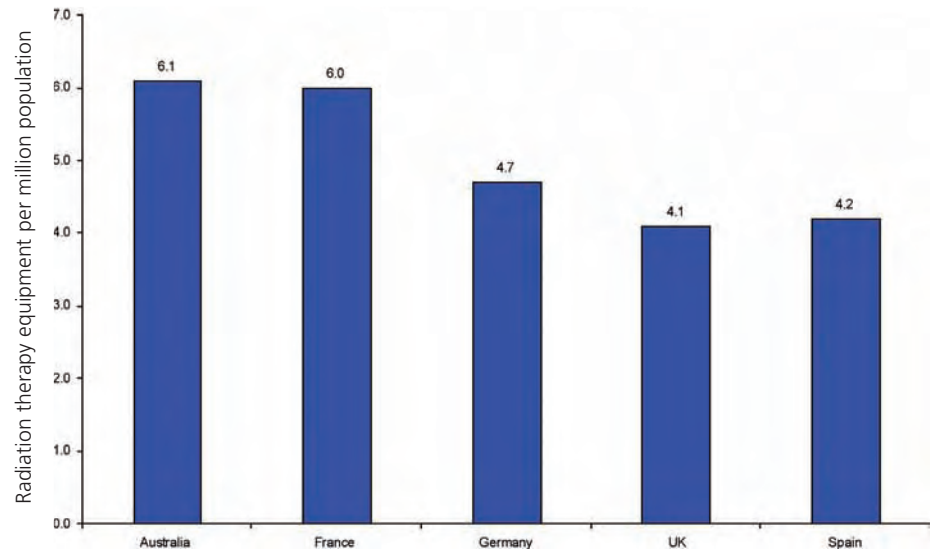


Source: OECD, 2007

## Radiation therapy equipment

Shortages in radiotherapy equipment can be a cause of significant delays and are a factor in the quality deficiencies in cancer care in the UK. This chart illustrates a snapshot picture of availability of radiotherapy equipment in 2005. There is limited time series data available. Between 2002 and 2005, the UK figures increased from 3.9 to 4.1 pieces of equipment per million population (5 per cent increase). This level of increase was exceeded by Australia with 13 per cent and Spain with a 14 per cent increase, over the same time period.

Radiation therapy equipment per million population, international comparison, 2005



Source: OECD, 2007

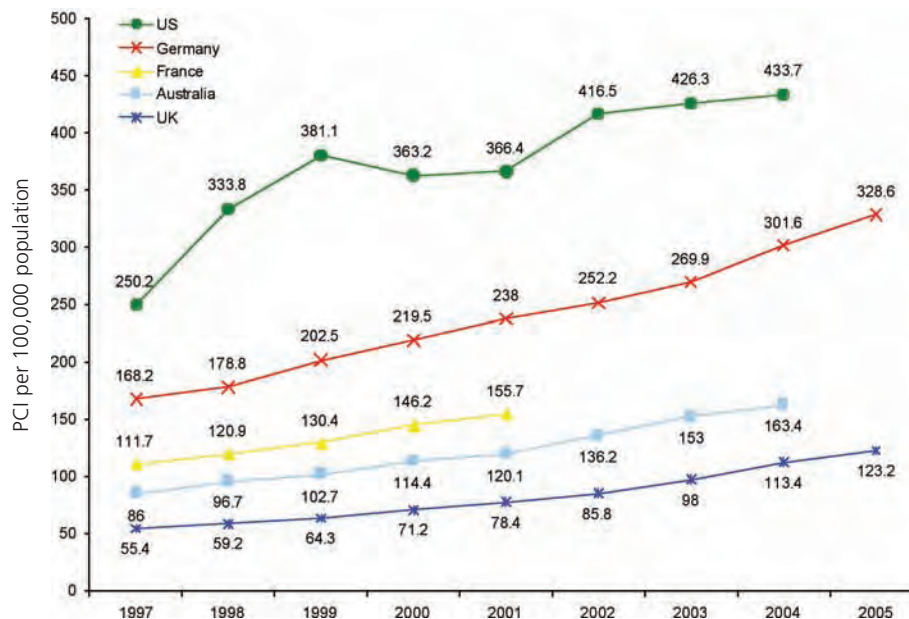


## Percutaneous coronary interventions

The rates of surgical interventions used to treat coronary heart disease (CHD) in the UK have increased in recent years. Most dramatically the number of percutaneous coronary interventions (PCI – a type of revascularisation procedure) increased by more than 120 per cent between 1998 and 2005. Despite this increase, the UK still lags behind other comparator countries.

	% increase 1997–2005
Australia	90.0
France	39.4
Germany	95.4
UK	122.4
US	73.3
Australia and US 1997–2004; France 1997–2001	

Percutaneous coronary interventions per 100,000 population, international comparison, 1997–2005

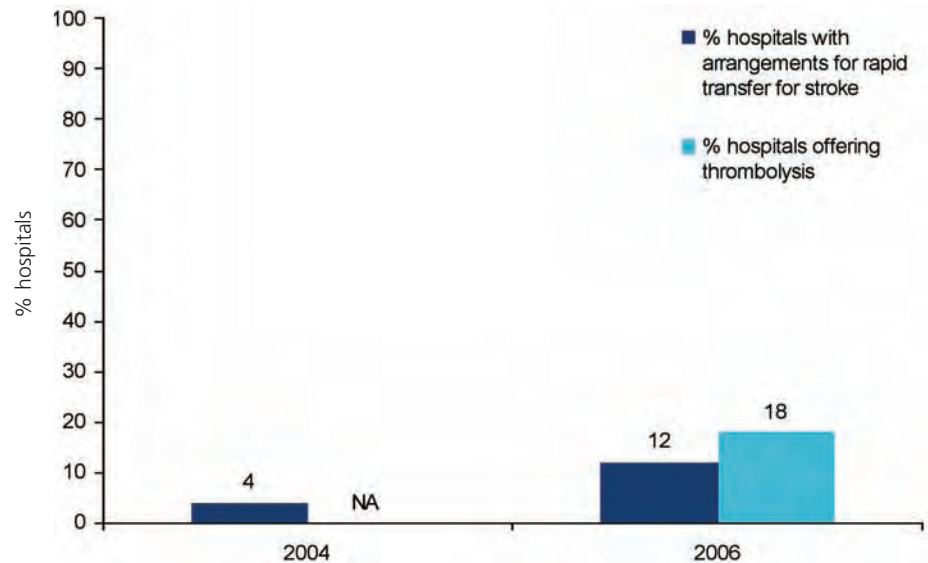


Source: OECD, 2007

## Emergency treatment for stroke

Thrombolysis has the potential to improve outcomes for stroke patients. The National Clinical Guidelines for Stroke (Royal College of Physicians, 2004) recommend that thrombolytic treatment be given following an ischaemic stroke if: it is administered within three hours of the onset of symptoms; haemorrhage has been definitively excluded; and the patient is in a centre registered with the Safe Implementation of Thrombolysis in Stroke Monitoring Study. This chart is based on the Royal College of Physicians' Sentinel Stroke Audit and shows that in 2006, only 12 per cent of hospitals had arrangements with local ambulance services for emergency transfer to hospital for acute stroke; and only 18 per cent (40/226) of hospitals offered a thrombolysis service.

Emergency treatment for stroke, England, Wales and Northern Ireland, 2004 and 2006



Source: Royal College of Physicians

Continued over...

### *Emergency treatment for stroke continued*

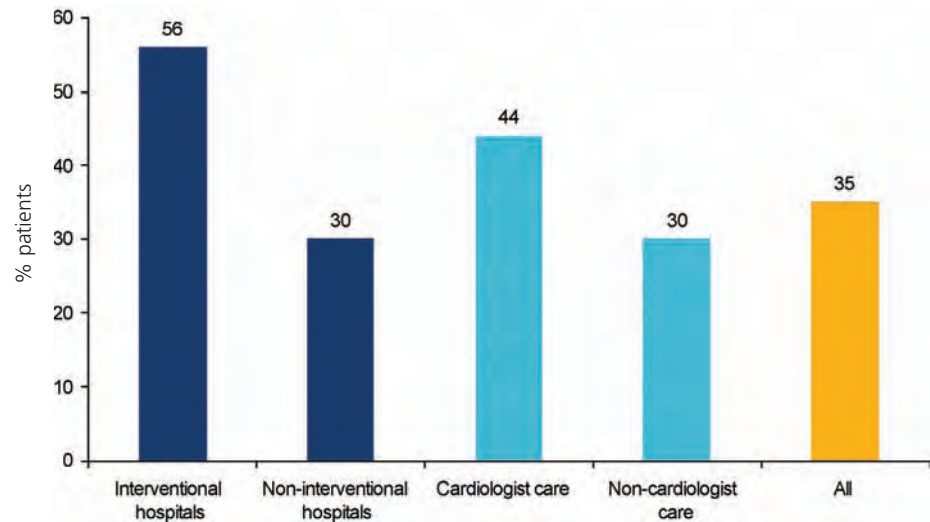
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Notably, 10 of the 40 sites offering thrombolysis did not thrombolyse any patients, and only 218 (0.2 per cent) patients in total were thrombolysed, over a 12-month period (data not shown). This is a tiny proportion of the patients who would potentially benefit. The audit noted that the failure to develop arrangements with paramedic services for urgent transfer of stroke to a hospital reflects the slow progress that has been made in the development of thrombolysis services in the UK.

## Angiography rates

National and international societies recommend the early use of diagnostic angiography after acute cardiac ischaemic events. Despite these recommendations, this chart illustrates that in 2004–05, angiography was performed on only 35 per cent of AMI patients. Angiography was more likely in interventional hospitals (56 per cent vs 30 per cent) and in patients admitted under cardiologists (44 per cent vs 30 per cent). The latest data from the Royal College of Physicians' MINAP audit found that in 2006–07, 3,192 patients (3,148 in England and 44 in Wales) were treated with primary angioplasty compared with 1,647 in 2005–06, an increase of 94 per cent.

AMI patients receiving angiography, England and Wales, 2004–05



Source: Birkhead et al., 2006

## Trauma care – expertise and facilities

The National Confidential Enquiry into Patient Outcomes and Death (2007b) conducted an evaluation of trauma care in England, Wales and Northern Ireland, collecting data between 1 February and 30 April 2006. The evaluation concluded that many severely injured patients are taken to hospitals that do not have the staff or facilities to provide definitive care. The chart shows the availability of 24-hour treatment across the 183 hospitals that provided data. Only 17 out of 183 hospitals

had a full range of specialties available (this level of capacity would be necessary to be considered for a Level 1 Trauma Centre under the verification system of the American College of Surgeons). The report asserts that improved outcomes for trauma patients would be achieved if regional reconfiguration of trauma services was pursued, so that patients were concentrated in a limited number of expert centres.

Table 2. Trauma care facilities in England, Wales and Northern Ireland

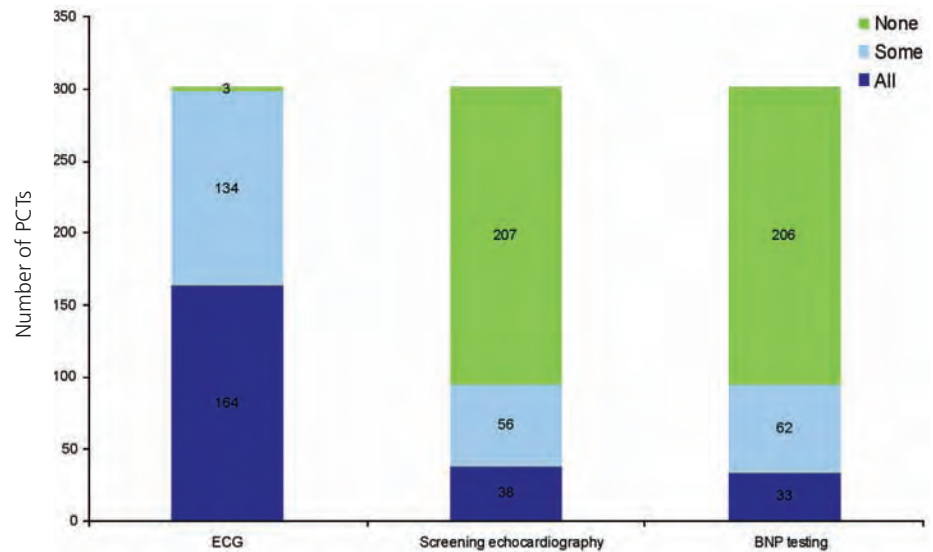
Emergency department	Emergency department	Emergency department	Emergency department	Emergency department	Emergency department	Emergency department
	General surgery	General surgery	General surgery	General surgery	General surgery	General surgery
		Orthopaedic trauma	Orthopaedic trauma	Orthopaedic trauma	Orthopaedic trauma	Orthopaedic trauma
			Vascular surgery	Vascular surgery	Vascular surgery	Vascular surgery
				Neurosurgery	Cardiac or thoracic surgery	Neurosurgery
						Cardiac or thoracic surgery
<b>183</b>	<b>166</b>	<b>159</b>	<b>90</b>	<b>23</b>	<b>33</b>	<b>17</b>

Source: NCEPOD, 2007. England hospitals 155/176 (88% of sample)

## Heart failure – availability of preliminary investigations

PCTs can help to reduce the demand on hospital-based echocardiography services by carrying out preliminary investigations to rule out a diagnosis of heart failure. These include electrocardiograms, B-type natriuretic peptide (BNP) testing and screening echocardiography. The Healthcare Commission undertook a service review of heart failure and asked PCTs about the extent to which their GP practices had the capacity to provide preliminary investigations. The chart shows that the use of these services in primary care is patchy. More than two-thirds of PCTs reported that none of the GP practices in their area had access to screening echocardiography or BNP testing available.

Availability of preliminary investigations in primary care, England PCTs, 2005–06



Note: The ongoing review of strategies for diagnosing heart failure in primary care, as part of the NHS Health Technology Assessment Programme, is expected to result in clear advice to GPs about how best to diagnose heart failure, including the value of different diagnostic tests, such as BNP.

Source: Healthcare Commission, 2007a

## Staffing of neonatal units

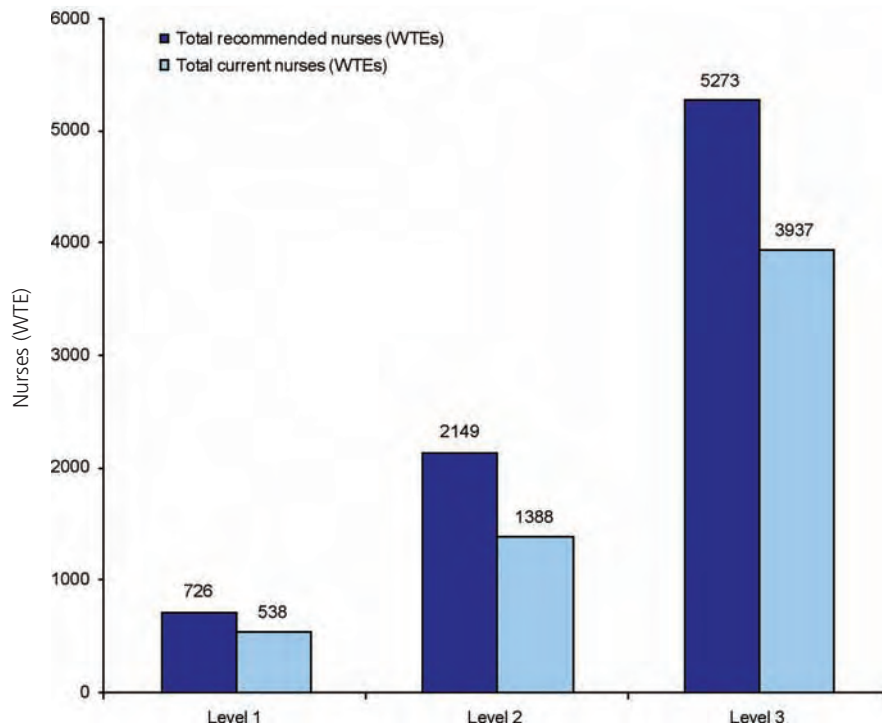
There are three levels of neonatal care provided by units in England.

**Level 1:** Special care for babies requiring continuous monitoring of respiration or heart rate; receiving added oxygen, being tube fed, receiving phototherapy or recovering from more specialist care (recommended nurse to baby ratio – 1:4).

**Level 2:** High dependency care for babies receiving nasal continuous positive airway pressure (CPAP) but not fulfilling any of the categories for intensive care; any baby below 1,000g who does not fulfil any of the categories for intensive care; babies receiving parental nutrition, with apnoea requiring stimulation (recommended nurse to baby ratio – 1:2).

**Level 4:** Intensive care for babies needing respiratory support (ventilation); weighing less than 1,000g and/or born at less than 28 weeks' gestation and receiving nasal continuous positive airway pressure (CPAP); with severe respiratory disease or that require major surgery (recommended nurse to baby ratio – 1:1).

Nursing shortfalls, neonatal care, 2006



Source: NPEU/BLISS (Redshaw and Hamilton, 2006)

## *Staffing of neonatal units continued*

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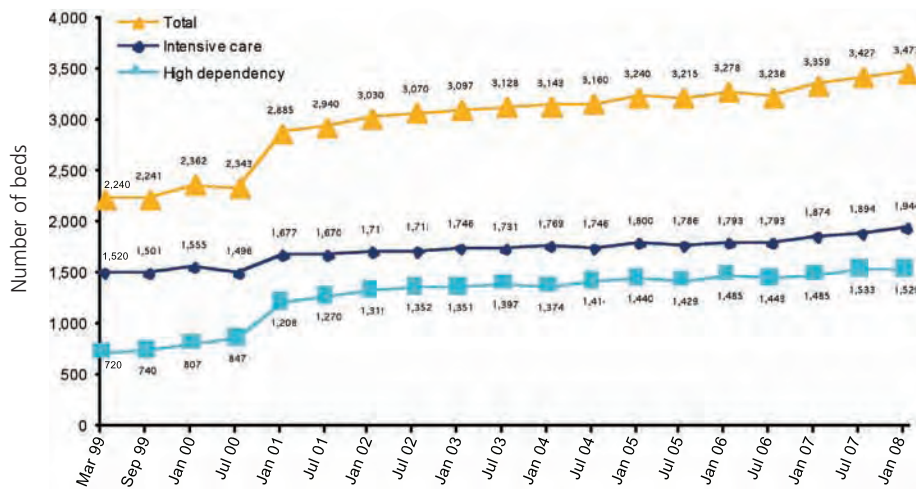
There is good evidence of a direct link between the number of trained specialist neonatal nurses and the outcomes of babies born weighing less than 1,500g or at less than 31 weeks' gestation (Hamilton et al., 2006). A survey of neonatal units across the UK conducted by the NPEU (Redshaw and Hamilton, 2007) found that there were marked staffing shortages in many units. Only 3.8 per cent of neonatal units were able to achieve the recommended staffing levels. The shortfalls are shown in the chart.



## Critical care beds

Critical care medicine provides intensive care and monitoring to people in an unstable or critical condition. Critical care beds in England include both Intensive Care Unit (ICU) beds and beds on high-dependency units (HDUs). HDUs provide an intermediate level of care for patients not well enough to go on to general wards. Critical care is very labour and resource-intensive; a typical six-bed ICU unit is staffed by several consultants and an average of 30 to 50 nurses (Intensive Care Society, 2007). The chart shows that between March 1999 and January 2008, the total number of critical care beds increased by 55 per cent. In January 2008, there were 3,473 critical care beds in England, corresponding to 6.8 beds per 100,000 population.

Critical care beds, England, 1999–2008



Source: Department of Health

# SAFETY

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## Introduction

*... there is still a crucial lack of data on medical and surgical mistakes that are estimated to cause thousands of deaths or injuries every year. A similar tragedy [to Bristol] could be happening again in the NHS today and we would not know it. (Kennedy, 2007)*

Safety is a fundamental attribute of healthcare quality. It encompasses avoidance of medical error and elimination of unnecessary risk of harm to patients. In recent years, safety has commanded considerable attention internationally (Kohn et al., 2000; Millar et al., 2004; WHO, 2005).

Data on safety is often difficult to interpret – there is always the perennial and legitimate question of whether measured increases in adverse incidents reflect a negative situation of worsening safety of care or actually reflect a positive situation of better reporting of safety problems.

In a wide-ranging review of quality problems in the NHS, the Healthcare Commission identified weak leadership, ineffective

management and poor use of systematic information as key reasons why patient safety is put seriously at risk. NHS Trust boards fail on patient safety because it is unclear who is responsible for maintaining safety and staff feel unable to speak out when problems occur (Healthcare Commission, 2008a).

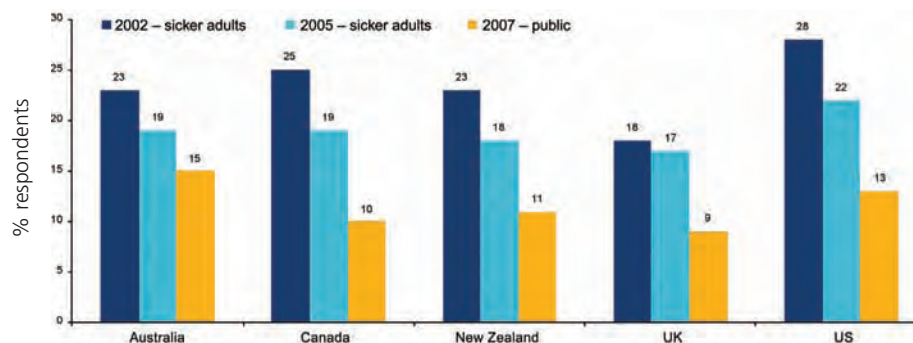
Healthcare acquired infections represent a grave threat to patients and it is the safety issue most visible to the public. As part of the settlement with the Treasury for NHS funding from 2008/09 to 2010/11, two indicators addressing safety were agreed under the Better Care for All Public Service Agreement:

- a reduction in MRSA bloodstream infections so that the annual number of MRSA bacteraemia for the period 2008–09 to 2010–11 is less than 50 per cent of the 2003–04 figure
- a reduction in number of *C. difficile* infections by 30 per cent nationally for 2010–11 from a baseline of 2007–08.

## Patient-reported error – international comparison

The Commonwealth Fund’s International Health Policy surveys in 2002 and 2005 focused on adult patients with health problems. The 2007 survey focused on adults’ healthcare experiences. Respondents were asked whether in the past two years they thought that either a medication error or a medical mistake had been made in their treatment or care. The UK sample reported the lowest proportion of incidents in all surveys. In the 2005 survey, 40 per cent of UK respondents who experienced an error or mistake (seven per cent of the total sample) reported that the error had ‘very serious’ or ‘somewhat serious’ consequences for their health (data not shown). The 2005 survey found that, across the countries studied, around two-thirds of medical errors or medication mistakes occurred outside hospital settings. It is important to note that the figures may represent increased patient awareness of safety issues as well as actual performance.

Patient-reported incidence of either a medication error or medical mistake in treatment or care in the past two years, international comparison, 2002, 2005 and 2007



Source: Commonwealth Fund

## Serious safety incidents

The National Patient Safety Agency's National Reporting and Learning System (NRLS) includes all patient safety incidents reported from NHS organisations in England and Wales. Between October 2003, when the NRLS was first set up, and December 2007, 2,145,606 incident reports were received. Between October 2006 and September 2007, 66 per cent of incidents were reported as resulting in no harm to patients; 27 per cent were reported as resulting in low harm, and 6 per cent were reported as resulting in moderate harm. Only 1 per cent of all incidents were consistently reported as resulting in severe harm or death. Details about the setting in which the incidents took place are shown in the chart.

### Number of incidents reported resulting in severe harm or death, England, October 2006–September 2007

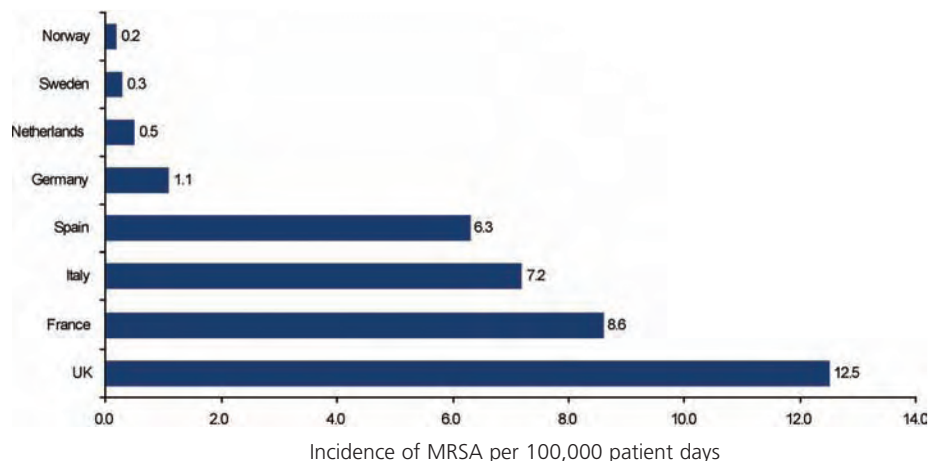
	Severe harm	Death
General practice	30	21
Community nursing, medical and therapy service (including community hospital)	709	270
Community and general dental service	2	1
Acute/general hospital	5,017	1,548
Ambulance service	19	15
Mental health service	681	1,349
Learning disabilities service	66	23
Community pharmacy	8	1

Source: National Patient Safety Agency

## MRSA rates – international comparison

The European Antimicrobial Resistance Surveillance System (EARSS), funded by the European Commission, is an international network of national surveillance systems which collects comparable and validated antimicrobial susceptibility data for public health action. In December 2006, more than 800 microbiological laboratories serving some 1,300 hospitals from 31 countries had provided susceptibility data. The chart arrays comparative data on the incidence of MRSA bacteraemia across Europe; of the countries shown, the UK in 2006 had the highest rates of infection.

MRSA bacteraemia isolates per 100,000 patient days, international comparison, 2006

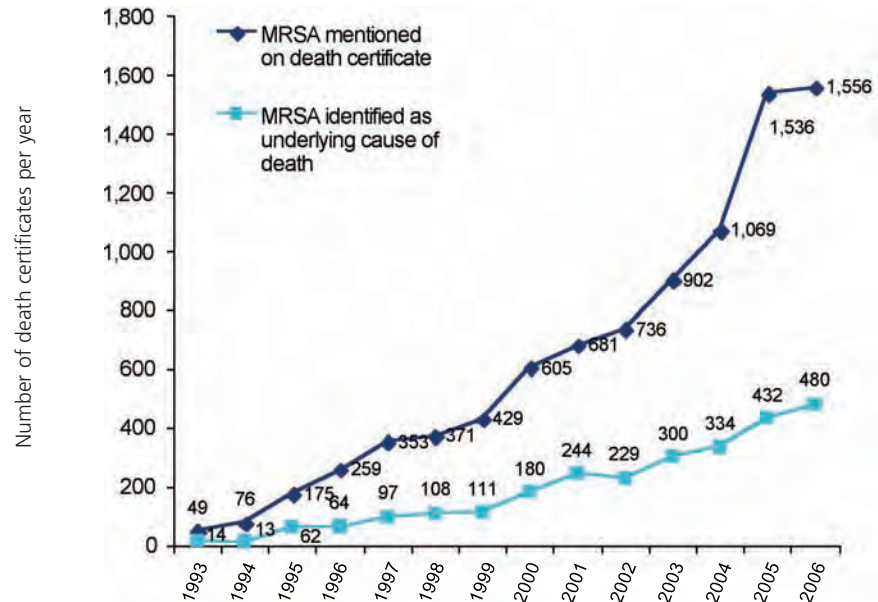


Source: EARSS

## Deaths involving MRSA

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a strain of bacterium that is resistant to a wide range of antibiotics. MRSA was first discovered in 1961 and is now widespread, particularly in hospitals where it is commonly called a 'superbug'. This chart illustrates data derived from death certificates in England and shows that the frequency with which MRSA is mentioned as a contributory factor in deaths has increased dramatically from 49 in 1993 to 1,556 in 2006, although there had been a levelling off seen in the past year.

Number of deaths involving MRSA, England, 1993–2006

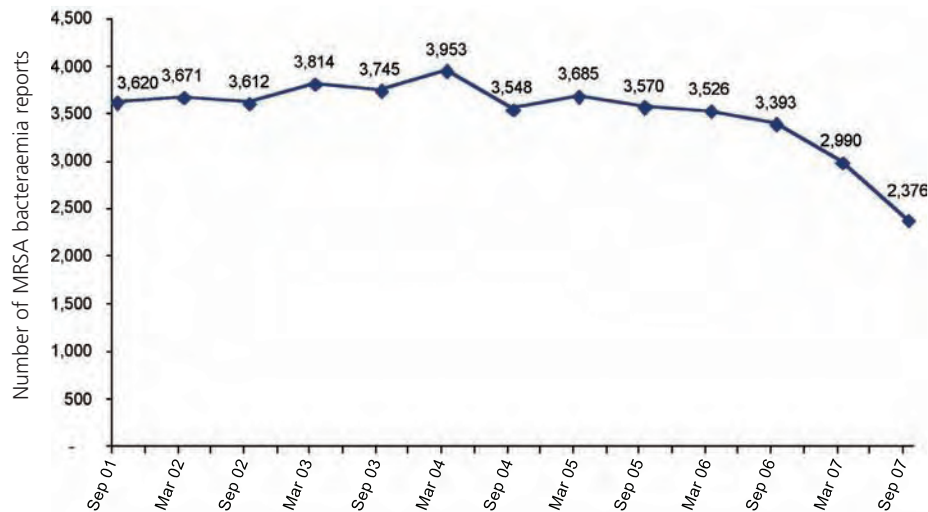


Source: ONS

## MRSA bacteraemia

MRSA attracts a high level of public and media concern. It is of such importance that the Department of Health has set up a sophisticated surveillance and reporting scheme to monitor the problem. Bacteraemia (or blood infection) rates are monitored as they provide the best picture of true MRSA infections, as opposed to harmless colonisation or contamination. The chart illustrates data from the surveillance scheme, which is administered by the Health Protection Agency in England, and includes reports from all Acute Trusts. It shows that from a peak in March 2004, the number of MRSA reports in September 2007 had decreased by 40 per cent. Between April 2007 and September 2007, the MRSA bacteraemia incidence rate was 1.24 per 10,000 occupied bed days; for the same period in 2004, the rate was 1.72 per 10,000 bed days (data not shown) (Health Protection Agency, 2008).

Six-monthly MRSA bacteraemia reports, England, 2001–07

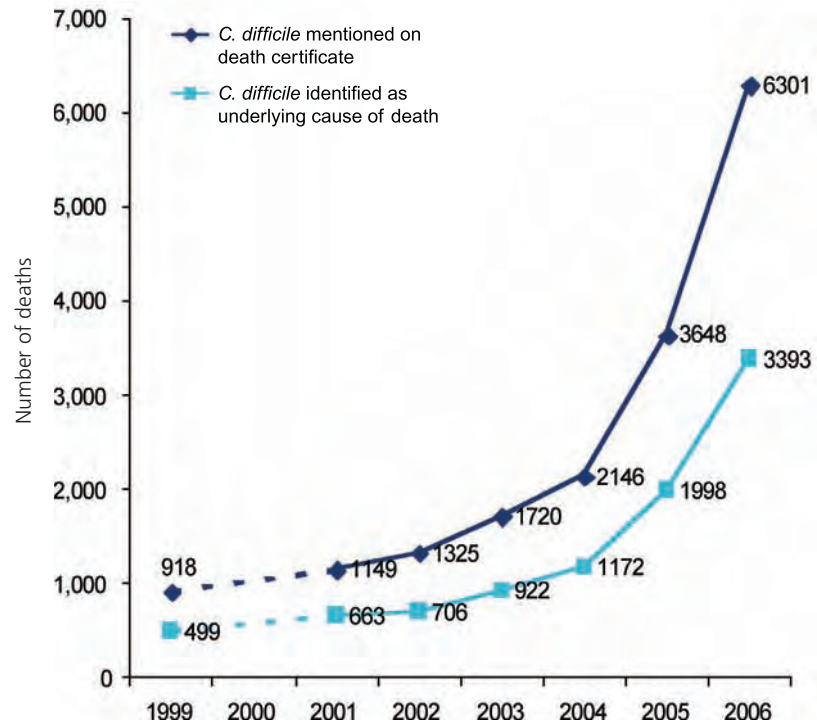


Source: Health Protection Agency

## Deaths involving *Clostridium difficile*

*Clostridium difficile* (*C. difficile*) is a bacterium that causes diarrhoea and can lead to serious illness and death. People aged 65 years and over, and patients with a serious underlying disease, are particularly susceptible to infection. Under certain conditions *C. difficile*, which is found in the faeces, can produce spores. These spores are resistant to heat, alcohol and acids in the stomach, and can survive in patients and the surrounding environment for long periods of time. The environment of a hospital may become contaminated with spores from *C. difficile* from patients who are already infected. This places other patients at risk of contracting the infection. The chart illustrates data derived from death certificates in England and shows that the frequency with which *C. difficile* was mentioned as a contributory factor in deaths has increased dramatically from 918 in 1999 to 6,301 in 2006.

Death certificate mentions of *Clostridium difficile*, England, 1999–2006



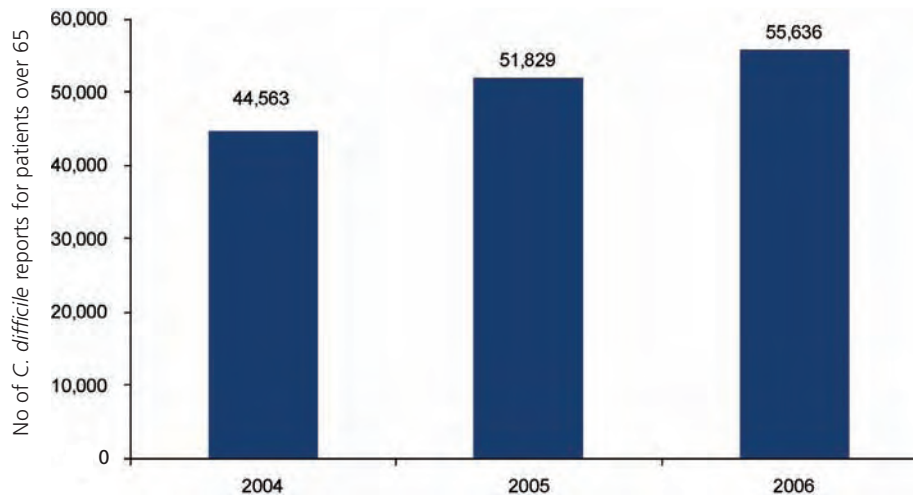
Source: ONS



## ***Clostridium difficile* infection rates**

*C. difficile* is a bacterium that causes diarrhoea and can lead to serious illness and death. In England, mandatory surveillance of *C. difficile*-associated disease in people aged 65 years and over has been conducted since January 2004. The chart shows that the number of reports of *C. difficile*-associated disease increased from 44,563 in 2004 to 55,636 in 2006: a 25 per cent rise. This represented an increase in the rate of *C. difficile*-associated disease from 1.92 in 2004 to 2.39 cases per 1,000 bed days in 2006 (Health Protection Agency, 2008).

*Clostridium difficile* reports in patients ≥65 years, England, 2004–06

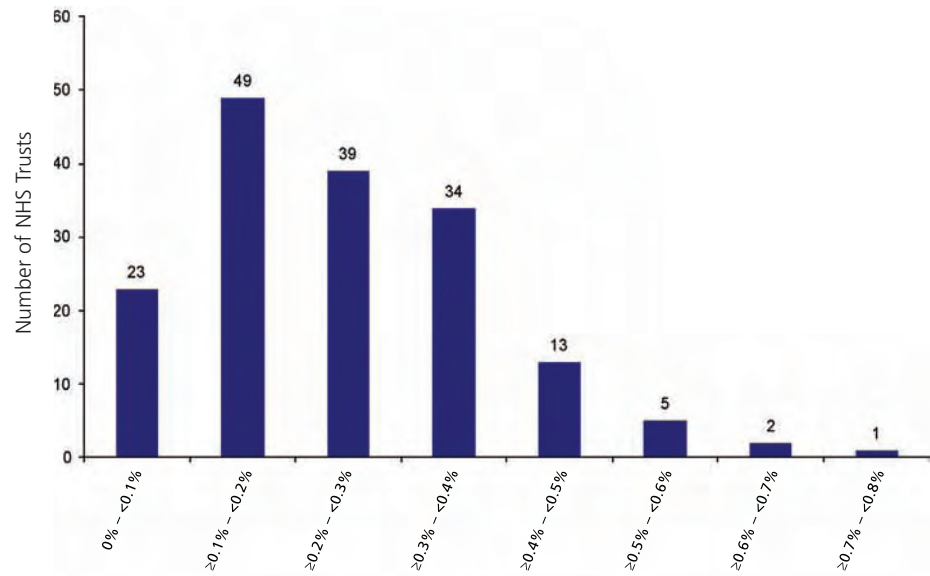


Source: Health Protection Agency

## Falls in hospital

Dr Foster Intelligence conducted analysis on Hospital Episode Statistics (HES) data, investigating the incidence of falls in patients aged 65 years or over, during stays in 2006–07. The chart illustrates the extent of variation across NHS trusts in England. The rate of falls ranged from 0 to 0.7 per cent.

Falls in hospital, NHS trust histogram, 2006–07



Note: Denominator is discharges in 2006/07 where the patient was 65+ years old on discharge.

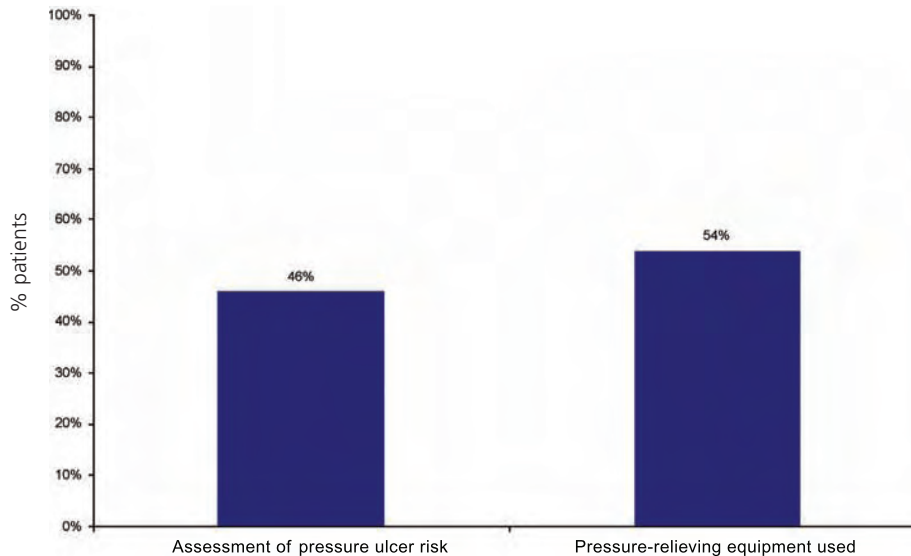
Falls are defined as a secondary ICD10 diagnosis of W00-W19.

Source: Dr Foster Intelligence

## Preventing pressure sores after falls

The Royal College of Physicians conducted a national clinical audit to investigate the care received by older patients who have fallen and sustained a fragility fracture of the hip, wrist, humerus, pelvis or vertebra. Falls are the commonest reason for an older person to attend A&E departments and for being admitted to hospital. Hip fractures are the most frequent fragility fracture caused by falls and the most common cause of 'accident'-related death. This chart illustrates that only around one-half of patients were assessed for pressure sore risk; and the same proportion were treated with pressure-relieving apparatus to mitigate risk.

Managing pressure sore risk, England, 2007

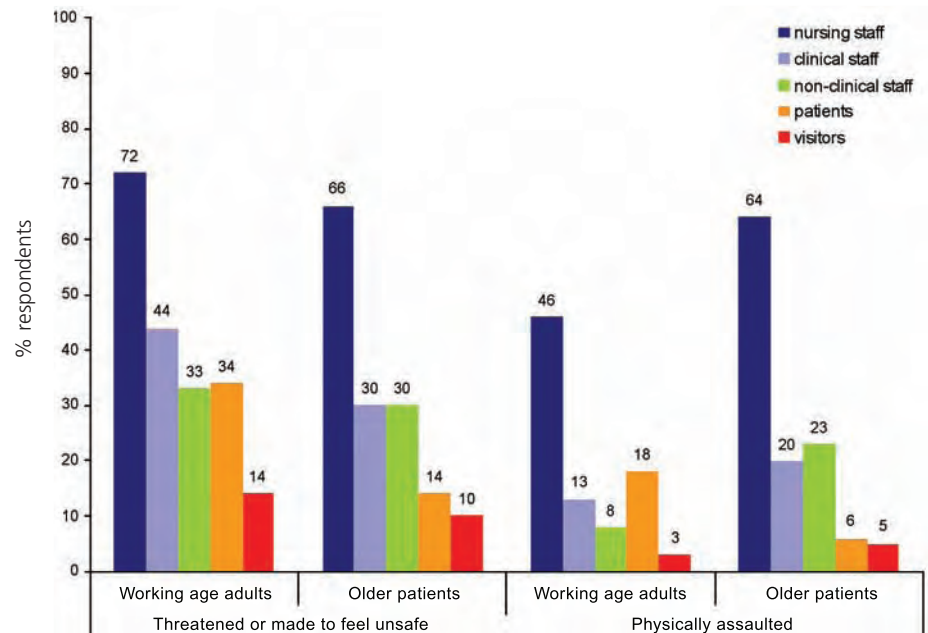


Source: Royal College of Physicians, 2007b

## Violence in mental health organisations

The Royal College of Psychiatrists and the Healthcare Commission published two audit reports on violence in mental health units in 2007. The audits focused on working age adults in acute mental health wards and older people's mental health wards. It included a survey of staff, patients and visitors in mental health units which asked: 'Have you personally been threatened or made to feel unsafe?' and 'Have you personally been physically assaulted?' The chart illustrates the responses. Further questions were asked about details of the physical environment which may contribute to the levels of violence. For example, when nursing staff were asked whether a personal safety alarm was available for use, only 57 per cent of respondents in the older people's wards answered yes, compared to 86 per cent in the acute wards (data not shown).

Violence in mental health units, England and Wales, 2006–07



Source: Healthcare Commission and Royal College of Psychiatrists, 2007



# PATIENT-CENTREDNESS

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## Introduction

*The needs of patients not the needs of institutions will be at the heart of the NHS. (DH, 1997: para.1.6)*

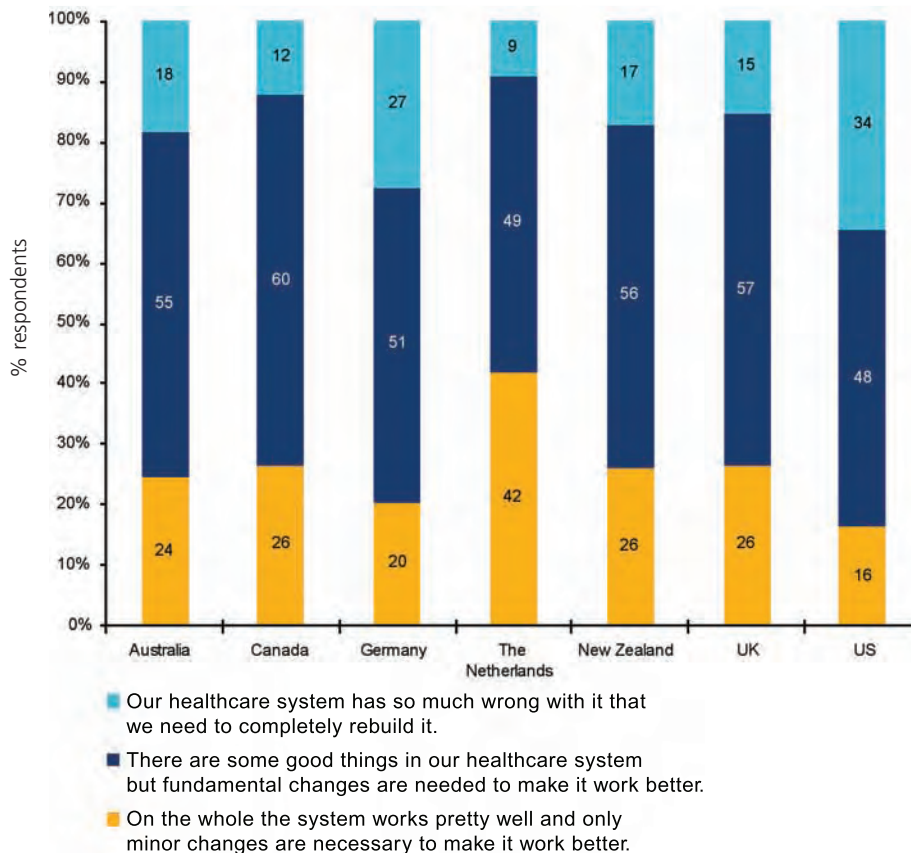
Placing the patient at the centre of the NHS has been a recurring theme throughout the 10-year quality reforms – though recent data suggests that there is some way to go to achieve that aim (Healthcare Commission 2008b: see p.222).

In September 2007, a comprehensive chartbook containing a wide range of charts focusing on patient and public experience in the NHS was published (Leatherman and Sutherland, 2007).

## Extent of change required in healthcare system – international comparison

The 2007 Commonwealth Fund International Survey of Adults’ Health Care Experiences asked respondents: “Which of these statements comes closest to expressing your overall view of the healthcare system in this country?” Dutch respondents were the most satisfied with their healthcare system, with only 9 per cent indicating that their healthcare system required a complete rebuild. In contrast, 34 per cent of US respondents indicated this level of dissatisfaction. Longitudinal data for the UK from 1988 is shown on the following chart.

Overall view of healthcare system, international comparison, 2007

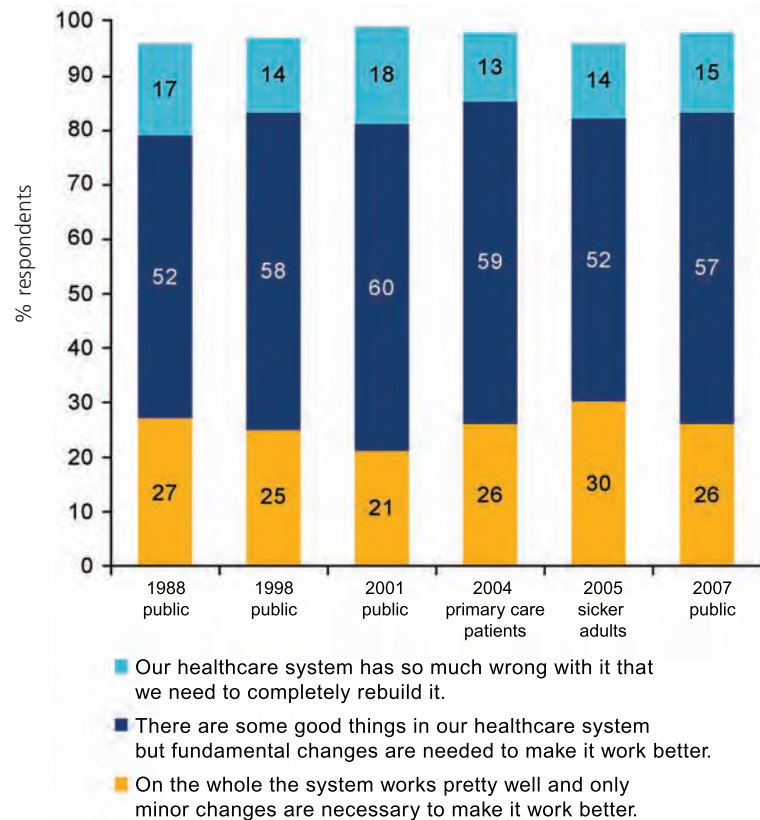


Source: Commonwealth Fund

## Extent of change required in healthcare system – UK time series

The Commonwealth Fund International Health Policy Survey was first conducted in 1988 and since 1998 has been conducted annually, focusing on different provider, population and patient groups. This chart illustrates the way in which UK respondents, over time, have answered the question: “Which of these statements comes closest to expressing your overall view of the healthcare system in this country?” Notably, the response asserting that only minor change was required in the UK achieved its highest score in the 2005 survey, for which survey respondents were a sample of ‘sicker adults’.

Public perception: extent of change required in healthcare, UK, 1998–2007



Source: Commonwealth Fund

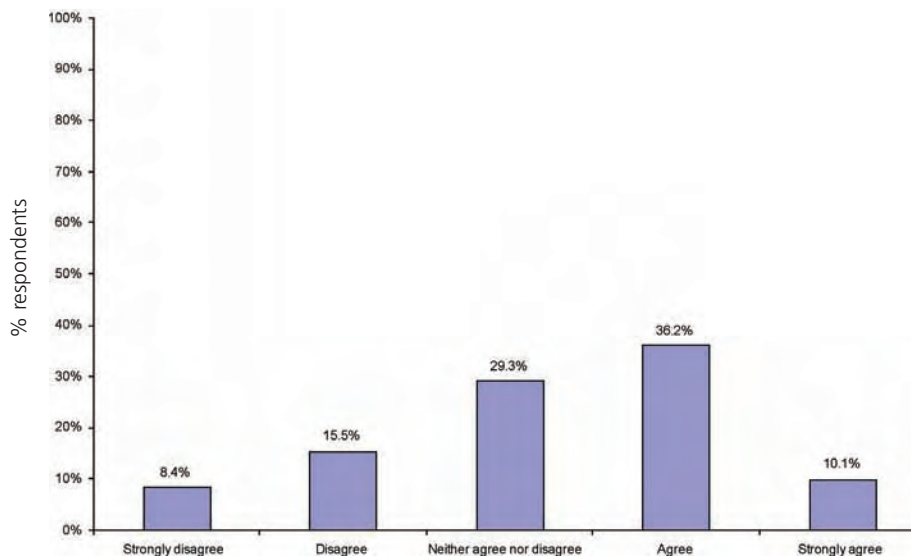


## Staff survey – patients as top priority?

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The Healthcare Commission undertakes large staff surveys on an annual basis. In 2007, the survey covered 150,000 staff and asked them about the extent to which they agreed with the statement: “The care of patients is my trust’s top priority.” The results are illustrated in the chart. Fewer than half of all respondents indicated that patient care was their trust’s top priority.

Staff survey: care of patients is trust’s top priority, England, 2007

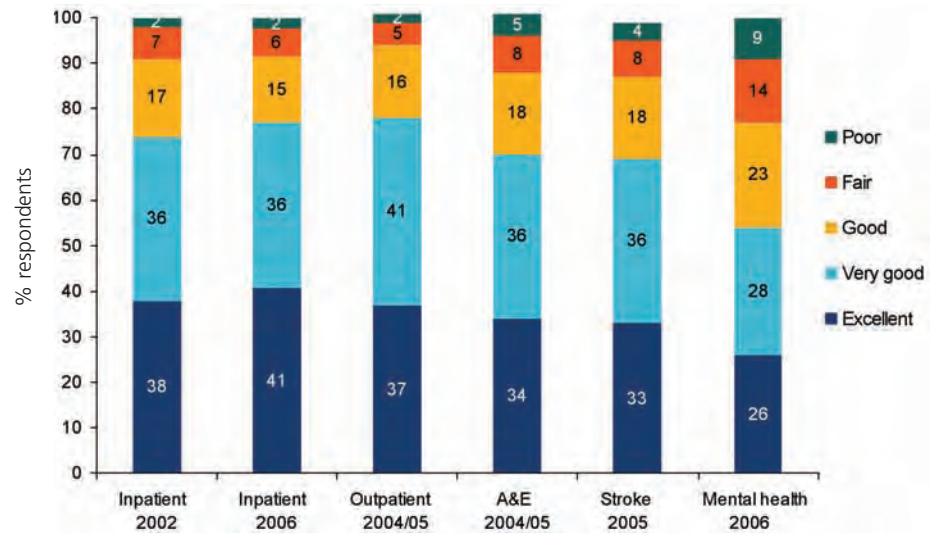


Source: Healthcare Commission

## Patient ratings of care

The Healthcare Commission conducts large patient surveys in England across different patient groups in the NHS. This chart illustrates the responses to the question: “Overall, how would you rate the care you received?” The data was drawn from six separate surveys: adult inpatients in 2002 and 2006 (allowing for comparison over time); outpatients in 2004–05; emergency department patients in 2004–05; stroke patients in 2005; and adult mental health patients in 2006. For inpatients and outpatients, the overall rating was high, with around three-quarters of respondents indicating that care was excellent or very good. Mental health patients were less satisfied with the care they received, with 54 per cent rating it excellent or very good.

Patient ratings of care, England, 2002, 2004, 2005 and 2006

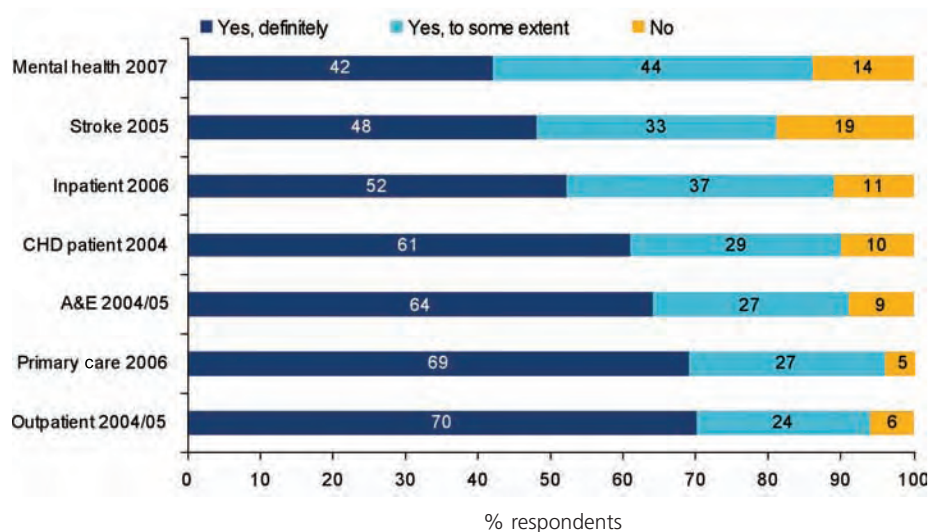


Source: Healthcare Commission

## Patient involvement in decisions about care and treatment

The Healthcare Commission conducts large patient surveys in England across different patient groups in the NHS. The surveys regularly ask: “Were you involved as much as you wanted to be in decisions about your care and treatment?” Data in this chart was drawn from seven separate surveys: mental health patients; stroke patients; inpatients; CHD patients; patients attending A&E; primary care patients; and outpatients. Approximately 70 per cent of primary care and outpatient respondents indicated that they were definitely involved as much as they wanted to be in decisions about their care; however, only half of inpatients and 40 per cent of mental health patients indicated that they were fully involved. Stroke patients had the highest level of dissatisfaction, with almost one in five respondents indicating that they were not as involved in decisions as they would have liked to be.

Patients involved as much as they wanted to be in decisions about care and treatment, England, 2004–07



Source: Healthcare Commission

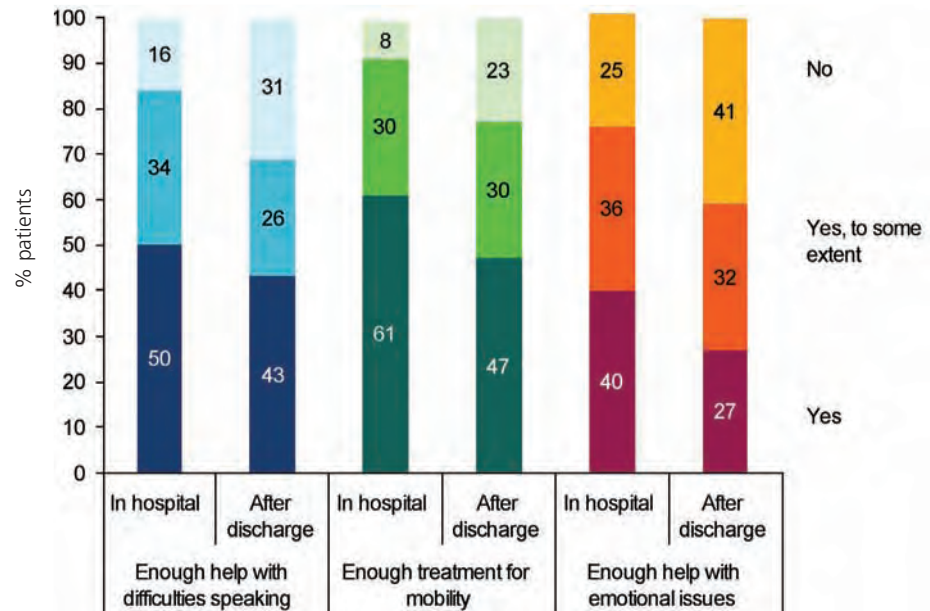
## Stroke rehabilitation services – patient perspective

In 2005, the Healthcare Commission undertook a patient survey of stroke patients, which asked the following questions of stroke patients about their time in hospital and after discharge:

- Did you get enough help with speech and communication problems?
- Did you get enough treatment to improve your mobility?
- Did you get enough help and support with any emotional issues that might be affecting you?

A significant minority of respondents said that they had not received enough help in hospital for speech and communication difficulties (16 per cent), mobility problems (8 per cent) or emotional issues (25 per cent). After they left hospital, the percentage of patients who reported that they had not received enough help and support rose further.

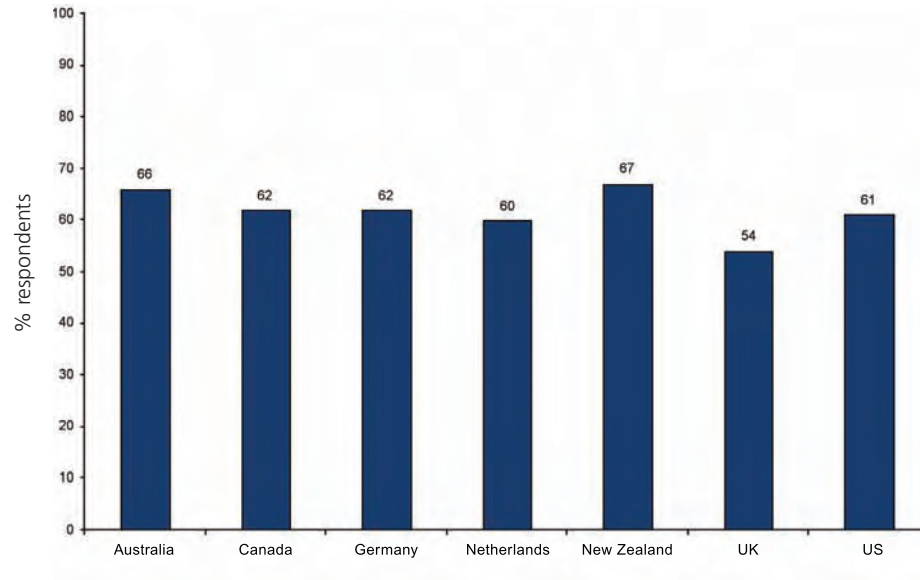
Provision of stroke rehabilitation services – patient perspective, England, 2005



## Patient involvement in decisions – international comparison

The 2007 Commonwealth Fund International Survey on Adults' Experiences of Health Care asked: "When you visit your doctor, does he or she always tell you about treatment options and involve you in decisions about best treatment?" The chart illustrates the proportion of respondents answering yes. Across all the countries shown, at least a third of respondents indicated that they were not always given information on treatment options or involved in decision-making.

Involvement in decisions, international comparison, 2007

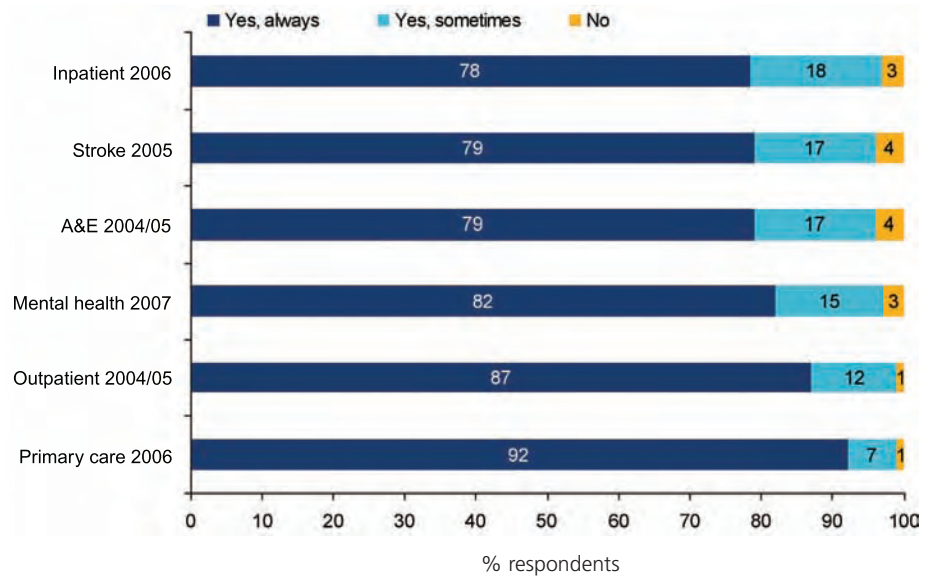


Source: Commonwealth Fund

## Treated with respect and dignity

The Healthcare Commission surveys in England gauge opinion among different patient groups in the NHS. The question “Overall, did you feel you were treated with respect and dignity?” was asked of stroke patients, inpatients, patients attending A&E, outpatients, primary care patients, and mental health patients. A large majority of respondents indicated that they were treated with respect and dignity at all times. While these results are commendable, the finding that one-fifth of stroke patients, inpatients, patients attending A&E and mental health patients (referring to psychiatrists) felt that they were not treated with dignity and respect at all times is of concern.

Patient perceptions: treated with respect and dignity, England, 2004–07

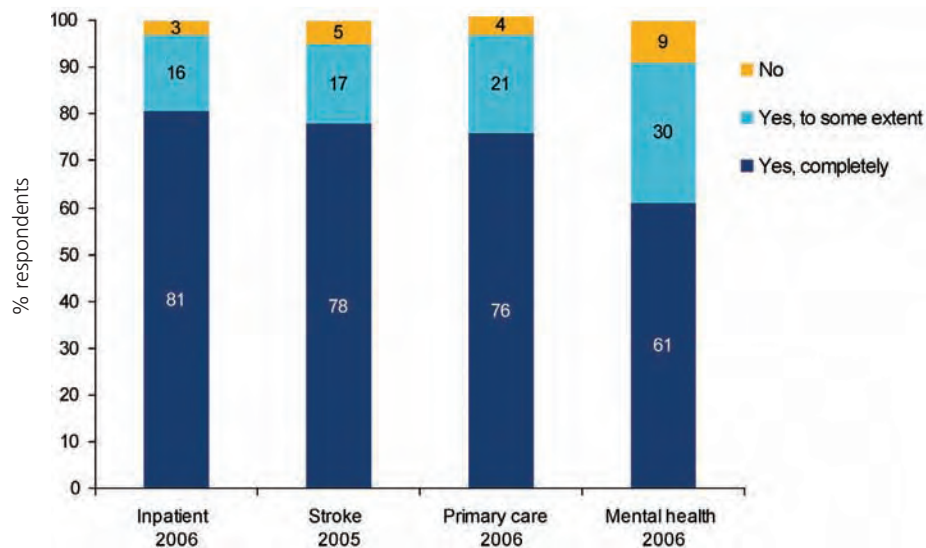


Source: Healthcare Commission

## Patient perceptions – confidence and trust

The Healthcare Commission surveys in England gauge opinion across different patient groups in the NHS. The surveys generally include the question: “Did you have confidence and trust in the doctors treating you?” This chart illustrates responses to four surveys published in 2005–06. Three-quarters or more of respondents in the surveys of primary care patients, inpatients and stroke patients indicated that they had complete confidence and trust in their doctors. Among those responding to the mental health survey, only 61 per cent indicated that they had complete trust and confidence in the doctors (psychiatrists) treating them.

Patient feelings of confidence and trust in doctors, England, 2005–06

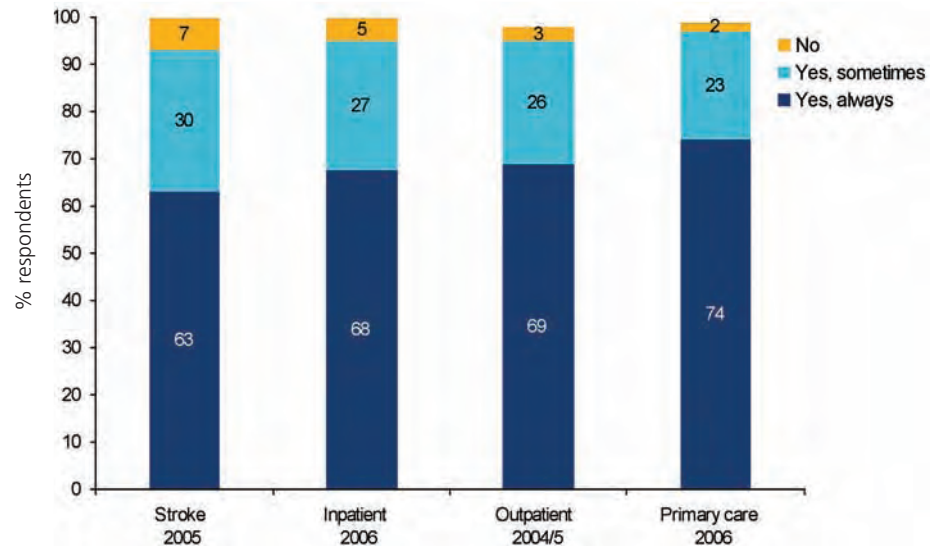


Source: Healthcare Commission

## Communication – doctor answered questions/explained action in a way that was understood

The Healthcare Commission conducts large-scale patient surveys across different patient groups in the NHS in England. This chart draws data from four surveys conducted between 2004–05 and 2006 (stroke patients, inpatients, outpatients and primary care patients) and depicts responses to the question: “If you had questions to ask the doctor, did you get answers that you could understand?” The majority of respondents indicated that they always received comprehensible answers to their questions.

Getting clear answers to patient questions, England, 2004–06



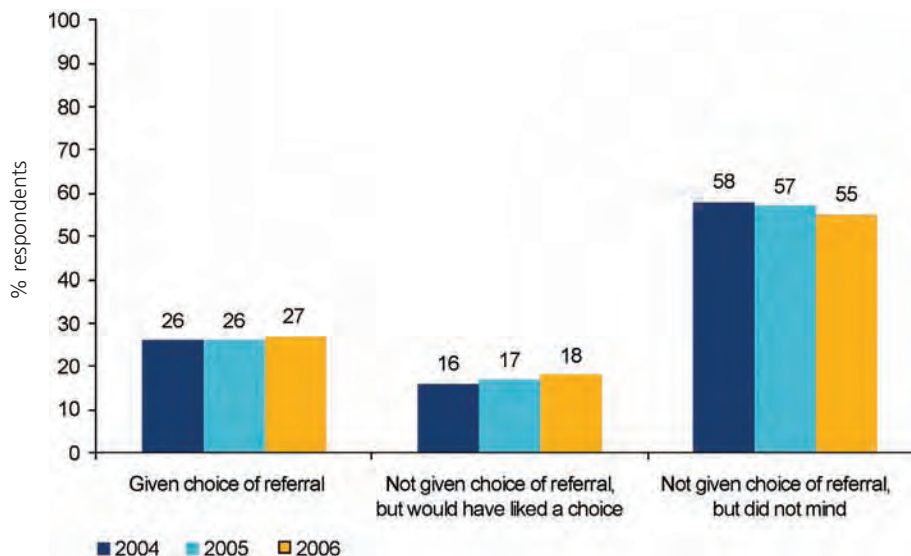
Source: Healthcare Commission



## Choice in referrals

The Healthcare Commission conducts large-scale patient surveys in England, focusing on various patient groups. Surveys of primary care patients in 2004, 2005 and 2006 asked patients who had been referred to a specialist: “Were you given a choice about where you were referred to?” Overall, there has been little change in the pattern of responses; however when confined to patients who were referred in 2006 only (rather than responding about their last referral), 31 per cent recalled being offered choice.

Choice in referrals, England, 2004–06



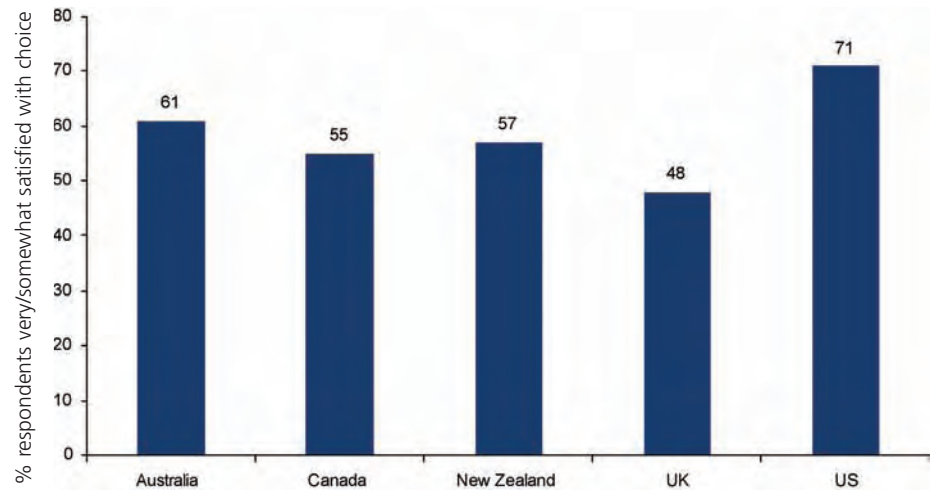
Source: Healthcare Commission and Picker Institute Europe

## Choice of surgeon

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The 2005 Commonwealth Fund International Health Policy Survey focused on sicker adults and asked respondents who had undergone major surgery in the preceding two years: “How satisfied were you with the amount of choice you had in choosing the surgeon?” The chart depicts the percentage of respondents who indicated they were either very or somewhat satisfied. UK respondents appeared least satisfied with the amount of choice.

Patient satisfaction with choice of surgeon, international comparison, 2005

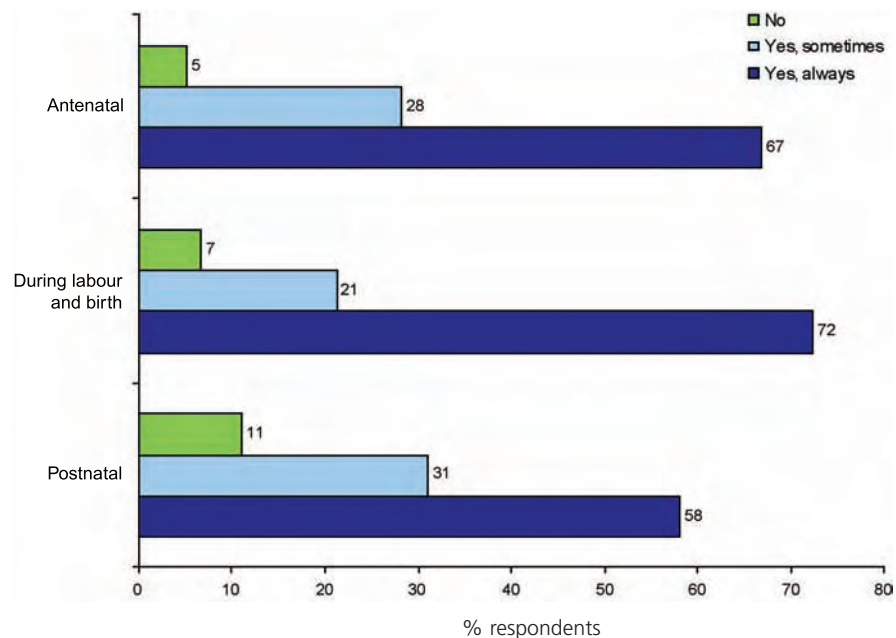


Source: Commonwealth Fund

## Information for maternity patients

The Healthcare Commission published the results of a large-scale survey of maternity patients in November 2007. The survey asked women whether they were given the information or explanations they needed at three key stages: (a) during antenatal care; (b) during labour and birth; and (c) during postnatal care. The chart shows that information provision was most problematic in the postnatal period, and only 58 per cent of respondents indicated that they were always given the information and explanations they needed.

Given information and explanations needed, maternity patient survey, England, 2007

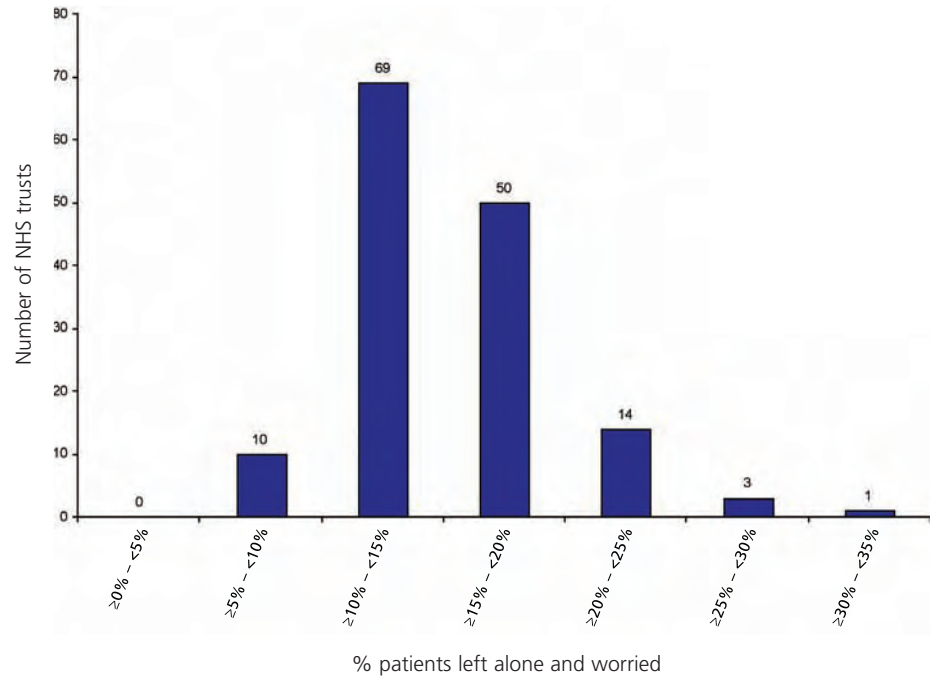


Source: Healthcare Commission

## Left alone during labour – variation across NHS trusts

The Healthcare Commission undertook a large-scale survey of maternity patients in 2007 and asked respondents: “Were you (and/or your husband, partner or a companion) left alone by midwives or doctors at a time when it worried you?” Overall, 15 per cent of respondents across England indicated that they had been left alone during labour. This chart illustrates the degree of variation found in responses from NHS trusts. The proportion of respondents indicating that they had been left alone during labour at a time when it worried them ranged from 9 per cent to 33 per cent.

Maternity patients left alone and worried, NHS trust histogram, 2007

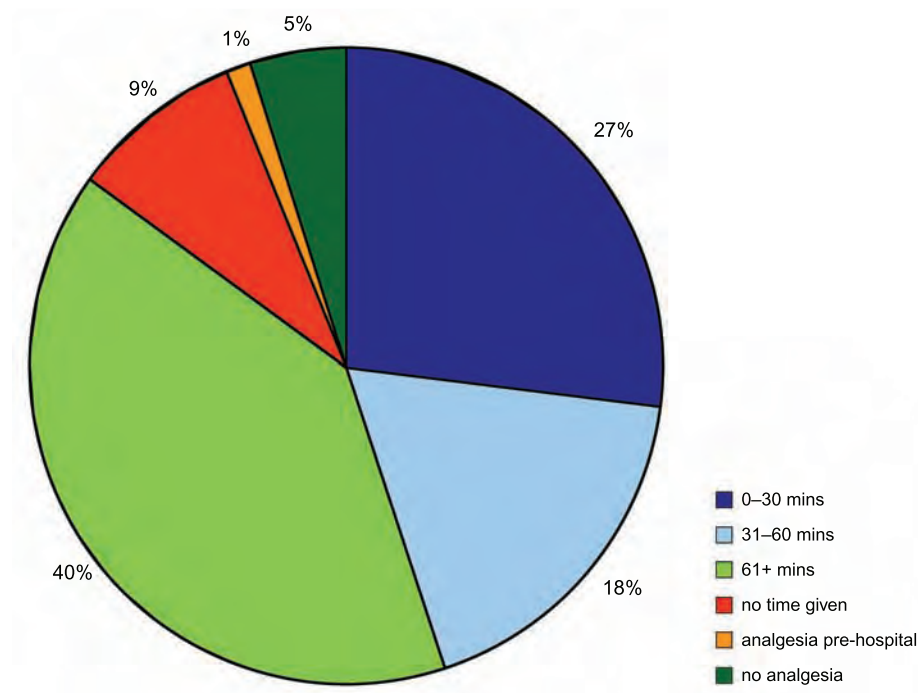


Source: Healthcare Commission

## Analgesia after bone fracture in older patients

The Royal College of Physicians (2007b) has established a clinical audit into falls and bone health in older people. In 2007, it found that 95 per cent of patients were given analgesia; however, 40 per cent of patients waited more than one hour.

Waiting for analgesia – older patients after falls, England, 2007

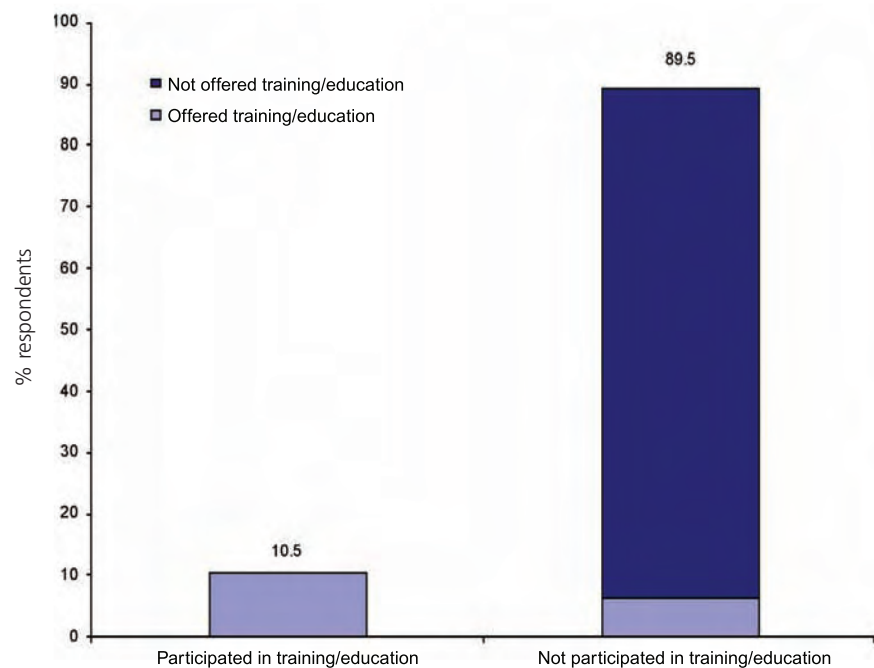


Source: Royal College of Physicians

## Patient education – diabetes care

The Healthcare Commission's 2006 survey of diabetic patients in England asked respondents about their access to training and education programmes. Maintaining good glycaemic control, as measured by HbA1c levels, is important in preventing the development of many of the serious sequelae of diabetes. The National Diabetes Audit (2004–05) found that 48 per cent of diabetes patients had HbA1c levels above the recommended threshold of 7.5 per cent. Improved self-care is seen as a key intervention to help improve HbA1c levels. This chart shows that only one in 10 diabetic patients indicated that they had participated in education and training programmes. Of those that had not participated in such programmes, the vast majority (83 per cent of total respondents) had not been offered the opportunity to do so.

Offer and uptake of education and training for diabetic patients, England 2006

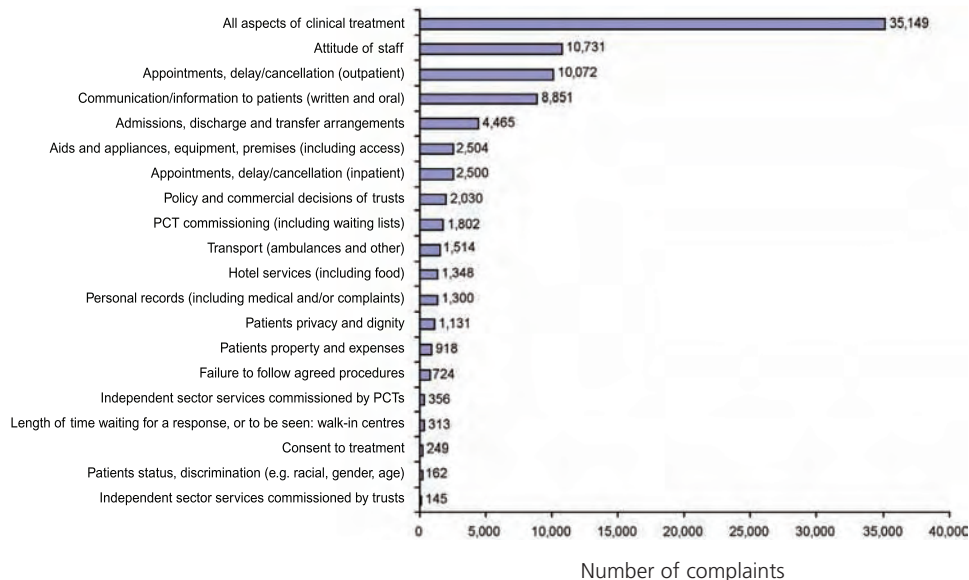


Source: Healthcare Commission

## Types of complaints in the NHS

The past 10 years have seen no discernible change in the number of complaints made. In September 2006, the target for resolving complaints was changed from 20 to 25 working days. Between 1 April 2006 and 31 August 2006, 75 per cent of complaints were resolved within the 20-day target and between 1 September 2006 and 31 March 2007, 77 per cent of complaints were resolved within the 25-day target. The 90,801 written complaints made about hospital and community health services in 2006–07 covered a wide range of subjects. This chart shows the 20 most common subjects, with aspects of clinical care being by far the most common topic. Although numbers are relatively low – particularly in the context of the millions of consultations that occur each year in the NHS – complaints about clinical care (35,149), attitude of staff (10,732), communication (8,851), and patients’ privacy and dignity (1,131) are particularly concerning.

Subject of complaint (20 most common subjects), England, 2006–07



Source: NHS Information Centre

# EQUITY

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## Introduction

Equity, one of the founding principles of the NHS, still distinguishes the NHS from many other healthcare systems. Treating patients on the basis of need rather than on the basis of the ability to pay (or any other non-clinical criteria) remains a cherished principle.

This chapter provides data on equity in the NHS in terms of equity both in provision of care processes (such as vaccination rates) and in outcomes (such as mortality rates and life expectancy).



## Cost barriers to care

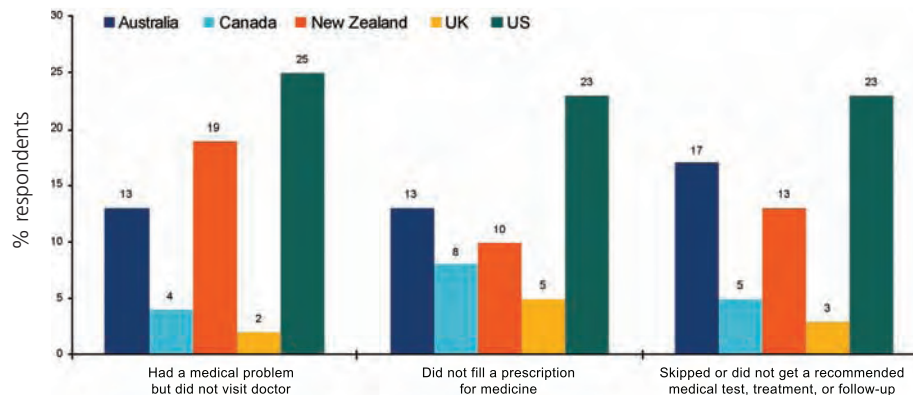
One measure of ability to access healthcare is whether a patient encounters serious obstacles of cost. The 2007 Commonwealth Fund International Health Policy Survey, which focused on adults in general, asked the following:

Was there a time in the past year when you:

- had a specific medical problem but did not visit the doctor?
- did not fill a prescription for medicine?
- skipped or did not get a medical test, treatment, or follow-up that was recommended by a doctor because of cost?

The UK performed best on all of these questions, an indication that service provision is equitable across different income groups.

Respondents who did not get medical care because of cost, international comparison, 2007

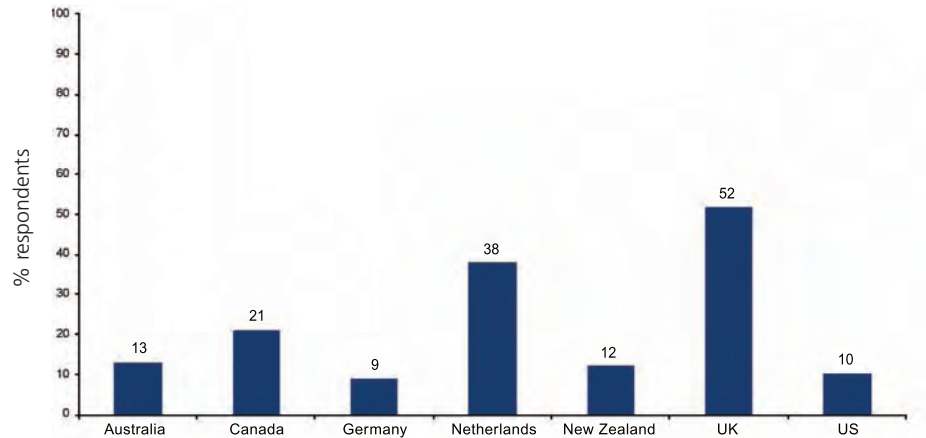


Source: Commonwealth Fund

## Out-of-pocket costs

The 2007 Commonwealth Fund International Survey of Adults' Health Care Experiences asked respondents: "How much have all your medical bills cost you out-of-pocket in the past year?" The chart illustrates the proportion of respondents who indicated that they had no such costs. More than half of UK respondents, the highest proportion of all the countries surveyed, indicated that they had no out-of-pocket costs. Almost one-third of US respondents (30 per cent) indicated that they had spent more than \$1,000 in the previous year, compared to 4 per cent of UK respondents (data not shown).

No out-of-pocket costs for medical bills in previous year, international comparison, 2007

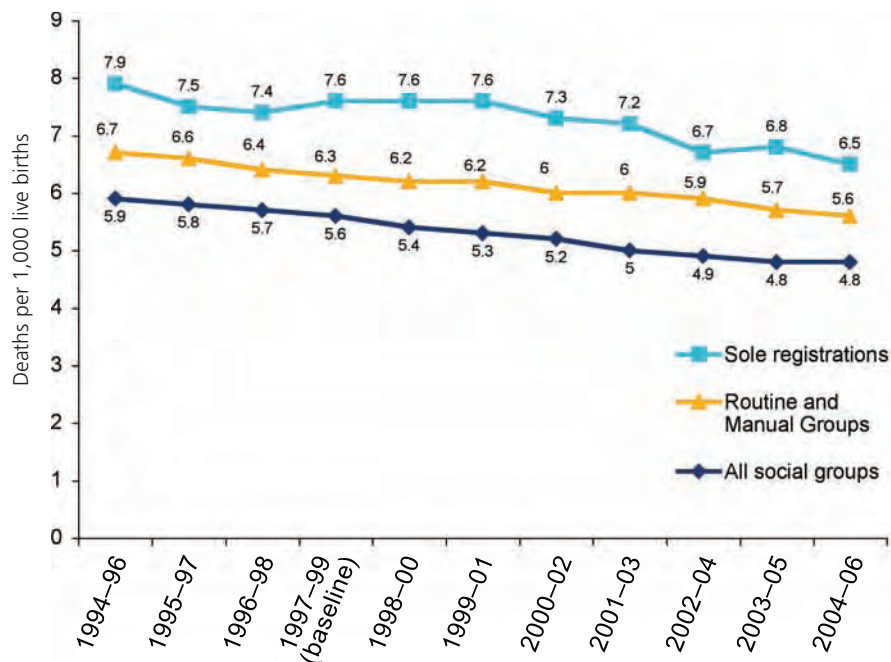


Source: Commonwealth Fund

## Socio-economic disparities in infant mortality

Deprivation levels are known to affect infant mortality rates. In its drive to tackle health inequalities, the Government pledged “by 2010 [to] reduce by at least 10 per cent the gap in infant mortality between routine and manual groups and the population as a whole” (HM Treasury, Public Service Agreement, 2004), using 1997–99 as the baseline. The data displayed in the chart show an overall fall in infant mortality rates across England and Wales. The infant mortality rate among the routine and manual group was 13 per cent higher than that in the population as a whole during the period 1997–99. Rather than narrowing, this gap widened to 17 per cent during the period 2004–06. The chart also illustrates data for sole registrations even though this data is not covered by the Public Service Agreement (PSA) target. In 2004–06, the rate for managerial and professional groups was 3.3 deaths per 1,000 live births; for intermediate groups the rate was 4.4 deaths per 1,000 live births (data not shown).

Infant mortality by socioeconomic classification, England and Wales, 1994–96 – 2004–06



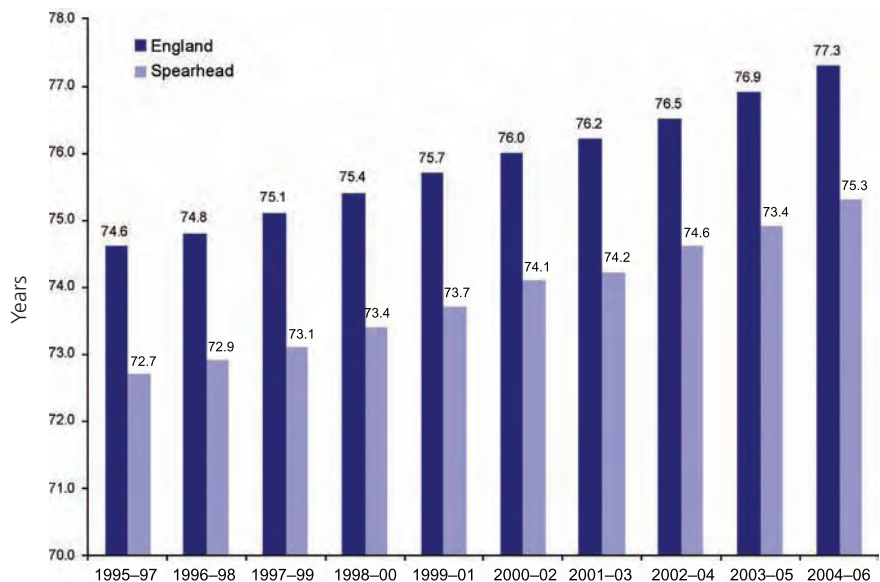
Source: ONS



## Life expectancy – by deprivation

The national Health Inequalities Public Service Agreement Target is, by 2010, to reduce by at least 10 per cent the gap in life expectancy between the one-fifth of areas with the worst health and deprivation indicators (the spearhead group) and the population as a whole. The latest data for 2004–06 shows that both the relative gap and the absolute gap in life expectancy between England as a whole and the one-fifth of areas with the worst health and deprivation indicators was wider than at the baseline (1995–97) for males and females.

Life expectancy at birth, males, England 1995–97 – 2004–06

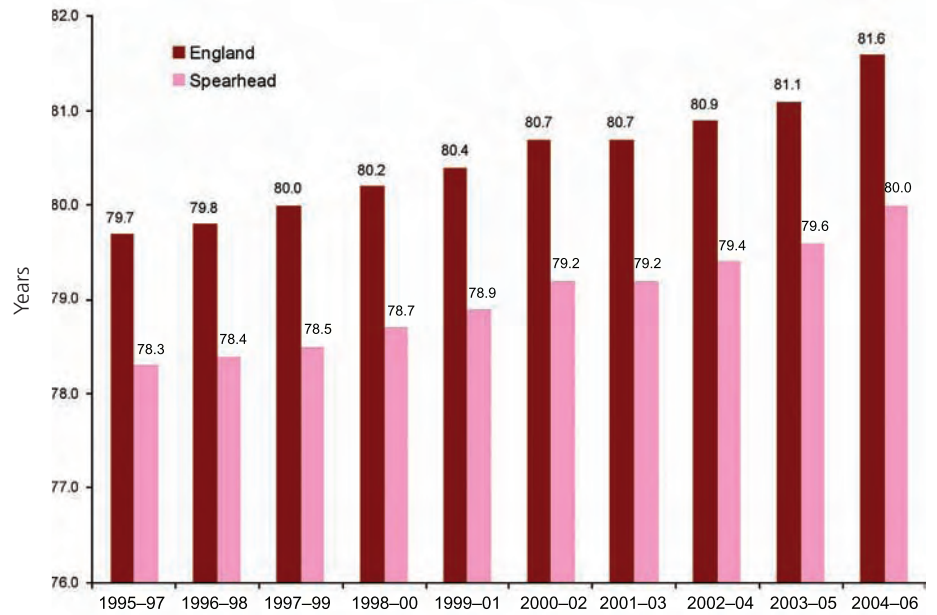


Note: The spearhead group is made up of 70 local authorities and 62 primary care trusts, based upon the local authority areas that are in the bottom fifth nationally for three or more of the following five indicators:

- male life expectancy at birth
- female life expectancy at birth
- cancer mortality rate in under 75s
- cardiovascular disease mortality rate in under 75s
- Index of Multiple Deprivation 2004 (Local Authority Summary), average score

Source: ONS

Life expectancy at birth, females, England 1995–97 – 2004–06

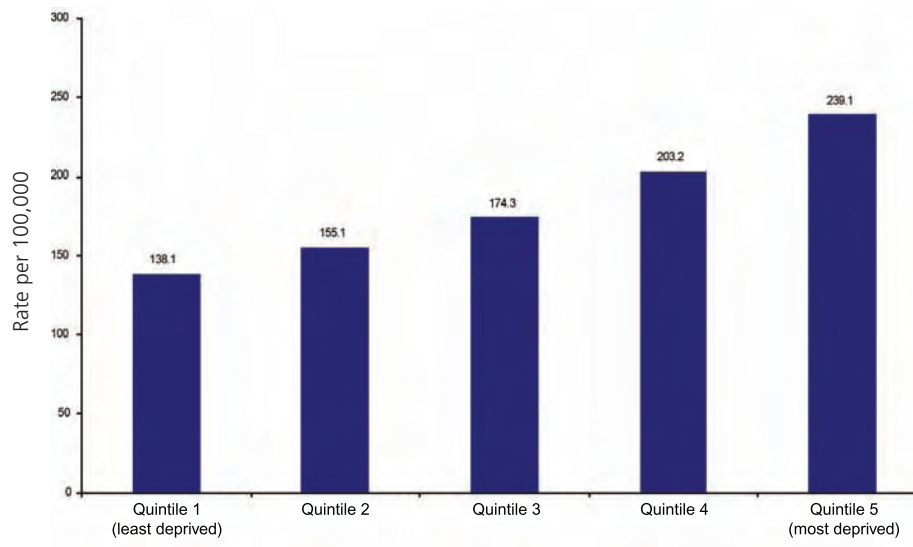


Source: ONS

## Emergency admissions for asthma and diabetes – by deprivation

Asthma and diabetes are chronic illnesses that are amenable to management in the primary care setting. Although it would be impossible to eliminate them entirely, many emergency admissions can be avoided through better primary care and support for patients to manage their own illnesses at home. This chart illustrates the number of admissions in 2006–07, stratified by deprivation quintile. A clear gradient can be seen, with higher admission rates in more deprived areas.

Rates of emergency admissions for asthma and diabetes per 100,000 population, by deprivation, England, 2006–07

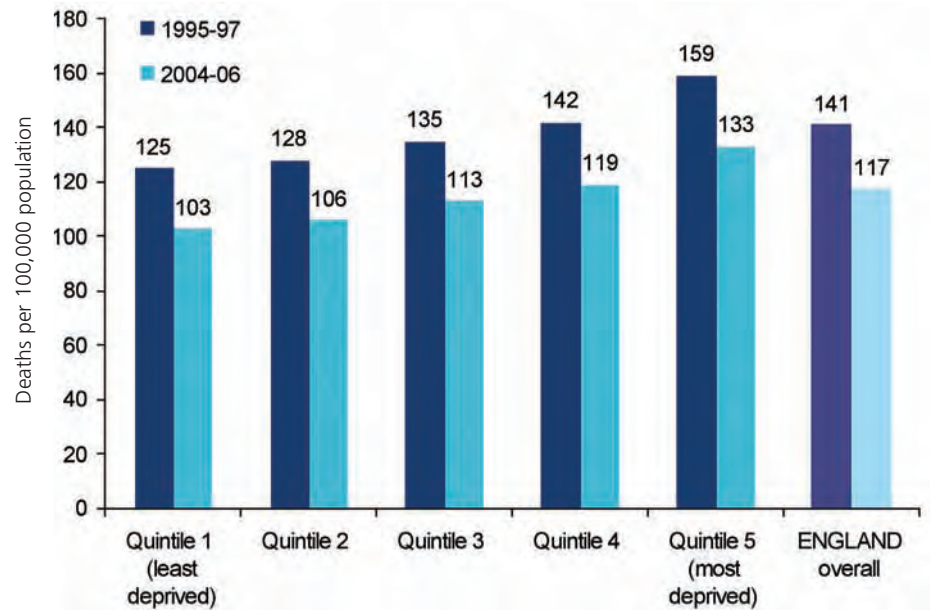


Source: London Health Observatory

## Cancer mortality – by deprivation

Alongside the pledge to reduce by 20 per cent the mortality rates from cancer in patients aged less than 75 years across England, the Government also set a target to reduce by at least 20 per cent the inequalities gap between mortality rates in the most deprived areas and the population as a whole. While there has been a generalised decrease in death rates, the relative gap has not changed significantly. There was a 13 per cent difference between the most deprived areas and the population as a whole in 1995–97, compared with a 14 per cent difference in 2004–06. The cancer death rate for those aged under 75 years in the most deprived areas was 29 per cent higher than the rate in the least deprived areas in 2004–06, compared to 28 per cent.

Death rates from cancer, by deprivation quintile, people aged under 75, England, 1995–97 and 2004–06



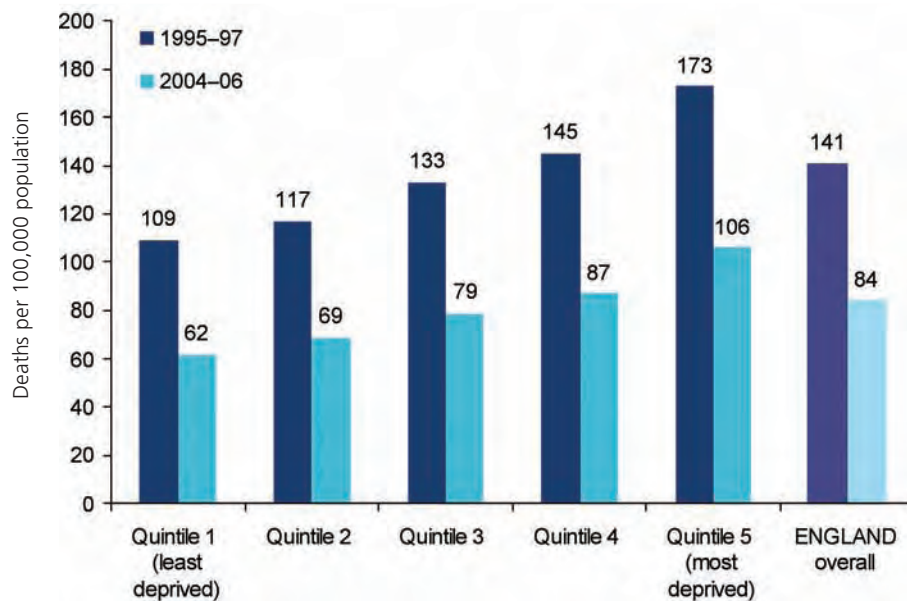
Source: ONS



## Circulatory disease – mortality and deprivation

Alongside the pledge to reduce by 40 per cent the mortality rates from circulatory disease in patients aged less than 75 years across England, the Government also set a target to reduce by at least 40 per cent the inequalities gap between mortality rates in the most deprived areas and the population as a whole. While there has been a generalised decrease in death rates, the inequalities gap has widened from a 22 per cent difference between the most deprived areas and the population as a whole in 1995–97, to a 26 per cent difference in 2004–06. Even more stark, the circulatory disease death rate for those aged under 75 years in the most deprived areas was 71 per cent higher, compared to the least deprived areas.

Age standardised death rates from circulatory disease by deprivation quintile, people aged under 75, England, 1995–97 and 2004–06

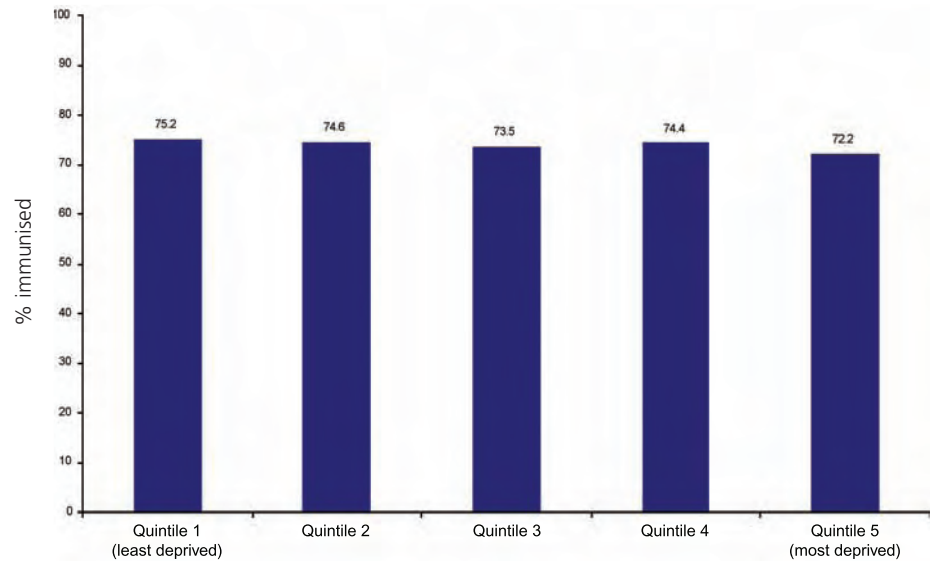


Source: ONS

## Influenza vaccination rate – by deprivation

The overall provision of influenza vaccinations for people aged over 65 years has improved steadily over recent years and latest data show uptake rates of 74 per cent in this age group (NHS Information Centre, 2007c). This chart illustrates data on coverage in 2006–07 by deprivation and shows no strong relationship between deprivation and influenza vaccination rates.

Percentage of population aged over 65 immunised against influenza by PCT deprivation quintile, England, 2006–07



Source: London Health Observatory



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# APPENDIX 1

Metadata for the charts are available on the source websites, as listed below.

Chart title	Metadata available at:
<b>EFFECTIVENESS</b>	
Mortality from conditions considered amenable to healthcare – England	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Mortality from causes considered amenable to healthcare – international	<a href="http://www.commonwealthfund.org/publications/publications_show.htm?doc_id=640980">http://www.commonwealthfund.org/publications/publications_show.htm?doc_id=640980</a>
Deaths from circulatory disease	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Circulatory disease mortality – international	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Years of life lost to circulatory disease – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Mortality rates from circulatory disease – progress against a target	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Mortality from coronary heart disease	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Mortality from coronary heart disease – international	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
CHD indicators – time series, blood pressure and cholesterol	<a href="http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf">http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf</a>
CHD prevention, blood pressure and cholesterol control – variation within England	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Mortality from acute myocardial infarction – international	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>



Thrombolysis rates post-AMI	<a href="http://www.rcplondon.ac.uk/pubs/books/minap07/index.htm">http://www.rcplondon.ac.uk/pubs/books/minap07/index.htm</a>
Secondary prevention – AMI	<a href="http://www.rcplondon.ac.uk/pubs/books/minap07/index.htm">http://www.rcplondon.ac.uk/pubs/books/minap07/index.htm</a>
Heart failure – appropriate prescribing	<a href="http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/National%20Heart%20Failure%20Audit%20April%202007.pdf">http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/National%20Heart%20Failure%20Audit%20April%202007.pdf</a>
Arrangements for monitoring heart failure	<a href="http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf">http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf</a>
Follow-up care – heart failure	<a href="http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf">http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf</a>
Cerebrovascular disease mortality – international	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Potential years of life lost to cerebrovascular disease – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Mortality rates from stroke	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Key indicators for stroke care	<a href="http://www.rcplondon.ac.uk/pubs/books/strokeaudit/">http://www.rcplondon.ac.uk/pubs/books/strokeaudit/</a>
Variation within key indicators of stroke care effectiveness	<a href="http://www.rcplondon.ac.uk/pubs/books/strokeaudit/">http://www.rcplondon.ac.uk/pubs/books/strokeaudit/</a>
Prevention – Quality and Outcomes Framework indicators for stroke	<a href="http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf">http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf</a>
Cancer mortality – international	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Potential years of life lost to cancer – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Mortality from cancer – progress against a target	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Cancer survival rates – international comparison	<a href="http://www.ncbi.nlm.nih.gov/pubmed/17714993?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/17714993?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum</a>
Breast cancer screening	<a href="http://www.ic.nhs.uk/statistics-and-data-collections/screening/breast-cancer">http://www.ic.nhs.uk/statistics-and-data-collections/screening/breast-cancer</a>
Diabetes mortality – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>

Effective management of diabetes	<a href="http://www.healthcarecommission.org.uk/serviceproviderinformation/nationalclinicalaudit/furtherinformation.cfm?cit_id=379">http://www.healthcarecommission.org.uk/serviceproviderinformation/nationalclinicalaudit/furtherinformation.cfm?cit_id=379</a>
Diabetes control – PCT variation	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Diabetes indicators – time series, blood pressure and cholesterol	<a href="http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf">http://www.ic.nhs.uk/webfiles/QOF/2006-07/QResearch%202006-70%20QOF/Time%20Series%20Analysis%20for%20Selected%20Clinical%20Indicators%20from%20QOF%202001-2006%20Report.pdf</a>
Provision of recommended care processes	<a href="http://www.healthcarecommission.org.uk/serviceproviderinformation/nationalclinicalaudit/furtherinformation.cfm?cit_id=379">http://www.healthcarecommission.org.uk/serviceproviderinformation/nationalclinicalaudit/furtherinformation.cfm?cit_id=379</a>
Retinal examination – international comparison	<a href="http://www.oecd.org/dataoecd/57/22/39447928.pdf">http://www.oecd.org/dataoecd/57/22/39447928.pdf</a>
Retinal examination – variation across PCTs	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Caesarean section rates	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Caesarean section rate – variation across NHS trusts	<a href="http://www.ic.nhs.uk/webfiles/publications/maternity0506/NHSMaternityStatsEngland200506_Tables.xls">http://www.ic.nhs.uk/webfiles/publications/maternity0506/NHSMaternityStatsEngland200506_Tables.xls</a>
Complying with evidence-based recommendations – birth positions	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm</a> <a href="http://www.healthcarecommission.org.uk/_db/_downloads/MAT07_7_The_birth_of_your_baby_v4.xls">http://www.healthcarecommission.org.uk/_db/_downloads/MAT07_7_The_birth_of_your_baby_v4.xls</a>
Perinatal mortality rates – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Perinatal mortality – regional variation	<a href="http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=9687&amp;Pos=1&amp;ColRank=1&amp;Rank=272">http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=9687&amp;Pos=1&amp;ColRank=1&amp;Rank=272</a>
Infant mortality – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Infant mortality – regional variation	<a href="http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=9687&amp;Pos=1&amp;ColRank=1&amp;Rank=272">http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=9687&amp;Pos=1&amp;ColRank=1&amp;Rank=272</a>
Suicide rate – international comparison	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Suicide rate – progress against a target	<a href="http://www.nchod.nhs.uk/">http://www.nchod.nhs.uk/</a>
Suicides and last contact with health service	<a href="http://www.medicine.manchester.ac.uk/suicideprevention/nci/">http://www.medicine.manchester.ac.uk/suicideprevention/nci/</a>

Adherence to NICE guidelines for schizophrenia	<a href="http://www.healthcarecommission.org.uk/serviceproviderinformation/reviewsandstudies/servicereviews/improvementreviewmethodology/adultcommunitymentalhealthservices.cfm">http://www.healthcarecommission.org.uk/serviceproviderinformation/reviewsandstudies/servicereviews/improvementreviewmethodology/adultcommunitymentalhealthservices.cfm</a>
Mental health patients – talking therapies	<a href="http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/mentalhealth.cfm">http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/mentalhealth.cfm</a>
Occupational and benefits help	<a href="http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/mentalhealth.cfm">http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/mentalhealth.cfm</a>
Emergency care	<a href="http://www.ncepod.org.uk/2007.htm">http://www.ncepod.org.uk/2007.htm</a>
Appropriate trauma care	<a href="http://www.ncepod.org.uk/2007b.htm">http://www.ncepod.org.uk/2007b.htm</a>

### ACCESS

Inpatient waits	<a href="http://www.performance.doh.gov.uk/waitingtimes/index.htm">http://www.performance.doh.gov.uk/waitingtimes/index.htm</a>
Outpatient waits	<a href="http://www.performance.doh.gov.uk/waitingtimes/index.htm">http://www.performance.doh.gov.uk/waitingtimes/index.htm</a>
Cancer waits	<a href="http://www.performance.doh.gov.uk/cancerwaits/index.htm">http://www.performance.doh.gov.uk/cancerwaits/index.htm</a>
Two-month cancer waits – variation	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Cancelled operations	<a href="http://www.performance.doh.gov.uk/hospitalactivity/data_requests/index.htm">http://www.performance.doh.gov.uk/hospitalactivity/data_requests/index.htm</a>
Cancelled operations not rescheduled – local variation	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Rapid-access chest pain clinic two-week waits – variation	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Delayed transfers of care – variation	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Access to GUM clinics	<a href="http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm">http://www.healthcarecommission.org.uk/nationaltargets2007-2008.cfm</a>
Time to operation after hip fracture in older patients	<a href="http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/">http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/</a>
Trauma patients – access to diagnostics and consultant review	<a href="http://www.ncepod.org.uk/2007b.htm">http://www.ncepod.org.uk/2007b.htm</a>
Heart failure – waits for echocardiography	<a href="http://www.performance.doh.gov.uk/diagnostics/commissioner.html">http://www.performance.doh.gov.uk/diagnostics/commissioner.html</a>

### CAPACITY

Practising physicians per 1,000 population	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;lang=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;lang=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Number of GPs	<a href="http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers">http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers</a>
Number of consultants	<a href="http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers">http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers</a>

Number of nurses	<a href="http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers">http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers</a>
Number of scanners	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Radiation therapy equipment	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Percutaneous coronary interventions	<a href="http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1">http://www.ecosante.fr/index2.php?base=OCDE&amp;langs=ENG&amp;langh=ENG&amp;valeur=&amp;source=1</a>
Emergency treatment for stroke	<a href="http://www.rcplondon.ac.uk/pubs/books/strokeaudit/">http://www.rcplondon.ac.uk/pubs/books/strokeaudit/</a>
Angiography rates	<a href="http://www.bmj.com/cgi/content/full/332/7553/1306">http://www.bmj.com/cgi/content/full/332/7553/1306</a>
Trauma care – expertise and facilities	<a href="http://www.ncepod.org.uk/2007b.htm">http://www.ncepod.org.uk/2007b.htm</a>
Heart failure – availability of preliminary investigations	<a href="http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf">http://www.healthcarecommission.org.uk/_db/_documents/Pushing_the_boundaries_Improving_services_for_patients_with_heart_failure_200707042319.pdf</a>
Staffing of neonatal units	<a href="http://www.npeu.ox.ac.uk/newneonatalsurvey">http://www.npeu.ox.ac.uk/newneonatalsurvey</a>
Critical care beds	<a href="http://www.performance.doh.gov.uk/hospitalactivity/data_requests/index.htm">http://www.performance.doh.gov.uk/hospitalactivity/data_requests/index.htm</a>
<b>SAFETY</b>	
Patient-reported error – international comparison	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Serious safety incidents	<a href="http://www.npsa.nhs.uk/patientsafety/patient-safety-incident-data/quarterly-data-reports/">http://www.npsa.nhs.uk/patientsafety/patient-safety-incident-data/quarterly-data-reports/</a>
MRSA rates – international comparison	<a href="http://www.rivm.nl/earss/Images/EARSS%202006%20Def_tcm61-44176.pdf">http://www.rivm.nl/earss/Images/EARSS%202006%20Def_tcm61-44176.pdf</a>
Deaths involving MRSA	<a href="http://www.statistics.gov.uk/downloads/theme_health/MRSA_Numbers.xls">http://www.statistics.gov.uk/downloads/theme_health/MRSA_Numbers.xls</a>
MRSA bacteraemia	<a href="http://www.hpa.org.uk/webw/HPAweb&amp;Page&amp;HPAwebAutoListName/Page/1191942126522">http://www.hpa.org.uk/webw/HPAweb&amp;Page&amp;HPAwebAutoListName/Page/1191942126522</a>
Deaths involving <i>Clostridium difficile</i>	<a href="http://www.statistics.gov.uk/downloads/theme_health/Counts_CDiff.xls">http://www.statistics.gov.uk/downloads/theme_health/Counts_CDiff.xls</a>
<i>Clostridium difficile</i> infection rates	<a href="http://www.hpa.org.uk/webw/HPAweb&amp;Page&amp;HPAwebAutoListName/Page/1191942126522">http://www.hpa.org.uk/webw/HPAweb&amp;Page&amp;HPAwebAutoListName/Page/1191942126522</a>
Falls in hospital	Personal communication, contact authors (Leatherman/Sutherland) for details
Preventing pressure sores after falls	<a href="http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhof/">http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhof/</a>
Violence in mental health organisations	<a href="http://www.rcpsych.ac.uk/PDF/!removed—WAA%20Nat%20Report%20final%20for%20Leads%2010%2012.pdf">http://www.rcpsych.ac.uk/PDF/!removed—WAA%20Nat%20Report%20final%20for%20Leads%2010%2012.pdf</a>

**PATIENT-CENTREDNESS**

Extent of change required in healthcare system – international comparison	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Extent of change required in healthcare system – UK time series	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Staff survey – patients as top priority?	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofnhsstaff.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofnhsstaff.cfm</a>
Patient ratings of care	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Patient involvement in decisions about care and treatment	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Stroke rehabilitation services – patient perspective	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/heartdiseases/strokepatients.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/heartdiseases/strokepatients.cfm</a>
Patient involvement in decisions – international comparison	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Treated with respect and dignity	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Patient perceptions – confidence and trust	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Communication – doctor answered questions/explained action in a way that was understood	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Choice in referrals	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders.cfm</a>
Choice of surgeon	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Information for maternity patients	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm</a>
Left alone during labour – variation across NHS Trusts	<a href="http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm">http://www.healthcarecommission.org.uk/healthcareproviders/nationalfindings/surveys/healthcareproviders/surveysofpatients/maternityservices.cfm</a>
Analgesia after bone fracture in older patients	<a href="http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/">http://www.rcplondon.ac.uk/COLLEGE/ceeu/fbhop/</a>

Patient education – diabetes care	<a href="http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/longtermconditionsdiabetes.cfm">http://www.healthcarecommission.org.uk/nationalfindings/surveys/healthcareprofessionals/surveysofnhspatients/longtermconditionsdiabetes.cfm</a>
Types of complaints in the NHS	<a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/complaints/data-on-written-complaints-in-the-nhs-2006-07">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/complaints/data-on-written-complaints-in-the-nhs-2006-07</a>

## **EQUITY**

Cost barriers to care	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Out-of-pocket costs	<a href="http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318">http://www.commonwealthfund.org/surveys/surveys_list.htm?attrib_id=15318</a>
Socio-economic disparities in infant mortality	<a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471</a>
Life expectancy – by deprivation	<a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471</a>
Emergency admissions for asthma and diabetes – by deprivation	<a href="http://www.lho.org.uk/HEALTH_INEQUALITIES/Basket_Of_Indicators/BasketOfIndicators.aspx">http://www.lho.org.uk/HEALTH_INEQUALITIES/Basket_Of_Indicators/BasketOfIndicators.aspx</a>
Cancer mortality – by deprivation	<a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471</a>
Circulatory disease – mortality and deprivation	<a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471</a>
Influenza vaccination rate – by deprivation	<a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/DH_083471</a>



# THE QUEST FOR QUALITY: REFINING THE NHS REFORMS

## A POLICY ANALYSIS AND CHARTBOOK

Just over a decade ago, the Labour Government came to power promising modernisation and renewal of the NHS, in a process that would install quality 'at its heart' (Department of Health, 1997). What followed in England was an ambitious and wide-ranging series of reforms that sought to improve quality of care. Importantly, these reforms have been supported by substantial increases in spending on health. Overall, it is apparent that quality has improved. What is less clear, however, is whether the gains are commensurate with investment and effort.

To obtain a well-rounded picture of the state of quality of care in the NHS since 1997, *The Quest for Quality: Refining the NHS reforms* combines comparative quantitative information, collected from a variety of UK and international sources, with an insightful policy analysis on the effect to date of the NHS reforms in England. The authors call for the establishment of an English national quality programme, and provide a blueprint for how this might be implemented.

Authoritative and insightful, this book will be essential reading for policy-makers, healthcare leaders, researchers and anyone interested in studying the effect of the NHS reforms since 1997.

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[www.nuffieldtrust.org.uk](http://www.nuffieldtrust.org.uk)