

IMPROVING THE QUALITY OF CARE IN GENERAL PRACTICE

Report of an independent inquiry commissioned by
The King's Fund

This report was commissioned by The King's Fund on behalf of an independent panel:

Sir Ian Kennedy, Emeritus Professor of Health, Law and Ethics at University College London and
Chair of the Independent Parliamentary Standards Authority

Dr Michael Dixon, Chair, NHS Alliance

Professor Steve Field, former Chairman of Council of the Royal College of General Practitioners

Professor Ursula Gallagher, Borough Director and PEC Chair, Ealing NHS

Dr Rebecca Rosen, Senior Fellow, The Nuffield Trust

The report was written and edited by:

Dr Nick Goodwin

Dr Anna Dixon

Teresa Poole

Dr Veena Raleigh

Data analysis was provided by:

Dr Haiyan Gao

Tom Lyscom

The views expressed in this report are those of the independent panel and do not necessarily
represent the views of The King's Fund

IMPROVING THE QUALITY OF CARE IN GENERAL PRACTICE

Report of an independent inquiry commissioned by
The King's Fund

The King's Fund seeks to understand how the health system in England can be improved. Using that insight, we help to shape policy, transform services and bring about behaviour change. Our work includes research, analysis, leadership development and service improvement. We also offer a wide range of resources to help everyone working in health to share knowledge, learning and ideas.

Published by
The King's Fund
11-13 Cavendish Square
London W1G 0AN
Tel: 020 7307 2591
Fax: 020 7307 2801
www.kingsfund.org.uk

© King's Fund 2011

Charity registration number: 1126980
First published 2011

All rights reserved, including the right of reproduction in whole or in part in any form.

ISBN: 978 1 85717 611 7

A catalogue record for this publication is available from the British Library

Available from:
The King's Fund
11-13 Cavendish Square
London W1G 0AN
Tel: 020 7307 2568
Fax: 020 7307 2801

Email: publications@kingsfund.org.uk
www.kingsfund.org.uk/publications

Edited by Eleanor Stanley
Typeset by Helen Joubert Design
Printed in the UK by The King's Fund

Contents

List of figures and tables	vii
Acronyms	ix
Preface	xi
Foreword	xiii
Key messages	1
1 Introduction	8
About the inquiry	8
About this report	11
2 The evolving role and nature of general practice in England	13
The history of general practice	13
A commitment to generalism	15
The scope of general practice	16
The changing social context	19
The policy context	22
Conclusions	23
Key points	23
3 Defining and measuring the quality of general practice	25
Defining quality	25
How to measure quality	28
Benefits and risks of measuring quality	30
Recent approaches to measuring quality in general practice	31
Conclusions	42
Key points	44
4 The current state of quality in English general practice	45
Core services provided within general practice	45
Non-clinical aspects of general practice	77
General practice as part of a wider system of care	91
Understanding variations and identifying gaps in the quality of care	98
Conclusions	102
Key points	103

5 Developing an environment for quality improvement	104
Supporting quality improvement from within general practice	104
Supporting quality improvement from outside general practice	115
Conclusions	122
Key points	123
6 The future of general practice	125
How does general practice need to change?	125
Conclusions	132
Key points	132
7 Conclusions	134
References	139

List of figures and tables

Figures

Figure 1: The five 'outcome domains' of the NHS Outcomes Framework	26
Figure 2: Percentage of practices undertaking at least 12 significant event audits by deprivation quintile of practice	47
Figure 3: Percentage of practices undertaking at least 12 significant event audits by practice list size quintile, 2009/10	47
Figure 4: Elective hospital admission rates per 100,000 practice population, 2008/9	48
Figure 5: Percentage of statins prescribed that are low cost, with associated potential saving, London PCTs, 2008	56
Figure 6: Percentage of patients with coronary heart disease whose last measured total cholesterol is 5mmol/l or less by PCT, 2009/10	58
Figure 7: Percentage of patients with coronary heart disease whose last measured total cholesterol is 5mmol/l or less by practices in a low-performance PCT, 2009/10	59
Figure 8: Percentage of patients with a history of TIA or stroke in whom the last blood pressure reading is 150/90 or less by PCT, 2009/10	60
Figure 9: Percentage of patients with a history of TIA or stroke in whom the last blood pressure reading is 150/90 or less by practices in a low-performance PCT, 2009/10	61
Figure 10: Percentage of people estimated to have dementia who are on a dementia register by PCT, 2007/8	62
Figure 11: Percentage of patients diagnosed with dementia whose care has been reviewed in the past 15 months, 2009/10	63
Figure 12: Percentage of patients with diabetes in whom the last HbA1c is 7 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months by PCT, 2009/10	64
Figure 13: Using the 'bundle' approach to measure performance in diabetes care	65
Figure 14: Percentage of patients with schizophrenia, bipolar affective disorder and other psychoses with a review recorded in the preceding 15 months by PCT, 2009/10	66
Figure 15: Percentage of patients on the mental health register with a comprehensive care plan documented in the records agreed between individuals, their family and/or carers, 2007/8 to 2009/10	67
Figure 16: Percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression was undertaken in the last 15 months, 2009/10	68
Figure 17: Percentage of patients who had support from local services to help manage long-term health condition, 2009/10	69
Figure 18: Emergency admission rates for all ACS conditions, London PCTs, 2010	70
Figure 19: Percentage of children with MMR uptake (first and second doses) by their 5th birthday, 2009/10	74
Figure 20: Percentage of patients with specific conditions offered smoking cessation advice or referral to a specialist in the previous 15 months, 2009/10	76
Figure 21: GPs per 100,000 population by PCT, 2009/10	77
Figure 22: Percentage of patients able to see a doctor fairly quickly, 2009/10	78

Figure 23: Percentage of patients able to see a doctor fairly quickly: intra-PCT variations by practice, 2009/10	78
Figure 24: Percentage of patients able to book ahead, 2009/10	79
Figure 25: Percentage of patients able to book ahead: intra-PCT variations by practice, 2009/10	79
Figure 26: Percentage of patients able to see preferred doctor, 2009/10	80
Figure 27: Percentage of patients able to see preferred doctor: intra-PCT variations by practice, 2009/10	81
Figure 28: Percentage of patients satisfied with opening hours, 2009/10	81
Figure 29: Percentage of patients satisfied with opening hours: intra-PCT variations by practice, 2009/10	82
Figure 30: Percentage of patients rating their GP as good on giving enough time, 2009/10	84
Figure 31: Percentage of patients rating their GP as good at listening, 2009/10	84
Figure 32: Percentage of patients rating their GP as good at treating with care and concern, 2009/10	85
Figure 33: Percentage of patients who had discussion with a doctor or nurse about how best to deal with a longstanding health problem, 2009/10	86
Figure 34: Percentage of patients who had ever been told by their doctor or nurse that they had a 'care plan', 2009/10	87
Figure 35: Percentage of patients rating their GP as good at explaining tests and treatments, 2009/10	89
Figure 36: Percentage of patients who rate the doctor as good at involving patients in decisions, 2009/10	89
Figure 37: Percentage of patients who have confidence and trust in their GP, 2009/10	90
Figure 38: Percentage of patients with CHD and cholesterol 5.0mmol/l or less by deprivation quintile of practice, 2009/10	93
Figure 39: Emergency hospital admission rates per 100,000 practice population by deprivation quintile of practice, 2008/9	94
Figure 40: Elective hospital admission rates per 100,000 practice population by deprivation quintile of practice, 2008/9	95
Figure 41: Ratio of emergency to elective hospital admission rates, 2008/9	95

Tables

Table 1: Quality domains	26
Table 2: Donabedian's framework for assessing quality in health care	28
Table 3: Risks and benefits of using quality indicators in general practice	30
Table 4: Summary of evidence on necessity of GP referrals	49
Table 5: Summary of evidence on timeliness of GP referrals	50
Table 6: Summary of evidence on destination of GP referrals	50
Table 7: Summary of evidence on quality of referral letters	51
Table 8: Summary of evidence on shared understanding of purpose	52
Table 9: Summary of evidence on patient choice	53
Table 10: Summary of evidence on pre-referral management	53
Table 11: Patient involvement in decisions	88
Table 12: Patient involvement in decisions by age and gender	90
Table 13: UK ranking in international comparison of health systems by dimension of quality	97

Acronyms

A&E	accident and emergency
ACG	adjusted clinical groups
ACS	ambulatory care sensitive
APMS	Alternative Provider Medical Services
BMA	British Medical Association
BME	black and minority ethnic
CHD	coronary heart disease
CHF	coronary heart failure
COPD	chronic obstructive pulmonary disease
CQC	Care Quality Commission
DES	directed enhanced services
EOLC	end-of-life care
FTE	full-time equivalent
GMC	General Medical Council
GMS	General Medical Services
GPs	general practitioners
GPAQ	General Practice Assessment Questionnaire
GPEQ	GP's Experiences Questionnaire
GPES	General Practice Extraction Service
GPPS	GP Patient Survey
GPwSI	GPs with a special interest
HES	Hospital Episode Statistics
HQIP	Healthcare Quality Improvement Partnership
ICO	integrated care organisation
IPQ	Improving Practice Questionnaire
LES	local enhanced services
MAAG	Medical Audit Advisory Group
MMR	measles, mumps and rubella
NCAPOP	National Clinical Audit and Patient Outcomes Programme

NES	national enhanced services
NETS	North East Transformation System
NICE	National Institute for Health and Clinical Excellence
NPSA	National Patient Safety Agency
PCT	primary care trust
PCTT	Primary Care Trigger Tool
PDSA	Plan/Do/Study/Act
PMS	Personal Medical Services
PROM	patient-reported outcome measure
QIST	Quality Improvement Support Team
QOF	Quality Outcomes Framework
RCGP	Royal College of General Practitioners
SEA	significant event audit
SHA	strategic health authority
TIA	transient ischaemic attack

Preface

I am delighted to submit this report to The King's Fund on behalf of my colleagues on the independent panel of the inquiry. It represents over 18 months of work since I took over as Chair from Niall Dickson. It has been a hugely interesting, challenging, and, I hope, valuable exercise. I pay tribute to the insight, intelligence and hard work of my colleagues. It is their work; I merely tried to keep order and move us on to deal with an agenda which, at times, threatened to overwhelm us. I also pay tribute to Niall in conceiving the idea of the inquiry and the incredibly able and hard-working team from The King's Fund who supported us throughout.

Producing a report of the quality of care in general practice is no easy job. There were problems to solve at the beginning – what does quality mean? – at the end – what are we offering which adds value? – and all the way along, as we wrestled with these and other questions. We went about our task by first commissioning research in a number of areas which constituted aspects or domains of quality, as conventionally understood. We exposed our thinking to the challenge of distinguished experts and commentators. And we sought the views of practitioners and the wider public.

This is not the place to offer a résumé of the inquiry, or even our key findings. They are clearly set out in the following pages. What my colleagues and I are anxious to say here is that the study of quality in general practice is an underdeveloped area. Many reasons might be offered. One which comes through clearly is that, for many in general practice, it is not an area of health care greatly given to self-reflection and self-challenge. One of our hopes is that this inquiry will bring home the importance of greater self-examination. The ways of doing so and accumulating the range of evidence (hard and soft) necessary to know how you are doing, formed an important part of the inquiry. The benefits in terms of improving the service offered to patients cannot be overstated.

Perhaps one other theme should be mentioned – the notion of general practice as a team effort. This is how health care will increasingly be delivered. And 'teams' refer to those working within general practice and those working in general practice alongside others, whether in health care or in other public services. Teams also include patients as active participants in decisions about their care. Quality extends to the way in which all types of team work for the benefit of patients and the wider public.

The timing of this inquiry could not be more propitious. We are about to embark on a radical overhaul of the way in which the NHS is organised and delivers its services. General practice (not GPs alone, but all those involved in primary health care) is at centre stage in the present government's vision. General practitioners are to take on a central role in commissioning health care. Quality must be the watchword in their role as commissioners just as in their role as providers. Our hope is that this inquiry will provide a guide as to how to ensure that quality is at the heart of the service that general practice offers to patients of the future.

Sir Ian Kennedy
Chair, independent panel

Foreword

Good primary care is the bedrock of a cost-effective health care system, according to Barbara Starfield's research. Her work also suggests that the NHS has a stronger primary care orientation than the health care systems of most other countries. Surveys show that public satisfaction with the NHS is higher than it has ever been and that general practitioners and other primary care staff enjoy high levels of trust and confidence from patients. Against this background, why did The King's Fund establish an inquiry into the quality of general practice in England?

Although the majority of patient contacts in the NHS take place in general practice, many of the initiatives to measure and improve quality had been focused on the acute sector. There was relatively little information on the quality of general practice and no comprehensive overview. While the introduction of a pay-for-performance element into the GP contract in 2004 – the Quality and Outcomes Framework – generated the first national data on the quality of care, it was narrow in scope. The King's Fund commissioned the inquiry to take a broader look at the current state of quality in general practice, to make recommendations about how quality could be improved, and to suggest ways in which general practice needs to change in future

The Inquiry was launched and initially chaired by my predecessor, Niall Dickson. We are very grateful to Sir Ian Kennedy for taking up the chair and guiding the panel's deliberations over the past year and to the other members of the panel who contributed so generously of their time and brought a depth of experience, intellectual rigour and expertise from within and outside general practice. This report demonstrates the careful consideration given to these issues by the panel and by The King's Fund staff who supported them. We are enormously grateful for all their work.

The evidence brought together in this report shows that while standards of general practice are generally high, there are no grounds for complacency. On many of the available indicators, there are variations in performance, suggesting that more needs to be done to realise Nye Bevan's vision that the NHS should 'universalise the best'.

The panel quite rightly emphasises the role that practices themselves have in tackling variations in the quality of general practice and in creating an environment for quality improvement. General practice commissioning consortia are well placed to play a part in this process so long as the NHS Commissioning Board works with and through consortia to improve the quality of primary medical care provision.

It is not clear whether action by general practice will be sufficient. Like other professions, general practice includes conservatives as well as innovators. At a time when the coalition government is increasing the role of choice and competition in the NHS, the stimulus provided by new market entrants may prove to be just as important, perhaps more so, than the drive to improve quality that comes from within.

This report also underlines the importance of general practice adapting to meet the needs of an ageing population in which there is an increased prevalence of chronic disease. Despite the undoubted strengths of the current model of general practice based on

small practices that are often highly valued by patients, a case can be made for practices to collaborate in federations to reduce the risk of isolation and offer a wider range of services. The model of post-industrial care advocated in this report envisages much greater emphasis on teamwork, closer integration between GPs and specialists, and a new deal with patients. Innovative practices in many parts of the country are already evolving in this direction, and the financial pressures on the NHS will accelerate these developments.

At the Fund we will be looking at how through our own work we can reflect the research, leadership development and improvement requirements which this report identifies. Henry Ford once famously said that in developing the motor car there was a choice between producing a faster horse and doing something quite different. Ford's pioneering example of disruptive innovation has since been emulated in many other sectors, including banking, telecommunications and the airline industry. Health care has evolved more gradually and the time is now surely right to explore how the real strengths of general practice can be built on in the challenging times that lie ahead. The gauntlet thrown down by this report is to accelerate the pace of improvement in general practice and to develop a system that is fit for the future.

Chris Ham
Chief Executive

Key messages

The evolving role and nature of general practice in England

- The range of activities provided in general practice has increased. General practice plays an increasingly important role in co-ordinating care provided in other settings.
- There is a trend towards larger practices and federated models of working. Between 2004 and 2009, the number of single-handed GP practitioners fell from 1,949 to 1,266.
- The availability of general practitioners is inequitable, ranging by PCT from fewer than 50 to more than 80 per 100,000 population.
- Nurses play a greater role in general practice than in the past. The number of whole-time equivalent nurses employed in general practice increased by 37 per cent between 1999 and 2006 to 14,616. However, the number subsequently dropped to 13,582 by 2009.
- There are projected shortages in the general practice workforce due to an ageing workforce and changing working patterns.
- Contractual arrangements in general practice are now more diverse. The number of salaried GPs employed in practices has risen significantly – from 786 in 1999 to 7,310 in 2009.
- The ageing population and increasing number of people living with co-morbidities requires general practice to work in partnership with patients and to support self-management in order to improve the quality of care.
- Patients today expect a more responsive service. Patients want to play a much more active role in decision-making about their care.
- Technology is available that could transform the way patients interact with general practice. However, general practice has been slow to adopt it.
- GPs will have a key role to play in the reformed NHS, as commissioners as well as providers of care. They will need new skills, and will need to make greater use of information, engage with local authorities and other public services, be more open and transparent, and be more widely accountable.
- General practice will become increasingly involved in, and responsible for, the health of local populations. This includes those who are most in need of care but currently do not receive it.

Defining and measuring the quality of general practice

- Quality is complex and multidimensional. No single group of indicators is likely to capture all perspectives on, or all dimensions of, quality in general practice.

- Clinical outcomes are the ultimate measure of quality, but good outcomes can be achieved only if there is agreement on what they are, and if appropriate structures and processes for achieving them are in place.
- Nationally available data sets provide a rich source of material for measuring quality in general practice, but they have significant gaps. Other methods of harnessing information from data held within general practices are needed to supplement national quantitative indicators.
- Not all aspects of general practice lend themselves to quantitative assessment. More diverse and creative approaches to assessment and improvement of quality are needed, including the use of practice audit, peer review and qualitative research methods.
- Standards are required to ensure the quality and completeness of data recorded and reported by general practice.
- Standardised methods for defining and applying indicators are also needed, to ensure comparability between indicators in different areas or reported by different agencies.
- Audit and quality assurance at local or practice level is underdeveloped, but can play a significant role in ensuring that general practice delivers safe, high-quality care.
- Other data users, such as regulators, need to agree a standard set of indicators and not seek to request additional data returns directly from general practice.
- Greater transparency of information on quality is both welcome and proper, but the presentation of information needs to be tailored so that it can be used by clinicians for peer review, by patients for choice, and by those concerned with accountability.
- There are many different sources of information about quality in general practice. There is an urgent need for these to be rationalised in order to avoid duplication.

The current state of quality in English general practice

Core services provided within general practice

- **Diagnosis** A variety of factors can lead to delays and errors in diagnosis, but there is not enough evidence to ascertain the scale of such problems in general practice. Retrospective audit and significant event audit is essential in order to assess and improve the quality of diagnosis.
- **Referral** There are wide variations in the rate of referrals between practices. The evidence suggests that a significant proportion of referrals made in general practice may not be clinically necessary. However, the appropriateness of a referral is specific to the context, and it may be difficult to decrease unnecessary referrals without also decreasing necessary referrals. There is scope for improvement in the quality of other aspects of referral:
 - ensuring that timely referrals are made (especially in cancer care)
 - the quality of referral letters
 - getting patients to the right destination
 - involving patients in decisions about referral options.
- **Prescribing** Variation in the level of prescribing between general practices is common and widely reported. Much of the practice-level variation in prescribing results from differences in the clinical case-mix of patients and socio-economic

factors. There are opportunities for quality improvement to address inefficient or inappropriate prescribing – for example, through

- reducing medication errors
- improving adherence to what is prescribed
- standardising prescribing practices for certain treatments, such as the prescription of low-cost statins, potentially saving the NHS £200 million.

- **Acute illness** Appropriate and effective diagnosis and management of acute illnesses form a key aspect of high-quality care. The evidence suggests that GPs are more likely to make a misdiagnosis of acute illness compared to non-acute illness. More needs to be done to monitor the quality of acute care – for example, through peer-reviewed audit of referral letters and case notes, and to reach out to those patients whose acute illness is not being managed.
- **Long-term conditions** Improvements in care for patients with long-term conditions have been made over the years, particularly for those with diabetes, but the evidence suggests that recommended care is not reliably delivered to all patients – especially to those with multiple long-term conditions. There is significant scope for primary and community care providers to undertake more proactive preventative activities that can lead to earlier diagnosis and treatment, and the prevention of unscheduled hospital admissions.
- **Health promotion** There is a need to target childhood immunisations at those groups where uptake is low. Most general practices meet targets related to smoking cessation advice, but there is evidence that a more proactive approach to supporting patients may help people to quit smoking. Approaches to the management of people with obesity are inconsistent, and obesity is often seen as a lifestyle issue rather than as a priority for general practice. More evidence is needed for appropriate interventions in general practice.

The non-clinical aspects of general practice

- **Access** Most people, most of the time, report good access to care. However, there are wide variations across all dimensions of access. Since people's preferences about access to general practice vary, retaining a set of measures to examine the broad picture appears reasonable. General practice needs to reach out to all those in their local community who need care but who are not currently receiving care.
- **Continuity of care** Enabling patients to see the same doctor and other clinical staff with whom they build a relationship over time is regarded as a priority by GPs and patients alike. There is evidence to show that in recent years it has been more difficult for patients to see a preferred GP, raising concerns about continuity of care.

There is a need to improve co-ordination of care – particularly for those patients with complex and long-term care needs. Greater priority needs to be given to continuity of care and care co-ordination, and innovative ways need to be found to assess the quality of such care in practices, and between practices and others providing public services.

- **Engagement and involvement of patients** Patients report high levels of confidence and trust in general practice, but patients' experiences of involvement in decisions about their care and treatment vary. Overall, patients and carers remain poorly engaged in making decisions about their own health. More effort and attention in general practice needs to be placed on enabling patients to be engaged in decision-making, and in supporting people to care for themselves.

As GP commissioning is implemented, involving patients and the public in making decisions about services and in evaluating the success of the services provided will be a key to delivering high-quality services.

General practice as part of a wider system of care

- **End-of-life care** There is confusion about the roles and responsibilities of general practice and other care providers in providing end-of-life care. Evidence suggests that there are problems with out-of-hours care and meeting a patient's preferred place of care, and that GPs lack confidence in communicating prognosis and discussing care planning with patients and their families. General practice needs to be encouraged to support the co-ordination of health and social care to people at the end-of-life and to promote continuity of care.
- **Maternity care** There has been a dramatic decline in the role of GPs and general practice in maternity care, both in terms of involvement and skills. There is a need to re-skill GPs in maternity care and to develop a shared care approach with midwives (except for intrapartum care).
- **Health inequalities** Practice-level variations in achievement of quality targets in general practice tend to show that, although the differences are small, poor-performing practices are in areas of the highest deprivation. GPs working in such areas are faced with a challenging case-mix of patients and high levels of demand. Practices in deprived areas might benefit from additional support and investment.

There is evidence of inequalities in provision of general practice care for patient sub-groups. GP commissioning consortia will have a key role to play in assessing the needs of local populations and in tackling health inequalities. There needs to be a greater focus on health inclusion and reaching out to those in local communities who remain unregistered with general practice and lack access to care.

Overall

- The majority of care provided by general practice is good. However, there are wide variations in performance and gaps in the quality of care that suggest there is significant scope and opportunity for improvement.
- In judging comparative performance based on rates of variation, it is important to determine whether such differences can be justified; for example, more data needs to be adjusted to take account of differences in case-mix.
- More needs to be done to make those working in general practice aware of variations in quality, and to understand how much of this variation is unjustified.
- More needs to be done to ensure that where unacceptable variations exist, these are addressed so that a better and more consistent standard of care can be delivered to patients. Practices that perform poorly compared to others will need to be challenged to improve and, where appropriate, supported to do so.
- There is considerable scope for improvement in ensuring that all patients receive all their recommended care as defined in clinical best-practice guidance; for example, in the prescribing of low-cost statins and in delivering care to people with long-term chronic illness.
- Significant potential exists for reducing the number of emergency hospital admissions for conditions that could have been managed in primary care.

- There are wide variations in patient experiences in terms of access to care, continuity of care, and patient engagement. Patients remain poorly engaged in making decisions about their own health and more could be done to support patients to make choices, to be engaged in decision-making, and to care for themselves.
- There is considerable scope to improve the quality of care co-ordination for patients with long-term chronic and mental illnesses, for those at the end of life, and in maternity care. Links between general practice and other services need to be strengthened in areas where patients with complex problems receive care from multiple providers.

Developing an environment for quality improvement

- Many general practices are engaged in quality improvement initiatives and are proactive in seeking to deliver improvements in care. However, quality improvement is not yet routinely embedded as a way of working. Practices need to be supported in creating an environment within which quality improvement can flourish.
- GPs are often unaware of the variations in quality that exist within and between their practices and those of their peers. Making clinicians aware of such variations is a first step to encouraging them to explore the reasons for variable performance, and to act accordingly.
- Practices need to use data and information tools to provide clinicians with the information they need to identify and prioritise areas for quality improvement.
- Strong clinical leadership is essential to foster a clear vision and set of common values through which effective collaboration and teamworking can operate.
- People working in general practice need training and support in order to acquire the necessary skills to implement quality improvement.
- Protected time and incentives, both financial and non-financial, are required for individuals to think about, train for, and reflect on the quality of care.
- Excellence needs to be recognised and rewarded. High-performing practices need to use their skills to support those that are weaker, and should ultimately be given the ability to expand and/or take over failing practices.
- Developing an environment for quality improvement also requires action to be taken at many different levels. Policy-makers, regulators, commissioners and the professional bodies all have roles to play in creating a better environment that supports general practice in its quest for quality.
- There is an opportunity for GP commissioning consortia to be provided with the levers to drive improvements and challenge poor practice. Member practices need a system of rewards and penalties that is genuinely influential and that focuses on local priorities.
- GP commissioning will make general practices accountable for the quality of care they provide and responsible to take action where such quality is sub-optimal.
- An open culture needs to be developed that balances GP consortia's ability to challenge as well as support practices. General practice is more likely to become engaged in driving improvements in care where there is transparency in the sharing of data at a local level with patients, the public and professional peers.
- Fundamentally, general practice must own the quality agenda and take on professional leadership for quality improvement.

The future of general practice

- Generalism lies at the heart of the future of the NHS, and the system needs to value this. Instead of general practitioners developing more specialist knowledge, general practice needs to make specialist support available during the consultation process, during care planning, and in ongoing care to support patients to manage their own illness.
- General practice needs to see itself at the hub of a wider system of care, and must take responsibility for co-ordination and signposting to services beyond health care – in particular, social care, housing and benefits.
- General practice needs to move from being the gatekeeper to specialist care to being the navigator that helps steer patients to the most appropriate care and support.
- Delivering high-quality care requires effective teamworking within general practice. The skill-mix in general practice will need to evolve, to include a wider range of professionals working within and alongside it. The GP should no longer be expected to operate as the sole reactive care giver, but should be empowered to take on a more expert advisory role, working closely with other professionals.
- Delivering high-quality care also requires new models of shared care to be developed with other care providers, including those working in the community, in hospitals, and in care and well-being services. Multi-specialty local clinical partnerships need to develop that integrate services across boundaries. Such models of care will need to articulate the roles and responsibilities of general practice clearly to ensure that care for patients is well co-ordinated.
- As referrers – and, in future, as commissioners of care – general practice will have a responsibility to ensure that the services to which they refer patients provide high-quality care (as well as care that gives value for money).
- These new responsibilities will require those in general practice to work with their partners within GP commissioning consortia, local authorities and wider public services to improve the health of the population and to reduce health inequalities. General practice needs to be far more proactive in preventing ill health and taking a population-based approach to care.
- In the transition of commissioning from PCTs to GP consortia, the Department of Health and the NHS Information Centre must ensure that information flows, and indicators derived from them, are appropriately and speedily realigned to consortia boundaries.
- General practice needs to strike a new deal with patients, in which patients are active participants in decisions about their care and the services they receive. This is important as effective engagement with patients is intrinsic to quality improvement.
- Overall, general practice needs to deliver ‘post-industrial’ care in which measuring performance, improving care standards, and transparent reporting are key features of the way care is provided. To achieve this, general practice will need to operate at a scale commensurate with the demands placed upon it.
- There is an urgent need to accelerate the work to establish federations of practices, and to bring isolated practices more formally into larger provider organisations or networks. The advent of GP commissioning will make this a necessity.

Conclusions

- General practice has evolved significantly from its origins. Many practices have been at the vanguard of innovation and quality improvement. However, if general practice is to meet its new responsibilities and maintain its international reputation for excellence, it needs to adapt significantly.
- The transition will not be easy. Those leading practice organisations and GP consortia have the opportunity to build on the strong values and professional ethos to be found in general practice.
- General practice will need to have a relentless focus on improving the quality of care given to patients, supported by the proactive use of data and information to do so.
- Quality improvement needs to balance and combine external scrutiny and regulation with locally driven, peer-led and user-centred approaches. The key to achieving this balance is transparency. Reporting on quality – to patients, between peers, to other care partners, and to commissioners and regulators – can help create a ‘virtuous circle’ of quality improvement.
- GP commissioning could provide a new platform through which improvements in the quality of care of general practice can be driven.

1 Introduction

In April 2009 The King's Fund commissioned an independent inquiry panel to undertake a review of the quality of general practice in England, and to make recommendations as to how general practice can be supported to improve quality. The key aims of the inquiry were:

- to examine the current state of quality of care in general practice across key 'dimensions' of care and to identify opportunities for quality improvement
- to consider the current availability and use of data and information in supporting quality improvement in general practice, and to explain how data can contribute to quality improvement in the future
- to produce practical ideas and recommendations on how to promote quality improvement in general practice
- to set out the challenges for general practice in meeting the quality agenda and present a commentary on how the existing model of general practice may need to be adapted in the future.

This report summarises the findings of the inquiry's deliberations. It aims to support further efforts by those working with and in general practice to improve the quality of care. In particular, it proposes specific ways to support and encourage general practice to make better use of available data sets and information, in order to improve the quality of care. Its findings will be relevant for policy-makers, regulators and commissioners of general practice services. It makes some suggestions as to how these actors can constructively engage with, and support, those working in general practice in their quest to improve quality.

The inquiry has been conducted in a rapidly evolving political and policy environment. The developments outlined in the coalition government's 2010 White Paper *Equity and Excellence: Liberating the NHS* (Department of Health 2010a) are radical and far-reaching, and include fundamental changes to the role of general practice. The devolution of commissioning to general practice consortia will require a more transparent and systematic approach to how quality of care in general practice is monitored, managed and reported – one that goes well beyond the Quality Outcomes Framework (QOF) and existing patient experience surveys. The report is therefore also forward-looking, in that it suggests not only quality of care in general practice can continue to be improved but also how the model of general practice needs to change in future.

About the inquiry

Since April 2009, the inquiry has collected and examined evidence on the quality of care and services provided by general practitioners (GPs) and other health professionals working in general practice (*see the box opposite*). The inquiry panel selected a number of aspects ('dimensions') of general practice. These dimensions spanned different elements of what general practice does on a day-to-day basis (such as diagnosis and referral, and prescribing) as well as some of the 'enablers' of high-quality care (such as

clinical leadership and the commissioning of general practice services). It also considered a number of areas in which the role of general practice is less well defined, and indeed is contested (such as maternity and end-of-life care).

The dimensions of care examined in the GP inquiry

The inquiry commissioned 10 research projects covering the following themes:

- the management of acute illness (both minor and serious)
- the quality of diagnosis and referral
- prescribing and prescriptions management
- the management of people with long-term conditions, including mental health problems
- health promotion and ill-health prevention
- access to care
- continuity of care and how well general practice is integrated into the rest of the health care system
- patient engagement and involvement
- end-of-life care
- tackling inequalities in general practice.

The inquiry also commissioned four discussion papers on:

- the quality of the therapeutic relationship
- improving the quality of commissioning general practice services
- the quality of maternity care in general practice
- clinical leadership.

The majority of these papers are available on The King's Fund's website at: www.kingsfund.org.uk/current_projects/gp_inquiry/index.html.

The inquiry was conducted in four phases:

- research
- validation
- integration
- approaches to quality improvement.

Each of these is described below.

Phase 1: Research

To inform its work, the inquiry commissioned a series of research papers and discussion papers on key dimensions of care. Each paper examined the following issues.

- What does high-quality care look like?
- What is the role of general practice in the delivery of high-quality care?
- What is currently known about quality of care, and how does this vary between practices?
- What measures of quality are currently being used, or could potentially be used, to assess each dimension – and for what purpose?
- What does the evidence tell us about the future challenges of general practice in delivering high-quality care?

In commissioning the research papers, the inquiry asked the authors to suggest measures that might capture 'quality', as defined in their reports. As a result of the suggestions put forward by the research teams, the inquiry compiled about 200 different measures, ranging from the readily quantifiable to the unmeasured and aspirational. The suggested measures included those that were:

- derived from routinely available data sets, such as QOF and the General Practice Patient Survey
- derivable from locally available data or data in GP systems
- based on audit within general practice
- measures of good practice, process or structure suitable for accreditation
- areas that are critical to high-quality care and where further development of measures is required.

Researchers at The King's Fund analysed routinely available data to illustrate how data can be used to compare performance between practices, and to identify variations in the quality of care where these exist. A selection of this data is presented in Chapter 4.

Phase 2: Validation

The inquiry was committed to testing the findings of the research with GPs, other frontline general practice professionals, managers, patients and the public. In February and March 2010, The King's Fund held a series of engagement seminars with audiences of up to 40 people. At these events, the report authors shared the key messages emerging from their research and used the audience feedback to revise their papers where necessary.

The inquiry also engaged people in its work through The King's Fund website. People were invited to submit comments via email to the inquiry team. More than 500 individuals and/or groups directly signed up for updates with the inquiry.

Research reports and discussion papers were published online from June 2010 onwards, with further feedback invited through online discussion. The King's Fund also ran an online survey, between December 2009 and March 2010, to gather the views of those working in general practice (Goodwin *et al* 2010b). In all, we estimate that more than 1,500 individuals contributed advice or commentary to the inquiry.

Finally, the panel held a stakeholder dinner in September 2010 at which the emerging findings and recommendations were discussed and debated. This feedback and information fed into the panel's deliberations, and has been considered in preparing this final report.

Phase 3: Integration

The integration phase involved reviewing the current availability and use of quality measures and indicators, in order to identify gaps where key dimensions of quality were not being measured. To assist with this, The King's Fund carried out research that mapped current and planned initiatives for developing and using quality indicators in general practice (*see* Chapter 3).

In March 2010, the inquiry convened an 'indicator group'. This group of experts had two purposes: to review the quality measures and indicators recommended by the 10 research reports, and to advise the inquiry on whether any of these could be usefully developed into indicators for the purpose of informing quality improvement in general practice.

The inquiry considered that rather than working to produce a comprehensive basket of indicators, it would be preferable to suggest measures of quality. This was particularly

the case for aspects of care that are currently considered difficult to quantify. These could then act as useful markers, or proxies, of quality in a local practice, and/or could be developed into ways of gathering data and information to support quality improvement through self-reflection, audit and peer review.

To guide the work of the indicator group, the inquiry panel developed a set of criteria for judging the usefulness of the indicators. They were interested in indicators that:

- promote quality improvement in general practice – in other words, that are intended for use within general practices for self-evaluation, rather than for assessing performance or for setting external targets
- general practice can use – in other words, that make sense to GPs and health professionals in general practice as measures that can be used to ensure that patients are receiving a good service and to drive further improvement
- are not confined to routinely available national data sets, but include measures that could be derived through local audit and review in general practice
- raise the bar of quality – in other words, supporting high-quality performance beyond minimum standards
- go beyond those currently available, and that capture some of the hard-to-measure aspects of good-quality care in general practice.

Phase 4: Approaches to quality improvement

The inquiry commissioned a further discussion paper examining quality improvement in general practice (Dawda *et al* 2010). This paper sought to examine the barriers to, and factors promoting, improvement and was used as the basis for discussion at an expert seminar held in July 2010. The seminar discussed different approaches to quality improvement, and the barriers to, and factors that promote, improvement in general practice.

About this report

The inquiry panel met 14 times over a 24-month period. Meetings were held at The King's Fund and attended by key staff involved in supporting the inquiry. These meetings involved the panel:

- clarifying the remit and scope of the inquiry
- agreeing the dimensions of care to be examined
- determining the remit for the commissioned research
- reviewing the reports
- listening to direct feedback from the research teams
- considering additional evidence and feedback
- reviewing and discussing drafts of this report.

This report reflects the lively discussions and deliberations held within the meetings described above, and sets out the conclusions and recommendations agreed by the panel.

Having considered the scope and remit of the inquiry, in this Introduction, we move on to the report findings. Chapter 2 looks at the evolving nature and role of general practice and its growing range of responsibilities. This is followed by an overview of current approaches to the measurement of quality in general practice, set out in Chapter 3.

In Chapter 4, we assess the quality of general practice, drawing heavily on the findings of the research papers and analysis of routine data. In Chapter 5 we go on to discuss how different approaches to quality improvement within a general practice context might be

promoted and applied, and how external organisations can support quality improvement in general practice.

Chapter 6 considers how general practice needs to evolve as part of the wider health system to meet the aspiration of delivering a higher quality of care, and reflects on whether recent NHS reforms will support this.

Our concluding comments are presented in Chapter 7.

2 The evolving role and nature of general practice in England

This chapter examines the inquiry's interpretation of the nature and role of general practice in England and how this has evolved over time. It examines the history of general practice, the core values that underpin it, the scope of the services it provides, and the way that it is funded and organised. It examines how general practice has had to adapt continually to the changing social and political context in which it operates, including the new skills and responsibilities that will be required as GPs and general practice play a central role in the reformed NHS.

The history of general practice

We understand 'general practice' to be at the core of the primary care team that involves GPs, nurses and other practice-based staff. However, while there are many definitions of primary care, there is no clear definition of general practice.

When the NHS was formed in 1948, general practice became responsible for all personal medical care, and became the gateway for individuals to access hospitals, specialist care and sickness benefit. However, even in those early years, the lack of explicit standards for general practice, few incentives for medical professionals to take on the GP role, and a rapidly growing demand for services were recognised as challenges (Collings 1950).

Since that time, the professional status of GPs has increased, with clearer professional standards, formal postgraduate training, and greater financial incentives to work as a GP. General practice has evolved considerably in terms of the scope and nature of the services provided, the workforce, and how it is funded, as described in the box below.

The evolution of general practice: historical timeline

1948 – The NHS is formed

- With the formation of the NHS, GPs took on responsibility for covering the entire population and controlling access to specialist care – a major expansion in their role. Within one month, 90 per cent of the population had registered with a GP.
- GPs chose to remain outside the NHS as independent contractors rather than salaried NHS employees.

1950s – A troubled start

- The Collings report – the first major report on quality in general practice – found poor standards of care, bad working conditions and isolation from other professionals. Many GPs worked under considerable pressure, with limited support.
- Most GPs worked in single-handed practices or with one partner. The NHS Act (1948) had intended that, over time, GPs would be re-housed within health centres, but this proved unaffordable.

1960s – Contractual improvements

- In 1966 a new contract improved pay and conditions for GPs, instituting a maximum list size of 2,000 patients and providing resources for professional education, improvement of premises and hiring of support staff.
- The following years saw improvements in terms of recruitment and facilities and an increasing trend for group practice to become the norm.

1970s – Professionalisation

- The creation of the Royal College of General Practitioners, in 1972, gave GPs an official representative body for the first time.
- After years of concern about the adequacy of GP training, from 1976 three-year postgraduate training programmes became mandatory.
- With the Alma Ata declaration on primary health care in 1978, prevention and health promotion became seen as an increasingly central part of the GP's professional role.

1980s – Increased scrutiny

- The Royal College of General Practitioners (RCGP) Quality Initiative was launched in response to evidence of large variation in clinical practice, and in line with a wider political trend to subject public services to greater scrutiny.
- Early attempts to measure quality in primary care and provide incentives for improvement proved controversial, and generated professional resistance.

1990s – Evolving roles, new contracts

- The trends towards increased scrutiny and evidence-based medicine were consolidated in the 1990 GP contract, which launched an era of greater external management for general practice and introduced elements of performance-related pay.
- GP fundholding allowed GPs to take on responsibilities for commissioning services on their patients' behalf, creating an incentive for GPs to become more involved with the wider health system.

2000s – Quality, commissioning, competition and choice

- The 2004 GP contract represented a new relationship between GPs and the NHS, putting an increased emphasis on performance-related pay, as measured by the QOF.
- The Darzi review (Department of Health 2008c) encouraged the use of quality indicators at all levels in the health system, including general practice.
- Stronger regulatory and governance mechanisms were introduced for primary care, with annual appraisals for GPs from 2002 onwards; a requirement to register with the Care Quality Commission by 2011; and moves towards a mandatory revalidation process.
- GPs' involvement in commissioning continued through practice-based commissioning, introduced in 2006, and GP commissioning, introduced in pilot form in 2010.

- In 2007, the RCGP published the first national training curriculum for general practice. Successful completion of the assessment for membership of the RCGP (MRCGP) has since been compulsory for doctors undertaking the specialty training in general practice.
- Competition in primary care was encouraged through enabling patient choice of general practice, scrapping practice boundaries, and introducing independent-sector competition through ‘any willing provider’ contracts.
- The shape of primary care provision also underwent significant change, with expanded roles for nurses and other practice staff, increased use of information technology, and the growth of a range of alternative access points.

A commitment to generalism

Despite all the changes that have taken place within the system, general practice retains a core commitment to generalism that is manifest in two key concepts: patient centredness and holism. We now go on to explore these.

Patient centredness means that the individual patient’s priorities must be identified and respected in order to reach an appropriate clinical decision – a process facilitated through the development of good doctor–patient relationships over time (Howie *et al* 2004). It also means organising services for patients based on their needs, not on provider convenience. The document *Good Medical Practice* identifies the following as key to a partnership between the patient and doctor:

- be polite, considerate and honest
- treat patients with dignity
- treat each patient as an individual
- respect patients’ privacy and right to confidentiality
- support patients in caring for themselves to improve and maintain their health
- encourage patients who have knowledge about their condition to use this when they are making decisions about their care (General Medical Council 2006).

A related concept is family centredness – the need to explore the illness and needs of a patient so that the care that is provided is culturally responsive, flexible and relevant to each individual in the context of their family. Advocates of family practice suggest a model in which the generalist plays a key role in helping to support families to function effectively. This is regarded as particularly important in the care of children, adolescents and pregnant women and at end of life – and yet seems to be lacking, according to research commissioned by the inquiry (Addicott 2010; Smith *et al* 2010).

The second core value of general practice is that of holism. Holism represents a method of care where the decisions made on the diagnosis and management of a patient should reflect the entirety of a person’s needs – it is also termed ‘the biopsychosocial approach’. It is more than providing a service that addresses multiple health issues.

General practice lies at the heart of care delivery in the English NHS. Yet it has not always been confident about its own future and the role of generalists in an ever-increasing specialised medical system, to the extent that at one point the profession even asked: ‘Do we have a future, or are we an unwanted anachronism?’ (Royal College of General Practitioners 2004).

The scope of general practice

GPs will be familiar with the description of the skills and competencies they need in *Being a General Practitioner* (Royal College of General Practitioners 2007a). *Good Medical Practice* (General Medical Council 2006) also provides more general guidance for all doctors about what is expected of them. Despite these descriptions of what a general practitioner is expected to do, the scope of the services provided in general practice is less clear cut.

For most people, general practice is the first and most commonly used point of access to health care in England (*see* the box opposite). Since 2004, patients have been registered with a practice, rather than with an individual. So, the patient of today increasingly has a relationship with a general practice team rather than with ‘their own’ GP. First contact with a care professional may be provided in a range of ways, including (Jones *et al* 2010):

- GP consultations
- nurse practitioner triage
- practice nurse and health visitor consultations
- telephone consultations with the ‘duty’ doctor
- deputising services that provide out-of-hours care.

The consultation with a GP remains at the core of general practice. The purpose of the consultation may be to manage a pre-existing condition or to make an effective diagnosis of a presenting problem. The consultation may involve the practitioner giving advice and information, prescribing medication, treating the patient, or referring them to a specialist or another service. Over the years, practice activities have expanded, and today services include:

- screening and immunisation
- health promotion
- active disease management programmes
- responsibility for a number of services previously provided in hospital and community settings.

General practice provision

General practice is heterogeneous, ranging from ‘traditional’, single-handed practitioners to large, multi-partner practices employing a variety of clinical staff. However, as the box opposite shows, there is a distinct trend to larger practices, while the pattern of availability of general practice continues to reflect the inverse care law – that is, the availability of medical care tends to vary inversely with the need of the population served (Tudor-Hart 1971). For example, the number of GPs in areas with the greatest health needs has increased in recent years, but GP levels – weighted for age and need – are still lower in deprived areas (National Audit Office 2010). Policy-makers have looked to develop new models of care that enable more accessible integrated services – particularly in areas where single-handed GPs struggle to provide the full range of services now expected to be delivered in the community (Imison *et al* 2008).

Many general practices have established specialist clinics within their own practices run by GPs with a special clinical interest (for example, in dermatology) (Salisbury *et al* 2005), while others have worked with hospital specialists to establish innovative services in the community. The services provided in general practice settings have grown considerably over the years, branching out into providing a range of new care options for patients, such as public health advice, well-being services, minor surgery, specialist clinics and so on.

General practice: key facts and figures

- In 2009, there were 32,111 full-time equivalent (FTE) GPs and 72,153 FTE practice staff working in general practice in England across 8,228 practices (not including GP registrars or GP retainers).
- In 2008 there were 300 million general practice consultations, 62 per cent of which were undertaken by GPs.
- GPs made 9.3 million referrals to secondary care, suggesting that around one in 20 GP consultations results in a referral to secondary care. That means 19 out of 20 GP consultations, plus consultations with other general practice staff, were resolved within general practice by health professionals with generalist skills.
- There is a varied distribution of GPs across England, ranging by primary care trust (PCT) from less than 50 to more than 80 per 100,000 population.
- Overall, the number of single-handed GP practitioners is falling: down 35 per cent from 1,949 in 2004 to 1,266 in 2009.
- The number of FTE GPs increased by 21 per cent in the 10 years to 2009, and the number of practices decreased over the same period by 9 per cent.
- The number of FTE practice nurses increased by 37 per cent between 1999 and 2006, peaking at 14,616, but between 2006 and 2009 dropped 7 per cent to 13,582.
- The proportion of female GPs rose from 30.6 per cent to 43.7 per cent of the whole GP workforce between 1999 and 2009 (not including GP registrars or GP retainers).
- Between 1995 and 2008 the proportion of general practice consultations undertaken by nurses increased from 21 per cent to 35 per cent.
- The number of salaried GPs employed in practices has risen significantly: from 786 in 1999 to 7,310 in 2009.
- In 2009, 55.3 per cent of GP practices held General Medical Services (GMS) contracts (covering 4,554 practices), equating to 50.2 per cent of the total GP contract count (not including GP registrars or GP retainers).
- 41.3 per cent of practices in 2009 held purely Personal Medical Services (PMS) contracts – equating to 45.1 per cent of the total GP contract count (not including GP registrars or GP retainers).
- Between 2002/3 and 2006/7, expenditure on GP services grew from £4.9 billion (7.5 per cent of total NHS expenditure) to £7.9 billion (7.9 per cent).

Sources: Boyle *et al* (2010); Foot *et al* (2010); Hippisley-Cox and Vinogradova (2009); National Audit Office (2008); Information Centre (2008, 2010).

Polyclinics, where general practices co-locate alongside specialists and a range of other services, have been held up as one such model. There is also an increasing number of GP federations, whereby a number of practices join together but maintain practices in separate locations. The RCGP has developed a toolkit to support the development of these new organisations (Imison *et al* 2010). In localities such as NHS Redbridge, the concept has been further advanced as a polysystem, designed to have a polyclinic at the heart of a network of health care professionals such as GPs, pharmacists, opticians and community services.

Workforce

A 2008 report by the NHS Workforce Review Team forecast that demand for primary care services would continue to increase, and that more training provision was needed to avoid 'a significant medium-term risk of GP shortages' (NHS Workforce Review Team 2008). The same report identified a bulge in the number of overseas-qualified GPs aged between 55 and 65, who are expected to retire over the next five-to-ten years. This 'bulge' represents 16 per cent of GPs. In addition, it found that 'the practice nurse population is ageing and capacity of the system to fast track newly qualified nurses into primary care is only growing slowly' (NHS Workforce Review Team 2008). The NHS Next Stage Review recommended that at least half of all doctors should train as GPs to meet the increased demand (Department of Health 2008a).

The working patterns of GPs themselves have also evolved. Partnership opportunities are increasingly scarce, and around one-third of care is now delivered by sessional GPs (locums, salaried and retainer GPs). The number of salaried GPs employed in practices has risen significantly: from 786 in 1999 to 7,310 in 2009 (Information Centre 2010). Meanwhile, the influx of women into the GP workforce has brought increasing requirements for flexible working and part-time working (Royal College of General Practitioners 2007b). It is forecast that by 2013 women will form a majority of practising GPs (Royal College of Physicians 2010a).

The wider practice team

Practice teams are becoming larger, with care being provided and managed by an increasingly multi-professional team that may include GPs, nurses, physician's assistants, health care assistants, practice managers and receptionists. This broader skill-mix has enabled GPs to relinquish many routine and non-clinical tasks. Nurses have already assumed a range of responsibilities that would previously have been undertaken by GPs. The number of FTE practice nurses increased by 37 per cent between 1999 and 2006, peaking at 14,616, although it then fell back 7 per cent between 2006 and 2009 to 13,582 (Information Centre 2010). Between 1995 and 2008 the proportion of general practice consultations undertaken by nurses increased from 21 per cent to 35 per cent (Hippisley-Cox and Vinogradova 2009).

Physician's assistants are a more recent addition to the general practice team. They work under the direct supervision of a doctor, and are trained to perform a number of clinical roles in the diagnosis and management of patients. Health care assistants are able to carry out routine procedures and care management tasks, thereby freeing up the skilled health professionals for more complex activities.

This sharing of the workload does not, as yet, seem to have reduced the demand for GP appointments, as the GP consultation rate rose slightly from 3.0 to 3.4 per patient year between 1995 and 2008 (Hippisley-Cox and Vinogradova 2009). However, if general practice is to meet the workforce and quality challenges of the future, GPs will need increasingly to focus their time on 'intuitive' medicine and complicated cases while nurses take over more of the rules-based care – especially in the realm of managing patients with long-term conditions. The trend of shifting routine and organisational tasks to non-clinical staff will similarly be a necessary part of meeting the efficiency agenda.

Contracts

Before 2004, most GPs in England were employed under a nationally negotiated General Medical Services (GMS) contract, through which GPs were contracted as individuals and received payment for each piece of work according to their number of registered

patients. In April 2004, a new GMS contract was introduced that was held by the practice rather than the GP. The contract provides a 'global sum' based on a needs-adjusted capitation. The average payment is £63.21 per patient per annum (Department of Health 2010b). Additional funding is available for the provision of 'enhanced services' – for example, extended opening hours, minor injuries services and other services designed in negotiation with the PCT.

The 2004 contract also introduced the QOF, to reward practices for providing high-quality care. QOF payments accounted for around one-third of average practice earnings in 2004/5 (National Audit Office 2008). Although the scheme is voluntary, 99.8 per cent of practices in the United Kingdom participate (Lester and Majeed 2008). QOF payments account for around 15 per cent of expenditure by PCTs on GP services in England (National Audit Office 2008). At its launch, the Department of Health estimated that in the first year of the QOF, GP practices would achieve an average of 75 per cent of the maximum points available (National Audit Office 2008). In fact, practices achieved 91.3 per cent, rising to 96.8 per cent by 2007/8 (Gregory 2009).

The other main contract is the Personal Medical Services (PMS) contract, which since 1998 has allowed GPs and other NHS staff to enter into locally negotiated contracts with PCTs. These contracts enable providers to develop services outside the scope of GMS to meet the specific needs of the local population. The provider need not be a traditional GP partner-led practice: NHS trusts, PCTs and other health care professionals, including nurses and dentists, can also be contracted. PMS providers are paid a fixed annual rate to provide services negotiated with their PCT.

The differences between PMS and GMS contractual arrangements have decreased since 2004. For example, the arrangements for out-of-hours contracting are the same, and most PMS providers take part in QOF and provide enhanced services.

Another contract – the Alternative Provider Medical Services (APMS) contract – enables PCTs to commission primary care from commercial or voluntary providers, or from foundation trusts. The opening of the market to alternative providers was intended to plug gaps in provision in under-doctored areas and to provide a greater choice of primary care provider to patients (Department of Health 2004).

The number of private organisations set to deliver general practice care under APMS ranges from multinational corporations, such as United Healthcare, to companies run by groups of GPs, such as ChilversMcCrae Healthcare and IntraHealth. Other NHS primary care services that are provided by private companies include walk-in centres, mobile screening units, occupational therapy and health visitors. However, use of APMS remains limited, and very few APMS contracts have been awarded to providers that are not already part of the NHS (Ellins *et al* 2009).

The changing social context

The changes that are taking place within general practice run alongside, and are linked with, changes within society as a whole. These include:

- demographic pressures
- funding pressures
- patient expectations and expertise
- new technology.

Each of these is described below.

Demographic pressures

Of the many external factors that impact on general practice, the ageing population will potentially have the greatest impact. We are living longer, and by 2033 it is projected there will be 3.2 million people aged 85 and older, compared with around 600,000 in 1983 (Royal College of Physicians 2010). People aged 65 or over consult their GPs on average more than twice as frequently as people aged 15–44 (Stationery Office 1995, cited in Royal College of Physicians 2010).

Part of the extra years of life is likely to be spent with long-term chronic illnesses that are not curable, but need active management. This task is complex, as few patients have single conditions and, when above the age of 65, 65 per cent of the population have two or more long-term conditions – many have five or six (Haslam 2005).

A 2010 report by the Royal College of Physicians concluded that the biggest single change facing doctors was in making the shift from treating episodic periods of illness to one dominated by working in partnership with the growing numbers of patients living with long-term conditions, to help them maintain stability in their lifestyles (Royal College of Physicians 2010). Providing general practice services to an ageing population with multiple chronic conditions will require different ways of working, including a key role in supporting self-management.

Funding pressures

In the current climate of economic austerity and public spending cuts, high-quality care must also be cost-effective. General practice accounts for 90 per cent of patient consultations and just below 8 per cent of the total NHS budget. Funding for GP services has risen in recent years in line with a strategy to increase the investment in general practice. Prescribing accounts for a significant proportion of general practice expenditure. Around a quarter of the total expenditure on primary care relates to prescription drugs, and 98 per cent of these drugs are prescribed by GPs (National Audit Office 2007).

Compared to other parts of the health care system, GP services are estimated to be less costly. GP care for a whole year costs less than a single day's hospital admission. GP consultations cost less than outpatient consultations, accident and emergency and ambulance calls. A face-to-face consultation with a GP costs the NHS about the same as a telephone consultation with a nurse through NHS Direct (Royal College of General Practitioners 2008b).

However, media reports about high GP partner earnings, and variable quality, can give the impression of poor value for money (Royal College of General Practitioners 2007b). A review by The King's Fund found that no conclusions could be drawn about productivity changes in general practice over the past decade because of a lack of routine and consistent data on which to calculate unit costs (Wanless *et al* 2007).

Patient expectations and expertise

In recent years, patients have become more demanding in what they expect from general practice. According to the RCGP (Royal College of General Practitioners 2007b), patients want:

- greater responsiveness from GP practices
- better co-ordination, extra services and greater emphasis on health promotion
- the GP practice to be the basic unit of care
- to protect the special relationship that exists between a patient and a GP who knows them.

Increasingly patients are acting as informed consumers by taking on more responsibility for managing their own health and health care and developing a degree of expertise about their own health and condition. According to the RCGP, 'A doctor's opinion is no longer regarded as sacrosanct and a new dialogue is developing between healthcare consumers and providers' (Royal College of General Practitioners 2007b). For some professionals it can be challenging – but professional attitudes are changing, and resistance is much weaker than it was in the past. We are moving rapidly towards a partnership model of decision-making, where both the professional and the patient bring something to the encounter (Dixon 2008).

New technology

Patients with mobile phone and internet-driven lifestyles now expect the same benefits of information technology in their interactions with general practice. Such technology provides greater convenience through the introduction of 24-hour online systems that enable patients to book and cancel appointments, order repeat prescriptions and view their records. Within the practice, touch-in arrival screens help avoid long queues. Ease of access has improved through telephone consultations and the exchange of routine information by email between the patient and practice. The proportion of GP consultations by telephone in England had risen to 12 per cent by 2008/9 (Hippisley-Cox and Vinogradova 2009), although evidence is sparse on whether patients are happy with this trend (Boyle *et al* 2010).

Technology also offers new platforms for monitoring symptoms, and to support and motivate health-behaviour change. For example, telehealth allows patients to record vital signs such as blood pressure at home and phone the results to their doctor (Field and Grigsby 2002). Telephone support can be used to encourage people with long-term conditions to change their lifestyles and stay well (NHS Birmingham East and North 2009). Such developments support self-management, help reduce the amount of general practice time taken up by routine checks, and benefit patients who find it difficult to travel to the surgery.

In most other industries, productivity has been driven by embracing new technology and harnessing the resources of the consumer. In this respect, general practice lags behind other service industries and has not yet exploited the enormous potential that technology offers for the patient to be a co-producer not only of health but also health care.

In general, information technologies are seen as 'overlays', or add-ons, to current structures. It is rare for the NHS to rethink how available information technologies can help fundamentally to alter the way of working and to contribute to service redesign (Dixon 2008). There has also been a problem with slow uptake and adoption of technologies in the NHS due in part (Liddell *et al* 2008) to:

- lack of resources
- lack of resources leadership
- a tendency to focus on cost rather than value
- the need to make services changes
- the complexity of the procurement process.

General practice needs to embrace such technological advances while recognising that their adoption may require changes to clinical practice and a proportion of patients may resist their use, or need help to master them.

The policy context

In the White Paper *Equity and Excellence*, the coalition government has set out its proposals for further reform of the NHS (Department of Health 2010a). The intention to increase patient choice and competition is likely to result in a greater diversity of primary care providers. The White Paper also puts a strong emphasis on involving patients in decisions about their treatment and care – under the slogan ‘no decision about me without me’. This will require GPs to engage patients more actively in decision-making about their treatment and care.

The proposal to devolve commissioning to GP-led consortia gives GPs the lead role in the design and delivery of services on a scale not seen before. The implementation of GP-led commissioning will require rapid transformation in the skills and working practices of GPs. Much greater and more informed use of information, data and indicators will be imperative if general practice is to meet the challenges integral to its new role.

The White Paper also proposes that local authorities will have responsibility for the integration of health and social care and for public health in future. This will require general practice to engage with people and institutions beyond the walls of their practices.

A major challenge will be how GPs, and other professionals working alongside them, can balance their dual roles as providers and commissioners. Part of the logic of the coalition’s reforms is to align provider and commissioner so that the system can be imbued with clinical leadership and commissioning decisions can lead more directly to changes in physician behaviour. However, in so doing, general practice will have to demonstrate that there are no conflicts of interest in their activities both as providers and commissioners.

To avoid some of the conflicts inherent in this relationship, the new NHS Commissioning Board is intended to be responsible for commissioning GP services and holding GP contracts. However, it has also been proposed that all GP commissioning consortia will have an ‘explicit duty’ to support the board in continuously improving the quality of primary care services (Department of Health 2010d). The board will be able to delegate responsibility so that consortia ‘will play a systematic role in helping to monitor, benchmark and improve the quality of GP services, including through clinical governance and clinical audit’.

While the board will retain the formal role of ensuring a practice meets its contractual duties, it ‘will be able to delegate some responsibilities for managing the GP Performers List to GP consortia, where it makes sense to do so’ (Department of Health 2010d, para 4.82). This means that consortia will have a dual responsibility of commissioning services on behalf of practices, and supporting them to improve their performance as providers.

This new contractual relationship between GP commissioner and general practice should be used to support peer review – and should encourage commissioning consortia to adopt broad approaches to quality improvement, rather than simply monitoring minimum standards. However, as the consortia will not have the formal authority that comes with being the contract holder, if they are to have a meaningful enforcement role with the poorest-performing practices then they will need clearly defined powers.

In the reformed system, general practices will be held to account for quality, both as providers and in their role as members of GP consortia responsible for commissioning services. This means that the process of judging the quality of general practice will shift from a focus on the clinical activities delivered within the surgery to the broader questions of:

- whether the health status of the local community is improving

- whether patients' expectations are met
- whether they have secured value for money for the taxpayer.

Under the public health reforms, GP consortia will be encouraged 'to maximise their impact on improving population health and reducing health inequalities', and there will be increased incentives for GP practices to improve the health of their patients (Department of Health 2010a).

Conclusions

The role of general practice has changed significantly since the NHS was founded. General practice is no longer responsible for round-the-clock care, and many doctors are employed in larger practices and work alongside a growing number of nurses and other clinicians. General practice must now adapt to the changing context in which it finds itself with the demands of an ageing population, a tighter funding environment, and patients who are more informed and are accustomed to using technology in their everyday lives.

Policy changes mean that general practice will have to take responsibility as a commissioner of care, as well as a provider of care. This means that if the quality of care is to be sustained and improved in the future, there is a great need for practices to demonstrate the quality of care they provide – either by themselves or in partnership with others.

Delivering high-quality care in this environment will require general practice to change. We will explore what these changes mean for the future of general practice in Chapter 6. In the chapter that now follows, we go on to look at how quality of care in general practice is measured in England.

Key points

- The range of activities provided in general practice has increased. General practice plays an increasingly important role in co-ordinating care provided in other settings.
- There is a trend towards larger practices and federated models of working. Between 2004 and 2009, the number of single-handed GP practitioners fell from 1,949 to 1,266.
- The availability of GPs is still not equitably distributed, ranging from fewer than 50 to more than 80 per 100,000 population.
- Nurses play a greater role in general practice than in the past.
- There are projected shortages in the general practice workforce due to an ageing workforce and changing working patterns.
- Contractual arrangements in general practice are now more diverse. The number of salaried GPs employed in practices has risen significantly – from 786 in 1999 to 7,310 in 2009.
- The ageing population and the increasing number of people living with co-morbidities require general practice to work in partnership with patients and to support self-management in order to improve the quality of care.
- Patients today expect a more responsive service than they did in the past. Patients want to play a much more active role in making decisions about their care.

- Technology is available that could transform the way patients interact with general practice. However, general practice has been slow to adopt it.
- GPs will have a key role to play in the reformed NHS as commissioners as well as providers of care. They will need new skills and will need to make greater use of information, engage with local authorities and other public services, be more open and transparent and be more widely accountable.
- General practice will become increasingly involved in, and responsible for, the health of local populations. This includes those who are most in need of care but currently do not receive it.

3 Defining and measuring the quality of general practice

The main aim of this inquiry has been to examine the current quality of care in general practice across key ‘dimensions’ and to identify opportunities for quality improvement. For this reason, the inquiry’s main focus has not been on quality measurement per se, but on how data and information on quality may be used to drive quality improvement.

So, we have been primarily interested in the assessment of quality for use within general practice, for the purpose of improvement, rather than the external assessment of quality for purposes of regulation or performance management. We have also been interested in the ways in which information and data can be used in clinical practice to support high-quality care – for example, through stratifying risk, clinical prompts, and to guide case management.

This chapter sets out the challenges in attempting to measure and judge quality in general practice. It distinguishes between the respective roles in quality measurement of:

- national versus local initiatives
- quantitative versus qualitative methods
- peer review versus performance management and regulation.

It examines recent approaches to the measurement of quality in primary care, and uncovers some shortcomings that need to be addressed if general practice is to be better supported to improve care.

Defining quality

Quality within health care can be defined in different ways. In recent years, a range of organisations have sought to define quality. Their work reveals a wide range of possible domains on which to assess it – for example, from patient safety and clinical effectiveness to access and care outcomes (*see* Table 1 overleaf). The one consistent dimension across these quality domains is patient experience.

The 2008 Darzi *NHS Next Stage Review* (Department of Health 2008c) defined quality in the NHS in terms of three core areas:

- patient safety
- clinical effectiveness
- the experience of patients.

Until that time, performance was defined by policy-makers primarily as the achievement of productivity targets, activity volumes and waiting times targets (Raleigh and Foot 2010).

The coalition government has since committed to build on the ‘good work’ of Lord Darzi by putting a stronger emphasis on quality and outcomes. The NHS Outcomes Framework, which will be used to hold the NHS Commissioning Board to account, defines five domains of quality (*see* Figure 1 overleaf).

Figure 1 The five 'outcome domains' of the NHS Outcomes Framework



Source: Department of Health (2010d)

Table 1: Quality domains

Domains	IOM	OECD	Quest for Quality	Performance Assessment Framework	NHS Next Stage Review	CQC
Safety	✓	✓	✓		✓	✓
Effectiveness	✓	✓	✓	✓	✓	
Outcomes of care				✓		✓
Patient-centred / experience	✓	✓	✓	✓	✓	✓
Timely	✓		✓			
Access			✓	✓		✓
Efficient	✓			✓		
Value for money						✓
Capacity			✓			
Equity	✓		✓			
Healthy, independent living						✓
Health improvement				✓		

Source: Raleigh and Foot (2010)

IOM: Institute of Medicine

OECD: Organisation for Economic Co-operation and Development

CQC: Care Quality Commission

Quality means different things to different people, and these different perspectives may at times conflict. GPs and practice nurses, patients and families, and managers and commissioners of general practice services may all have different views about what they value.

For example, a clinician might emphasise the appropriateness of the clinical diagnosis or referral. A patient may take it for granted that a GP will provide clinically effective care, and instead might stress good communication skills or the ability to access care at a convenient time.

There may not be a consensus even among patients: those with chronic long-term conditions, children or the terminally ill may have different priorities from adults with acute minor ailments. For example, continuity of care tends to be a higher priority among older people and for people who feel vulnerable (Nutting *et al* 2003), and is also an

important dimension of quality for patients with serious, complex and long-term chronic illnesses and/or mental health problems (Goodwin *et al* 2010a).

Quality is also defined by regulators, politicians and government. In a tighter funding environment general practice may need to make trade-offs and prioritise different dimensions of quality, such as access, continuity or clinical outcomes. For example, research shows that for most patients, the continuity of their relationship with their GP is often a higher priority than access (Turner *et al* 2007), but waiting times are a highly visible and political measure of quality. Policy-makers, regulators and commissioners need to engage in a mature debate with general practice to agree the basis for such decisions.

There is a need for a more comprehensive definition of the quality of care in general practice that encompasses the different perspectives of patients and professionals. A balance of measures is needed that accommodates the tensions between different perspectives and dimensions of quality. This will require those working in general practice to engage with and listen to patients and the public, in order to understand how they define quality of care.

What is more, given the financial challenges facing the NHS, it will no longer be enough to deliver good clinical outcomes. The mark of quality in future will be to deliver high-value care – that is, care that is safe, delivers good outcomes and a positive patient experience, and is cost-effective.

Quality improvement

The inquiry's focus is not on quality measurement per se, but on driving quality improvement and establishing how data, information and indicators can be used more effectively to improve quality in general practice. While this is examined in detail in Chapter 5, it is important here to identify what we mean by the term and how it differs from assessment and/or assurance processes that use data on quality for different purposes.

- **Quality improvement** can be defined as a process within general practice through which the individuals who provide care adopt various approaches to self-reflection and benchmarking in order to understand and address the reasons for poor quality or variations in quality, and to identify areas where acceptable quality can be improved further. They then implement corrective measures, and devise new approaches to improve quality of care. Conventional quality indicators that rely on routinely collected data sets usually form part of the quality improvement process, but other relevant information may be obtained through practice audit, case review and qualitative approaches to collecting information and feedback.
- **Quality assessment** uses various tools, including relevant indicators, to appraise the standard of quality of particular aspects of general practice care. However, a simple assessment of variations in activity or performance (for example, of prescribing or referral rates) does not in itself constitute an assessment of quality. This is because an indicator may not have incorporated causal factors outside the control of general practice (for example, economic deprivation) that may explain the variation.
- **Quality assurance** involves an assessment of quality of care by an external body – often in terms of comparisons against agreed thresholds or standards – to determine whether the quality of care is acceptable. This judgement leads to further decisions on whether, and where, 'corrective actions' are required to maintain or improve quality. Quality assurance also ensures that these actions are implemented, through

monitoring and reviews of progress. Quality indicators usually play an important role in quality assurance.

How to measure quality

There have been several attempts to define a framework for assessing quality of health care. Donabedian (1988) argued that the most important consequences and markers of high-quality care were care outcomes, but that these outcomes were more likely to be realised if structural arrangements and processes of care met quality standards (see Table 2 below).

While outcomes are ultimately an important measure on which to judge quality, good outcomes can only be achieved if appropriate structures and processes are in place. This means that process measures are very important – especially in the context of managing long-term conditions and continuity of care. Process measures can be useful to drive service improvements at practice level, and have the advantage of being attributable to those who implemented them and linking more closely to the period of time during which the activities occurred. Many of the proposals for quality measures made by the research groups that we commissioned to consider this point focused on the importance of getting the processes of care right. While these may or may not be reflected in outcomes, they are essential elements of the quality of services.

Table 2: Donabedian’s framework for assessing quality in health care

Structure	Process	Outcome
For example:	For example:	For example:
<ul style="list-style-type: none"> • Facilities • Equipment • Personnel • Administration • Protocols 	<ul style="list-style-type: none"> • Management • Records • Diagnosis • Treatment plan • Sequencing 	<ul style="list-style-type: none"> • Patient satisfaction • Health status • Completion of treatment • Recall pattern • Needs of recall

Source: Adapted from Donabedian (1988)

It is more common for general practice to measure symptoms, diagnoses and treatments rather than outcomes. Patient experience and intermediate outcome indicators are available for general practice, but overall, outcome measures are currently more readily available from other parts of the health system, such as secondary care.

Information about quality lies on a continuum – from measures that can be readily captured and quantified through routinely available data, to the hard-to-measure aspects of quality of care that can be assessed only through local audit, feedback from patients and other qualitative methodologies. While the former lends itself to quantitative measurement and dissemination nationally, the latter approaches to measurement inevitably need to be locally defined, implemented and acted on.

For example, assessing the quality of the therapeutic relationship between GPs and patients, or examining whether patient care is being co-ordinated effectively, requires qualitative approaches to be used. These might include:

- review meetings that assess case notes or referrals
- the development of ‘quality circles’ where the general practice team meets regularly to identify, analyse and address quality issues
- proactive input from patient groups on the care they receive and experience.

Einstein is reputed to have believed that ‘not everything that counts can be counted; not everything that can be counted counts’ (McKee 2004). So, it is important that quality measurement is seen as one tool within a broader quality improvement strategy (Werner and Asch 2007). Over-reliance on measurement can mean that aspects of quality that are not readily quantifiable, or where an evidence base and/or data are not available, are overlooked or missed (Raleigh and Foot 2010).

In a number of areas covered by the inquiry, the research report authors found it difficult to identify readily quantifiable measures of quality. We were particularly interested in whether aspects of quality such as the therapeutic relationship (traditionally considered unmeasurable) could in fact be measured. We are grateful for the authors’ efforts in this regard.

Lester and Roland (2009) set out some of the challenges in assessing quality of care for people with chronic illness. For example:

- different elements of care are delivered in different ways across different settings
- co-ordinated responses are required, and their multiple linkages are complex
- there are challenges in adjusting for co-morbidities and other patient-related and external factors influencing outcomes
- many aspects of prolonged, co-ordinated, interpersonal care and informed self-management are difficult to measure quantitatively. For example, process and intermediate outcome measures for diabetes in QOF are important potential predictors of the impact of quality in primary care on longer-term outcomes for diabetic patients, but they fall short of reflecting the overall quality of care in general practice for a patient with diabetes.

The inquiry believes that these hard-to-measure aspects of general practice should be included in quality frameworks, but recognises that a more creative approach may be needed to assess these. So, we recommend that national, quantitative quality measurement initiatives are supplemented by locally tailored approaches to information gathering such as practice audit, critical appraisal by peers, and the use of qualitative measures of performance.

Outcomes are important in quality measurement, but achieving those outcomes depends on having appropriate structures and processes in place. For this reason, the inquiry recommends that measures of quality in general practice need to include elements of structure and process as well as outcome.

We also call on the National Quality Board, the Royal College of General Practitioners and the National Institute for Health and Clinical Excellence (NICE) to undertake further work on developing measures and indicators to address gaps in our understanding of quality of care in general practice, including in hard-to-measure areas. There are diverse approaches to quality measurement. National, quantitative indicator measurement initiatives must be supplemented locally by more diverse and creative approaches to quality assessment and improvement, including the use of audit and qualitative methods of harnessing information.

New measures to hold practices to account for their commissioning activities will be needed in future. These should capture a wider set of dimensions of quality of care and should include broader measures produced together with other parts of the health and care system – for example, reducing avoidable admissions. Given the key role of general practice in co-ordinating care across organisations and along pathways of care, there is a need for measures of integration such as care transitions in order

to monitor the extent of partnership working. These must capture the quality and experience of care for patients across the whole pathway.

There is a risk to these recommendations in that they may lead to an increased burden of data generation and measurement within general practices. It will be important to streamline data collection in order to avoid the potential for multiple requests for information. General practice will also need support to use such information and data proactively for the purposes of improving the quality of care it provides.

Benefits and risks of measuring quality

In the past decade there has been much ongoing debate on the benefits and risks of using quality indicators in general practice (see Table 3 below). As Marshall *et al* (2002) point out, it is important to recognise that quality indicators are just that – indicators – and not definitive judgements about quality. What matters is how the indicators are used.

Table 3: Risks and benefits of using quality indicators in general practice

The benefits	The risks
<ul style="list-style-type: none"> ■ Allows comparisons to be made between practices against set standards over time to stimulate and motivate change ■ Facilitates an objective evaluation of a quality improvement initiative ■ Can be used to identify unacceptable performance and improve accountability ■ Stimulates an informed debate about the quality of care ■ Focuses attention on improving the quality of information in general practice ■ Is a quicker and cheaper tool than other quality improvement methods, such as peer review ■ Helps target resources to areas where quality needs improving to meet needs ■ May improve public engagement and professional pride when quality targets are met and exceeded 	<ul style="list-style-type: none"> ■ Encourages a fragmented, rather than holistic and integrated, approach in general practice ■ Fails to encompass important yet subjective aspects of general practice ■ May be based on data and information that is of poor quality, is difficult to access ■ May be difficult to interpret, for example, whether differences in care standards represent real differences in quality of care or the presence of confounding factors such as case-mix and case severity ■ May be expensive and time-consuming to produce. The cost-benefit ratio of measuring quality is largely unknown ■ Encourages a culture of blame rather than internal professional motivation ■ Can lead to a short-term rather than long-term response to quality improvement ■ If deficiencies of care are highlighted, may erode public trust and professional morale ■ If the results of indicators are published, encourages manipulation of data ■ May encourage clinicians to focus on the counted rather than the patient, while areas of care not covered by indicators risk being ignored ■ Indicators tend to persist even where the evidence of benefit is not strong ■ Indicators cover only a minority of clinical activity

Source: Adapted from Marshall *et al* (2002)

More generally, Lester and Roland (2009) warn that measuring isolated aspects of performance may result in clinicians focusing on what is being counted, rather than the patient in front of them. There is evidence to show that problems that are not incorporated in indicators get less attention. Currently, indicators cover only a minority of clinical activity (for example, less than 10 per cent of the activities undertaken in primary care are covered in the QOF).

This issue is a crucial one, since there is a balance to be struck between developing and using quality indicators for judging performance versus those important aspects of the quality of care that cannot be captured in this way. Performance in these latter areas needs to be captured in other ways, or taken more on trust. We return to this issue of trust and control in the use of quality measures in Chapter 5. Getting the right balance between these two factors is important for quality improvement to flourish.

Recent approaches to measuring quality in general practice

In England, a wide range of activities to measure quality in relation to general practice takes place at national, regional and local levels. In autumn 2009, the Department of Health identified more than 20 indicator sets and quality improvement initiatives (not including local examples), with numerous NHS and other organisations having a role in the monitoring and reporting of quality in primary care (Department of Health 2009d).

In this section, we first describe the main data sources relating to quality in general practice, then we take stock of the range of approaches to measuring quality that have arisen. To support this assessment, the inquiry carried out a mapping exercise of the different indicator sets and quality assessment approaches that were in use or under development for general practice in 2010. The indicators were being used for a range of purposes, including:

- benchmarking
- pay for performance
- performance management
- quality assurance
- accreditation
- regulation
- informing patient choice
- commissioning.

Data sets for general practice

Patient records from GP systems provide medical life histories of individuals and, together with other routinely collected practice information, offer a rich source of data. At a national level, the available information can be categorised into two broad categories: patient-level information and aggregated data. Below, we provide examples of the main sources of data for measuring the quality of general practice (*see also* box, p 33). Further details about primary care data sources and their applications are available elsewhere (Gnani and Majeed 2006; Majeed 2004).

Patient-level information

This type of information includes:

- general practice records
- hospital records
- patients surveys.

Each of these is described below.

General practice records

Records of individual patients are normally held electronically, and can be extracted and aggregated to provide anonymised, longitudinal, representative research databases such as the General Practice Research Database (GPRD), QResearch, and The Health

Improvement Network (THIN). These aggregated data sets are available to researchers, and have been used to investigate quality of care. They do not, however, provide data at a local or practice level.

These data sets include demographic and clinical details of individual patients, including diagnoses, use of health care services, prescriptions, outcomes and some lifestyle factors. Further details may be recorded, such as referrals, and hospital attendances, admissions and discharges. If it is implemented, the General Practice Extraction Service (GPES) will provide a centrally managed data extraction service for England, to enable government and NHS organisations to access information from patient records held in general practice clinical computer systems.

However, there are no national standards for recording data in primary care (Department of Health 2009b), leading to variation in the completeness and accuracy of coding of clinical information in GP systems (Majeed 2006). The accuracy of diagnostic coding is also unknown. There is evidence that data quality across general practices is variable (Gnani and Majeed 2006). As data from general practice comes increasingly into play – and especially in view of the proposed developments around GPES – uniformity of coding within general practice and improved data quality is of paramount importance. Furthermore, there needs to be consistency across institutional and professional boundaries if meaningful information is to be obtained through data compilation and linkage.

Hospital records

Hospital Episode Statistics contain individual patient records for all inpatients and outpatients in England, including codes for the GP practice with which each patient is registered, and the referring GP. Again, this data can be aggregated to examine admission/referral rates for individual general practices by details such as diagnosis, procedure and patient demographics.

Patient surveys

Data on the experience and opinions of individual patients is collected through surveys. The GP Patient Survey (GPPS), conducted by the Department of Health each quarter (see Department of Health 2010e), asks a sample of patients in general practice about access, choice, satisfaction and quality of care in their general practice. The data is aggregated and published at practice level. In 2009/10, 2.2 million of those receiving the survey questionnaire responded (Department of Health 2010e). Many practices also conduct their own surveys using the General Practice Assessment Questionnaire (GPAQ) and Improving Practice Questionnaire (IPQ).

Aggregated data sets

The main aggregated data sets come from the QOF and prescribing data. These are both described below.

Quality and Outcomes Framework

Under the QOF, practices have been awarded ‘points’ for delivering services in four main categories:

- clinical (based on best available evidence of effectiveness in general practice in selected clinical areas)
- organisation
- patient experience
- additional services.

The more points a practice receives, the higher their payment (Gregory 2009). QOF indicators are based on aggregated information derived from GP computer systems, and do not contain patient-level details. QOF data is published at practice level. Over the period of the inquiry, the QOF pay-for-performance system was placed under review for its cost-effectiveness with NICE, which was also tasked with developing a revised set of indicators (Lester and Majeed 2008).

At present, QOF data does not provide prevalence and achievement rates that are adjusted for age, socio-economic and ethnicity differences in the population, and does not take account of inconsistencies in diagnosing and coding of disease conditions between health care professionals (Gnani and Majeed 2006). Consequently, there are caveats in its use for making comparisons between practices.

Prescribing data

The electronic prescribing analysis and cost (ePACT) database provides real-time online data to the NHS on all prescriptions issued by GPs in England. It provides data on the costs and volume of prescribing, and options for benchmarking practices, but does not contain details about patient demographics or diagnostic information. ePACT data is used extensively for monitoring GP prescribing, analyses of prescribing costs, and for informing prescribing policy.

For general practices and PCTs, the data is available at the level of prescribing GP, practice and PCT. For other users, limited prescribing data is published, but only at PCT and strategic health authority (SHA) levels. While the Prescribing Indicator Toolkit contains some quality prescribing measures, much of the prescribing data overall is used for managerial and financial purposes (such as cost–volume comparisons for identifying potential savings) rather than for monitoring the provision of safe, high-quality care for patients.

The main data sets for measuring and/or comparing the quality of care in general practice

- **Data sets of patient records** Aggregated data sets of individual patient records derived from GP computer systems in a sample of practices. The data sets are designed primarily for research purposes, and are unsuitable for comparisons across individual practices.
- **Hospital Episode Statistics (HES)** Records of all patients in England using inpatient and outpatient hospital services, with details of GP registration and referring GP.
- **General Practice Patient Survey** A data set derived from surveys run by the Department of Health to assess patients' access to and experience of GP services.
- **The Quality and Outcomes Framework** A data set used as a pay for performance mechanism in general practice for performance against clinical, organisational, patient experience and additional services indicators.
- **Prescribing Indicators and Comparators** A data set produced by the NHS Information Centre for benchmarking prescribing patterns across practices.

Quality indicators

Quality indicators have been described as:

... specific and measurable elements of practice that can be used to assess the quality of care. They are usually derived from retrospective reviews of medical records or routine information sources. Some authorities differentiate 'quality' from 'activity' or 'performance' indicators. The important issue is that a good-quality indicator should define care that is attributable and within the control of the person who is delivering the care.

(Marshall *et al* 2002)

While the generic term 'measure' is often used informally to mean some type of rule-based description of a service, quality indicators must be precisely defined. There are different potential users of indicators of general practice quality, and different purposes for which such information can be used, including (Raleigh and Foot 2010):

- performance assessment and management (in other words, judgement)
- incentivising quality improvement (pay for performance)
- publication to inform the public and support patient choice
- benchmarking against peers for feedback and learning to support quality improvement
- use in a non-health care environment, such as academic research.

There are different approaches to developing quality indicators, including using evidence from clinical guidelines, randomised control trials, and consensus-building with expert informants. Indicators of quality can also be devised by combining scientific evidence with an understanding of the practicalities of applying measures such as these in the real world.

In the context of general practice, RAND and the National Primary Care Research and Development Centre used this approach to establish a range of clinically based quality indicators, including for the management of common clinical conditions, prescribing and mental health care (Marshall *et al* 2003). Indicators based on published evidence were given to expert panels to rate their validity and practicality, and were then tested against patient records.

Sources of quality indicators for use in general practice

Indicators for Quality Improvement (IQI) An evolving menu of more than 200 quality indicators across a broad range of services, developed by the NHS Information Centre, to support benchmarking and enable local clinical teams to examine specific areas in need of quality improvement. Based across three quality domains (safety, effectiveness and patient experience), many indicators included for general practice are taken from QOF, GPPS and other routine data sources. The indicators are for use primarily by the NHS, with limited public access to the data.

NHS comparators A resource that contains about 200 indicators from QOF, GPPS and HES data, with results available for PCTs, acute trusts and individual practices. It provides comparator data for NHS commissioning and provider organisations, enabling users to investigate aspects of local activity, costs and outcomes. The indicators are for use primarily by the NHS, and are not publicly available.

Practice profiles Several public health observatories have developed practice-profiling tools that provide a range of indicators, including from QOF and other routine data sources, for individual practices. These profiles are published and publicly available.

QOF and GPPS data is published as data sets in their entirety, but the inquiry's research identified a growing number of other sources that provide indicators of the quality of general practice. Some of these are listed in the box opposite. There is a proliferation of multiple sources of information on quality in general practice, often presenting the same indicators. This is wasteful and potentially confusing for users. There are also variations in the indicator content and presentation formats used by different organisations, and there is no single information source with a comprehensive compilation of indicators for general practice.

The inquiry uncovered a crowded field of activity in the sources of quality measures and indicators for use in general practice. However, it found that little emphasis has been placed on standardising the methods of data collection and the formats in which they are presented. For example, many Public Health Observatories have produced profiles of individual general practices (for example, YHPHO 2009) but with variable and overlapping content (Fabunmi and Jacobson 2009). For large, complex national data sets, standardised methods for calculating measures and presenting information would ensure greater consistency, quality assurance, save on local analytical resources, and enable comparative assessments to be made.

We believe there is a need for a comprehensive review of indicators for general practice to consider their fitness for purpose in supporting, first, the assessment of quality within general practice, and second, the new commissioning role for GP consortia – including in improving population health in partnership with local authorities. Once there is an agreed set of indicators, the task is to analyse and disseminate a single set of indicators. This could be undertaken more cost-effectively by a single agency (such as the NHS Information Centre) rather than multiple agencies, resulting in easier access to the data without adding to the burden of data collection and measurement in general practice.

If there is a degree of centrally directed co-ordination, co-operation and production, the development of data and indicators, and the production and dissemination of information, is likely to be more efficient, cost-effective, consistent and quality-assured. Local agencies can then focus on the more critical task of analysing and monitoring variation and progress on the indicators. The Department of Health and the NHS Information Centre will play important roles in achieving this goal.

Audit

There are a number of forms of audit, including:

- practice audits
- the Primary Care Trigger Tool
- national clinical audits.

Each of these is considered in turn.

Practice audits

While significant event audits are well established in general practice, there is scope for more proactive use of audits for specific purposes, such as to identify missed, late or incorrect diagnosis and/or prescribing errors that may otherwise go unrecorded. The rationale for this is the knowledge that medical errors in primary care occur between five and 80 times per 100,000 consultations – mainly related to diagnosis and treatment – and that prescription errors occur in up to 11 per cent of prescriptions – mainly due to errors

in dosage (Sandars and Esmail 2003). The prevalence of preventable medicines-related hospital admissions is estimated at 4–5 per cent of all admissions (Pirmohamed *et al* 2004). Further evidence to support this is presented in Chapter 4.

A systematic review of the impact of audits in general practice showed reported improvements in performance (Holden 2004), suggesting that the approach has potential as a quality improvement tool. An example of such an approach in general practice for cancer diagnosis is provided in the box below.

Example of a practice audit to assess and improve the quality of cancer diagnosis and treatment

Ten GP partners at College Surgery, Integrated Centre for Health in Cullompton (Devon) meet quarterly to undertake a practice audit of cancer care. Partners critically and openly peer-review the treatment of every cancer patient in their practice by comparing each other's case notes. They examine care quality from the time of first presentation until referral and also the patient's ongoing treatment in secondary care. Delays before diagnosis and the reasons for such delays are discussed, confidentially, among the partners with key points for improvement taken forward. These practice audits have reportedly helped to improve: the appropriateness of diagnostic tests; the speed and quality of referrals (especially those referred to be seen within two weeks); and the level of communication with secondary care.

In 2008 the National Patient Safety Agency issued guidance on significant event audit (SEA) for general practice teams, to enable them to learn from patient safety incidents and 'near misses' (National Patient Safety Agency 2008). These episodes could include a wrongly administered measles, mumps and rubella (MMR) vaccination or wrongly prescribed medication. The seven-step guidance aims to improve the quality and safety of patient care in general practice by giving primary care teams a tool to develop a structured and effective SEA process and embed it as an improvement tool within their practice. SEA was incorporated into QOF in 2004, as part of the GMS contract requirements. An initial scoping exercise by the National Patient Safety Agency (NPSA) found that the quality of SEAs conducted was variable, and could be improved. The guidance aims to raise awareness of how to conduct an SEA.

The NPSA guidance focuses on adverse events or near misses and does not cover aspects of poor-quality care, such as 'non-events'. However, practice audit is a useful tool for targeting improvement activities. However, the inquiry recognises that a varied programme of audit needs to be developed that, over time, encompasses the totality of the practice's activities.

Primary Care Trigger Tool

Developed by the NHS Institute for Innovation and Improvement, the Primary Care Trigger Tool (PCTT) enables practices to carry out rapid structured case-note review to audit adverse events, inform priorities for action and track improvements over time. As a quantitative tool, it does not provide understanding of the causes of adverse events, so it is recommended that practices use techniques such as significant event analysis, in conjunction with other sources of information about patient safety (such as staff reports and patient comments) to achieve a broader understanding of risks to patient safety. An online trigger-tool portal will provide the practice with a data-entry form and real-time analysis of its data. It is not suitable for making comparisons between practices (benchmarking).

National clinical audits

Clinical audit is a powerful tool for improvement, but so far the national clinical audits have focused primarily on secondary care. One example is the National Clinical Audit and Patient Outcomes Programme (NCAPOP), a programme managed by the Healthcare Quality Improvement Partnership (HQIP), comprising a range of clinical audits covering medical, surgical and mental health conditions, relating mainly to secondary care.

There is no single listing of all the national clinical audits, but GPs are expected to contribute to some of the 25 or so national clinical audits co-ordinated by NCAPOP. These include audits for diabetes, some forms of cancer, such as head and neck cancer or lung cancer, and some audits currently under development or being scoped.

The inquiry found that some key aspects of quality cannot easily be captured by national measurement initiatives or standard, quantifiable indicators (in other words, they are not 'QOFable'), and are therefore in danger of being ignored. This suggests a need to develop additional approaches to measurement – for example, through practice audits – for those dimensions of quality that are less readily measured using routine data, such as continuity of care and the therapeutic relationship. This might involve proxy measures that capture activities that contribute to quality. Audit will also be useful for areas such as referral and diagnosis where it is the appropriateness rather than the level of activity that is relevant.

Regulation and accreditation

We also identified a number of external quality assessment processes that rely on a range of quality measures in general practice (*see box overleaf*). For example, from April 2012 all GP practices and related services, such as out-of-hours care, will be required to register with the Care Quality Commission (CQC). The registration system is intended to be part of a process in which all adult health and social care services are brought under a single set of essential standards for quality and safety for the first time. The detailed registration standards have not yet been published, but are expected to focus on the experience of patients – including in relation to the outcomes of care – suggesting the importance of patient survey data and feedback.

The RCGP has developed a voluntary accreditation scheme for practices that assesses practices on non-clinical aspects of care, and will be launched in 2011. Quality will be assessed across six domains:

- health inequalities and health promotion
- provider management
- premises, records, equipment, devices and medicines management
- provider teams
- learning organisation
- patient and carer experience, involvement and responsiveness.

The accreditation process is in two stages. The first stage requires practices to provide evidence against 42 criteria. The second stage seeks to encourage ongoing practice development, and assesses practices against 37 criteria. These are not yet publicly available.

GPs as individual professionals will also be subject to a revalidation process established by the General Medical Council (GMC). This has two elements. First, since autumn of 2009 all doctors have been required by law to hold a licence from the GMC that describes

a doctor's areas of licensed activity. Second, all licensed doctors will be subject to revalidation.

The revalidation process is expected to begin in late 2012 (subject to the Secretary of State's agreement). This will require all doctors to demonstrate that they are practising in accordance with the generic standards of practice set by the GMC in *Good Medical Practice* and specialist standards, developed by the Royal Colleges and specialist faculties, based on this same source. Much of the supporting information will be generated from within the practice and brought together through what will be an annual appraisal of all doctors.

Revalidation of GPs will be based on multi-source feedback both from professional colleagues and patients, based on surveys, but also including:

- records of complaints
- results of significant events audit
- participation in clinical audit
- results of the annual appraisals.

Examples of external quality assessment programmes

- **GMC revalidation** GPs will be appraised on information drawn from doctors in their actual practice, feedback from patients and participation in continuing professional development.
- **CQC registration** A 'quality and risk profile' will be used, drawing on a range of indicators and qualitative feedback from patients.
- **RCGP practice accreditation** This voluntary scheme is based on an assessment of a range of quality criteria across six quality domains.

In its final report on information on the quality of health services as a whole, the National Quality Board (2010a) pointed to the way in which responsibility for collecting data is currently spread across different organisations, 'resulting in duplicate responsibilities, and clear scope for rationalisation'. It called for the systems that collect data and turn it into useful information to be 'radically simplified'. In particular, it recommended that all data collections relating to health services should be brought together in a single body, which should publish the data online as efficiently and quickly as possible.

It also argues that, to reduce the burden of data collection, other data users (such as regulators) should agree to use these rather than requesting additional data returns directly from general practice. We endorse these recommendations.

Publishing data on the quality of general practice for patients and the public

There is an increasing amount of information about the quality of general practice – including individual patient feedback – available on the web. The Freedom of Information Act, along with service failures such as that at Mid-Staffordshire hospital and the government's commitment to transparency and the 'information revolution', mean that more data on the quality of care will be published in future. This raises the question of what measures of quality to publish, and how.

The content and presentation formats of the indicators must be selected for their relevance to the varying requirements of different audiences and users of information (Raleigh and Foot 2010). For example:

- **clinical teams** wanting to improve their performance will need complex, disaggregated information on the processes and outcomes of care at team or individual clinician level, presented with the appropriate statistical interpretation and caveats
- **commissioners** primarily need information on the quality and outcomes of services, and the value for money they offer
- **patients and the public** require less detailed, unambiguous information that is presented in readily interpretable formats.

We now look at three examples of approaches to publishing data on general practice performance for patients and the public:

- NHS Choices
- scorecards
- quality accounts.

Each of these is described in turn.

NHS Choices

One example of a website for the public that can be used when comparing the quality of care is *NHS Choices*. This site publishes information on quality indicators for individual GP practices and other information, such as opening hours and provision of specialist services. It also has the facility for patients to leave comments on care received. Other websites (such as www.patientopinion.org.uk and www.iwantgreatcare.org) also have the facility for patients to rate directly their experiences of general practice, including that of individual GPs.

Scorecards

Locally, approaches to publishing information about general practice for patients and public have been patchy and variable. In 2009, the Department of Health issued guidance that PCTs should have 'a robust and balanced set of quality measures in place for primary care' (Department of Health 2009c). It recommended a quality framework, or 'scorecard', that draws together and triangulates data from various national and local sources, in order to enable PCTs and practices to review performance, encourage self-assessment and peer review, and keep the public informed about quality and performance.

Some PCTs are using scorecards to support quality improvement and report on the performance of general practice (for example, *see* the box overleaf).

A recent survey of PCTs (West 2011) found that of the 110 who responded:

- 43 (39 per cent) were using scorecards to rate practice performance
- a further 33 (30 per cent) had gathered information that could be used to develop one
- 34 (31 per cent) had not taken forward such an initiative.

Only six PCTs in this survey were making this information publicly available – either indirectly through board papers, or directly to the public on their website.

Example of a publicly available PCT scorecard: NHS Hertfordshire

NHS Hertfordshire monitors how well general practice is doing by assessing GP practices, drawing on data from a number of sources, including patient surveys. The balanced scorecards for practices present information on:

- the accessibility and availability of services
- how practices are helping patients with long-term conditions
- how they are meeting their clinical targets.

A banding scheme puts information together into a score sheet that enables practices to measure how well they are doing and compare themselves with others. The scorecards also allow patients to see how well individual GP surgeries are providing services.

Source: Adapted from NHS Hertfordshire website – www.hertfordshire.nhs.uk/resource-centre/nhs-hertfordshire-publications/234-gp-balanced-scorecard.html

The survey also suggested that PCTs are using different baskets of locally agreed indicators, depending on their priorities. Some PCTs are reported to have stopped producing the scorecards since the NHS reforms were introduced in 2010.

This patchy approach demonstrates that monitoring and transparency of GP service quality through benchmarking is both underdeveloped and inconsistent across the country. Furthermore, it is unclear where, and how, responsibility for the level of detailed monitoring of performance in general practice required will rest in the future. Neither is it clear whether the NHS Commissioning Board can realistically perform this task effectively in partnership with the new GP commissioners.

Consistent publicly available information about quality in general practice lags behind what is available for secondary care services. We need a more consistent approach nationally to monitoring and reporting on the quality of care in general practice.

Quality accounts

Quality accounts are another example of publicly available information on the quality of an organisation's services. Quality accounts have been a requirement for acute, mental health and ambulance trusts since 2010, with the intention of being extended to primary and community care services in 2011. However, this was delayed to at least 2012 after pilot work on quality accounts in primary care concluded that 'further testing is required', and because it was clear that primary care providers needed considerable help from PCTs and SHAs (Department of Health 2010f p5). Instead, primary care providers will be encouraged – but not required – to produce quality accounts in 2011.

A recent report by The King's Fund on quality accounts of acute and mental health highlighted the variability in the content, quality and presentational formats of the measures used to describe performance, and how this made it problematic to assess provider performance comparatively (Foot *et al* 2011). Given the significantly larger numbers of providers, similar problems are likely to arise in general practice. The report concludes that the public would be better served if providers' quality accounts included some nationally comparative, quality-assured key measures of quality. This information could then be replicated consistently in all quality accounts, with providers adding other measures relating to local priorities.

Examples of approaches to publishing data on general practice performance for patients and the public

- **NHS Choices** publishes information on quality indicators for individual GP practices and other information, such as opening hours and the provision of specialist services.
- **PCT scorecards** present a variable selection of indicators drawn from routine data sources such as QOF, GPPS and data on referrals and accident and emergency (A&E) attendances. A few PCTs have published these indicators for their local practices. Some Public Health Observatories also publish indicator profiles of individual general practices locally.
- **Quality accounts** are locally developed reports on selected aspects of the quality of services provided by an organisation. They have been produced by providers of acute, mental health and ambulance services, and are expected to be produced by primary care providers from 2012.

Risks and benefits of publishing data on quality

We would hope that all general practices would commit to transparency, and would want to publish performance data on individuals as part of their commitment to public accountability. However, publishing this kind of data needs careful handling. Data on individual performance has been published by cardiothoracic surgeons, but when it comes to general practice publishing individual performance data raises a number of different challenges to those faced in other areas of medicine, such as surgery (Lester and Roland 2009).

This is for a number of reasons. For example, surgeons usually carry out a limited set of procedures, and information on case-mix is available to adjust their outcomes. In contrast, in general practice quality of care is often not solely the function of the skills and capabilities of an individual clinician, but that of the general practice team and the organisation and system in which it operates.

Moreover, performance data on individuals is more problematic in general practice compared to, say, cardiovascular surgery, because GPs deal with a far greater range of conditions and concerns on a daily basis, and the fact that external factors unrelated to the quality of clinical care can have a significant impact. Also, linking patient outcomes to an individual GP can be difficult because GPs also often provide services for specific population groups, such as patients in care homes and hospices, and individual patients often see more than one GP in a practice.

Having said that, some aspects of an individual's performance can be assessed at the GP level through local audit and monitoring such as patient feedback, length and quality of consultation, accuracy of diagnosis and appropriateness of prescribing. Where possible, practices that commit to transparency in the publication of this kind of data would move towards greater public accountability.

Within federations of practices and GP commissioning consortia, it is important that an individual clinician's poor performance is not hidden, so it is important that data is presented and examined at individual as well as team level. Those within practices or federations who hold the data on individual performance then need to act on it. It is not acceptable for poor performance to go unchallenged. In Chapter 5 we present a case study from NHS Tower Hamlets (*see* p 113) to show how this can be done in a way

that supports quality improvements. There may well be an extra impetus to act on this information if it is also in the public domain, but this needs to be balanced against the difficulties outlined above of publishing individual performance data.

Information about the quality of care is published by many organisations including the NHS Information Centre, the Department of Health, and NHS Choices, in a range of locations. There is a real danger that the number of agencies reporting on the quality of health care and the sheer volume of information will result in confusion among the public and patients. This was recognised by the National Quality Board, which stated ‘Some of the reporting of recent high profile failures in quality suggests that the system’s ability to present a clear message to the public has not kept pace with the overall quality agenda’ (National Quality Board 2010a).

As more information is published in future on the quality of general practice as part of the information revolution, information providers will need to ensure that the information they publish is clear, easily understood, consistent and comparable if patients and the public are to make effective use of it (Boyce *et al* 2010a).

Conclusions

Quality is complex and multidimensional, and no single basket of indicators is likely to capture all perspectives or cover all dimensions of quality in general practice. Nonetheless, we have no doubt that important dimensions of quality of care in general practice can be measured, and routine data sets used, to assess the comparative performance of practices.

General practice needs to make better use of data that is routinely available, as well as data currently within GP systems for practice-level peer review and local audits. Developing information systems such as GPES will allow a wide range of audiences to make greater use of patient-level data in GP systems. As GP commissioning consortia develop they will need to make sure that robust comparable data is available to benchmark member practices – not only on their resource use (for example, referral rates and prescribing practices) but also on the quality of the care provided and commissioned.

Measurement will also need to encompass the more challenging aspects of quality, such as:

- the ‘hard-to-measure’ dimensions
- co-ordination of care along individual patient pathways
- co-ordination of care in care planning
- the ability of general practice to support patients to manage their own conditions at home and across multiple care settings.

This will require the development of new approaches to measuring quality in general practice – including greater use of audit and qualitative methods – that span organisations and allow quality to be measured along pathways. However, the ease (and cost) of obtaining data must be considered when developing new measures or indicators.

The government must ensure that information systems are fit for purpose, and that steps are taken to facilitate the linking of health care data across primary, secondary and community care, and with public health data and social care data held by local authorities. It is vital for the development of quality measures that data from general practice can be made routinely available and linked to other data.

We urge the government to accelerate the programme for compiling data from the computerised records of GPs and to set a firm date for the implementation of the GPES.

Data standards in primary care need to be developed and implemented to ensure that routine data collection is accurate, complete and allows for robust adjustments to allow for meaningful comparisons. The Information Centre needs to ensure that data from general practices is linked to other routine data and (working with third parties as needed) to ensure full use of the data is made for:

- assessing needs
- stratifying risk
- measuring quality
- identifying gaps in care
- analysing unwarranted variations and inequities in access.

There is also a need for general practice to share data and information – not only with other organisations and clinicians within the NHS, but also, in some cases, beyond the NHS. As part of a model of shared care identified in the paper on maternity care, the GP needs to ensure that other clinicians, such as a midwife, have relevant information about the patient’s social and medical history to enable them to provide high-quality care. For some patients with complex needs, or for children or vulnerable adults, there may well be a need to share information with social services or education. Appropriate safeguards need to be in place to protect the confidentiality of the patient, but these should not obstruct the need for continuity of information.

There is also a need for a comprehensive review of indicators for general practice to consider their fitness for purpose in supporting both the assessment of quality within general practice and the new commissioning role for GP consortia. We recommend that a core set of measures are developed nationally for use locally by practices interested in improving particular aspects of care. While in some areas there need to be national standards and data to support an assessment of quality across all practices, we believe there is also much greater scope for the use of local audit and qualitative analytical methods as a driver of quality improvement. Reliance on externally imposed quality measures, and the use of periodic large-scale measurement for comparison against benchmarks, have stifled alternative approaches that might encourage local ownership of problems and their solution.

While there is a role for a market in information intermediaries who can develop innovative ways of presenting data for different audiences, we do not think this should extend to the specification of indicators, standard setting or data collection, as these are better done nationally.

We found a crowded landscape of quality measurement and reporting initiatives. We conclude that there is a strong case for simplifying and rationalising these activities in order to reduce wasteful duplication of effort and avoid confusion. This would potentially reduce the growing burden on commissioners and general practices and create a more accessible, transparent and coherent picture of quality – one that is more easily understood both by professionals and the public. In the next chapter we present the results of our own assessment of the quality of care in general practice in England.

Key points

- Quality is complex and multidimensional. No single group of indicators is likely to capture all perspectives on, or all dimensions of, quality in general practice.
- Clinical outcomes are the ultimate measure of quality, but good outcomes can be achieved only if there is agreement on what they are and if appropriate structures and processes for achieving them are in place.

- Nationally available data sets provide a rich source of material for measuring quality in general practice, but they have significant gaps. Other methods of harnessing information from data held within general practices are needed to supplement national quantitative indicators.
- Not all aspects of general practice lend themselves to quantitative assessment. More diverse and creative approaches to quality assessment and improvement are needed, including the use of practice audit, peer review and qualitative research methods.
- Standards are required to ensure the quality and completeness of data recorded and reported by general practice.
- Standardised methods for defining and applying indicators are also needed, to ensure comparability between indicators in different areas or reported by different agencies.
- Audit and quality assurance at local or practice level is underdeveloped, but can play a significant role in ensuring that general practice delivers safe, high-quality care.
- Other data users, such as regulators, need to agree a standard set of indicators and not seek to request additional data returns direct from general practice.
- Greater transparency of information on quality is both welcome and appropriate, but the presentation of information needs to be tailored so that it can be used by clinicians for peer review, by patients for choice, and by those concerned with accountability.
- There are many different sources of information about quality in general practice. There is an urgent need for these to be rationalised in order to avoid duplication.

4 The current state of quality in English general practice

This chapter provides an overview of the quality of care in English general practice by summarising the key findings from the research commissioned by the inquiry. This is supplemented with analysis of routine data to illustrate the extent of variations in the quality of care between practices. The chapter also briefly examines how the quality of English general practice compares with the primary care services offered in other countries.

In this chapter, we set out to make an overall assessment of what the evidence tells us about the quality of care in English general practice, the key areas where improvements to the quality of care could be made, and the gaps in knowledge that need to be addressed.*

The evidence is presented within three sections:

- core services provided within general practice
- non-clinical aspects of general practice
- general practice as part of a wider system of care.

Each of these is discussed in turn.

Core services provided within general practice

This section looks at the evidence from what might be termed the ‘core’ services provided within a general practice. It addresses:

- the quality of diagnosis, referral and prescribing
- the management of acute illness
- the management of people with long-term conditions
- promoting health and preventing ill health.

Diagnosis

The research we commissioned found considerable variation in the quality of diagnosis within and between general practices (Foot *et al* 2010). The evidence for such variation is not routinely available, but comes primarily from published research using SEAs. Variation in the quality of diagnosis, and in delays and errors in diagnosis, can occur for a number of reasons, including:

- atypical presentations or unusual symptoms (Kostopoulou *et al* 2008; Bjerager *et al* 2006; Esmail *et al* 2004)
- non-specific presentations (Kostopoulou *et al* 2008; Jiwa *et al* 2004)
- the very low prevalence of the condition (Kostopoulou *et al* 2008; Esmail *et al* 2004)
- the presence of co-morbidity and pre-existing disease (Kostopoulou *et al* 2008; Bjerager *et al* 2006; Macdonald *et al* 2006; Calder *et al* 2000)

*For a more detailed review of the evidence, the original reports that were published during the course of the inquiry are available at www.kingsfund.org.uk/current_projects/gp_inquiry/index.html

- perceptual features, meaning the missing of visual or auditory signs of a condition (Kostopoulou *et al* 2008)
- a GP's lack of exposure to the condition (Abel *et al* 2008; Bjerager *et al* 2006; Blomgren and Pitkaranta 2003)
- limited knowledge of signs and symptoms (Abel *et al* 2008; Bellamy and Smith 2007; Kassirer and Kopelman 1989)
- low adherence to guidelines recommending what to look for in certain conditions (Bellamy and Smith 2007; Daly and Collins 2007; Esmail *et al* 2004)
- poor examination (Weingart *et al* 2009; Singh *et al* 2007)
- an over-reliance on patient symptoms and information, as opposed to signs and screening (Abel *et al* 2008)
- not doing a test or investigation (Evans *et al* 2007; Singh *et al* 2007; Chapman *et al* 2001; Calder *et al* 2000; Bouma *et al* 1999)
- general uncertainty in diagnostic methods (Blomgren and Pitkaranta 2003).

It is difficult to establish the scale of the problem. A 2003/4 analysis of 202 randomly selected claims in the Medical Protection Society and Medical Defence Union databases found that 50 per cent were a result of diagnostic delay (Esmail *et al* 2004). The major themes across the claims were:

- lack of knowledge and skills
- diagnostic difficulties in newborns and children
- an insufficient level of suspicion regarding signs and symptoms of rare but life-threatening diseases.

More recently, the National Awareness and Early Diagnosis Initiative for cancer reported significant quality issues arising from delays in cancer diagnosis (Department of Health 2009a). However, a separate significant events audit (SEA) into the diagnosis of lung cancer and cancers in teenagers and young adults found that diagnosis was appropriate in the majority of cases. The audit found many cases of exemplary practice, but in a small proportion (9 per cent) of the cases reviewed there was also evidence of missed opportunities for earlier diagnosis (Mitchell *et al* 2009).

Under QOF, practices are required to record whether they have undertaken a minimum of 12 significant event audits in the past three years. Overall, the majority of practices achieved this target, and less than 5 per cent of practices failed to meet this target. Achieving the QOF target appears to occur less often among smaller practices and practices in the most deprived communities, although this gap narrowed over time (*see* Figures 2 and 3, opposite).

Areas for quality improvement

There is little available evidence that allows us to assess the overall quality of diagnosis across general practice. However, the evidence suggests that variations in the quality of diagnosis exist and are influenced by many factors, including the different knowledge and skills of GPs. Given the nature of the presentations they face, effective diagnosis can remain a challenge even for the most knowledgeable and expert of GPs. Retrospective audit and SEA is essential to assess the scale of any problems with the quality of diagnosis.

Diagnosis: key points

- A variety of factors can lead to delays and errors in diagnosis, but there is not enough evidence to ascertain the scale of any such problems in general practice.
- Retrospective audit and significant event audit is essential to assess and improve the quality of diagnosis.

Figure 2 Percentage of practices undertaking at least 12 significant event audits by deprivation quintile of practice

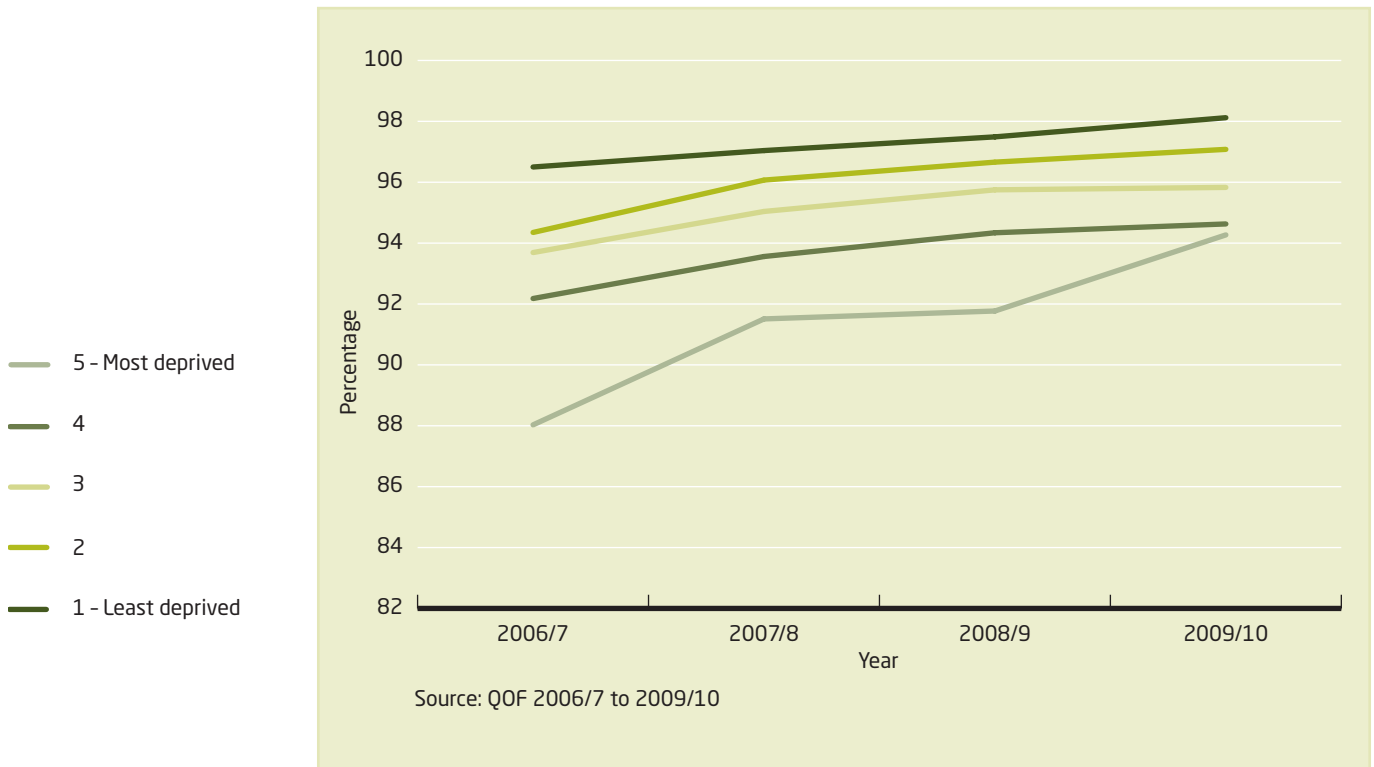
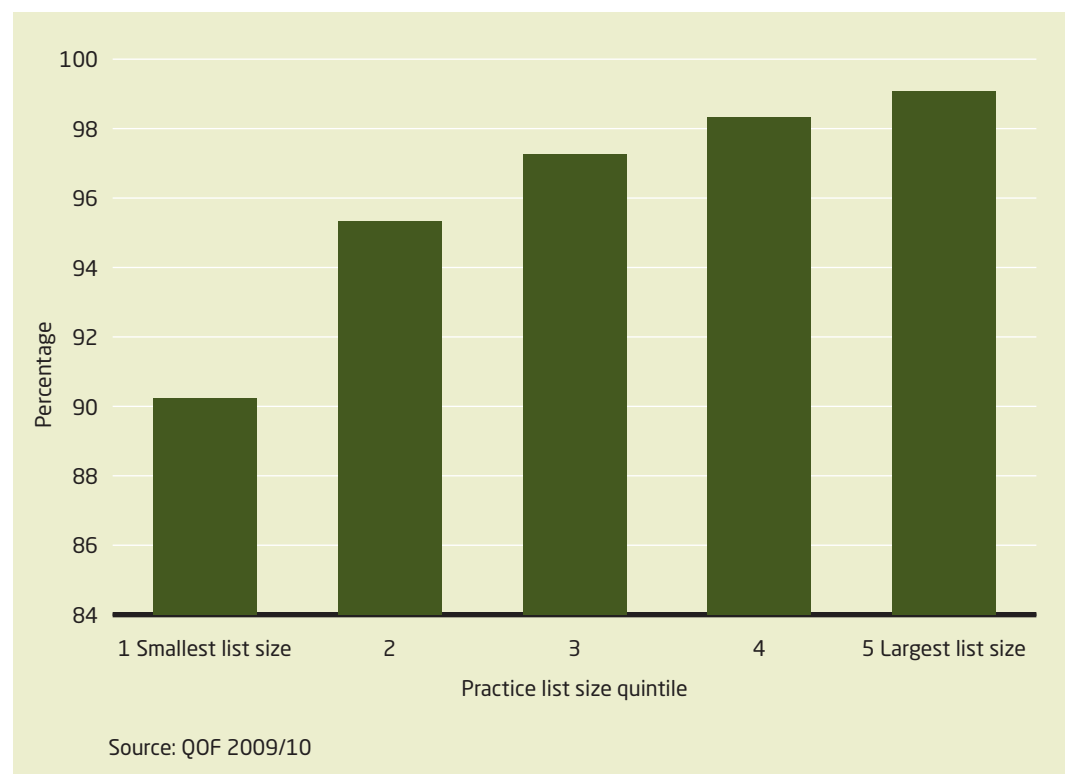


Figure 3 Percentage of practices undertaking at least 12 significant event audits by practice list size quintile, 2009/10



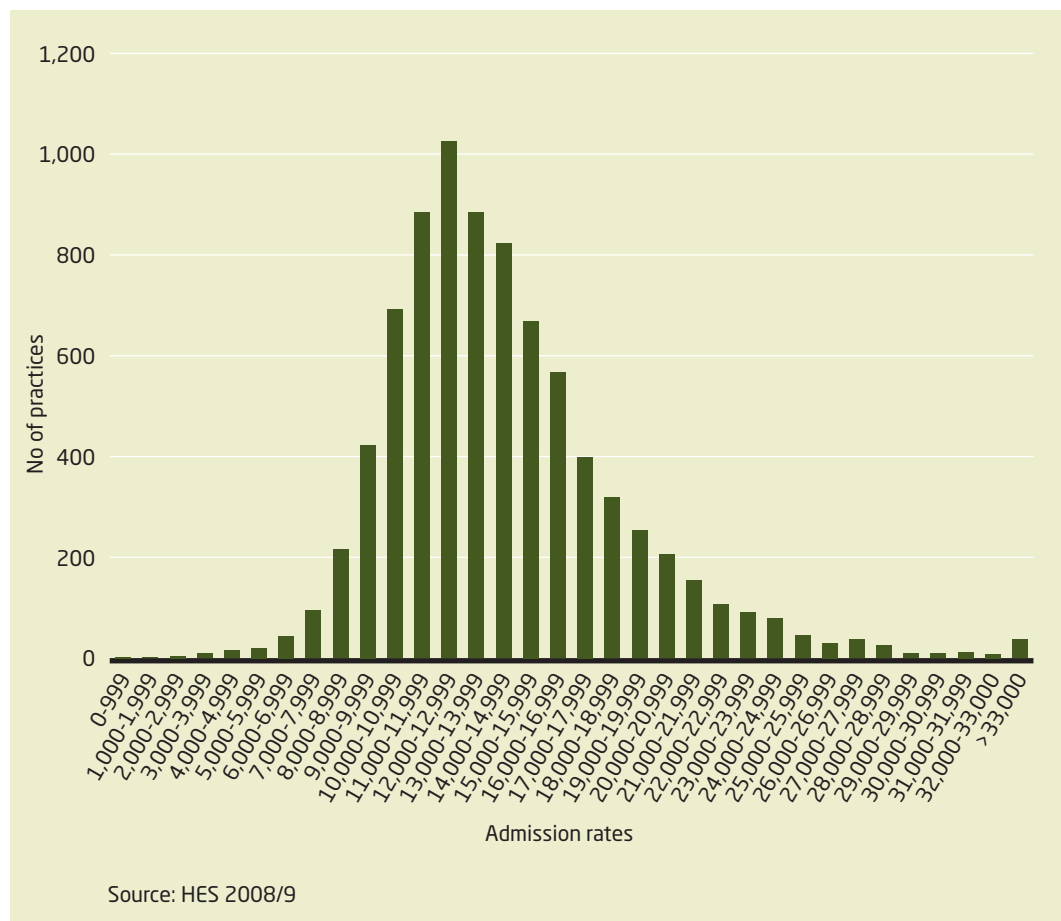
Referral

The research evidence presented to the inquiry shows that there are wide variations in the rate of referrals across GP practices (Foot *et al* 2010). For example, evidence from HES data on elective admissions to hospital shows that admission rates vary widely by practice across England (*see* Figure 4 below).

Studies have reported up to tenfold variation between the rates at which GPs refer to a particular specialty within a single area (Ashworth *et al* 2002; Creed *et al* 1990). Some of this can be accounted for by random variation (Moore and Roland 1989; Noone *et al* 1989) or by differing levels of morbidity between different groups of patients (O’Sullivan *et al* 2005). However, neither chance nor differing morbidity levels can account for all of the variation observed.

Despite widespread variations in referral rates, most research studies show that ‘inappropriate’ referral practice may account for only a relatively small amount of such variation (*see* Fertig *et al* 1993; Knottnerus *et al* 1990). Moreover, there appears to be little direct association between variation and subsequent patient outcomes.

Figure 4 Elective hospital admission rates* per 100,000 practice population, 2008/9



* Age- and sex-standardised rates

Foot *et al*'s (2010) research examined quality across the following four aspects of referral.

- **Necessity** Are patients referred as and when necessary?
- **Timeliness** Is this done without avoidable delay?
- **Destination** Are patients referred to the most appropriate destination first time?

- **Process** Is the process of referral a high-quality one, in the following respects:
 - Do referral letters contain appropriate information in an accessible format?
 - Are patients offered a choice of time and location of care and supported in making an informed decision?
 - Are the GP, patient and specialist able to construct a shared understanding of purpose and expectations of the referral?
 - Is pre-referral management adequate?

Each of these four aspects of referral is discussed below.

Necessity

The evidence suggests that a significant proportion of referrals made in general practice may be clinically unnecessary (*see* Table 4 below). However, there are also a number of patients (the precise number is often unknown) who need a referral but fail to receive one. Because of the trade-off between the sensitivity and specificity of the referral decision, it may be difficult to decrease unnecessary referrals without also decreasing necessary referrals.

Also, it should be noted that different stakeholders do not always agree on assessments of necessity. In a study of musculoskeletal referrals, 43 per cent of referrals rated as ‘probably unnecessary’ or ‘definitely unnecessary’ by the GP were rated as ‘definitely appropriate’ by the consultant (Roland *et al* 1991). Perhaps unsurprisingly, evidence suggests that patients almost always see their referral as necessary (Bowling and Redfern 2000).

Table 4: Summary of evidence on necessity of GP referrals

Study	Specialty	Key findings on quality
Jones and Stott (1994)	All referrals	35% of 168 referrals could have been managed in primary care
Roland <i>et al</i> (1991)	Musculoskeletal	23% of referrals to orthopaedics assessed by specialists as being unnecessary and more appropriate for primary care management. GPs considered 11% of referrals unnecessary
Patel <i>et al</i> (2000)	Cancer	28% of urgent referrals and 37% of non-urgent referrals assessed as unnecessary
Bowling and Redfern (2000)	General outpatients	95% of patients rated their referral as necessary
Forrest <i>et al</i> (2003)	Children	GPs refer young children more readily than older children with equivalent need, suggesting lower confidence levels and referral thresholds for younger children

Source: Foot *et al* 2010

Timeliness

The majority of GPs refer within recommended timeframes (Foot *et al* 2010). However, there is evidence of late GP referral in a number of areas – particularly for several kinds of cancer (Khattak *et al* 2006; Clark and Thomas 2005) (*see* Table 5 overleaf). An important component of cancer referral relates to the assessment of urgency, and there is a growing evidence base questioning GPs’ ability to do this accurately (*see* Potter *et al* 2007; Khawaja and Allan 2001).

However, it is important to distinguish between delays in referral and other sources of delay outside of the GP’s control. A study comparing the relative contribution of different sources of delay in treatment of psychosis found that only a small part of the overall delay can be attributed to delayed GP referral, compared to delayed help-seeking behaviour or delay within specialist services (Brunet *et al* 2007).

Table 5: Summary of evidence on timeliness of GP referrals

Study	Specialty	Key findings on quality
Roderick <i>et al</i> (2002) Levin (2000)	Nephrology	38% of 250 patients were referred late, and 45% of these late referrals were assessed as avoidable. Of direct referrals from GPs, 16% were late, and 36% of these were avoidable 20-50% patients starting dialysis are late referrals
Brunet <i>et al</i> (2007)	Mental health (psychosis)	9% of overall delay can be attributed to delayed GP referral, compared to delayed help-seeking behaviour or delay within specialist services
Clark and Thomas (2005) Khattak <i>et al</i> (2006) Potter <i>et al</i> (2007) Khawaja <i>et al</i> (2001)	Cancer	8%-14% of GP referrals to soft-tissue sarcoma unit deemed too late 38% of patients with colorectal cancer not referred in 6 weeks Specificity of two-week wait referrals has declined each year from 1999 to 2005. 90% of two-week wait patients have benign disease 50% of two-week wait referrals assessed by specialists as either inappropriate or non-urgent
Bestall <i>et al</i> (2004)	Palliative care	Often too late at crisis point when hospice admission impossible

Source: Foot *et al* 2010

Destination

Identifying the most appropriate destination for a referral is important, since it has clear implications for patient experience, clinical outcomes and resource use (Johnson *et al* 2008). Evidence suggests that, within particular areas, there is scope for improvement on this dimension of quality (*see* Table 6, below). Getting the right destination appears to be more challenging in the case of medical specialties rather than surgical specialties (Jenkins 1993), and can be a particular issue for musculoskeletal referrals, with a lack of clarity over whether patients are best sent to orthopaedics, rheumatology, physiotherapy or elsewhere (Speed and Crisp 2005). Several studies look at the proportion of referrals to secondary care that could have been seen in community settings.

The evidence suggests particular opportunities for diversion in the case of dermatology and musculoskeletal referrals (Foot *et al* 2010).

Table 6: Summary of evidence on destination of GP referrals

Study	Specialty	Key findings on quality
Jenkins (1993)	General outpatients	7% of referrals to medical specialties and 2% of referrals to surgical specialties assessed as having been referred to the wrong specialty
Clews (2006) Salisbury <i>et al</i> (2005)	Dermatology	Around 50% of referrals could have been treated in community settings 49% of referrals could have been treated by a GP with a special interest (GPwSI)
Speed and Crisp (2005)		27% of referrals to orthopaedics were more appropriate for rheumatology Around 50% of referrals could have been treated in community settings
Gilbert <i>et al</i> (2005)	Respiratory medicine	23-58% of referrals could have been treated by a GPwSI
Coulston <i>et al</i> (2008)	Hernia	84% referred to general surgeon or as an open referral - only 14% referred to hernia specialist

Source: Foot *et al* 2010

Referral process

The referral process is examined in terms of four separate factors:

- referral letters
- shared expectations of referral
- patient choice
- pre-referral management.

Table 7: Summary of evidence on quality of referral letters

Content item	Study	Specialty	% of letters with missing, incorrect or unsatisfactory information
Reason for referral	Jenkins (1993)	General outpatients	8
	Bodek <i>et al</i> (2006)	Cardiology	2
	White <i>et al</i> (2003)	All specialties	0
	Taylor and Markar (2002)	Learning disabilities	9
GP expectations of referral	Bodek <i>et al</i> (2006)	Cardiology	79
	Jenkins (1993)	General outpatients	12
Diagnosis	Bodek <i>et al</i> (2006)	Cardiology	68
	White <i>et al</i> (2003)	All specialties	50
	Mitchell <i>et al</i> (2008)	Emergency care	13
	Speed and Crisp (2005)	Musculoskeletal	63
	Mead <i>et al</i> (1999)	Emergency care	25
	White <i>et al</i> (2003)	All specialties	50
	Burbach and Harding (1997)	Mental health	41
	Taylor and Markar (2002)	Learning disabilities	17
Signs and symptoms	Patel <i>et al</i> (2008)	Vascular	90
	Burbach and Harding (1997)	Mental health	53
	Taylor and Markar (2002)	Learning disabilities	24
Examination results	Molloy and O'Hare (2003)	Medical outpatients	72
	Speed and Crisp (2005)	Musculoskeletal	68
	Mead <i>et al</i> (1999)	Emergency care	42
	White <i>et al</i> (2003)	All specialties	46
Investigation results	Molloy and O'Hare (2003)	Medical outpatients	32
	Speed and Crisp (2005)	Musculoskeletal	58
	Taylor and Markar (2002)	Learning disabilities	71
Details on prior management	Speed and Crisp (2005)	Musculoskeletal	41
Medical history	Jenkins (1993)	General outpatients	28
	McNeill (2008)	Stroke	9
	Mead <i>et al</i> (1999)	Emergency care	20 (recent)
		Prostatism	31 (past)
Elwyn <i>et al</i> (1999)		50	
Current/past medication	McNeill (2008)	Stroke	12
	Jenkins (1993)	General outpatients	26
	Mead <i>et al</i> (1999)	Emergency care	28
	Burbach and Harding (1997)	Mental health	66
	Elwyn <i>et al</i> (1999)	Prostatism	63
	Taylor and Markar (2002)	Learning disabilities	31
Relevant psychosocial details	Jenkins (1993)	General outpatients	21
	McNeill (2008)	Stroke	63
	Mead <i>et al</i> (1999)	Emergency care	74
Known allergies	Jenkins (1993)	General outpatients	12
	Mead <i>et al</i> (1999)	Emergency care	84
Assessment of urgency	Patel <i>et al</i> (2008)	Vascular	66
	Coxon <i>et al</i> (2003)	Cancer	87
	Burbach and Harding (1997)	Mental health	81
Information given to patient	White <i>et al</i> (2003)	All specialties	98

Source: Foot *et al* 2010

Each of these is discussed in turn.

Referral letters

There is strong evidence suggesting that quality could be improved for at least a substantial minority of letters (see Table 7 on p 51). In one survey, 38 per cent of specialists in outpatient departments reported that referral letters contain inadequate information ‘fairly often’ or ‘very often’ (Bowling and Redfern 2000). In a study examining emergency referrals, 17 per cent of referral letters were assessed as containing ‘inadequate’ information by the admitting doctor (Mead *et al* 1999).

Meanwhile, several studies have found that a proportion of referral letters do not contain sufficient detail to allow specialists to make reliable decisions about prioritisation and triage (Patel *et al* 2008; Webb and Khanna 2006) or to decide on the most appropriate destination for the referral (Speed and Crisp 2005).

Shared expectations of referral

Evidence suggests that GPs, consultants and patients often do not share a common understanding of whether a referral is primarily for diagnosis, investigation, treatment or reassurance (see Table 8 below). There is particular scope for mismatch between patients’ expectations and those of their GP in the case of referrals for chronic health problems, stigmatising conditions, problems of psychological or social origin, and mental health (Broomfield *et al* 2001; Preston *et al* 1999).

Table 8: Summary of evidence on shared understanding of purpose

Study	Specialty	Key findings on quality
Grace and Armstrong (1986)	11 medical and surgical specialties	In 67% of cases, there was no shared understanding of reason for referral between GP, patient and consultant
Molloy and O’Hare (2003)	Medical outpatients	16% patients did not understand reason for referral
Broomfield <i>et al</i> (2001)	Mental health	Referring GP and recipient psychologist disagreed on ‘reasons for care’ in 40% of cases. One-third of anxiety referrals and half of depression referrals were treated differently than envisaged by GP
Watson <i>et al</i> (2001)	Cancer genetics	Common misconceptions among GPs - 31% thought that patient would have genetic testing. In reality this is rarely performed.

Source: Foot *et al* 2010

Patient choice

There is little evidence as to whether GPs support patients to choose a hospital that fits with their preferences, but what evidence does exist shows that many patients were not offered a choice, did not discuss options with their GP, and did not attend the hospital they wanted (see Table 9 opposite).

Table 9: Summary of evidence on patient choice

Study	Specialty	Key findings on quality
Department of Health (2009) Green <i>et al</i> (2008)	Offering choice	47% of patients recalled being offered a choice of provider. Variation by PCT ranged from 27% in Newcastle PCT to 80% in Solihull PCT 41% of patients in one hospital's outpatient department recalled being offered a choice
Department of Health (2009)	Awareness of choice	50% of patients aware that they had a choice of hospital before visiting their GP
Department of Health (2009)	Patients attending the hospital they wanted	89% of patients who were offered choice went to the hospital they wanted, compared to 46% of those who were not offered choice
Hansard (2009-10)	Choose and Book usage	53% of GP referrals made through Choose and Book
Department of Health (2009)	GP support	41% of patients discussed which hospital they should go to with their GP

Source: Foot *et al* 2010

Pre-referral management

Several studies suggest that for a proportion of patients it would be beneficial if GPs performed more thorough investigations or examinations before making the decision to refer, or started preliminary treatment in primary care (*see* Table 10 below).

Table 10: Summary of evidence on pre-referral management

Study	Specialty	Key findings on quality
Bowling and Redfern (2000) Jenkins (1993)	General outpatients	In 22% of referrals, specialists reported that the GP could have done more before referral. 42% of specialists said that GPs do not perform adequate pre-referral investigation or treatment Referral letters for referrals assessed as inappropriate all showed evidence of misinterpretation of clinical symptoms/signs or investigation results
Molloy and O'Hare (2003)	Medical outpatients	Inadequate pre-referral investigations performed in 55% of cases. Where performed, results were not enclosed in 32%. In 61% of cases treatment could have been started before referral, but in 36% of these cases this was not done
Bodek <i>et al</i> (2006)	Cardiology	56% of patients received neither basic investigation nor treatment before referral

Source: Foot *et al* 2010

Areas for quality improvement

There are wide variations in the rate of referrals across GP practices. This variation in referral rates is influenced by a range of factors. These include those that general practice cannot influence directly (for example, related differences in case-mix, prevalence of co-morbidities, and patient characteristics such as age and sex). However, other factors could be addressed, including variation that is attributable to practice characteristics. These include practice size, characteristics of the wider health economy (such as where different services are available), and GP attitudes to risk and other cognitive factors. In particular, there is scope for improvement in a number of areas of referral quality, including:

- the clinical necessity of referrals
- whether referrals are made in a timely manner (especially in cancer care)
- the ability to get patients to the right destination of care following referral
- improving the quality of referral letters
- enabling patient choices
- involving patients in decisions about referral options.

To support quality improvements in these areas, general practice could consider a number of approaches. For example, in terms of the necessity, timeliness and destination of referral, local audits could help to establish compliance with best-practice guidelines.

However, it is important to exercise caution in interpreting the kind of data that would be produced from such an exercise. Judgements around necessity and destination often depend on context, and assessment can vary from one stakeholder to the next. Measures of timeliness need to distinguish between delays over which the GP has some control versus delay that is driven by other factors. For some surgical specialties, such as orthopaedics, an alternative would be to use conversion rates in secondary care as a measure of referral necessity and appropriateness of referral destination. Similar caveats around interpretation would apply.

Referral processes may be more easily subjected to approaches that might support quality improvement. For example, the quality of referral letters could be assessed in terms of inclusion of key details. This could be used to provide GPs with a useful overview of how their referral letters compare to those of their peers. However, in order to use the data collected as a measure of quality the list would need to be adapted for different types of referral. Data would need to be triangulated from GPs, consultants and patients in order to measure the extent to which understandings of the referral purpose are shared between the three groups. Patient-reported data could also be used to measure satisfaction with the provision of choice at the point of referral. However, collection of such data may pose an unacceptable administrative burden.

Referrals: key points

- There are wide variations in the rate of referrals between practices. The evidence suggests that a significant proportion of referrals made in general practice may not be clinically necessary. However, the appropriateness of a referral is specific to the context and it may be difficult to decrease unnecessary referrals without also decreasing necessary referrals.
- There is scope for improvement in other aspects of the quality of referrals:
 - ensuring timely referrals are made (especially in cancer care)
 - the quality of referral letters
 - getting patients to the right destination of care
 - involving patients in decisions about referral options.
- General practices could adopt a range of possible approaches to promote quality improvement in referral practices through local audits and patient-reported data. However, they would need to collect and interpret such data carefully.

Prescribing

The report to the inquiry on the quality of prescribing and prescriptions management by Duerden *et al* (2011) documented how the use of drugs and appliances ‘on prescription’ has been increasing rapidly in England. Between 1997 and 2007 prescribing costs in general practice rose by 60 per cent, to £8 billion – comprising nearly 10 per cent of the overall NHS budget (National Audit Office 2007). Variations in the levels of prescribing between general practices are common, and widely reported, but studies have not explained well the large differences in prescribing between practices.

The consequences of such variation have significant implications for the cost-effectiveness and the quality of care. Drug wastage is significant, and the estimated cost to the NHS

was at least £300 million in 2009 out of an overall drugs bill of £8 billion (York Health Economics Consortium 2010). This figure includes £90 million worth of unused prescription medicines stored in individuals' homes at any one time, £110 million returned to community pharmacies over the course of a year, and up to £50 million worth of NHS supplied medicines that are disposed of annually by care homes.

We consider this issue by examining:

- patient safety
- medicines management
- ensuring cost-effectiveness.

Patient safety

Medication errors in general practice occur in up to 11 per cent of prescriptions, mainly due to errors in dosage (Sanders and Esmail 2003). The ability to prevent, review and act on medication errors is an important aspect of the quality of prescribing in general practice. However, there is evidence to suggest that inadequacies in patient monitoring within general practice account for around one-quarter of preventable medication-related hospital admissions. Medication errors appear to be particularly high for certain groups of patients, including:

- frail elderly people
- people with multiple long-term conditions
- people with acute problems
- patients who do not follow medication guidance.

Medicines management

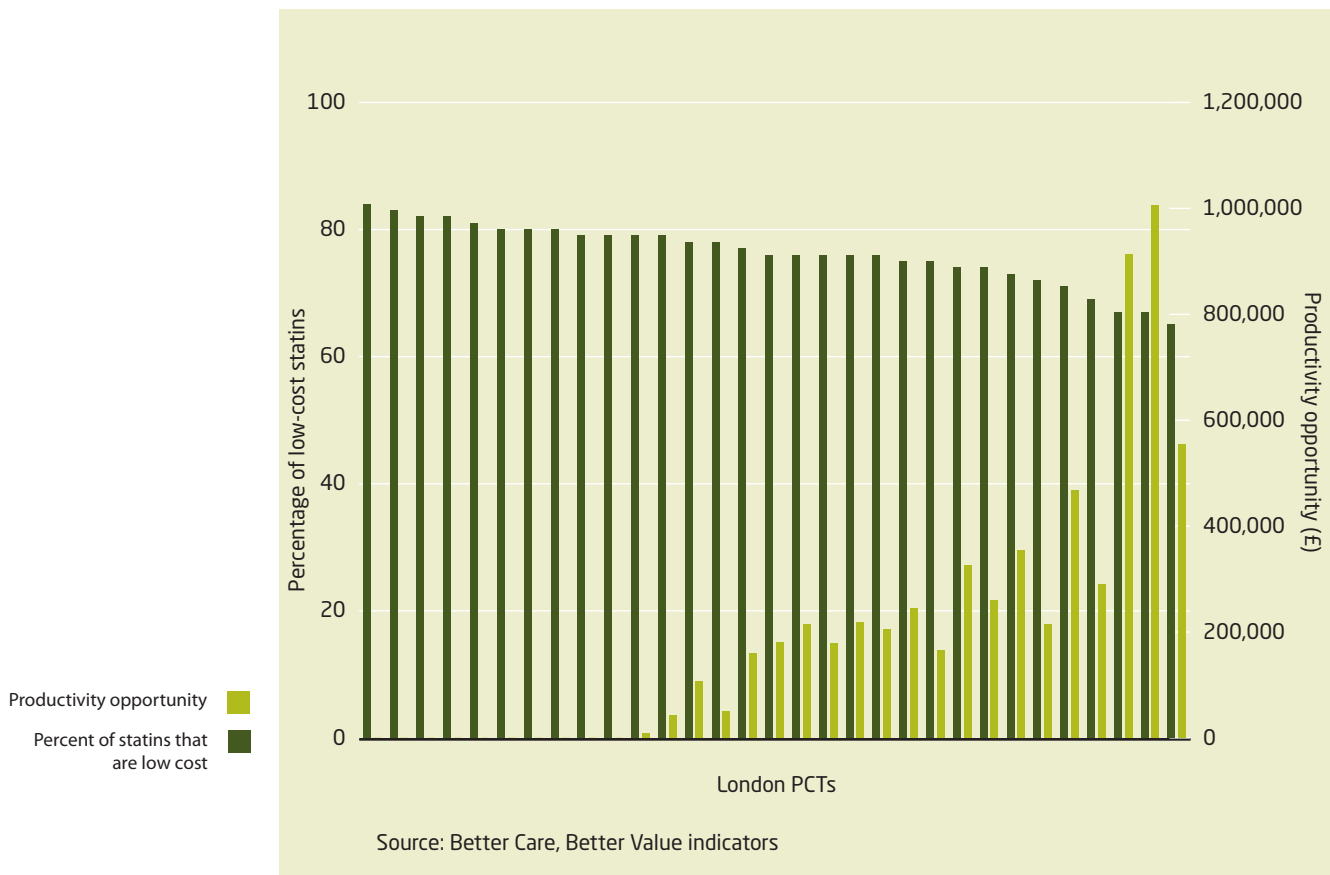
A Cochrane review on the systems and strategies that general practice uses to support adherence to medication regimes found that even the most effective interventions did not lead to major improvements in adherence (Haynes *et al* 2008). For example, between one-third and one-half of all medication prescribed for long-term conditions is not taken as recommended (Nunes *et al* 2009). The prevalence of preventable medicines-related hospital admissions has been estimated at 4–5 per cent of all admissions (Pirmohamed *et al* 2004).

General practice is incentivised under QOF to undertake a medication review, which enables them to meet a series of standards entitled Medicines 10, Medicines 11 and Medicines 12. The review entails:

- meeting a prescribing adviser annually and agreeing up to three actions related to prescribing and subsequently providing evidence of change (Medicines 10)
- demonstrating that medication reviews are recorded in the notes of all patients being prescribed four or more repeat medicines in the preceding 15 months (Medicines 11 – standard 80 per cent or more)
- demonstrating that a medication review is recorded in the notes in the preceding 15 months for all patients being prescribed repeat medicines (Medicines 12 – standard 80 per cent or more).

Most practices in the NHS in England meet – and, indeed, outperform – these standards, with 94.1 per cent of practices achieving Medicines 10, 97.6 per cent Medicines 11 and 95.8 per cent of practices achieving Medicines 12 in 2009/2010.

Figure 5 Percentage of statins prescribed that are low cost, with associated potential saving, London PCTs, 2008



Ensuring cost-effectiveness

English general practice has one of the highest rates of generic prescribing in the world, at 83 per cent in 2008 (Duerden *et al* 2011). However, it has been estimated that £200 million could be saved if the use of statins (and a number of other drugs) could be standardised to the 25 per cent most efficient practices (National Audit Office 2007). An illustration of the current variation in the percentage of low-cost statins prescribed across London PCTs, and the potential productivity opportunity for standardising statin prescriptions, is shown in Figure 5 above (NHS Institute for Innovation and Improvement 2006–11).

As with referral rates, observed variations in prescribing need to be adjusted in order to take account of the practice population using an appropriate case-mix adjustment. For example, Omar *et al* (2008) used patients’ clinical case-mix to explain variation in general practice prescribing. Their study showed that only 10 per cent of the variation in prescribing could be explained through factors such as age and sex, but that 80 per cent of the variation could be explained when including morbidity as a predictive variable. However, they concluded that the use of ‘patient-based measures’ (for example, the nature of the therapeutic area for which the drugs were prescribed) would be needed to better explain both the appropriateness and efficiency of prescriptions (Omar *et al* 2008).

Areas for quality improvement

There is evidence to suggest that the quality and cost-effectiveness of prescribing practice could be improved in a number of areas, including a focus on reducing medication errors, supporting medications management, and in standardising drug prescriptions for

certain treatments. This appears to be particularly true for the more vulnerable cohorts of patients such as frail older people and those with long-term conditions.

Prescribing: key points

- Variation in the level of prescribing between general practices is common and widely reported. Much of the practice-level variation in prescribing results from differences in the clinical case-mix of patients and socio-economic factors.
- The consequences of variation in prescribing have significant implications both for the cost-effectiveness of care and for its quality. Drug wastage costs the NHS more than £300 million a year.
- There are opportunities for quality improvement to address inefficient or inappropriate prescribing – for example, through reducing medication errors, improving adherence to what is prescribed, and standardising prescribing practices for certain treatments, such as the prescription of low-cost statins, probably saving more than £200 million.

The management of acute illness

Acute illnesses are illnesses of short duration. There are a number of categories of acute illness, including:

- acute minor illness (for example, skin rashes)
- acute major illness, which is self-limiting and requires treatment (for example, upper respiratory tract infections)
- acute exacerbation of existing major illness (such as myocardial infarction or diabetic coma)
- acute presentation of a previously undiagnosed condition, such as epilepsy or stroke or an acute emotional or psychological problem (Jones *et al* 2010).

A key aspect of assessing the quality of care of acute illness in general practice is the appropriateness and effectiveness of the diagnosis and the management distinctions that are made between these four categories.

Existing research evidence suggests that the misdiagnosis of acute illness is prevalent as a result of the diffuse presentations encountered in general practice (Kostopoulou *et al* 2008). Despite some evidence to suggest that significant event analysis can have a positive effect (for example, see Bowie *et al* 2008), monitoring the quality of acute care in general practice is poor.

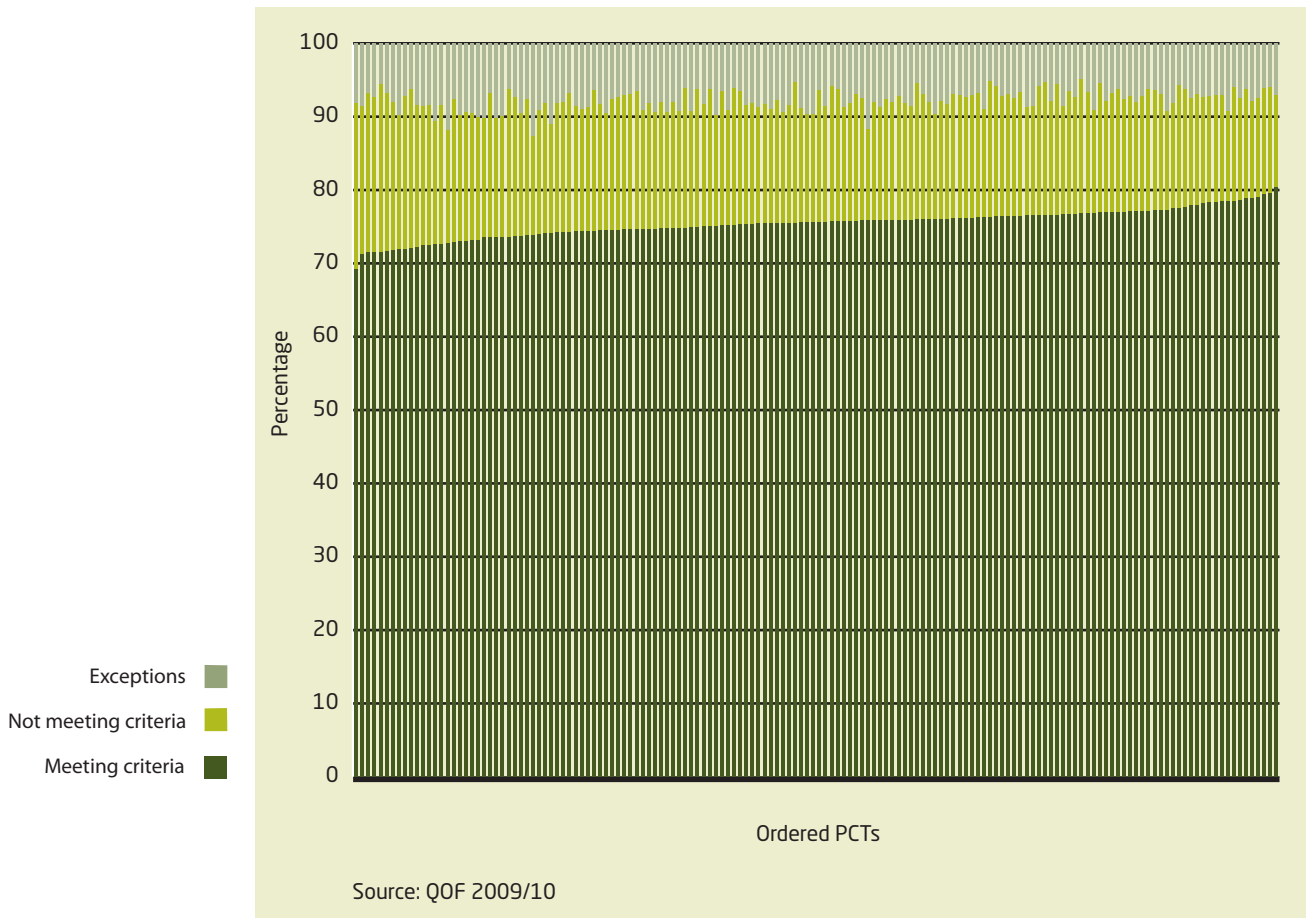
This section considers acute illness within three key areas:

- cancer
- cardiovascular disease
- stroke.

Cancer

The research commissioned by the inquiry examined referral data for suspected cancers from 51 practices in Lambeth PCT. This work revealed wide variance in the rates of two-week rule referrals, from 0.72 to 25.1 per 1,000 patients, and a 35-fold difference between practices with the lowest rates and those with the highest. The range between bottom and top quartiles was also wide, ranging from 5.7 to 12.3 per 1,000 patients. The percentage of cancer diagnoses among two-week referrals also ranged from 0 per cent to 24.2 per cent.

Figure 6 Percentage of patients with coronary heart disease whose last measured total cholesterol is 5mmol/l or less by PCT, 2009/10



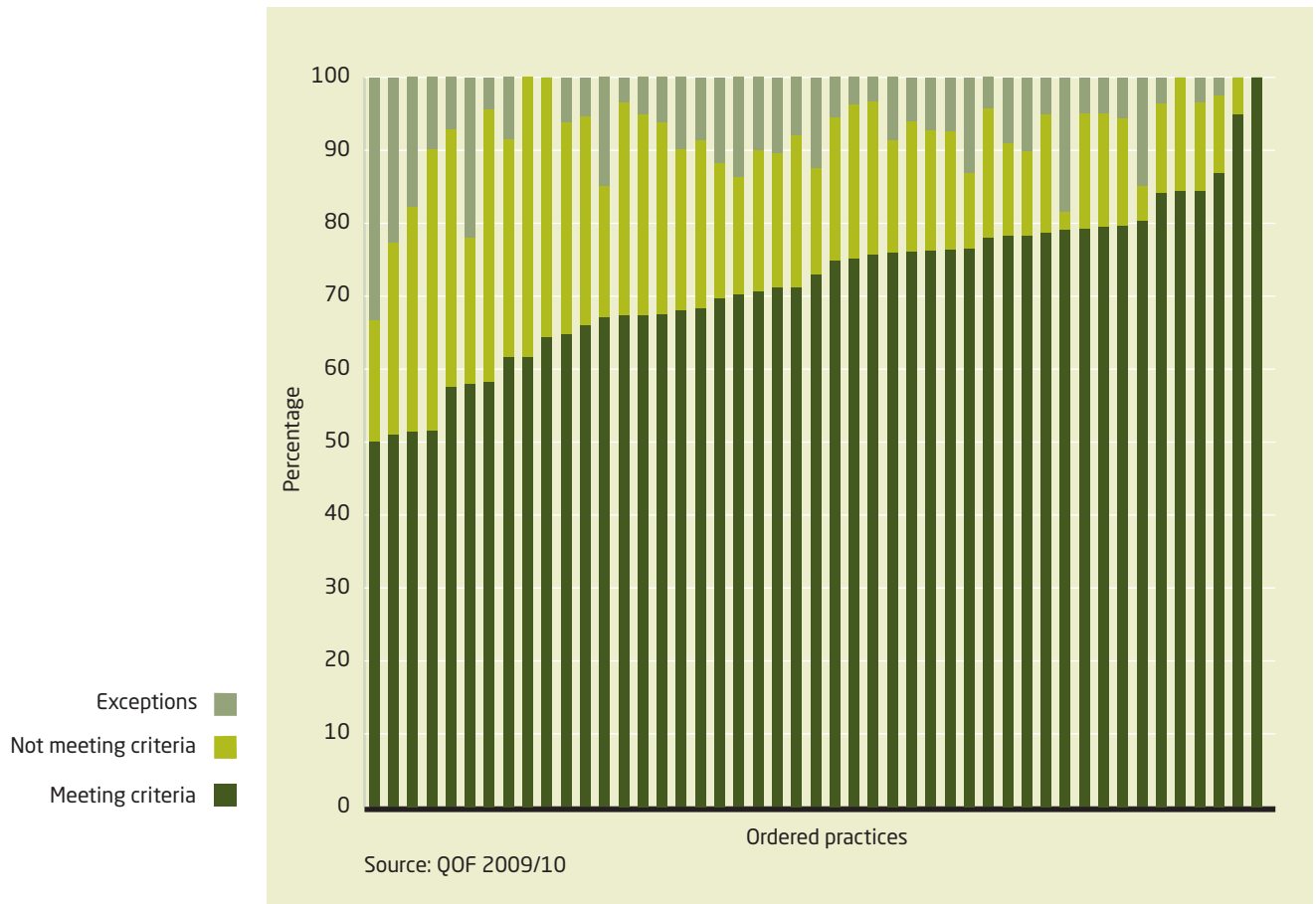
Jones *et al* (2010) concluded that if these findings were found to hold true across general practice as a whole, then those with exceptionally low rates of cancer diagnoses appear to be at risk of generating unjustifiable anxiety in patients referred and overburdening services. Conversely, those making referrals with exceptionally high rates of cancer diagnoses may be at risk of becoming insensitive to the possibility of cancer generally. In 2009/10, the National Audit Office (2010a) reported an eight-fold variation in the rate at which general practices in England urgently referred patients with suspected symptoms of cancer to specialists. In total, more than 900,000 people with suspicion of cancer were referred by GPs to specialists of which 11 per cent were subsequently diagnosed with cancer (National Audit Office 2010).

The National Oesophago-Gastric Cancer Audit 2009 annual report found significant regional variations in England and Wales in the pattern of referral from general practice to hospital for patients with oesophago-gastric cancer (Royal College of Surgeons *et al* 2009). One-third of patients diagnosed with stomach or oesophageal cancer were initially sent to hospital by their GP using non-urgent referral pathways – possibly resulting in late diagnosis and poorer survival chances. The proportion of patients who were not referred urgently ranged from 13 per cent to 66 per cent among the 30 regional cancer networks in England and Wales.

Cardiovascular disease

Analysis of QOF data shows that on average there is little variation in the proportion of the registered patients with coronary heart disease who have good cholesterol control, with

Figure 7 Percentage of patients with coronary heart disease whose last measured total cholesterol is 5mmol/l or less by practices in a low-performance PCT, 2009/10



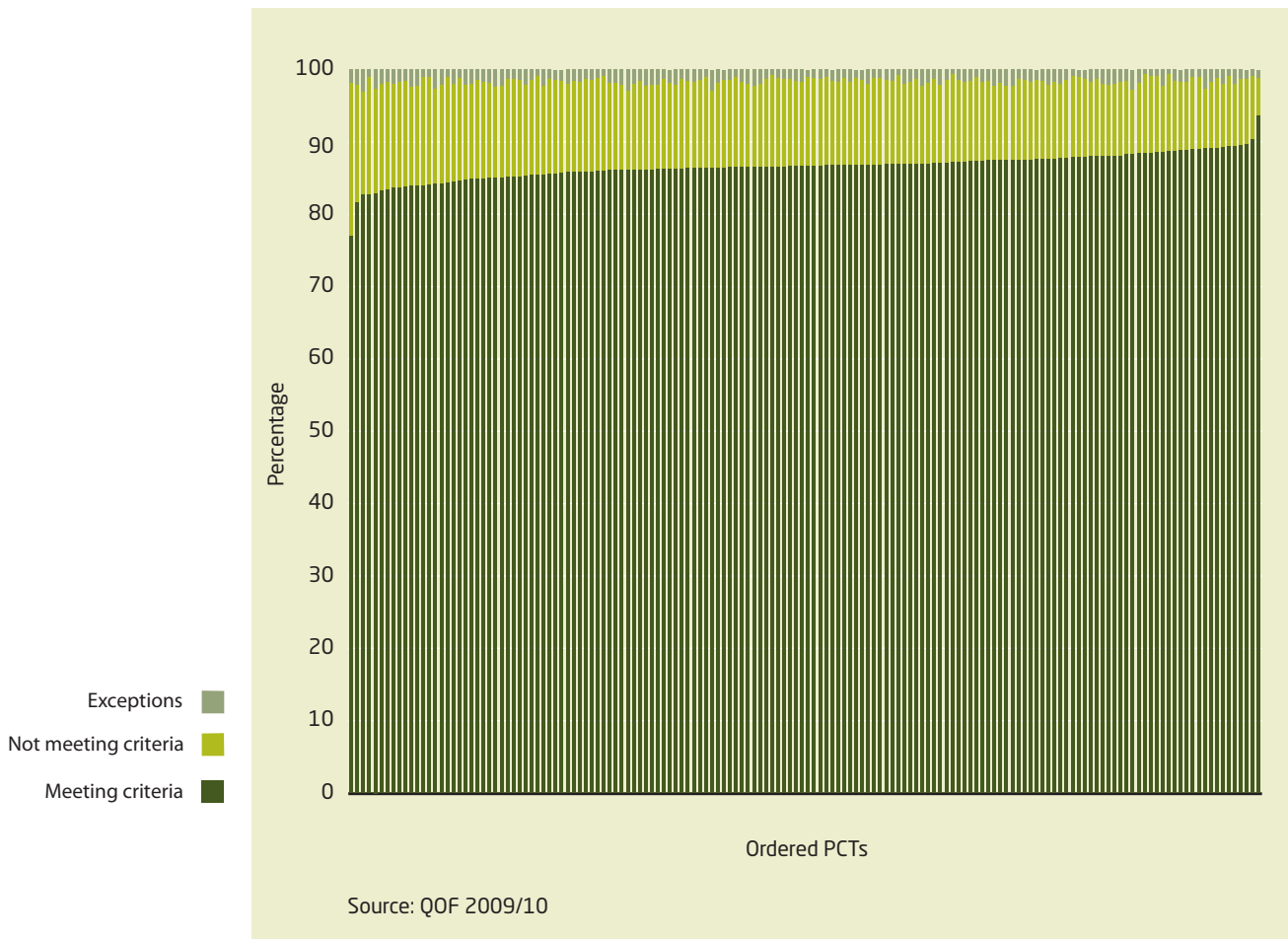
practices in PCTs on average meeting the target of 5mmol/l or less for 70–80 per cent of all diagnosed patients, including those who were exception reported (*see* Figure 6 opposite).

Average performance masks wide variation within areas. Within one of the low-performing PCTs, half of practices were achieving the target for 70 per cent or less of all diagnosed patients (*see* Figure 7 above), and a few practices had exception rates of 20 per cent or more.

Further evidence suggests that GPs are aware of guidance related to statins and the secondary prevention of cardiovascular disease, but that they do not always carry out best-practice recommendations (Boyce *et al* 2010b). The increased use of statins has been an achievement – but it is variably deployed. There are higher rates of statin prescribing in general practices that serve deprived populations, but lower prescribing volume in practices with higher proportions of older people and members of black and minority ethnic (BME) groups (Ashworth *et al* 2007).

The evidence also suggests that access and referral to (and uptake and completion of) cardiac rehabilitation is severely constrained (Bethell *et al* 2008). People from lower socio-economic groups are less likely to participate in cardiovascular screening, thus affecting treatment options and outcomes (Soljak *et al* 2009; Adams *et al* 2004). Evidence for sex and age differences in the care of patients with stroke has also suggested a need to target women and older people for secondary prevention therapy (Simpson *et al* 2005).

Figure 8 Percentage of patients with a history of TIA or stroke in whom the last blood pressure reading is 150/90 or less by PCT, 2009/10



Stroke

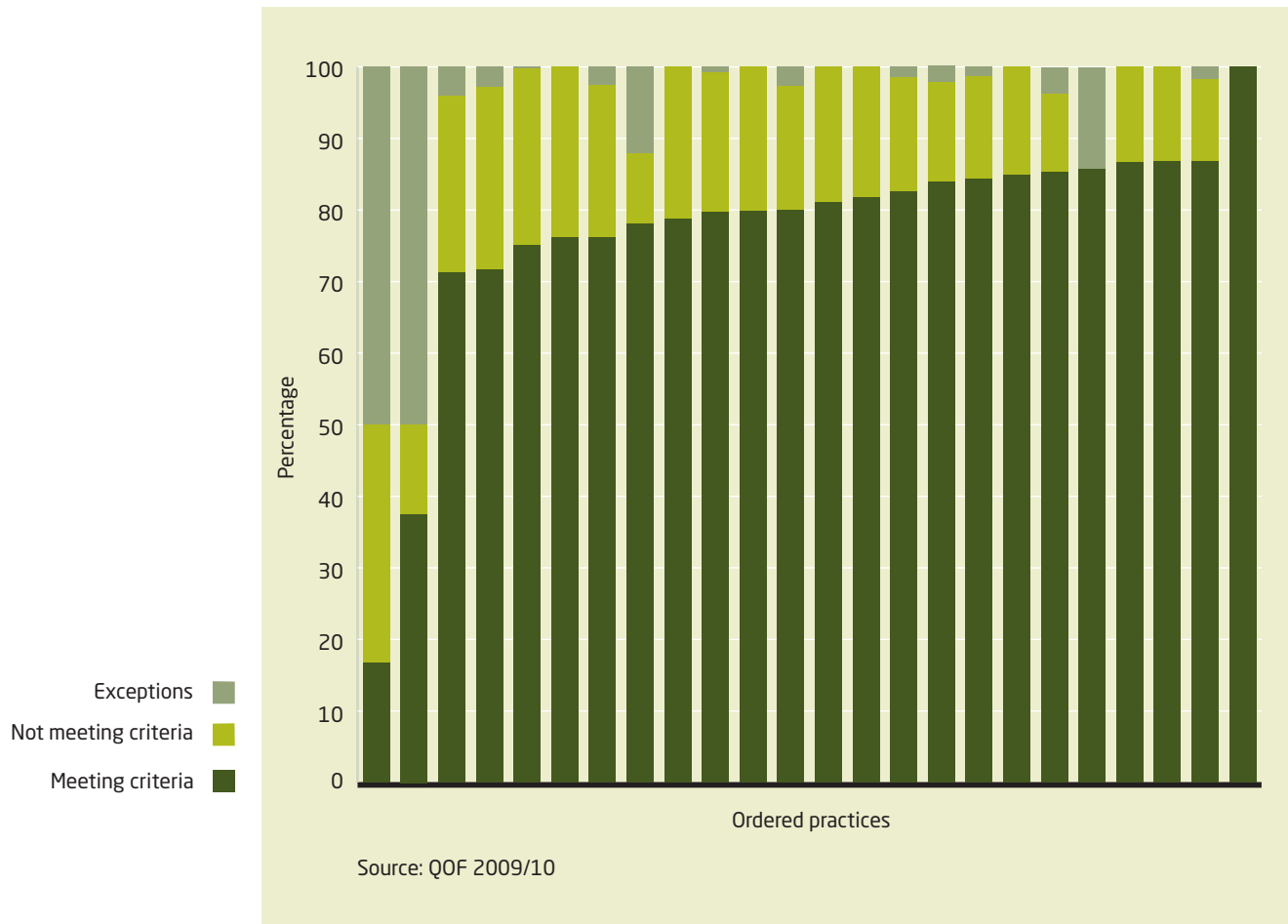
Similar analysis shows that there is some variation in the care of patients who experience a stroke or transient ischaemic attack (TIA). On average, at PCT level, for between 80 and 90 per cent of these patients on GP registers practices achieved the target of a last blood-pressure reading of 150/90 or less (*see* Figure 8 above). However, again this masks considerable variation in performance between practices. One practice had exception reported 50 per cent of patients with an achievement rate of under 20 per cent for all diagnosed patients. This compares with no-exception reporting and a 100 per cent achievement rate in another practice in the same PCT (*see* Figure 9 opposite).

Looking at such variations locally, it will be important to consider whether such outliers are due to data error or some other factor.

Areas for quality improvement

The evidence presented to the inquiry relating to the management of acute illness uncovered variation in certain aspects of acute illness management, and revealed a greater potential for misdiagnosis in general practice for people with acute illness. However, there is little available evidence to assess the extent of the problem, and more needs to be done to monitor the quality of acute care. As well as using value-for-money indicators and carrying out peer-reviewed audits of referral letters and case notes, measuring the quality of acute illness management requires the analysis of the data that is routinely collected in primary care.

Figure 9 Percentage of patients with a history of TIA or stroke in whom the last blood pressure reading is 150/90 or less by practices in a low-performance PCT, 2009/10



It is important that practices look at the health status of those patients for whom the target is not being met and at the reasons for the exception. If these patients are not in contact with the practice, or are not taking medication as directed, it is important that the practice makes efforts to understand why this is the case and adapts its services to meet these needs. If these patients experience deterioration in their health, or go on to have an acute coronary episode, then for these patients the care provided by general practice cannot be considered high quality.

Management of acute illness: key points

- As with other conditions, appropriate and effective diagnosis and management are key aspects of high-quality care. The evidence suggests that GPs are more likely to make a misdiagnosis of acute illness compared to non-acute illness.
- There is evidence of between-practice variation in performance – for example, in the management of cholesterol in people with coronary heart disease and the management of blood pressure for those who have experienced a stroke or TIA.
- More needs to be done to monitor the quality of acute care – for example, through peer-reviewed audit of referral letters and case notes, and by reaching out to those patients whose acute illness is not being managed.

Managing long-term conditions

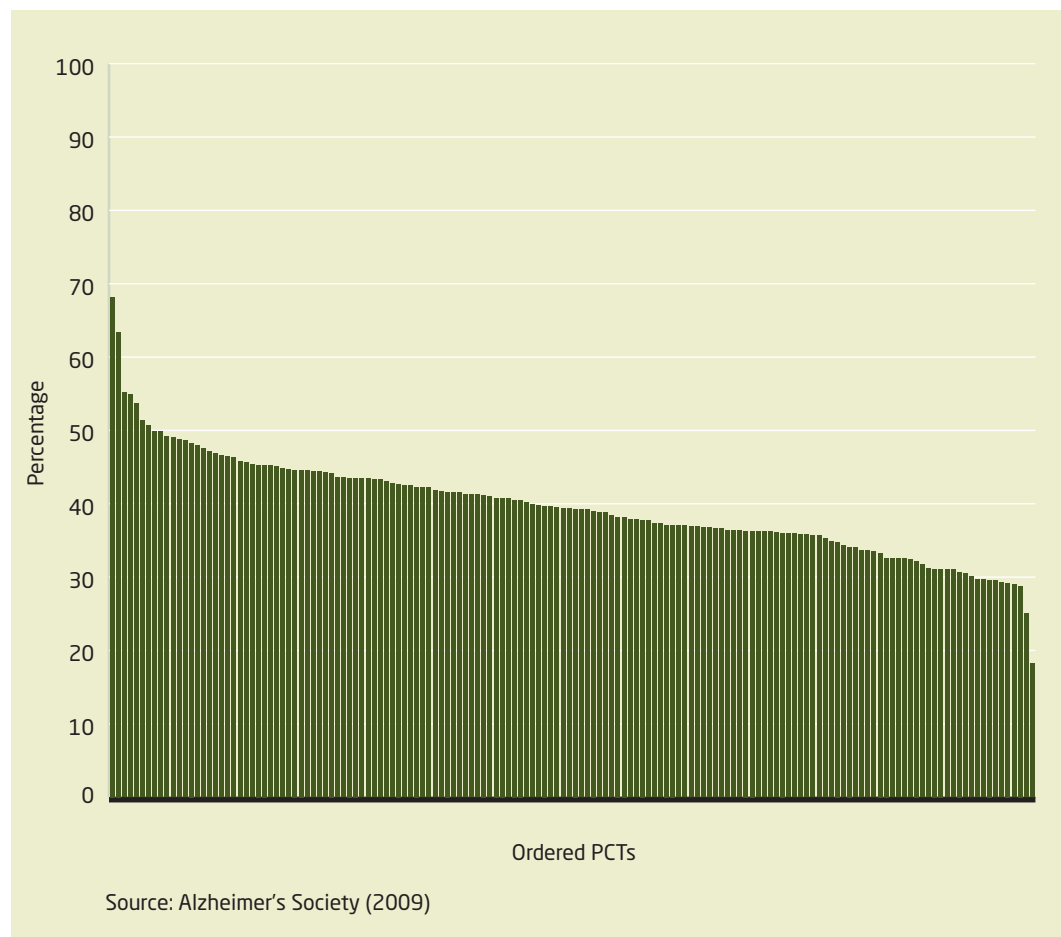
General practice plays a core role in the management of patients with long-term conditions, including long-term mental health problems. To examine the quality of care in long-term conditions management the inquiry commissioned work that focused on examining the following specific areas: arthritis, dementia, diabetes and mental health (Goodwin *et al* 2010a). The research also looked specifically at multiple co-morbidities, given their prevalence, and at the potential for general practice to be more proactive in identifying and managing patients with long-term conditions through a population-based approach.

Arthritis

Quality of care is currently highly variable and not always consistent with guidelines. For example, a recent study by RAND revealed how just 29 per cent of eligible patients for osteoarthritis treatment by a specialist had been provided with the care they should have received. This was the lowest figure in comparison to nine other conditions that the authors examined (Steel *et al* 2008). Research by Broadbent *et al* (2008) to assess the self-reported quality of care for 320 patients at various general practices showed a low level of patient satisfaction with the level of information they were provided about their condition (with a range of 17–30 per cent) and a wide-ranging set of views in terms of quality of treatment (with a range of 5–90 per cent).

A recent National Audit Office (2009) report that looked at the care of 1,200 individuals with rheumatoid arthritis found that less than 50 per cent were referred by their GP to

Figure 10 Percentage of people estimated to have dementia who are on a dementia register by PCT, 2007/8



a specialist within three months – a figure that had not increased since 2003. The study also showed that half of those who had experienced a delay in diagnosis attributed this to their GP, while GPs themselves acknowledged some lack of confidence in their ability to diagnose rheumatoid arthritis. Other work has shown that people with the condition visit their GP an average of four times before being referred (Steward and Land 2009).

Dementia

Early diagnosis and intervention is important in improving the quality of life of people with dementia. While the vast majority of first diagnoses occur in general practice, the evidence shows that this often occurs late in the illness, or at a time of crisis, when the opportunities for managing the condition to maximise quality of life have passed.

There is evidence to suggest that many GPs are either unable or unwilling to recognise dementia symptoms, for a range of reasons including:

- an inability to differentiate symptoms that may be attributed to the natural signs of ageing and/or could be confused with other disorders
- the lack of specialist services to refer patients to
- the lack of training and/or time to make an adequate diagnosis
- the judgement that such individuals might cope better and feel less distressed if a formal diagnosis were avoided (Goodwin *et al* 2010a).

Figure 11 Percentage of patients diagnosed with dementia whose care has been reviewed in the past 15 months, 2009/10

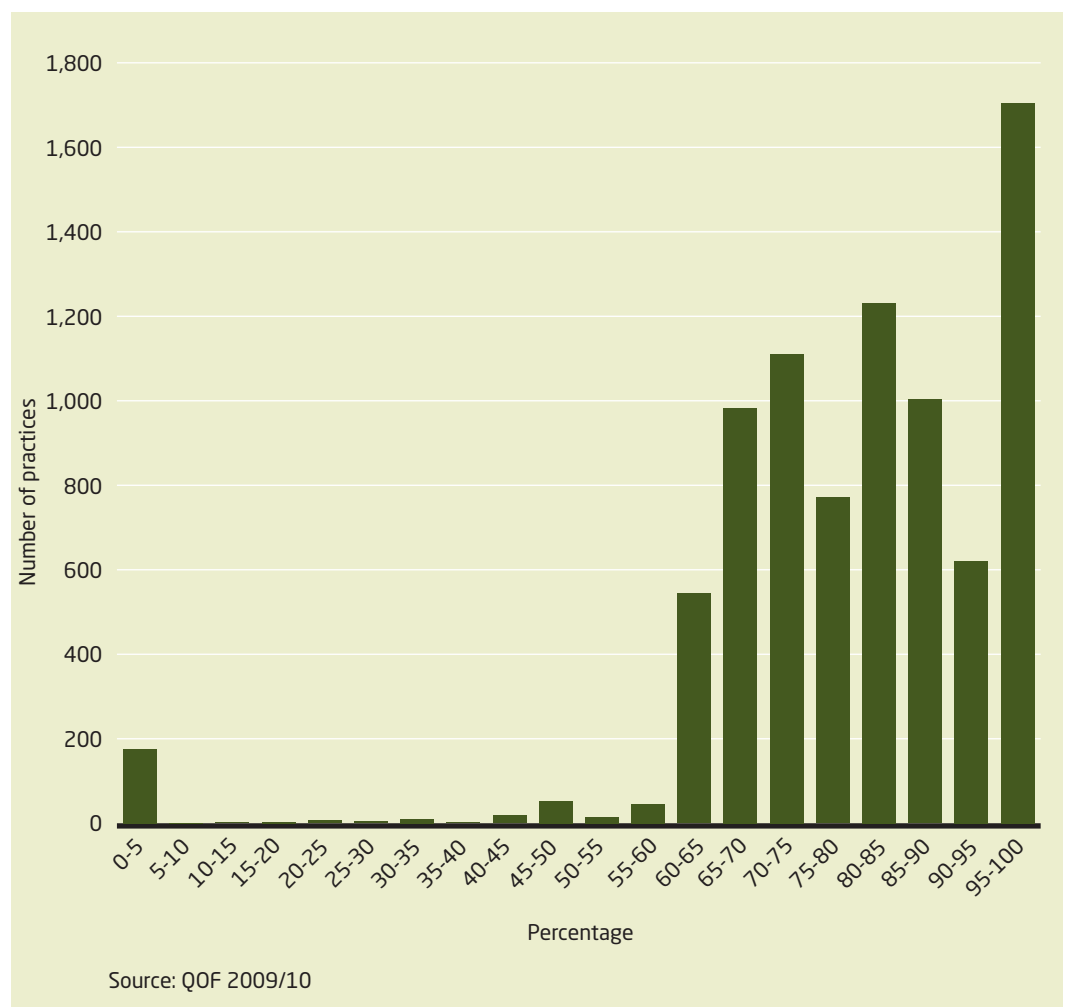


Figure 10, p 62, shows the estimated proportion of people in England who have dementia compared to the actual number who appear on a dementia register in general practice. The figures suggest that between one-half and two-thirds of people in every PCT who are likely to have dementia will be left undiagnosed and/or left off the register, and so not identified as being in need of support.

Figure 11 on p 63 shows the percentage of patients diagnosed with dementia whose care has been reviewed in the past 15 months. Achievement rates by practice have averaged over 80 per cent across all practices since 2005/6, but there is considerable variation in performance with practices in more deprived locations being less able to achieve the target (although the gap has reduced over time).

Diabetes

General practice plays a pivotal role in the management of diabetes, and has made a significant contribution to its effective management. Many aspects of diabetes management have improved markedly in recent years, through better recording and ongoing management. This is illustrated in Figure 12 below, which examines the percentage of patients with diabetes, by PCT, in 2009/10, whose last measured HbA1c within the previous 15 months was 7 or less. The results show that average achievement in general practice is above 80 per cent, but that this varies across PCTs, from a low of just over 73 per cent to a high of nearly 90 per cent.

Figure 12 Percentage of patients with diabetes in whom the last HbA1c is 7 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months by PCT, 2009/10

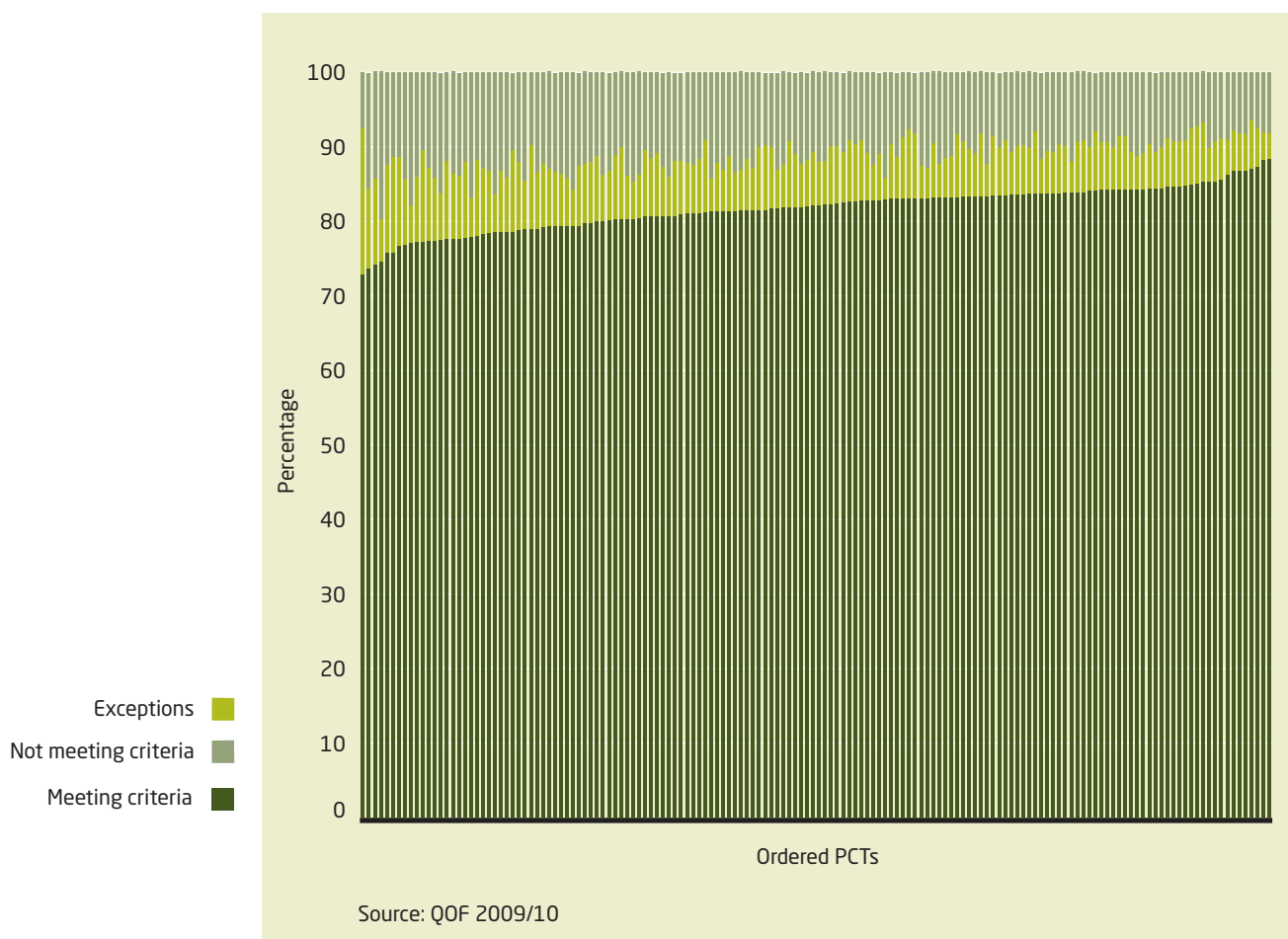
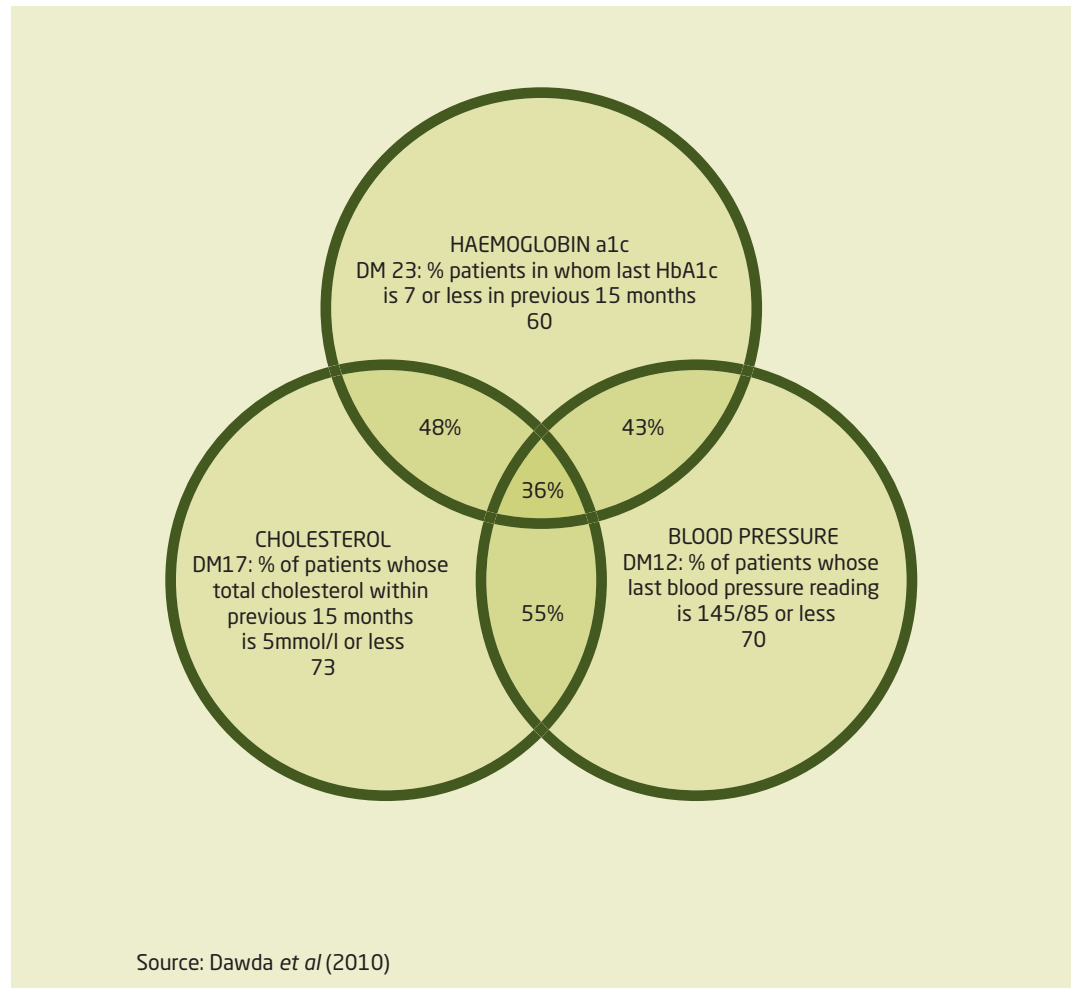


Figure 13 Using the 'bundle' approach to measure performance in diabetes care in one general practice



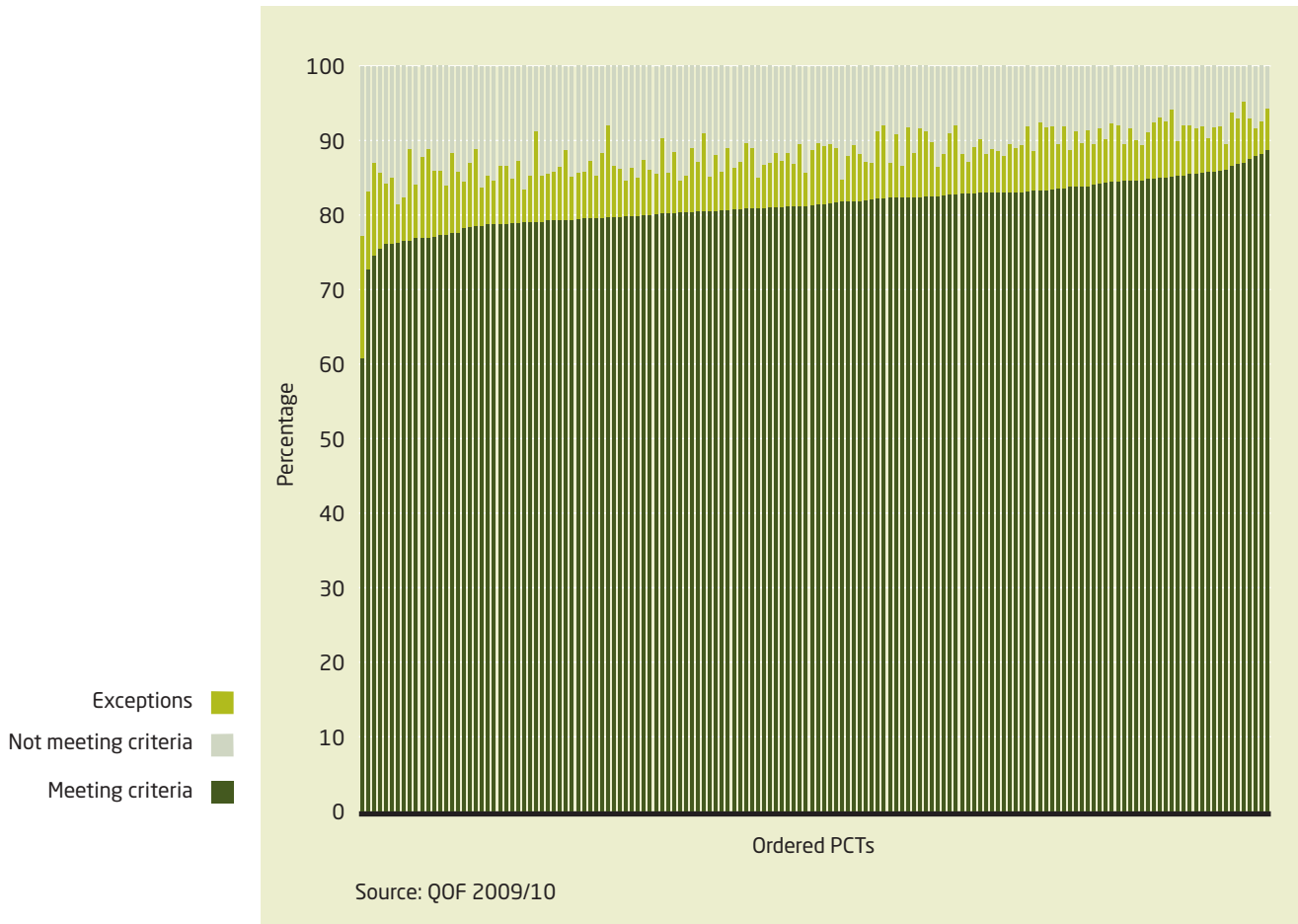
Despite these levels of performance, individual patients may not be getting all the recommended care to manage their diabetes. Figure 13, above, presents data from one practice showing that, while average delivery to diabetes patients of three single items in QOF ranged from 60 per cent to 73 per cent, only 36 per cent of these patients achieved the standard for all three QOF measures.

An international health policy survey of patients with severe illness in eight countries found that 67 per cent of adults with diabetes in the United Kingdom had received all four key diabetes services in the past year (as identified as important in diabetes management by the research team) (Schoen *et al* 2008). This compared favourably to the other countries in the survey where this ranged from a high of 59 per cent in the Netherlands to a low of 31 per cent in France.

Mental health

For people who experience depression or long-term mental health problems, high-quality care involves being supported by a planned system of 'collaborative care', which involves case management, systematic follow-up and improved primary–secondary care integration. High-quality care also requires sensitivity towards a patient's perception of the cause and nature of the problem. The evidence suggests the need for a 'strengths-based' approach that both provides treatment but also seeks to aid recovery.

Figure 14 Percentage of patients with schizophrenia, bipolar affective disorder and other psychoses with a review recorded in the preceding 15 months by PCT, 2009/10

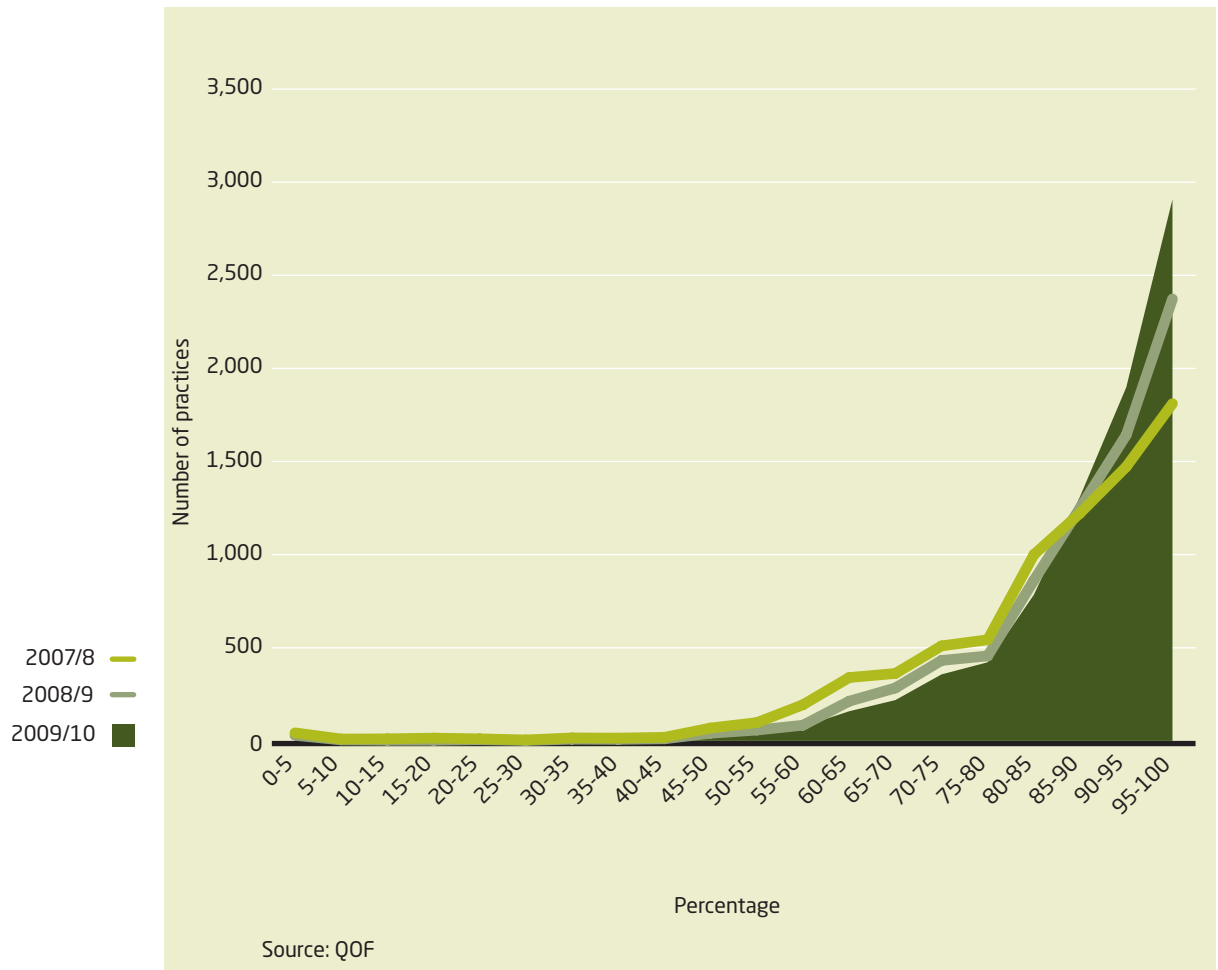


Research suggests that GPs possess many of the right skills, but some lack the confidence, support or time to use them (Goodwin *et al* 2010a). Overall, there is considerable potential to improve the quality of care for people with mild-to-moderate depression in general practice, but clinical education and training must be undertaken alongside work to build collaborative care models with specialists, as well as tackling social attitudes and stigma.

For people with more serious mental health problems, it is recommended that GPs carry out regular reviews. Figure 14, above, shows the percentage of patients with psychoses who had had a review in the preceding 15 months. It shows that performance in PCTs ranged from 70 per cent achievement to close to 90 per cent, with mean achievement of 81.3 per cent. On average, PCTs did not achieve this target for 7 per cent of patients. Exception reporting is generally high on this indicator, with PCTs on average exception reporting 11.6 per cent of patients. Understanding the reason for these exceptions is important, in order to ensure these patients are not failing to maintain regular contact with services.

Figure 15, opposite, shows the percentage of patients on the mental health register who have been recorded in general practice as having an agreed comprehensive care plan between 2007/8 and 2009/10. The figure shows a steady improvement over time in the number of practices meeting the criteria, although there remains a significant ‘tail’ of practices where a large proportion of such patients do not have a documented care plan.

Figure 15 Percentage of patients on the mental health register with a comprehensive care plan documented in the records agreed between individuals, their family and/or carers, 2007/8 to 2009/10



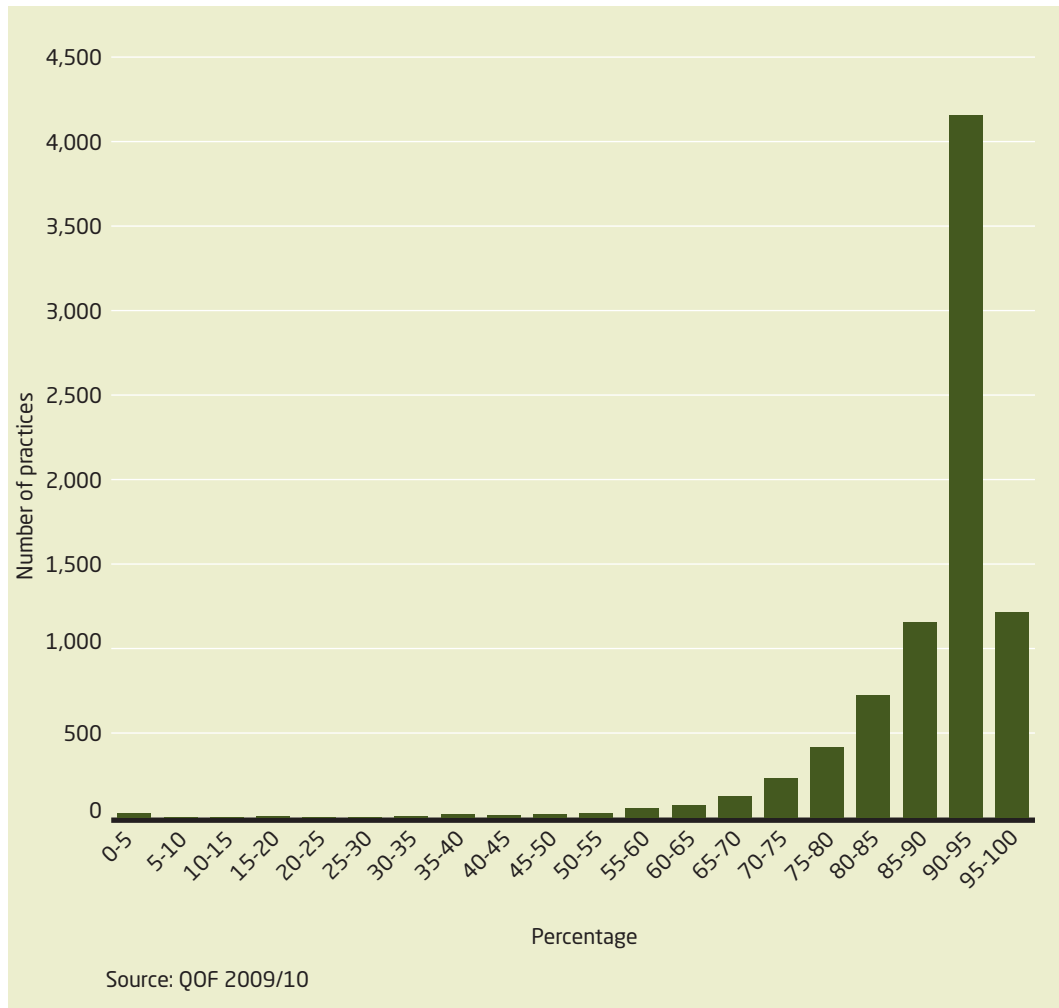
Co-morbidity

The impact of co-morbidity and multi-morbidity (having two or more long-term conditions) is profound. People with several long-term conditions have a markedly poorer quality of life, poorer clinical outcomes, longer hospital stays, and are the most costly group of patients that the NHS has to look after.

General practice plays a pivotal role in delivering high-quality care to people with multiple long-term conditions. These patients will often be in contact with many different professionals and services. General practice needs to work collaboratively with other care providers, sharing information across different teams and settings, and ensuring care is co-ordinated. For these patients continuity of care is particularly important, and many of the measures suggested below (*see* Continuity of care, p 83) would be applicable to patients with multiple long-term conditions.

To illustrate comparative performance in management of people with co-morbidity, a specific QOF measure examines the screening of people for depression as a consequence of their being on the diabetes or coronary heart disease registers. Figure 16, overleaf, shows the percentage of such patients in 2009/10 for whom case finding for depression had been undertaken in the previous 15 months. It reveals that the majority of practices achieved scores of above 90 per cent, albeit with a tail of poorer-performing practices.

Figure 16 Percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression was undertaken in the last 15 months, 2009/10



Self-management

Supporting people to self-manage their care is a key component of successful outcomes for people with multiple long-term conditions. General practice can play an important role in this – for example, in ensuring that patients can access support services and groups in the community. Also, people with long-term conditions often need to make changes to their lifestyle and behaviours. Evidence suggests that in order to be successful, people need more than advice and admonishment (*see* the box opposite).

There are a number of factors that a practice might measure in order to assess the quality of self-management support:

- the proportion of patients with long-term conditions whose notes contain a record that they have been provided with written information about the condition at least once
- the proportion of patients with long-term conditions who have been referred for self-management support
- the proportion of patients who have access to self-management support
- the proportion of patients who have high levels of knowledge, skills and confidence to manage their condition – using, for example, the patient activation measure (*see* Hibbard *et al* 2004)
- whether the practice is implementing the NICE guidance on behaviour change.

NICE guidance on behaviour change

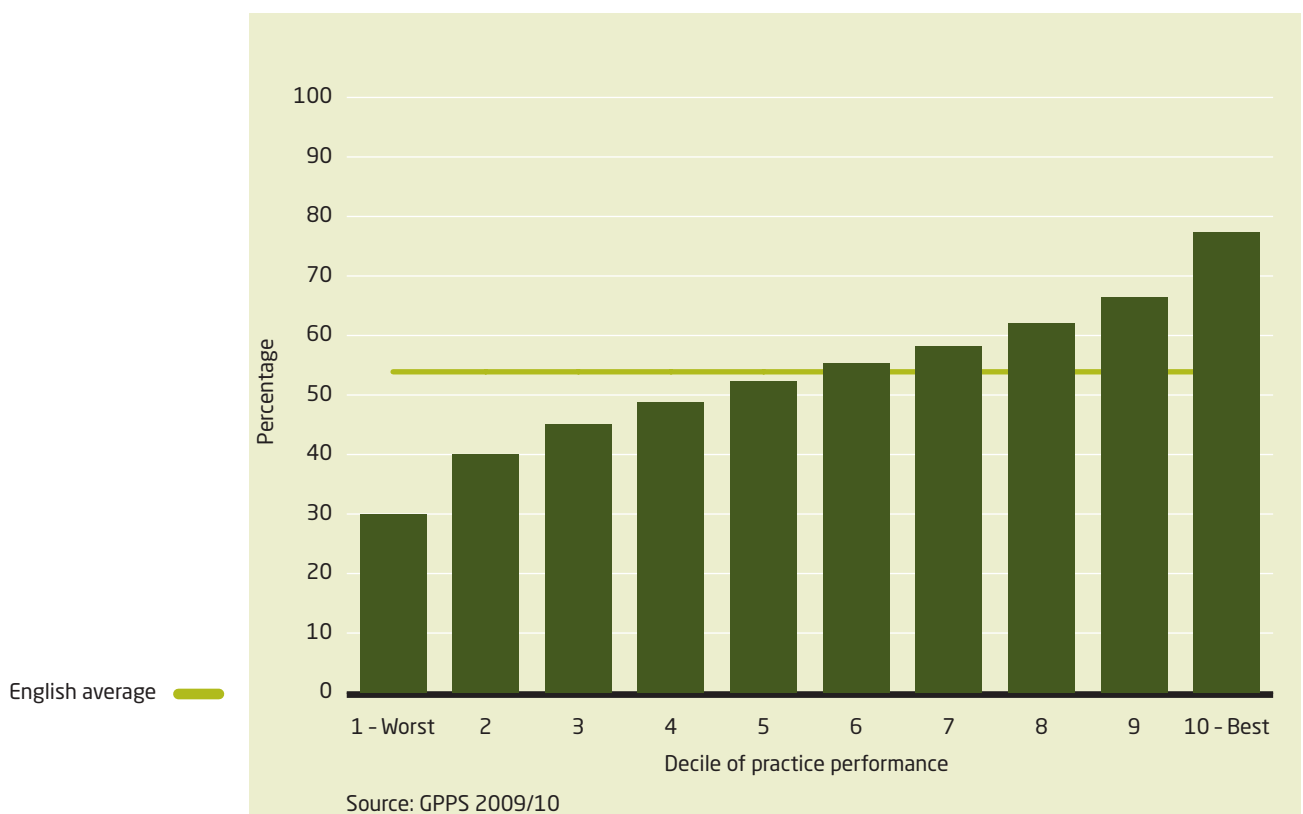
NICE recommends interventions that motivate and support people to:

- understand the short-, medium- and longer-term consequences of their health-related behaviours, for themselves and others
- feel positive about the benefits of health-enhancing behaviours and changing their behaviour
- plan their changes in easy steps over time
- recognise how their social contexts and relationships may affect their behaviour, and identify and plan for situations that might undermine the changes they are trying to make
- plan explicit ‘if-then’ coping strategies to prevent relapse
- make a personal commitment to adopt health-enhancing behaviours by setting (and recording) goals to undertake clearly defined behaviours, in particular contexts, over a specified time
- share their behaviour change goals with others.

Source: National Institute for Health and Clinical Excellence (2007)

GPPS data includes information on whether patients are receiving such support from ‘local services’ in order to help manage their long-term condition. On average 54 per cent of patients report receiving such support, but this ranges from only 30 per cent of patients in the bottom 10 per cent of practices to a high of 78 per cent in the top 10 per cent (see Figure 17 below).

Figure 17 Percentage of patients who had support from local services to help manage long-term health condition, 2009/10



Population management

Population management represents a proactive approach to the management of people with long-term conditions. It involves attempting to identify individuals in local communities whose health is at risk of deteriorating, with the intention of preventing or slowing that deterioration. It is based on the theory that early intervention can reduce downstream utilisation, since reactive episodic care may identify only those who seek help when in crisis.

One way of assessing the extent to which patients are being managed effectively in the community is to study the number of ambulatory care sensitive (ACS) conditions. ACS conditions represent those for which hospital admissions could be prevented by interventions in primary and community care. For example, hypertension (blood pressure) is a long-term condition that can be treated outside hospital. With proper medication and management of care, most people should not need to be hospitalised for hypertension.

Figure 18, below, shows the rate of emergency admissions for 19 ACS conditions across London PCTs based on the first quarter of HES data between 2010 and 2011. The rates were standardised for age, sex and social deprivation. The results reveal more than a twofold variation in hospital admissions for ACS conditions (NHS Institute for Innovation and Improvement 2006–11).

Other research on ACS emergency admissions provides similar evidence of variation. For example, *The NHS Atlas of Variation in Healthcare*, published in November 2010 (NHS Right Care 2010), highlighted a fivefold variation among PCTs in the rate of emergency admissions of patients aged 18 and over with asthma.

The *GP Practice Index* (Dr Foster Intelligence 2010) has similarly analysed non-elective admissions for four ACS conditions:

Figure 18 Emergency admission rates for all ACS conditions, London PCTs, 2010



- influenza and pneumonia
- diabetes complications
- chronic obstructive pulmonary disease (COPD)
- ear, nose and throat infections.

The study showed that there was significant variation between the 8,250 GP practices for which data was analysed. The report found that some 377,950 non-elective admissions in the four ACS conditions had occurred between July 2009 and August 2010, and that approximately £100 million could have been saved if patients had been managed effectively in the community.

It is important to stress that research into the causes of variation in ACS emergency admissions finds that the majority of such variation can be explained by socio-demographic factors such as age, race/ethnicity, deprivation, and geography (for example, see Purdy *et al* 2010). The key issue, therefore, is not the level of variation in ACS emergency admissions but the fact that these preventable admissions are so prevalent.

In general practice, QOF was designed to improve the management of long-term conditions and potentially reduce the numbers of patients being admitted to hospital. Dixon *et al's* (2010) research analysed the relationship between QOF scores in general practice and the rates of emergency admissions for seven ACS conditions: stroke, coronary heart disease (CHD), hypertension, congestive heart failure (CHF), diabetes, COPD and asthma. Their research concluded that emergency admissions for stroke and asthma were not significantly associated with the mean reported QOF achievement. However, lower mean QOF achievement for CHD, hypertension, CHF, COPD and diabetes was significantly associated with higher ACS admissions (Dixon *et al* 2010).

Interventions where positive effects have been reported on reducing emergency admissions include (Purdy 2010):

- continuity of care with a GP
- hospital at home as an alternative to admission
- assertive case management in mental health
- self-management
- early senior review in A&E
- multi-disciplinary interventions and telemonitoring in heart failure
- integration of primary and secondary care
- reducing readmissions through structured discharge planning
- personalised health care programmes.

So, the evidence suggests that there is an opportunity for general practice to play its part in improving the management of long-term conditions and other ACS conditions. As Goodwin *et al* (2010a) concluded, this implies a change in focus for general practice so that it works more closely with other primary and community care providers to improve care co-ordination and care integration. Under GP commissioning, reducing the numbers of preventable hospital admissions will become a key priority for general practice and its partners. Population management will become an important approach in achieving cost reductions without compromising on quality of care.

Areas for quality improvement

The research commissioned by the inquiry has identified a substantial amount of guidance on what constitutes high-quality care for people with long-term conditions (see the box overleaf). The evidence suggests that improvements in care for long-term conditions have indeed been made over the years – particularly in diabetes. However, the evidence also suggests that care is not reliably delivered to all patients with a

particular disease, nor does each patient necessarily receive all recommended care. This is particularly true for people with multiple conditions.

Key markers of quality in management of long-term conditions in general practice

- **Evidence of practice registries** Practices need to establish registries for patients with long-term conditions, to support the management of all patients with chronic illness.
- **Evidence for proactive case finding** Proactive case finding across practice populations, through regular analysis of data with community nurses and other partners, appears important in enabling a better multi-professional understanding of practice populations, and so helps to target services at individuals in need of care.
- **Availability of practice-level data** Practices need to make practice-level information and data available, for effective population management.
- **Problem recognition, early diagnosis and appropriate swift referral for early intervention** These result in better management of people with long-term conditions, but the evidence suggests this is currently highly variable. Specialist support for many GPs is needed alongside more time during the consultation in making an effective diagnosis.
- **Rules-based care** There is a need for rules-based care, which involves clinicians being supported by information systems to help co-ordinate and streamline patient care across settings.
- **Patient information** Providing patients with information about their long-term conditions can be effective in helping them self-manage and/or prevent deterioration in illness.
- **Supported self-care** General practice should provide supported self-care and/or signpost patients to receive this.
- **Support for carers** Providing education and support to carers enables them to manage the long-term conditions of those they are caring for.
- **Regular follow-up appointments** There needs to be a system of regular follow-up appointments for people with long-term conditions.
- **The planning process as a single point of entry** Using the planning process as a single point of entry to a range of services can help patients receive a more integrated service.
- **Case management** Targeted case management can improve outcomes for some people with long-term conditions.
- **Multi-disciplinary working** Working in a multi-disciplinary team is important in many aspects of care delivery for those with long-term conditions – for example, in having a single or co-ordinated assessment process or care plan, or in screening those with physical and mental health care needs.
- **Patient satisfaction** The quality of patient care is often considered less good for people with multiple long-term conditions, so practices need to measure satisfaction among those patients.

Source: Adapted from Goodwin *et al* (2010a)

The evidence suggests that quality of care could be significantly improved if there were a better understanding of long-term conditions among primary care professionals and a more proactive approach to care management. It is clear that responsibility for delivering high-quality care to patients should be shared across care settings and multi-professional teams, and that general practice has a core role to play as part of that continuum of care.

Goodwin *et al* (2010a) concluded that there were two key areas for quality improvement: the current knowledge and skills levels within general practice, and the need for care planning and care co-ordination that is integrated with services and professionals outside of general practice. These two points are explained below.

Knowledge and skill-mix in general practice

The evidence suggests that in order to improve quality of care for people with long-term conditions, one key factor is the ability for an early diagnosis, made in a general practice setting, and/or for a referral that leads to an appropriate and early intervention from a specialist. Care-planning skills must be included in the professional development of GPs and practice nurses in the future, so that they are able to:

- produce the care plan collaboratively with patients
- review the care plan regularly
- work sensitively and constructively with patients who are not meeting goals
- provide praise and motivation to patients who have achieved their goals.

Integrated care

The evidence suggests that general practices need to embrace specialist support during the consultation process, during care planning, and in ongoing care, in a way that makes patients feel like equal partners in their care, better supporting them to manage their own illness. However, there is a twofold problem: first, the lack of time, skills and capacity in general practice to make an effective diagnosis for all people with long-term conditions; and second, the lack of communication with, and availability of, specialist services.

It is unlikely that improvements in quality of care can be met without more fundamental structural changes to the way general practice operates and in order to ensure that practices are more closely integrated with the care and delivery of other health and social care providers.

Managing long-term conditions: key points

- Improvements in care for patients with long-term conditions have been made over the years, particularly for those with diabetes.
- However, the evidence suggests that recommended care is not reliably delivered to all patients – especially to those with multiple long-term conditions.
- There is significant scope for primary and community care providers to undertake more proactive preventative activities that can lead to earlier diagnosis and treatment, and the prevention of unscheduled hospital admissions.

Promoting health and preventing ill health

GPs and their practice teams have a crucial role to play in promoting health and preventing disease. The research we commissioned (Boyce *et al* 2010b) sought to

examine the role and effectiveness of general practice in health promotion and ill-health prevention in three key areas:

- childhood immunisations
- smoking cessation
- obesity.

Each of these is addressed in turn.

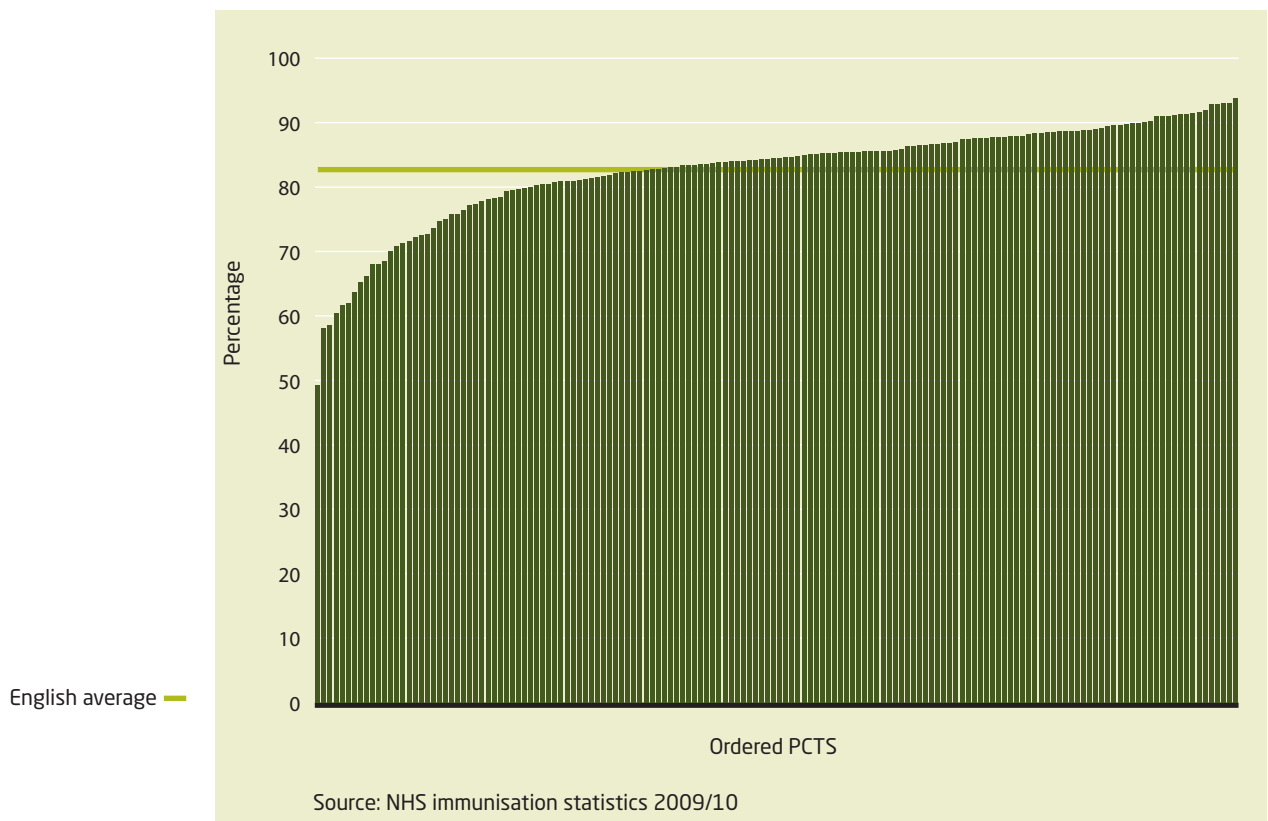
Childhood immunisations

Good-quality care in childhood immunisations can be directly measured by the vaccine uptake at a general practice level. There is high uptake of most childhood immunisations in England, but variations are common in most immunisation programmes – demonstrating the need to address variation and to target interventions at low-uptake groups (Boyce *et al* 2010b).

To illustrate, a study of MMR vaccination across 6,444 children in London showed that MMR uptake was highest among Asian children and lowest among white children (Middleton and Baker 2003). Another study has shown that one-third of children passing through a refuge for women, and who were victims of domestic violence, had incomplete immunisations (Webb *et al* 2001). In the 1999 national meningococcal C vaccine campaign, 33 per cent of children in public care did not receive the vaccine, compared with 14 per cent of children living at home (Hill *et al* 2003).

The size of a practice does not appear to impact on its ability to deliver childhood immunisation programmes. Lamden and Gemmell’s (2008) study of 257 general practices in Cumbria and Lancashire found no association between practice size and clinical

Figure 19 Percentage of children with MMR uptake (first and second doses) by their 5th birthday, 2009/10



staffing levels. However, more research is needed to examine the causes of variation in immunisation (Boyce *et al* 2010b).

Figure 19, opposite, shows that across PCTs in England, on average 83 per cent of children had an MMR vaccination by their fifth birthday, ranging from 49 per cent in the lowest-performing PCT to 94 per cent in the highest-performing PCT.

Smoking cessation

The majority of GP practices tend to be reactive rather than proactive in responding to requests for help from patients in giving up smoking (Boyce *et al* 2010b). Figure 20, overleaf, provides comparative data for the percentage of patients with a range of specific conditions whose record shows that smoking cessation advice or referral to a specialist (where available) had been offered in the previous 15 months. The majority of general practices perform well in meeting the target, though there are a small proportion of poor-performing practices.

Obesity

Approaches to obesity reduction in general practice have been inconsistent (Boyce *et al* 2010b). While general practice is incentivised to record each adult patient's weight following a QOF obesity indicator introduced in 2006, full adherence has yet to be achieved, and the impact on reducing weight has yet to be established. Boyce *et al*'s (2010b) research for the inquiry concluded that patients and GPs alike tend to believe that treating obesity should not be a priority in general practice, since it is a lifestyle issue that is a responsibility of the individual, rather than a medical condition or chronic illness to be managed.

There was also evidence to suggest that GPs remain hesitant to raise the issue of weight loss with obese patients if they feel that it will negatively impact their relationship with the patient (Michie 2007; Epstein and Ogden 2005). Less than 40 per cent of GPs regard pharmacotherapy and weight-loss surgery as effective (Ogden and Flanagan 2008), and GP practice staff state that they lack the expertise and resources to challenge obesity – particularly when it comes to childhood obesity (Turner *et al* 2009).

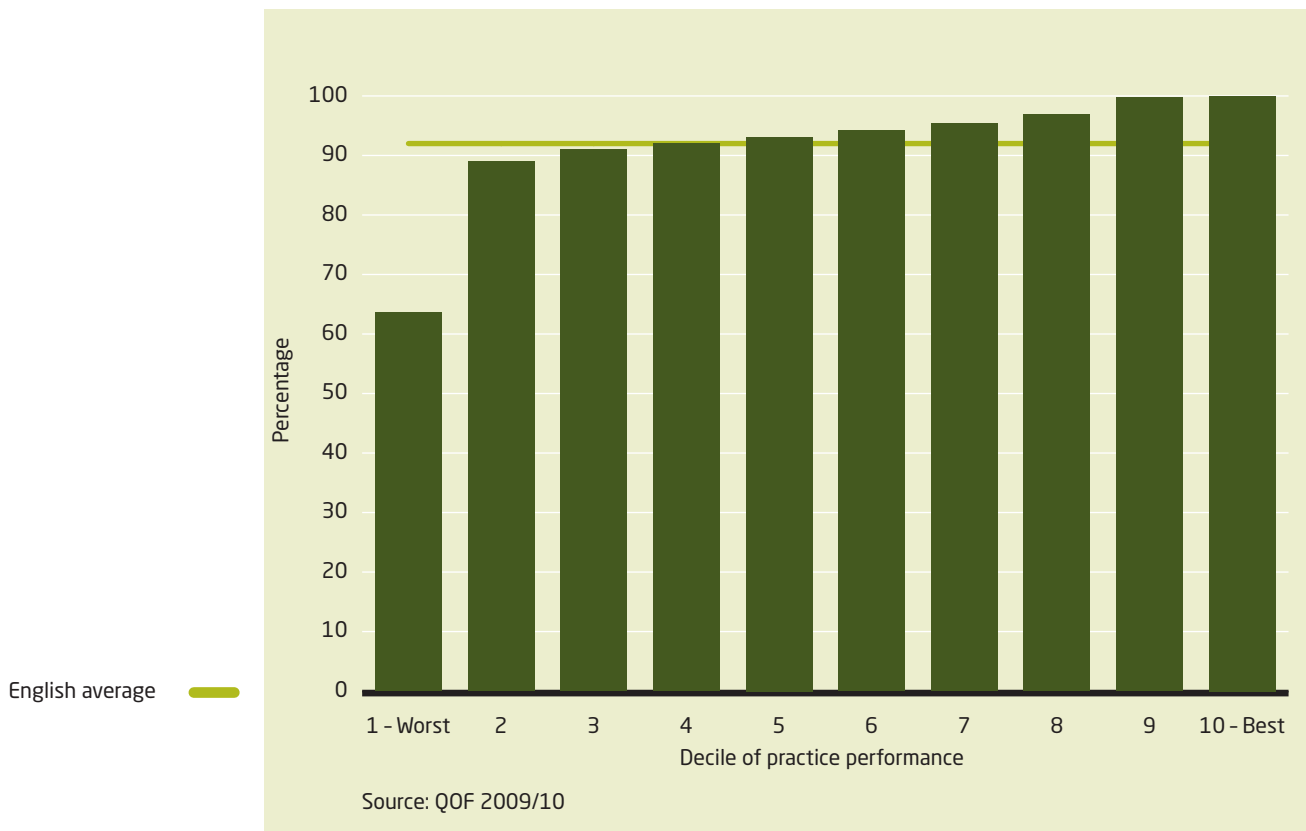
Areas for quality improvement

One of the challenges that general practice faces in meeting the quality agenda in terms of public health and ill-health prevention is the lack of evidence supporting the interventions that they could carry out. General practice, public health practitioners and academics all have the responsibility to work together to improve the evidence base, as well as to work in partnership in order to improve health and prevent disease.

GP commissioning raises a new set of challenges for public health and ill-health prevention, since it implies that general practice has a wider public-health role to play. It is essential that future contract negotiations discuss and assign responsibility for primary and secondary prevention. The QOF provided a stimulus to develop health promotion in many GP practices, and there has been a great deal of discussion about extending the coverage of the QOF to include other public health categories.

However, caution needs to be exercised when considering how such incentives should be used. Threshold payments, the focus on single clinical risk factors and poor evidence of effectiveness limit the overall effectiveness of incentive mechanisms.

Figure 20 Percentage of patients with specific conditions offered smoking cessation advice or referral to a specialist in the previous 15 months, 2009/10



Promoting health: key points

- General practice has a crucial role to play in health promotion – especially in its new role as members of GP commissioning consortia.
- There is a need to target childhood immunisations at those groups whose uptake is low.
- Most general practices meet targets related to smoking cessation advice, but there is evidence that a more proactive approach in supporting patients may help them to quit smoking.
- Approaches to the management of people with obesity are inconsistent, and obesity is often seen as a lifestyle issue rather than as a priority for general practice.
- More evidence is needed for appropriate interventions in general practice.

Non-clinical aspects of general practice

This section looks at aspects of general practice that are not clinical but that are nevertheless important dimensions of the quality of care as experienced by the patient. It discusses this by focusing on three factors:

- access to care
- continuity of care
- patient engagement and involvement.

Access to care

A range of factors contribute to whether patients feel they have good access to general practice care. The research we commissioned outlined a list of 23 different potential measures (Boyle *et al* 2010). These measures cut across three broad domains of quality of access:

- availability and proximity of general practice
- timeliness (speed of access)
- choice (ability to see a preferred doctor or nurse).

Availability and proximity of care

This can be measured in a number of ways. Here, we provide the numbers of GPs per 100,000 population by PCT – a simple measure that is often used as a key indicator of access nationally. As Figure 21 on p 77 shows, depending on where you live, there are wide

Figure 21 GPs per 100,000 population by PCT, 2009/10

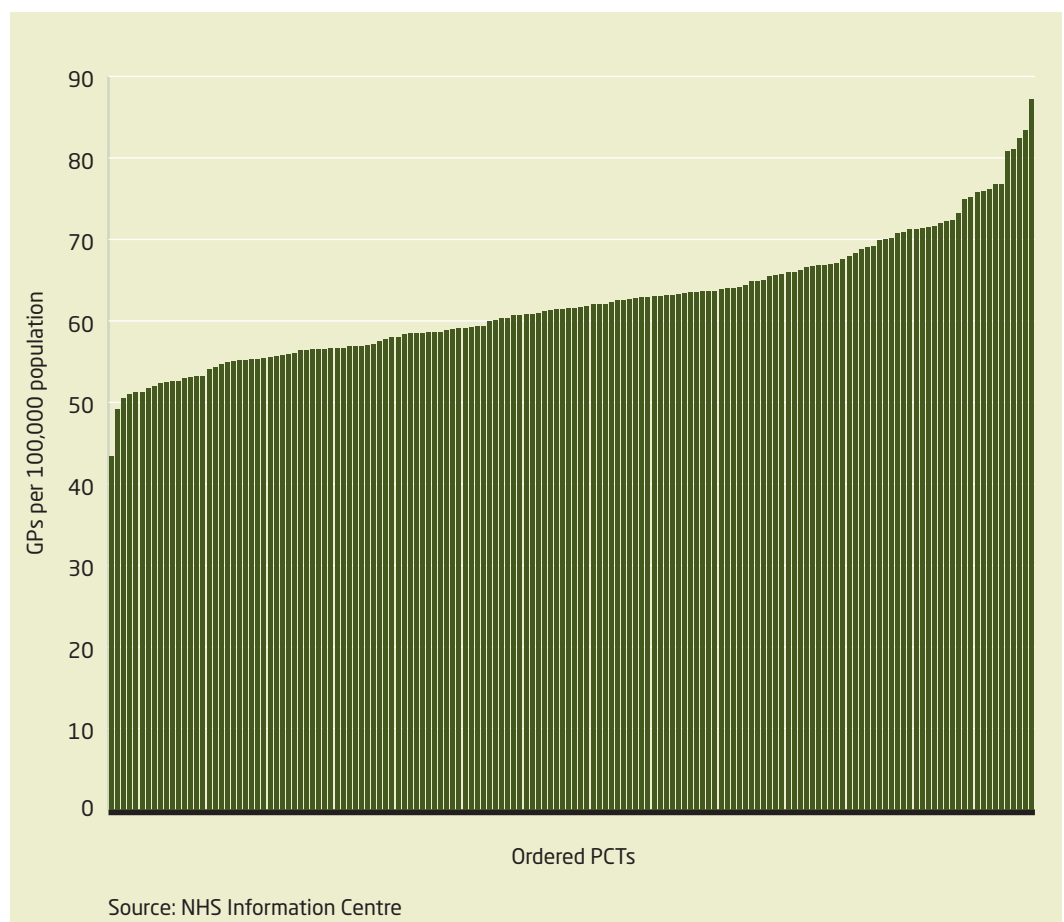


Figure 22 Percentage of patients able to see a doctor fairly quickly, 2009/10

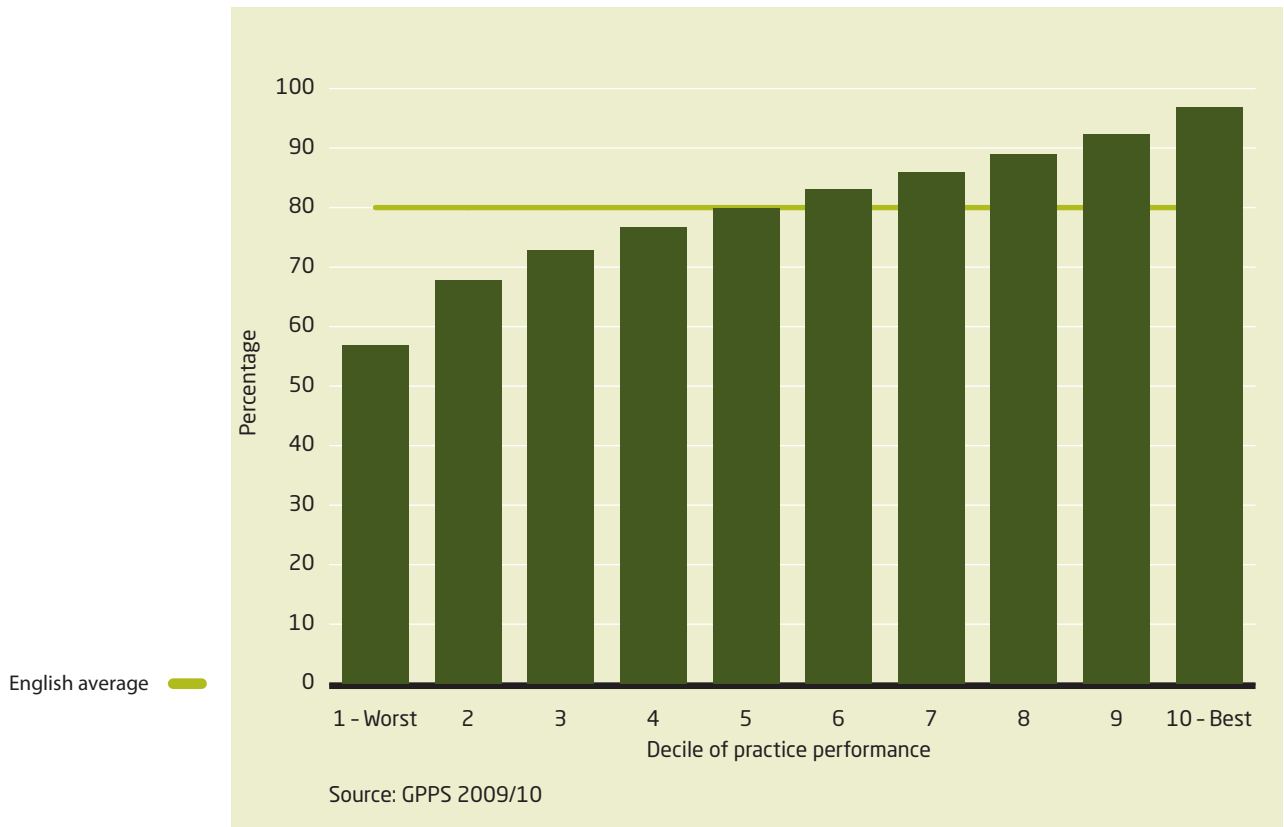


Figure 23 Percentage of patients able to see a doctor fairly quickly: intra-PCT variations by practice, 2009/10

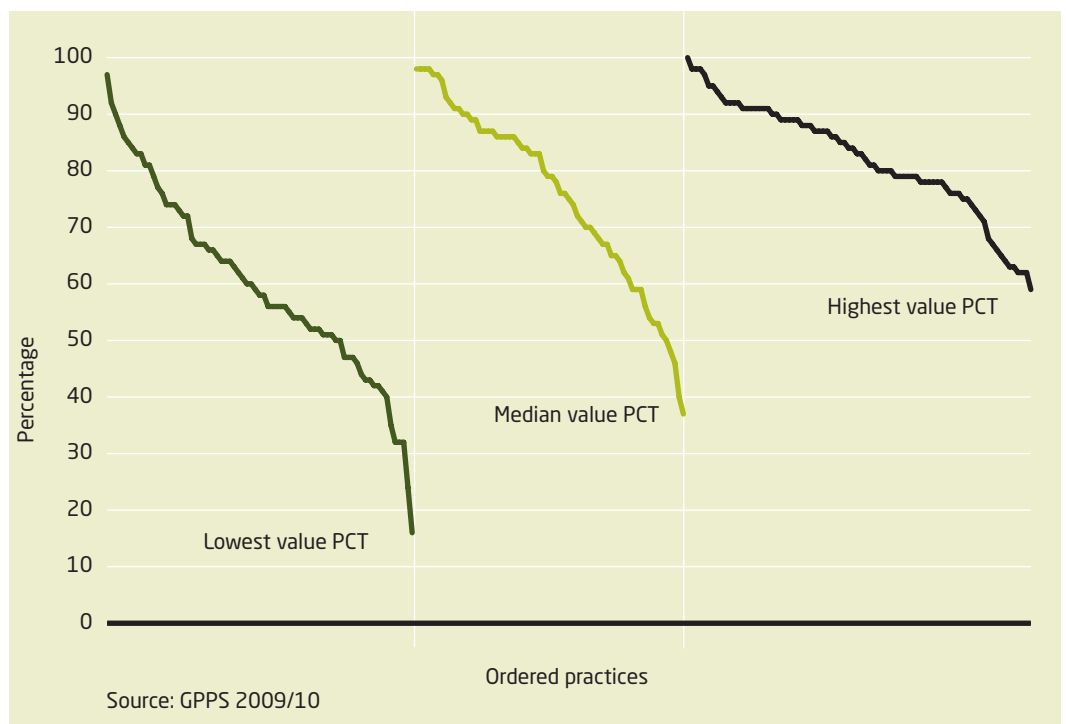


Figure 24 Percentage of patients able to book ahead, 2009/10

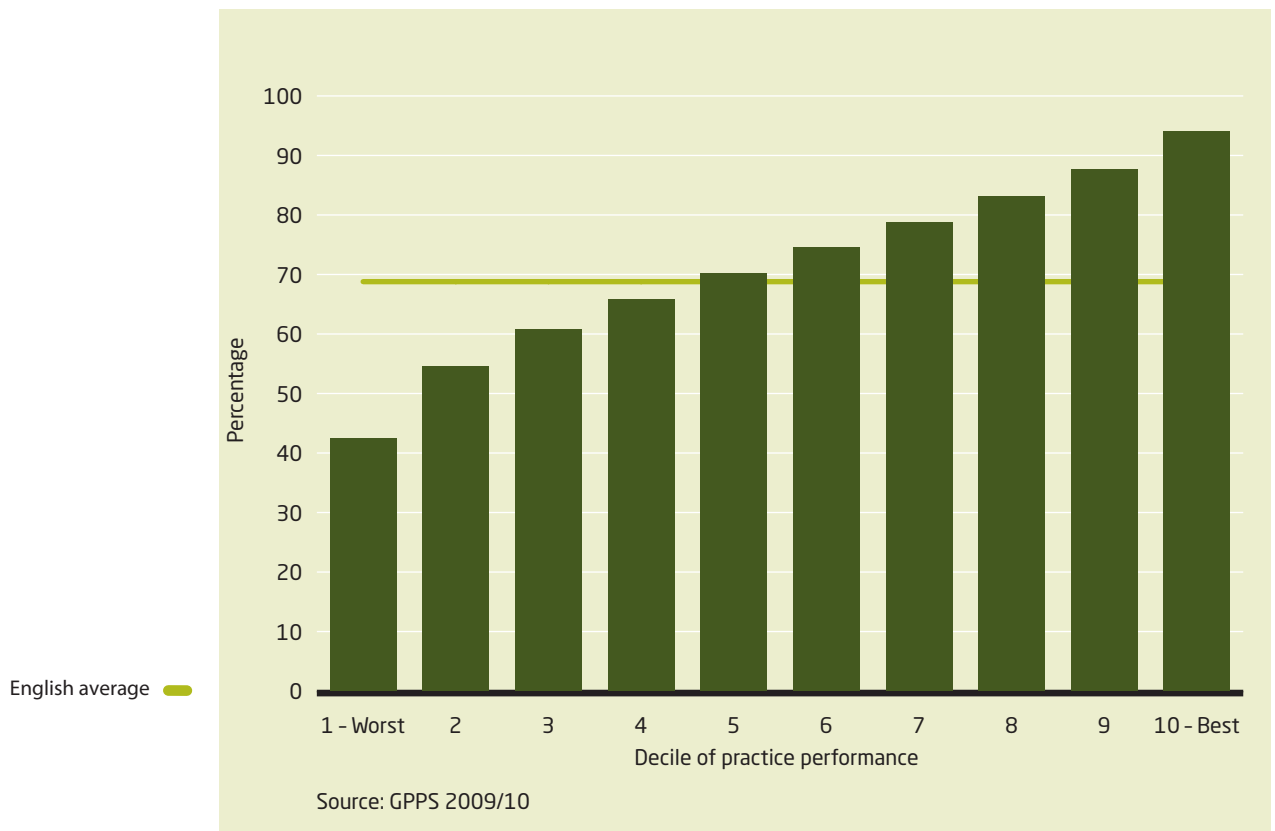
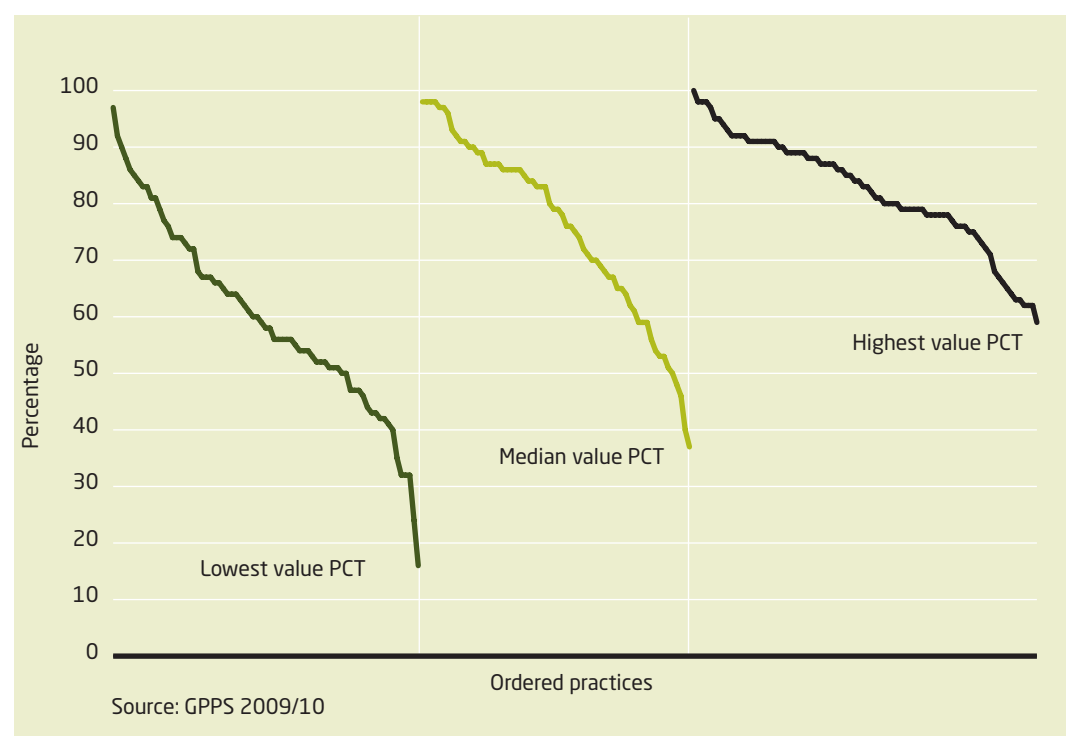


Figure 25 Percentage of patients able to book ahead: intra-PCT variations by practice, 2009/10



variations in the numbers of GPs available – ranging from a low of 45 GPs per 100,000 people to a high of just over 80 GPs per 100,000.

Speed of access

The speed of access to general practice has been a focus of policy, with guaranteed waiting times to see a member of practice staff within 24 hours and a GP within 48 hours. GP systems can also be used to audit patient waiting times between arrival at the practice and being seen by the GP, or the proportion of clinics that start late.

Figure 22 on p 78 shows that, on average, 80 per cent of patients reported that they were able to see a doctor ‘fairly quickly’, ranging from 57 per cent in the lowest-performing practices to 97 per cent in the highest-performing practices. Figure 23 on p 78 shows the extent of variation between practices within three PCTs with different levels of average performance.

Figure 24 on p 79 shows that in 2009/10, on average, 69 per cent of patients reported that they were able to book ahead for an appointment with a GP. There was considerable variance in the spread of performance, with 42 per cent of patients in the lowest-performing practices and 94 per cent in the highest-performing practices. Performance on this measure has also been declining steadily since 2005/6, revealing that it has become harder for patients to book appointments in advance. Figure 25 on p 79 illustrates intra-PCT variation.

Ability to see a preferred GP

There is often a trade-off to be made between speed of access and access to a preferred doctor. A King’s Fund opinion survey undertaken in 2009/10 found that the systemic focus on speed of access had, to some extent, come at the expense of being able to see

Figure 26 Percentage of patients able to see preferred doctor, 2009/10

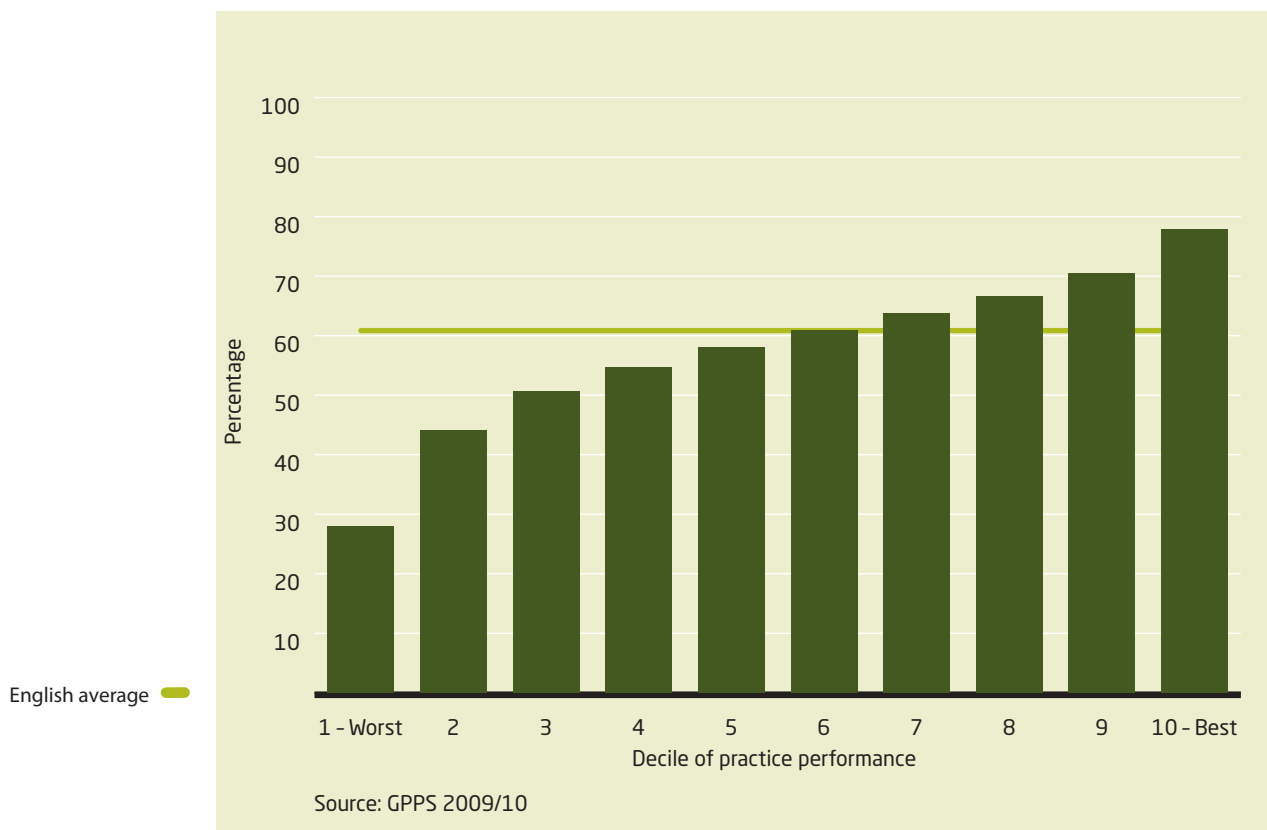
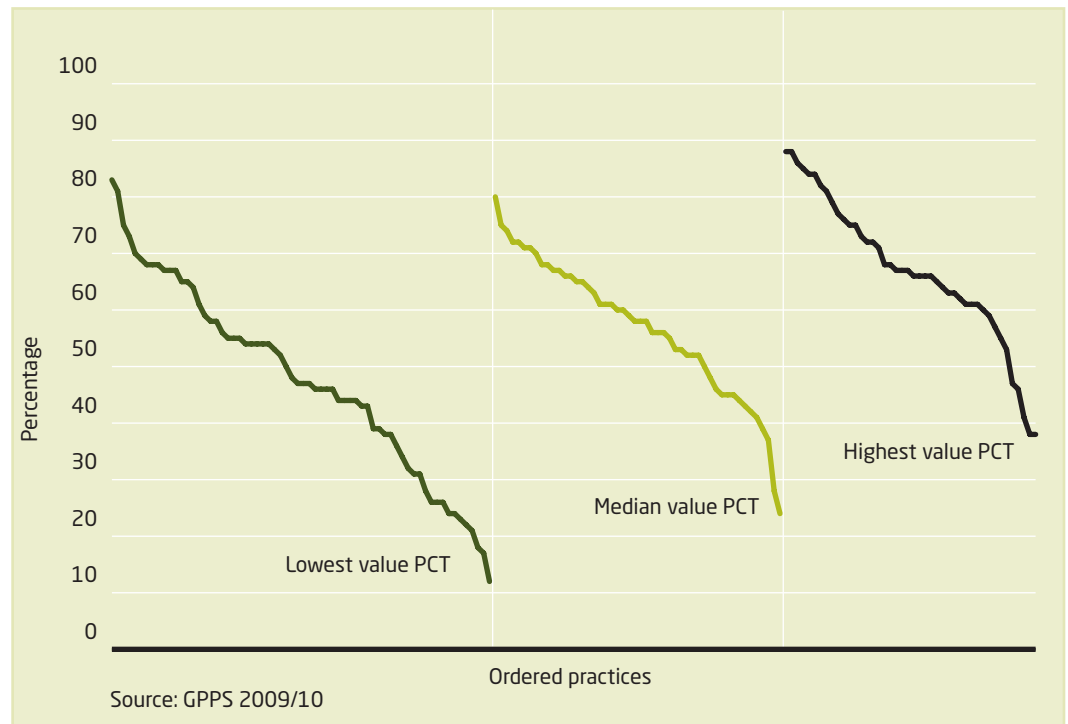


Figure 27 Percentage of patients able to see preferred doctor: intra-PCT variations by practice, 2009/10



the same and/or preferred GP (Goodwin *et al* 2010b). Indeed, improving care continuity was respondents' top priority for quality improvement compared to speed of access, which was seen as the least important priority. The research evidence backs up these observations, since there is evidence to show that the ability to see a preferred GP has

Figure 28 Percentage of patients satisfied with opening hours, 2009/10

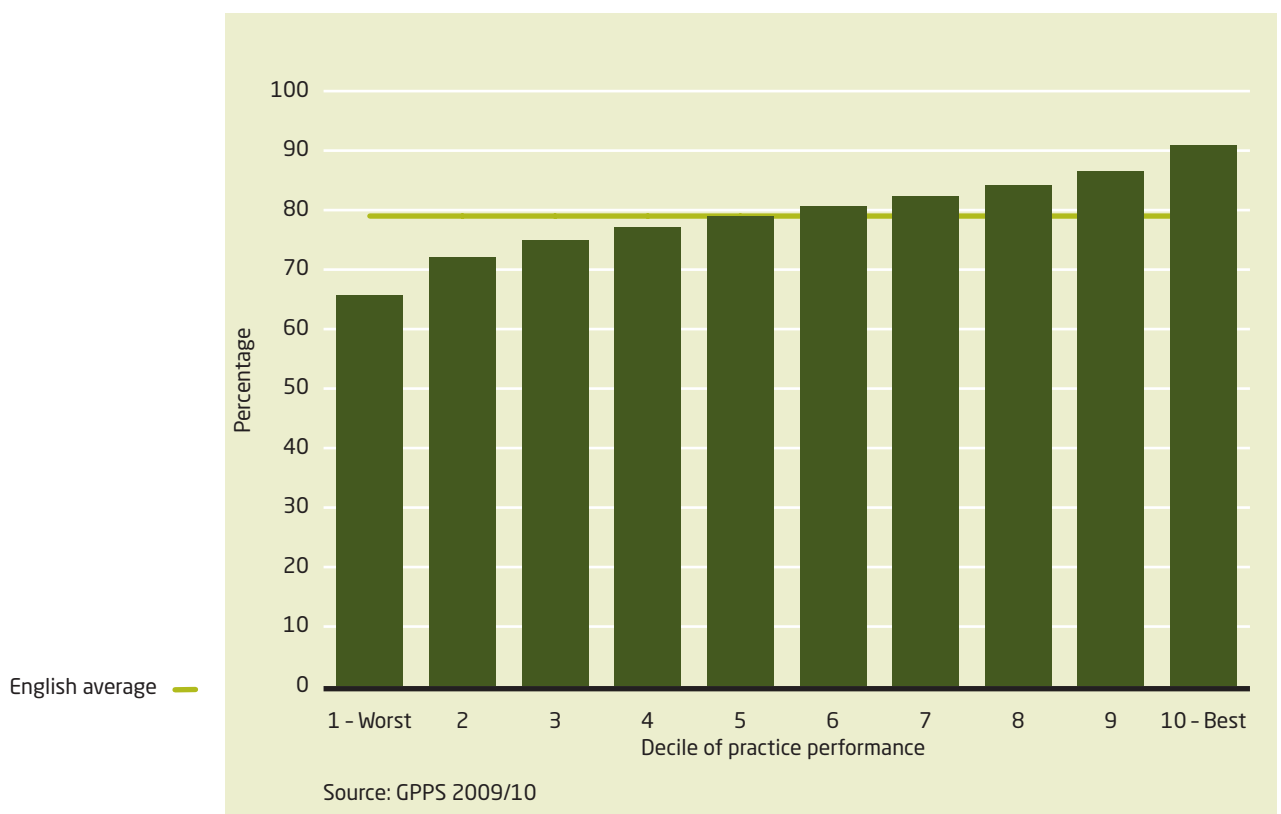
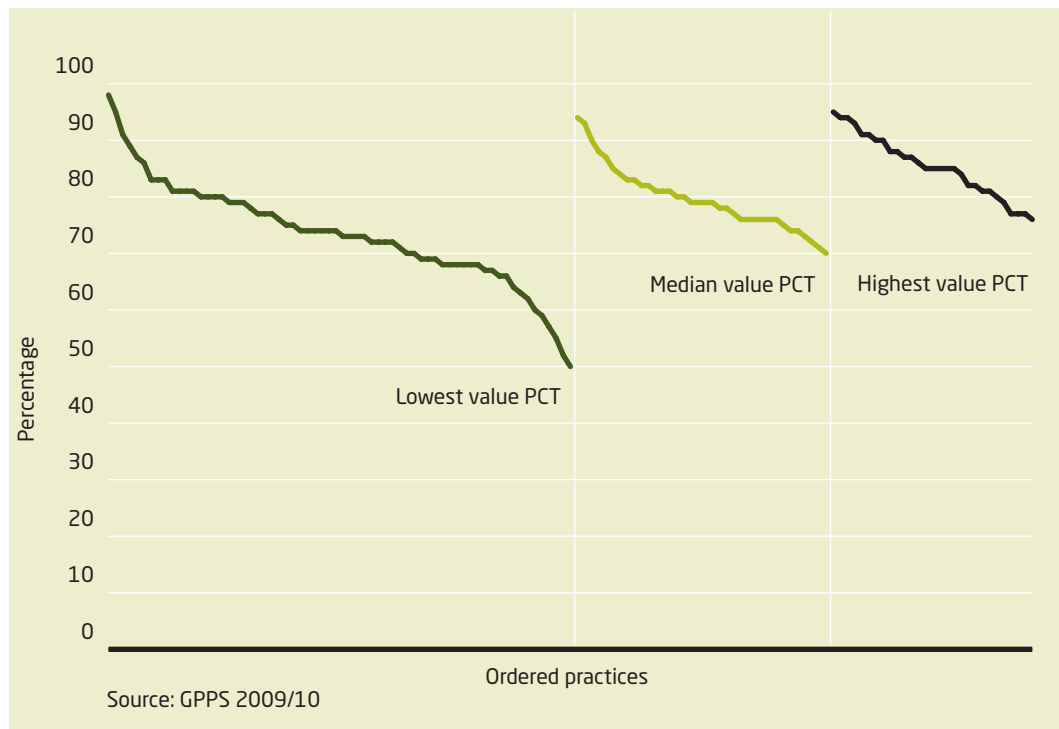


Figure 29 Percentage of patients satisfied with opening hours: intra-PCT variations by practice, 2009/10



worsened slightly since 2007. Moreover, there is considerable variation in the number of patients who are able to see their preferred GP.

In 2009/10, an average of 61 per cent of patients reported that they were able to see their preferred doctor, ranging from 28 per cent in the lowest-performing practices to 78 per cent in the highest-performing practices (*see* Figure 26 on p 80). Figure 27 on p 81 shows the variation between practices within three PCTs selected from among the lowest, median and highest-performing PCTs, demonstrating the opportunities for neighbouring practices to learn from each other.

Figure 28 on p 81 shows that the majority of patients are satisfied with opening hours. On average 79 per cent of patients reported satisfaction with this aspect of practice performance, ranging from 66 per cent in the worst-performing 10 per cent of practices to 91 per cent in the best-performing 10 per cent of practices. Figure 29, above, shows intra-PCT variation between practices in three selected PCTs with different average performance.

Areas for quality improvement

Overall, the research we commissioned concluded that most people, most of the time, report good access to care. However, there are wide variations evident across all dimensions of access. Moreover, speed of access appears to be less important to patients than choice of appointment or the ability to see a particular GP (Boyle *et al* 2010).

People's preferences about access to care varies, and more work needs to be done to tease out how different patient groups value the various dimensions of access discussed above. What is clear is that any measure of access should not be applied in a one-size-fits-all way. Indeed, existing measures of access to general practice pre-suppose a traditional GP practice model of care at a time where the nature and type of care services, communication technologies and society's preferences about access are changing. Retaining a range of measures to examine the broad picture may be the most appropriate

approach in this context, but at a local level quality improvement in access to care will be about meeting the needs of local patients.

Access to care: key points

- Most people, most of the time, report good access to care.
- However, wide variations are evident across all dimensions of access suggesting that patients get very different experiences locally.
- Speed of access appears to be less important to patients than choice of appointment or the ability to see a particular GP.
- There is evidence to show that the ability to see a preferred GP has become more problematic in recent years.
- Since people's preferences about access to general practice vary, retaining a range of access measures to examine the broad picture appears reasonable.
- General practice needs to reach out to all those in their local community who need care but who are not currently receiving it.

Continuity of care

Continuity of care, in the sense of a patient repeatedly consulting the same doctor, and forming a therapeutic relationship over time, has often been described as an essential feature of general practice in England. However, there is another dimension of continuity of care – an approach that involves patients in making decisions about planning their own care, including referrals, helping them to navigate services and systems outside the practice, and developing a shared patient record that enables patient ownership and input.

Freeman and Hughes (2010), who led the inquiry research on continuity of care, describe these two aspects as relational continuity (seeing the same doctor) and management continuity (how care is managed effectively for the patient). Each of these is described below.

Relational continuity

Relational continuity involves patients being encouraged (but not compelled) to establish a therapeutic relationship with one or more particular professionals in a general practice team. The previous evidence presented on access to care revealed this to be potentially more important to the preferences of GPs and patients alike than speed of access. Indeed, the evidence points to benefits to patients and clinicians that result from establishing and maintaining relational continuity as an essential feature of general practice.

Assessing the quality of relational continuity is clearly problematic, but general practice could use potential markers of quality to examine various dimensions of relational continuity, such as:

- the proportion of registered patients who report having a trusted relationship with a named GP
- the percentage of registered patients who have contact with the same clinician over 12 months
- the proportion of registered patients who report that they had sufficient time in the consultation

Figure 30 Percentage of patients rating their GP as good on giving enough time, 2009/10

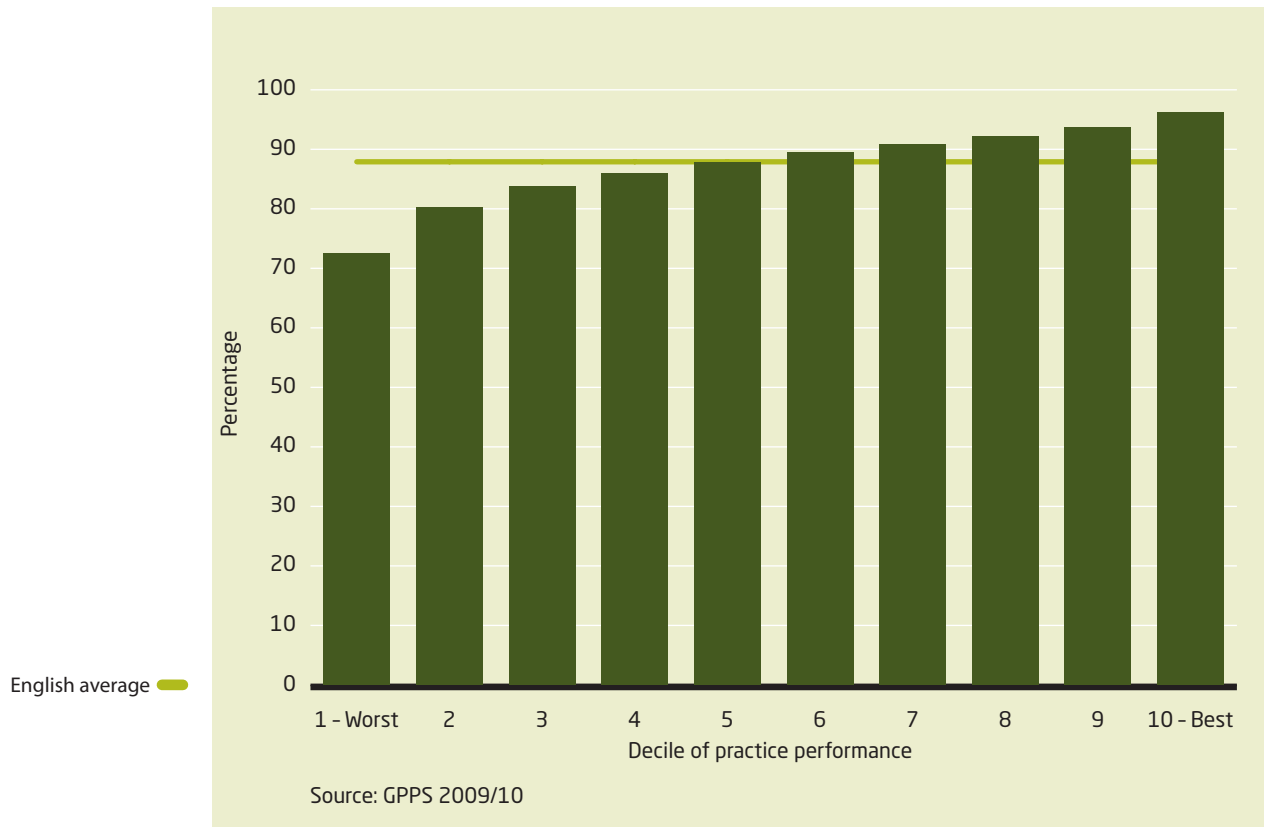


Figure 31 Percentage of patients rating their GP as good at listening, 2009/10

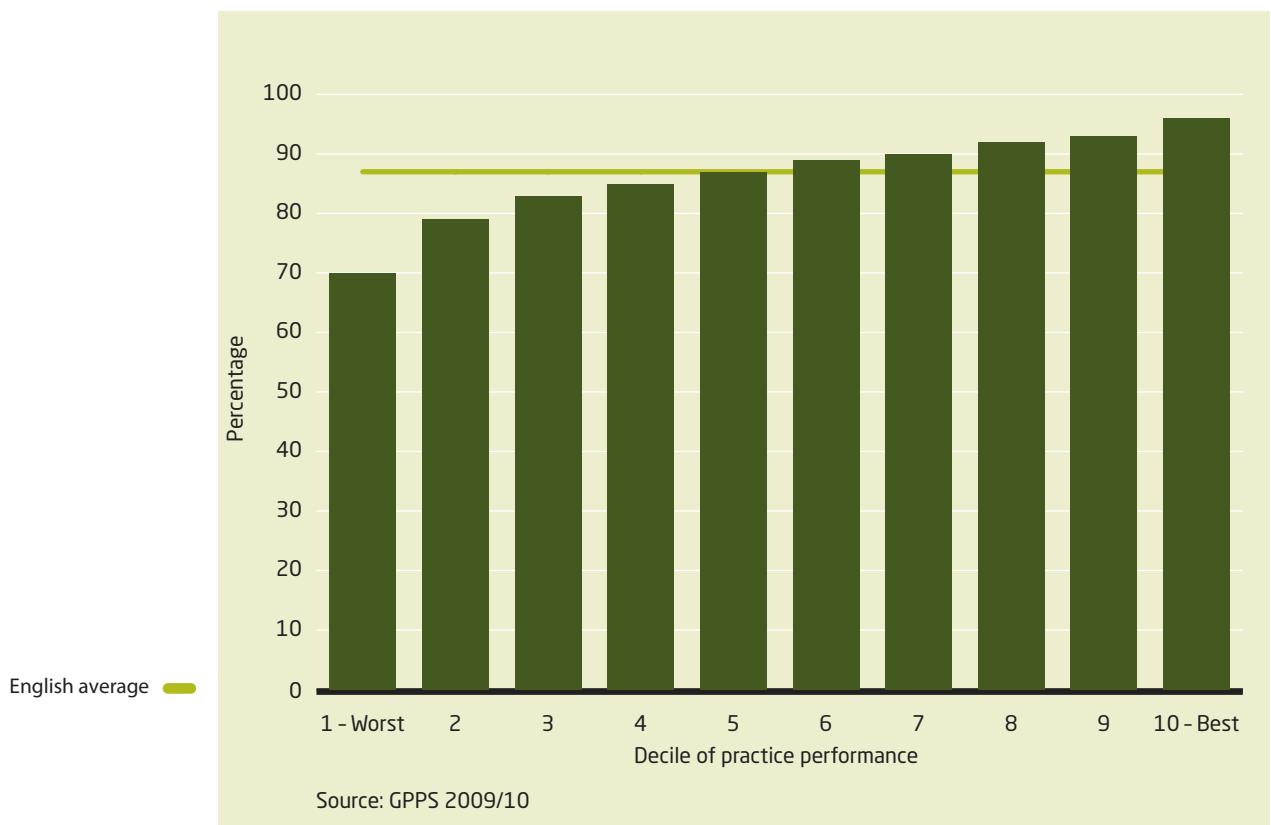
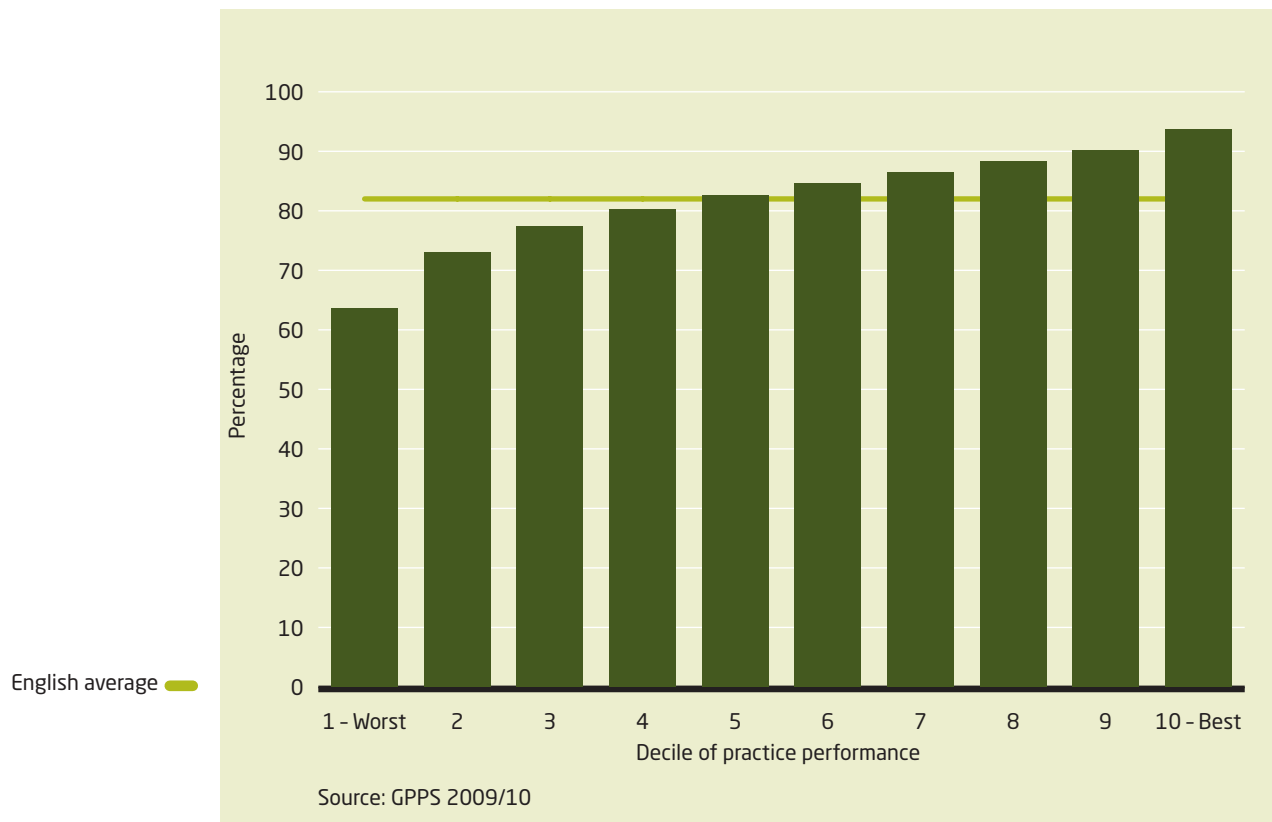


Figure 32 Percentage of patients rating their GP as good at treating with care and concern, 2009/10



- the average consulting times for routine and urgent appointments.

Some of these markers of quality can be assessed using routine data from the GPPS. For example, Figure 30, opposite, examines whether patients felt the GP gave sufficient time during their consultation. In 2009/10, 88 per cent of patients reported they had sufficient time during the consultation, though the percentage score fell to 73 per cent in the worst-performing decile of practices. Figure 31, opposite, shows that the percentage of patients who rated their GP as good at listening to their concerns averaged 88 per cent, but ranged between 70 per cent and 96 per cent between the worst-performing and best-performing 10 per cent of practices.

The GPPS also asks the extent to which patients feel that doctors are good at treating them with care and concern. In 2009/10 there was considerable variance between the best-performing and worst-performing practices (*see* Figure 32 above).

There is some research evidence to demonstrate that longer consultations tend to enable the GP and patient to address the wider patient care agenda, although a shorter consultation can reach a similar outcome if the patient and doctor already know each other well and the patient feels able to communicate key personal information (Howie *et al* 1997, 1999). Evidence also suggests that GPs feel that relational continuity has declined due to the growing needs and demands of patients, and because of contractual incentives, such as QOF, that reward ‘technical care’ as opposed to its psychosocial components (Hasegawa *et al* 2005).

Management continuity

Management continuity involves the practice effectively co-ordinating the care for patients during the course of their treatment. As the research on the management of long-

term conditions concluded, management continuity is particularly important for the quality of care provided to those with multi-morbidity, who often require comprehensive, personalised, holistic and co-ordinated care. Such care co-ordination includes offering interpersonal continuity, so that patients know which professional is responsible for co-ordinating their care and how to contact them, and GPs know which patients they are responsible for. The GP and practice team can also help patients to reconnect with services or systems when they experience discontinuities or fragmentation of care.

Few measures of quality that can be used to assess management continuity are readily available, but a range of possible markers could be developed – for example:

- whether the practice has in place systems to identify patients who need care co-ordination
- the proportion of patients who need care co-ordination that have a named care co-ordinator or advocate to support their care
- whether the practice has in place systems for needs assessment, including single assessments for those with social care needs
- the proportion of patients with long-term conditions or complex needs who have a written care plan
- the proportion of patients whose written care plans are fully implemented
- whether the practice holds regular multi-professional meetings and case management reviews
- whether practice staff attend case meetings with professionals from other agencies when requested
- whether the practice has in place procedures for effective handover of care between staff, and implements this particularly around out-of-hours care, holidays, sickness, and between part-time professionals

Figure 33 Percentage of patients who had discussion with a doctor or nurse about how best to deal with a longstanding health problem, 2009/10

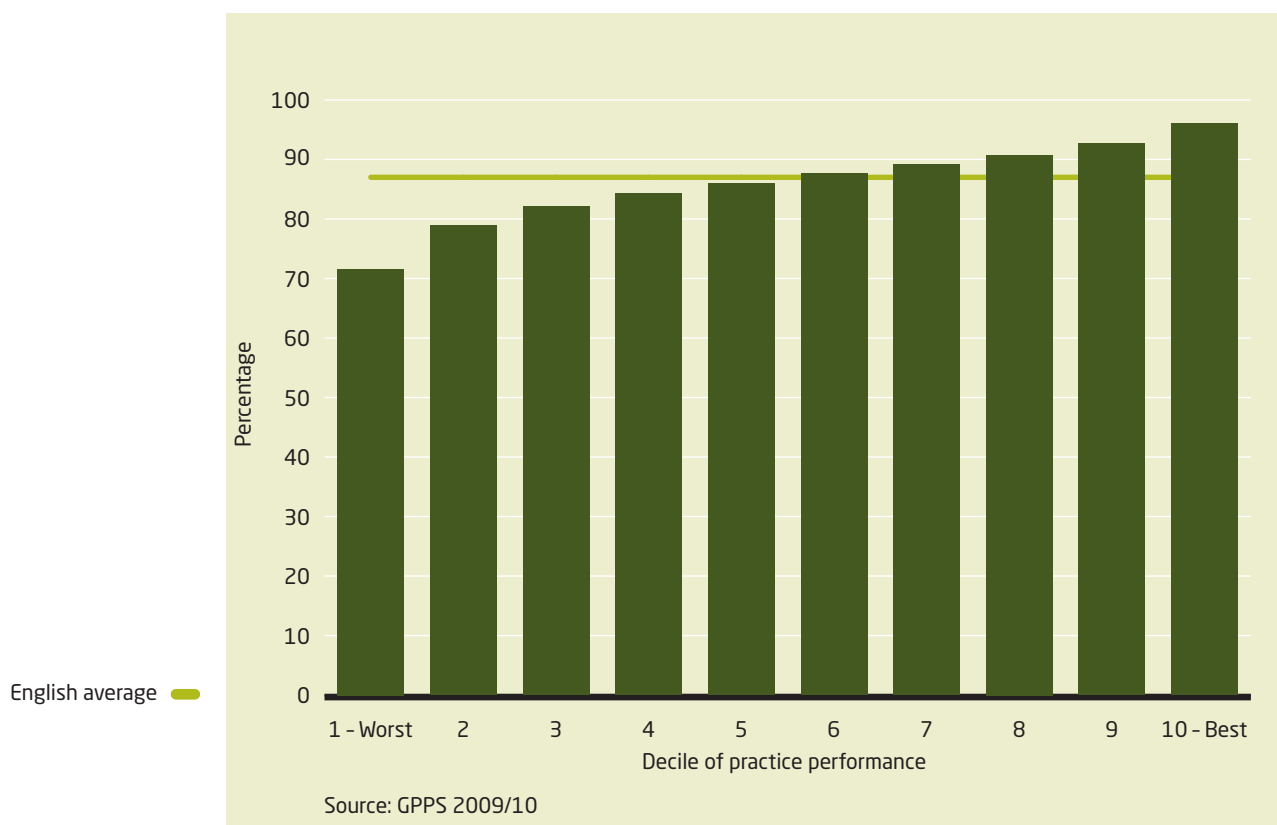
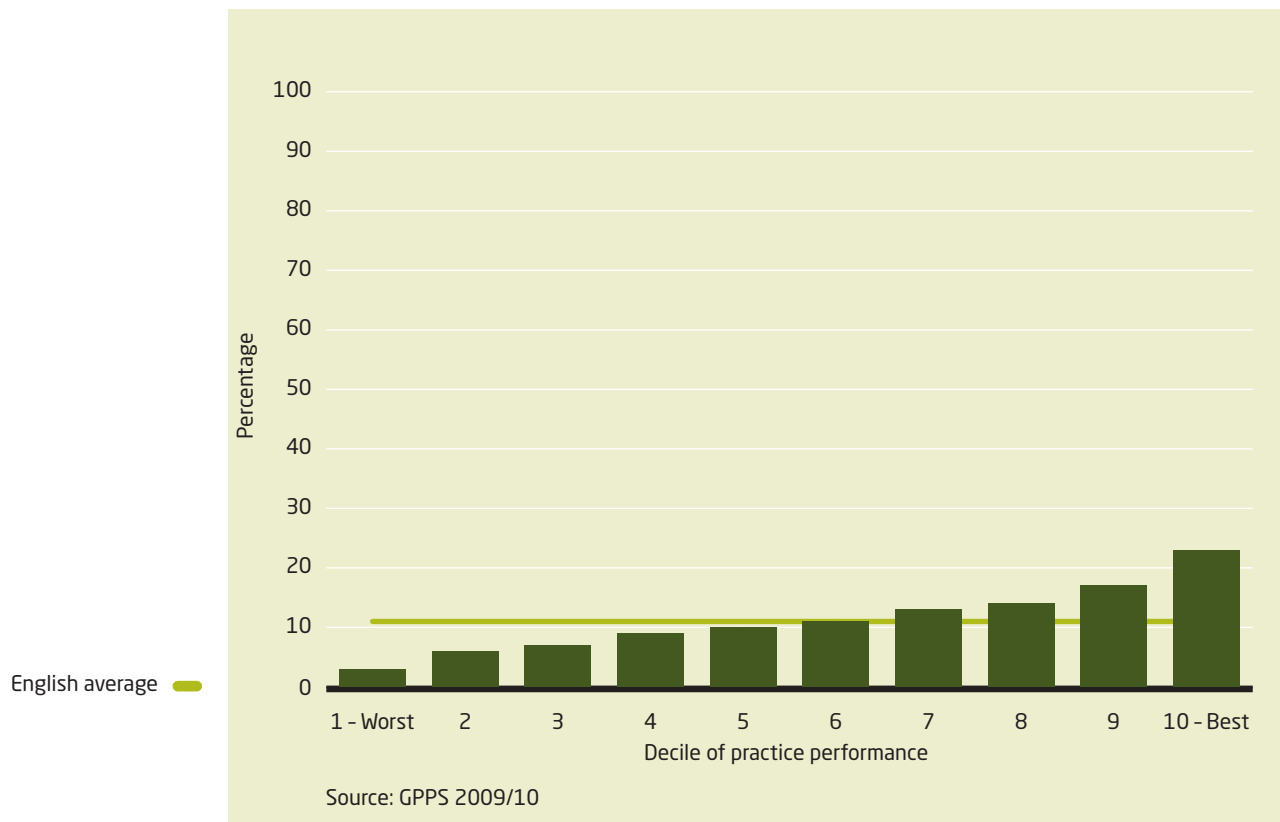


Figure 34 Percentage of patients who had ever been told by their doctor or nurse that they had a 'care plan', 2009/10



- the proportion of patients who receive proactive follow-up after a significant life/health event
- whether there are shared care protocols and/or shared information flows, to ensure the patient pathway is well managed.

As with relational continuity, evidence from the GPPS sheds light on some of these quality issues. For example, Figure 33, opposite, examines the percentage of patients who reported having a discussion with their doctor or nurse about how best to deal with a longstanding health problem. On average, 87 per cent of patients reported having done so. However, there were considerable variations, with 72 per cent of patients in the worst-performing 10 per cent of practices compared to 96 per cent in the top 10 per cent responding that they had.

Despite a policy commitment for everyone with a long-term condition to have a care plan – since the evidence suggests that this improves co-ordination of care for patients – in the GPPS only a very small proportion of patients (11 per cent) reported that they had been told they had a care plan (*see* Figure 34 above). This may be because patients are unfamiliar with the term 'care plan' or do not recognise their care plan as such, but either way it indicates that there is a long way to go to meet the policy commitment.

Areas for quality improvement

The evidence presented to the inquiry suggests that continuity of care (both relational and managerial) is an important but undervalued aspect of quality of care. There is ample evidence to show how continuity of care could be significantly improved in the NHS, and how and why this would improve patients' experience of care. However, a better understanding of the importance of continuity of care is needed so that it can become

prioritised or incentivised in general practice alongside other developments in health care.

Continuity of care is complex, subjective and dynamic, so it cannot be captured fully by a set of quantitative measures or reduced to a set of competences. However, it is important to try and capture at least part of its essence if it is to be valued as a dimension of quality (Greenhalgh and Heath 2010). Methods of assessing and promoting continuity of care in practice need to be developed – perhaps supported by a toolkit for practices.

Continuity of care: key points

- Relational continuity of care refers to patients seeing the same doctor or other clinical practitioner with whom they build a relationship over time. This is regarded as a priority by GPs and patients alike. However, the evidence suggests that quality of care in this area has deteriorated slightly in recent years.
- Management continuity of care refers to the business of co-ordinating care during the course of the patient’s treatment. There is a need to improve co-ordination of care, particularly for patients with complex and long-term care needs.
- Greater priority needs to be given to continuity of care and care co-ordination, and innovative ways need to be found to assess the quality of such care in practices, and between practices and other partners.

Patient engagement and involvement

There is wide variation in the way patients have reported their experience of involvement in decisions about care and treatment (Parsons *et al* 2010). For example, patients who described their ethnic group as white are more likely than those from other ethnic groups to say that they were ‘yes, definitely’ involved as much as they wanted to be in decisions about their care and treatment (*see* Table 11 below). Furthermore, older people were more likely than younger people to say that they were ‘yes, definitely’ involved (*see* Table 12 on p 90).

Table 11: Patient involvement in decisions

Primary care survey 2008	Were you involved as much as you wanted to be in decisions about your care and treatment?			Were you involved as much as you wanted to be in decisions about the best medicine for you?		
	Yes definitely	Yes, to some extent	No	Yes definitely	Yes, to some extent	No
Self-defined ethnic group	%	%	%	%	%	%
White	72	24	4	61	29	10
Asian or Asian British	54	36	10	54	36	10
Black or Black British	57	33	10	46	31	23

Source: Picker Institute Europe 2009

A further illustration of variation in performance is provided in Figures 35 and 36 opposite, which examine patient feedback on whether the doctor had been good at explaining tests and treatments and involving them in decision-making. These findings from 2009/10 are similar to results for previous years in terms of both average performance and the variation in it.

Figure 35 Percentage of patients rating their GP as good at explaining tests and treatments, 2009/10

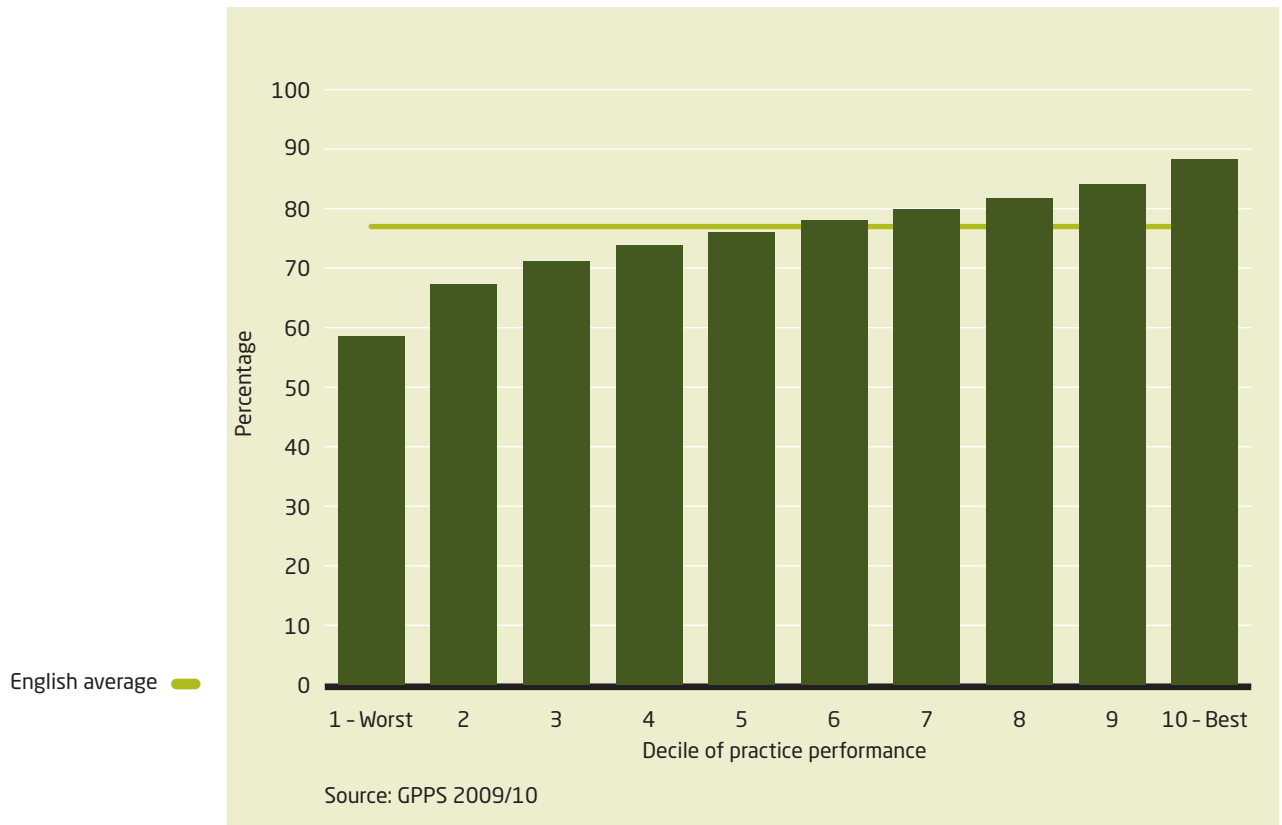


Figure 36 Percentage of patients who rate the doctor as good at involving patients in decisions, 2009/10

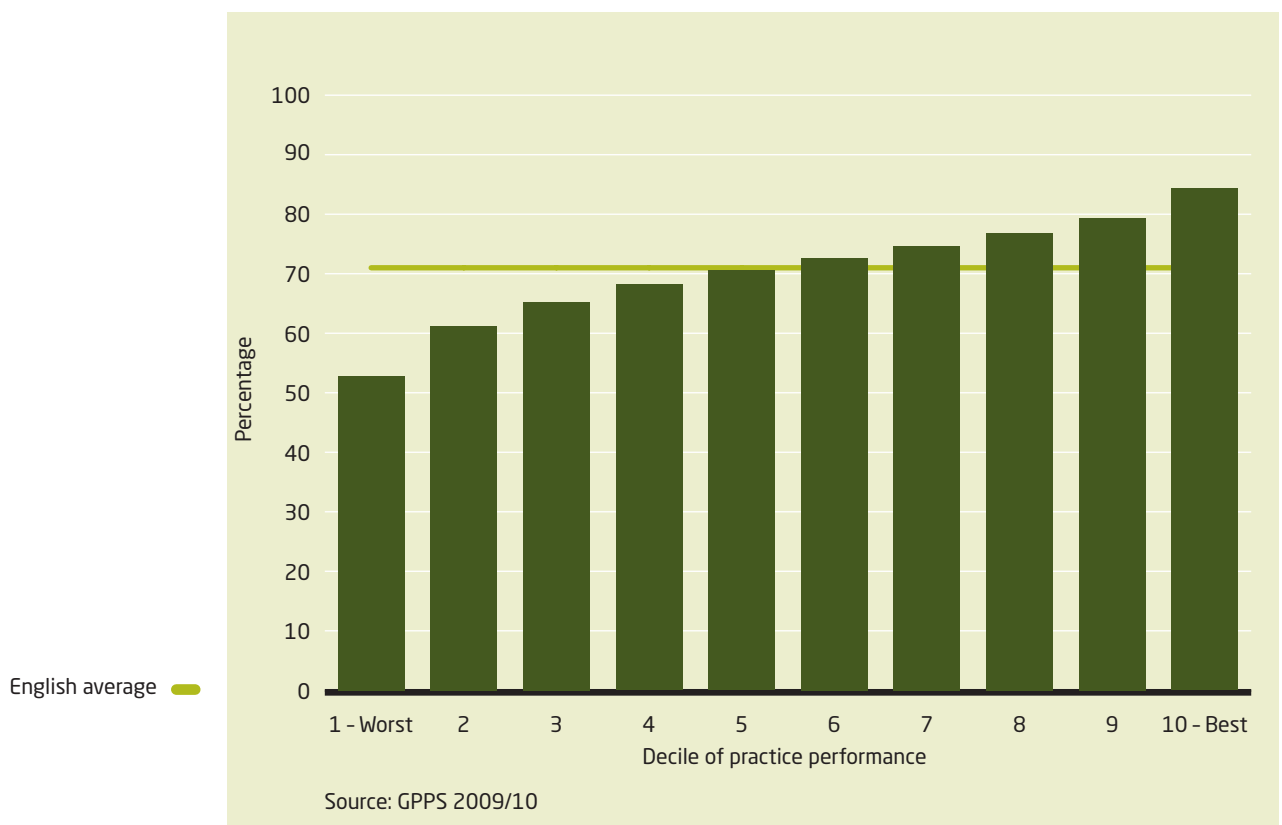


Figure 37 Percentage of patients who have confidence and trust in their GP, 2009/10

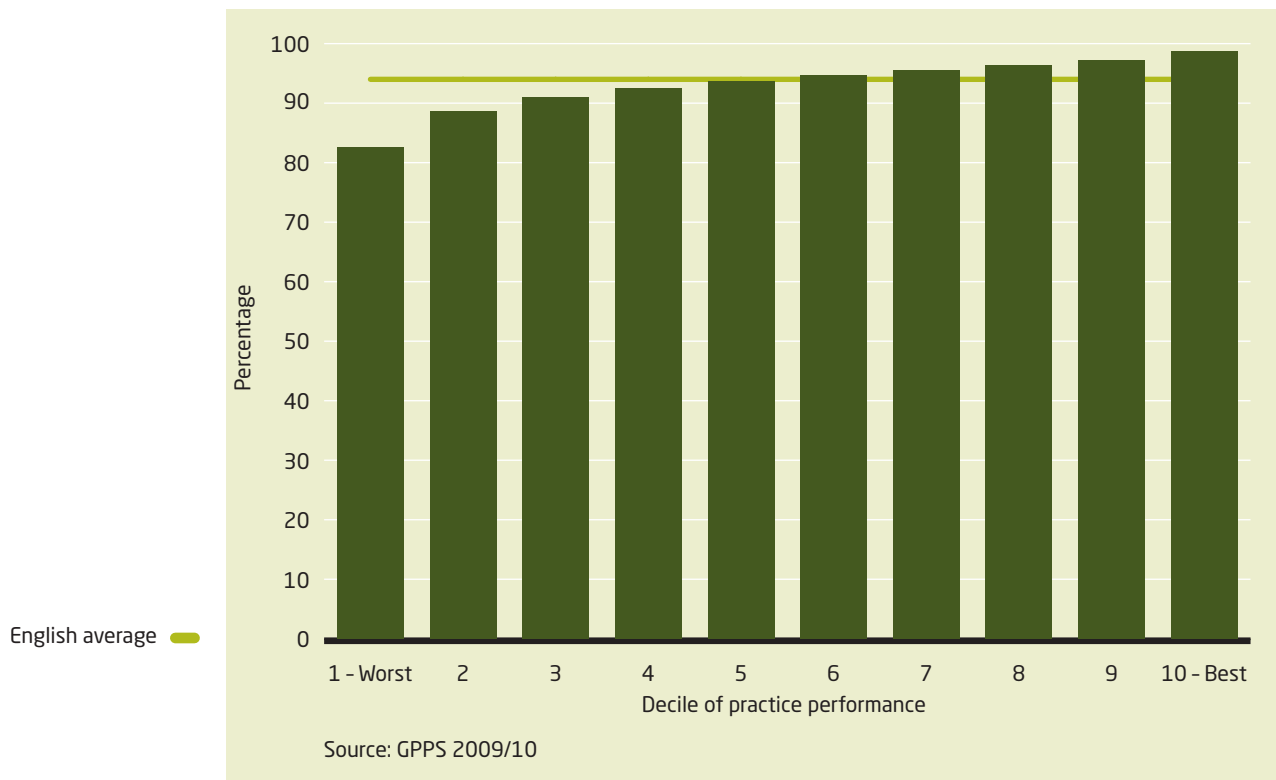


Table 12: Patient involvement in decisions by age and gender

Primary care survey 2008	Men				Women			
	16-35	36-50	51-65	>65	16-35	36-50	51-65	>65
'Yes definitely involved as much as wanted to be'	%	%	%	%	%	%	%	%
'...in decisions about your care and treatment'	58	66	73	78	61	69	74	77
'...in decisions about the best medicine for you'	50	53	59	66	56	58	63	64

Source: Picker Institute Europe 2009

On average, 77 per cent of patients rated their GP as good at explaining test and treatments, but this proportion ranged between 59 per cent and 88 per cent between the worst-performing and best-performing 10 per cent of practices. On average, 71 per cent of patients rated their GP as good at involving them in decisions about care, but this proportion ranged between 53 per cent and 84 per cent between the worst-performing and best-performing 10 per cent of practices.

Despite these variations in the levels of patient engagement, the research team concluded that, on the whole, patients report high levels of confidence and trust in GPs (Parsons *et al* 2010). Figure 37, above, shows that the majority of patients have confidence and trust in their GP (94 per cent). This variable shows much less variation than other indicators we examined, with over 80 per cent of patients reporting having trust and confidence even in the worst performing 10 per cent of practices.

Areas for quality improvement

Despite various strategies to promote patient engagement in general practice the evidence shows that patient engagement with general practice needs to improve. General practice, and the professional bodies that lead them, need to make a concerted effort to

develop a new strategy for patient engagement with a range of interventions, including health literacy, self-management support, universal patient access to medical records and the better use of patient experience and outcomes surveys that serve the purpose of improving the levels of patient engagement. As GP commissioning is taken forward, general practices should consider involving their patients in service development, evaluation and governance.

Listening to and involving patients and the public at a practice level are key to delivering high-quality services. This is different from involving patients directly in co-creating their health and care for example through personal budgets or shared decision-making. Practices need to involve patients and citizens in every level of the organisation. Meaningful engagement beyond those who have the time and inclination to attend open meetings will require practices to use technology and new media.

Patient engagement and involvement: key points

- Patients report high levels of confidence and trust in general practice, but patients' experiences of involvement in decisions about their care and treatment vary.
- Patients and carers remain poorly engaged in making decisions about their own health.
- More effort and attention in general practice needs to be placed in enabling patients to be engaged in decision-making and in supporting people to care for themselves.
- As GP commissioning is implemented, involving patients and the public in making decisions about services and in evaluating their success will be key to delivering high-quality services.

General practice as part of a wider system of care

The final set of dimensions examined by the inquiry looked at those aspects of care where the role of general practice is more contested or less well defined, but where it is integral to the wider system of care. It addresses:

- end-of-life care
- maternity care
- health inequalities.

End-of-life care

End-of-life care (EOLC) has historically been poorly organised, with large gaps in provision, depending on geography and diagnosis (Addicott 2010). Some of these gaps appear to be the result of confusion over roles and responsibilities, including those of the GP and general practice. Research has identified problems with out-of-hours care, monitoring and meeting patients' preferred place of care, and in GPs' confidence in communicating prognosis and care-planning discussions with patients (The King's Fund 2009).

To make sure patients' care needs and preferences are being met, all patients on end-of-life registers should have a documented care plan. To ensure that all stakeholders involved in patient care are aware of these care needs and preferences, these care plans should have been agreed by a multi-disciplinary team, including the GP, alongside other health and

social care providers as locally relevant. Although this type of information is not routinely available, it can be collected and monitored through local audit.

The number of practices reporting regular multi-disciplinary case review meetings of people on their palliative care database is a QOF target. The evidence shows a steady increase in attainment over time, with nearly 85 per cent of practices achieving this measure in 2009/10. However, it does suggest that the basis for high-quality palliative care is not in place in 15 per cent of practices.

Areas for quality improvement

The delivery of EOLC in general practice requires quality improvements to be made in many areas of care including: out-of-hours care, patient monitoring, and meeting patients' preferred place of care. The confidence of GPs in communicating prognoses and care-planning discussions with patients also needs supporting. General practice also needs to be better encouraged to:

- co-ordinate care across health and social care professionals
- promote continuity of GP care as patients' conditions change (for example, when entering a care home)
- improving communication skills with patients and carers about the prognosis and care planning.

End-of-life care: key points

- There is confusion regarding the roles and responsibilities of general practice and other care providers in providing end-of-life care.
- Evidence suggests problems with out-of-hours care and meeting a patient's preferred place of care, and that GPs lack confidence in communicating prognosis and discussing care planning with patients and their families.
- General practice needs to be encouraged to support the co-ordination of health and social care to people at the end of life and to promote care continuity.

Maternity care

Over the past 30 years, the role of GPs and general practice in maternity care has seen a dramatic decline, both in terms of involvement and skills (Smith *et al* 2010). The rise of professional midwifery has improved the quality of care that most pregnant mothers receive, and the evidence shows that mothers-to-be generally much prefer care provided by midwives with the professional skills to manage a normal pregnancy (Deverill *et al* 2010). However, the research we commissioned suggests there is a need to upskill GPs in maternity care and to develop a shared care approach with midwives (Smith *et al* 2010).

Very few practices fail to offer antenatal care and screening according to local guidelines. Between 2005/6 and 2008/9, the proportion of practices across England that achieved this remained at 98.7 per cent or more. Despite this recorded achievement, as measured in QOF, the analysis for the inquiry suggests there are a number of elements of care in which GPs could play a more active role in ensuring high-quality maternity services.

Areas for quality improvement

GPs should play an enhanced role in preconception, antenatal and postnatal care (but not intrapartum care). This would require GPs being adequately skilled to look after women safely, which would need some changes to their training. What is certainly true is that the current status of GPs in maternity care is in urgent need of clarification. The GP should be part of an effective team in which the roles, responsibilities and lines of communication are clear. Collaboration, co-operation, communication and competence are important characteristics of a high-quality service.

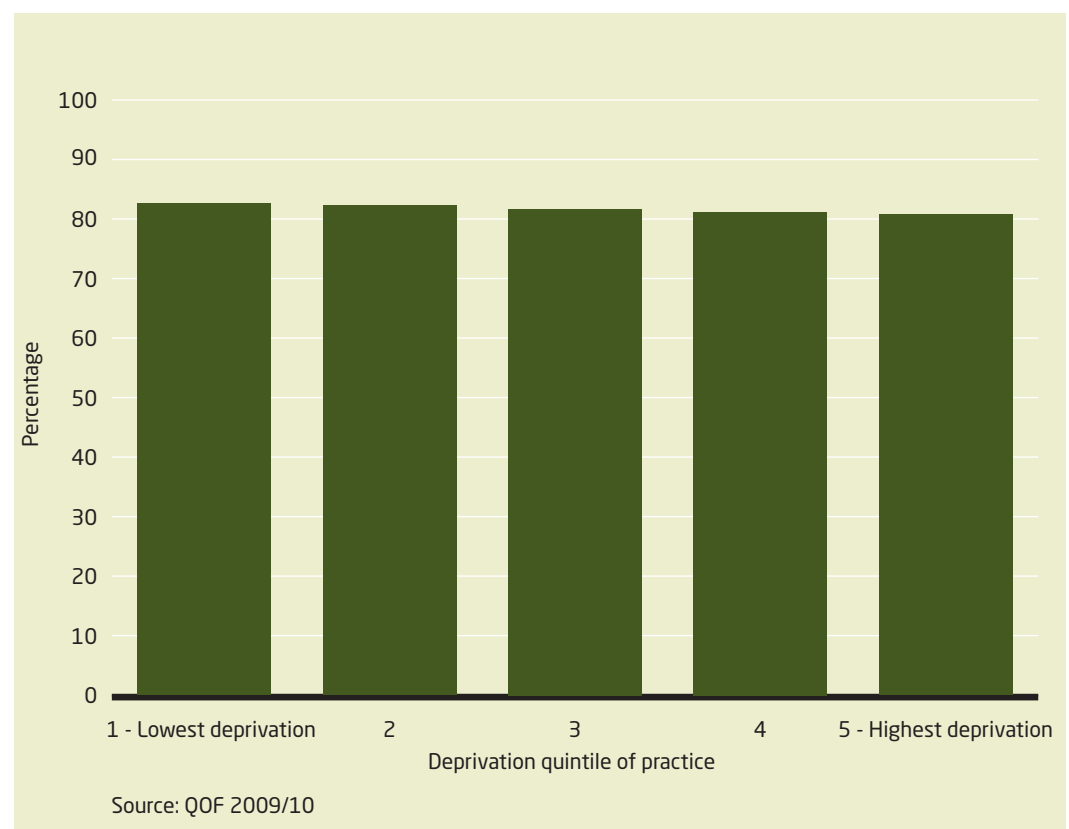
Maternity care: key points

- There has been a dramatic decline in the role of GPs and general practice in maternity care, in terms of both involvement and skills.
- There is a need to re-skill GPs in maternity care and to develop a shared care approach with midwives (except for intrapartum care).

Health inequalities

Health care (whether preventive or curative) should be provided on the basis of clinical need, regardless of personal characteristics such as age, gender, ethnicity, disability, socio-economic status or geographical location, and should aim to reduce differences in health

Figure 38 Percentage of patients with CHD and cholesterol 5.0mmol/l or less by deprivation quintile of practice, 2009/10



status, access to services and outcomes across population subgroups. Equality legislation also mandates requirements for equity.

General practice can play a key role in tackling health inequalities (British Medical Association 2010; Hutt and Gilmour 2010). Health inequalities can be defined as systematic and potentially remediable differences in one or more aspects of health, across populations or population groups defined socially, economically, demographically, or geographically. However, the research commissioned by the inquiry concluded that the majority of GPs were not currently equipped or motivated to engage with this aspect of health care. This was due to a lack of evidence, advice and incentive on how best to do so (Hutt and Gilmour 2010).

Hutt and Gilmour’s (2010) research uncovered numerous examples of health inequalities pertinent to general practice.

- Hypertension control has been poorly controlled in older age groups – especially in socially isolated males (Shah and Cook 2001).
- People from BME groups have been poorly served by mental health advocacy services (Newbigging and McKeown 2007).
- The treatment of depression, anxiety, schizophrenia, coronary heart disease and non-insulin-treated diabetes has been found to be higher in general practices in deprived areas (Moser 2001).

Many of the available indicators can be disaggregated at practice level by the various dimensions of inequality (for example, age, gender, ethnicity, disability and socio-economic status) to monitor equity of access and outcomes. The choice of indicators and the dimensions of inequality by which they should be disaggregated should be driven by the needs of local populations and circumstances.

Figure 39 Emergency hospital admission rates per 100,000 practice population by deprivation quintile of practice, 2008/9

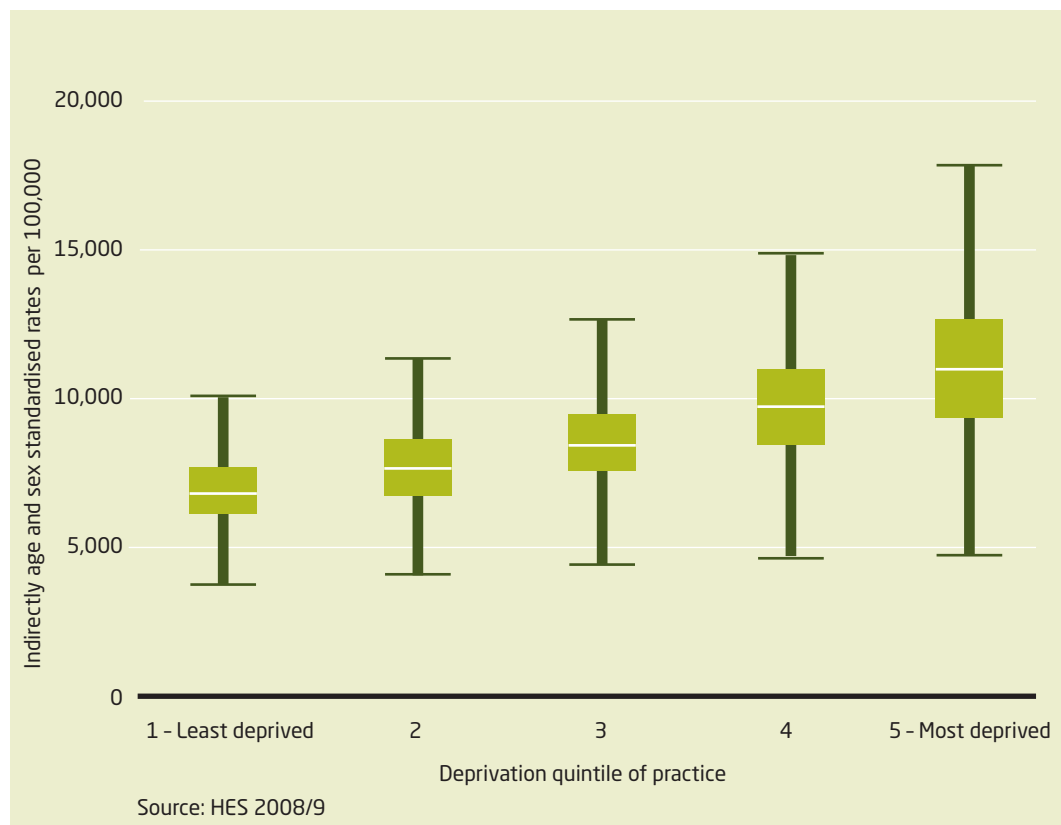


Figure 40 Elective hospital admission rates per 100,000 practice population by deprivation quintile of practice, 2008/9

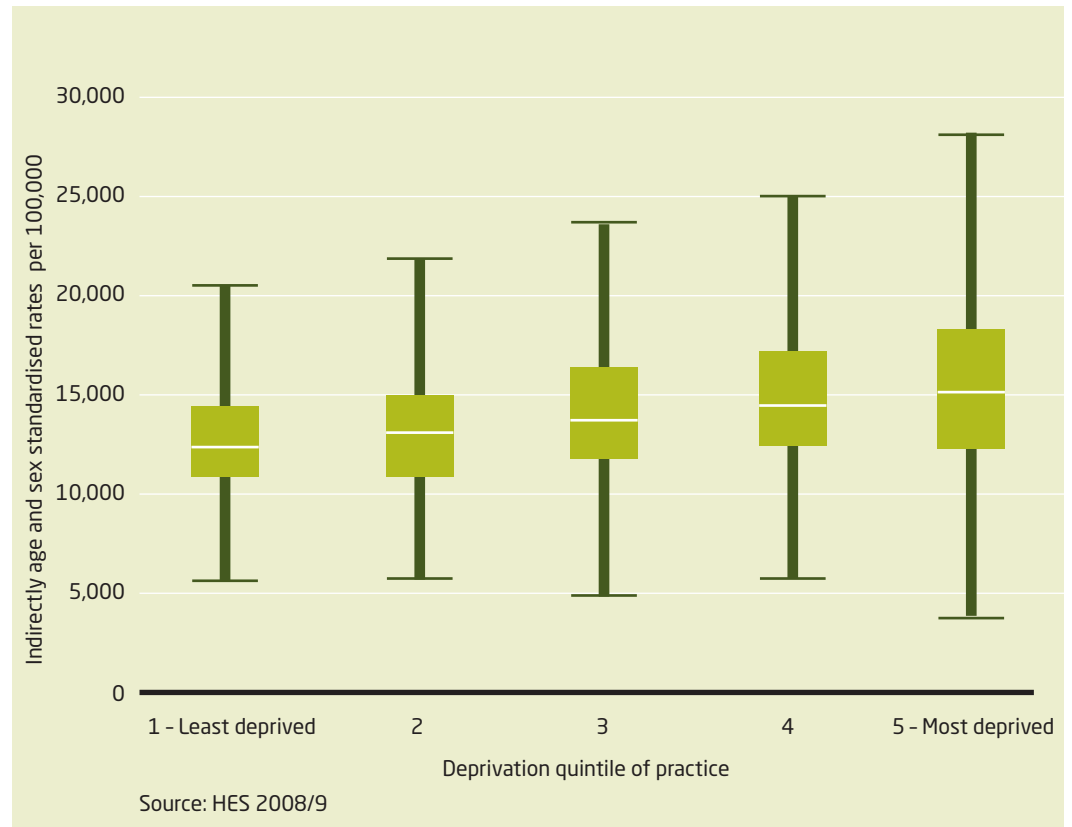
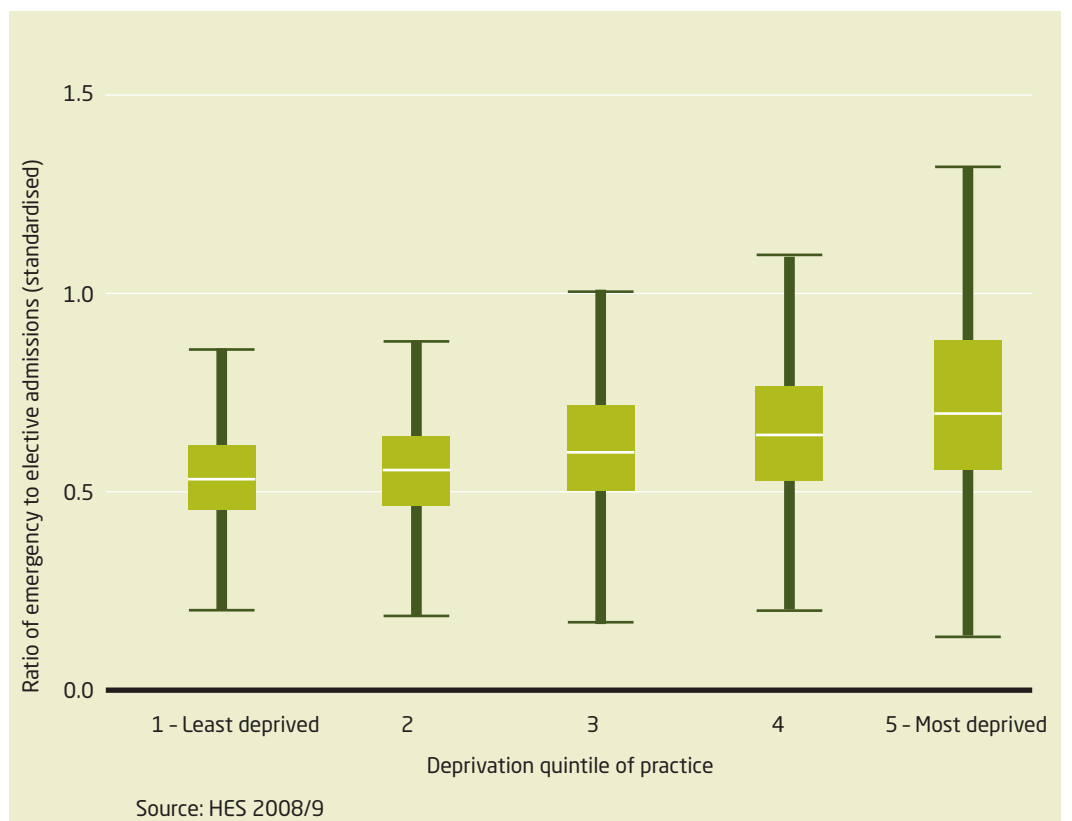


Figure 41 Ratio of emergency to elective hospital admission rates, 2008/9



An assessment of 34 QOF clinical indicator scores over the first three years of the scheme suggests that the gap in performance between deprived and affluent areas has narrowed, though the poorest-performing practices were still to be found in areas of the highest deprivation (Dixon *et al* 2010). Figure 38 on p 93 illustrates the high levels of performance to be found within QOF across all deprivation quintiles on some measures.

Figures 39, on p 94, and 40, on p 95, show the difference in age–sex standardised emergency and elective hospital admission rates, by deprivation quintile. There is a clear and strong gradient in the median rate of emergency admissions by deprivation, with higher median rates in the more deprived practices. Rates of elective admissions also show a deprivation gradient, but it is less steep. Other research (Judge *et al* 2010) has found that there are persistent inequalities in elective surgery rates by deprivation, even after adjusting for need, and recent research has found variations in referral to secondary care for dyspepsia, hip pain and post-menopausal bleeding by deprivation quintile (McBride *et al* 2010). Figure 41 on p 95 also shows that the ratio of emergency to elective admissions is higher in the most deprived practices.

There are a number of auditable measures that can be used to assess whether or not practices are addressing issues of inequality – for example, if:

- the practice collects information on the ethnicity, first language and religion of patients
- the practice conducts regular equity audits by, for example, age, gender, ethnicity, disability and the socio-economic status of patients
- interpreter services are available for patients in different languages, as appropriate locally
- the practice team have received training in dealing with the specific cultural needs of the range of ethnic groups for which they care
- the practice runs services to reach socially excluded people on their registered list.

Implications for quality improvement

GPs working in areas of high deprivation face high levels of clinical demands, and have to deal with a number of complex and pressing concerns from patients. Resources and training should reflect this. Medical undergraduate training and GP training has the potential to actively equip future doctors with knowledge and skills that is specifically relevant for tackling health inequalities. Health inequalities should continue to be co-ordinated nationally, in a framework that allows for local needs to be addressed.

Changes to the configuration of the NHS should ensure that tackling health inequalities remains a high priority. In particular, there needs to be a greater focus on health inclusion and on reaching out to the most vulnerable in society, who remain unregistered with general practice and lack access to care. GP commissioning consortia will have an important role in tackling inequalities in health care provision, and in tackling inequalities in the health of local populations. They will need good data for monitoring and tackling both types of inequalities.

Health inequalities: key points

- Practice-level variations in achievement of quality targets in general practice tend to show that, although the differences are small, poor-performing practices are in areas of the highest deprivation.
- GPs working in such areas are faced with a challenging case-mix of patients and high levels of demand. Practices in deprived areas might benefit from additional support and investment.

- There is evidence of inequalities in provision of general practice care for some patient subgroups.
- GP commissioning consortia will have a key role to play in assessing the needs of local populations and in tackling health inequalities.
- There needs to be a greater focus on health inclusion and reaching out to those in local communities who remain unregistered with general practice and lack access to care.

International comparisons

It is often asserted that English general practice is the ‘envy of the world’. Indeed, there is strong evidence internationally suggesting that the more effective health care systems are those with a stronger orientation to health promotion, disease prevention and providing accessible and universal primary and community care-based services (Goodwin 2008).

For example, one comparison of 12 industrialised nations showed that those countries with a strong primary care base achieved better outcomes, and at lower cost, than countries in which the primary care base was weaker (Starfield 1998). The core features that were consistently associated with good or excellent primary care included the comprehensiveness and family orientation of generalist-led primary care practices, within a wider system in which governments regulated the distribution of health care resources through taxation or national insurance. England and Wales rated top both in practice and system characteristics.

Table 13: UK ranking in international comparison of health systems by dimension of quality

	AUS	CAN	GER	NETH	NZ	UK	US
Overall ranking (2010)	3	6	4	1	5	2	7
Quality care	4	7	5	2	1	3	6
Effective care	2	7	6	3	5	1	4
Safe care	6	5	3	1	4	2	7
Co-ordinated care	4	5	7	2	1	3	6
Patient-centered care	2	5	3	6	1	7	4
Access	6.5	5	3	1	4	2	6.5
Cost-related problem	6	3.5	3.5	2	5	1	7
Timeliness of care	6	7	2	1	3	4	5
Efficiency	2	6	5	3	4	1	7
Equity	4	5	3	1	6	2	7
Long, healthy, productive lives	1	2	3	4	5	6	7
Health expenditures/capita, 2007	\$3,357	\$3,985	\$3,588	\$3,837*	\$2,454	\$2,992	\$7,290

Country Rankings	
	1.00-2.33
	2.34-4.66
	4.67-7.00

Note: * Estimate. Expenditures shown in \$US PPP (purchasing power parity).

Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organisation for Economic Cooperation and Development, OECD Health Data, 200 (Paris: OECD, Nov. 2009); Davis *et al* (2010)

A series of comparative studies published by the Commonwealth Fund on the performance of international health systems has ranked the United Kingdom consistently high overall, in comparison to others (see Table 13 on p 97). The United Kingdom's comparative performance shows that it has performed strongly in terms of access to care, equity, effectiveness and patient safety. However, it is comparatively poor in terms of timeliness of care (for example, in patients' ability to see a preferred doctor) and in terms of patient centredness (for example, patient involvement in decisions) (Davis *et al* 2010).

Understanding variations and identifying gaps in the quality of care

From the evidence presented above, what overall assessment can be made about the state of the quality of care in English general practice and what 'quality gaps' exist where improvements to the quality of care could be made?

A summative assessment of the evidence by dimension of quality examined during the inquiry is provided in the box below. In this section we seek to draw out from this evidence where we think the key opportunities lie for improvements in the quality of care, in terms of four key areas:

- examining the causes of variation
- ensuring that recommended care standards are met
- responding to patient experiences
- engaging with the wider system of care.

Summative conclusions about the current state of the quality of care in general practice by dimension of quality examined during the inquiry

- **Diagnosis** A variety of factors can lead to delays and errors in diagnosis, but there is not enough evidence to ascertain the scale of such problems in general practice. Retrospective audit and significant event audit is essential to assess and improve the quality of diagnosis.
- **Referral** There are wide variations in the rate of referrals between practices. The evidence suggests that a significant proportion of referrals made in general practice may not be clinically necessary. However, the appropriateness of a referral is specific to the context and it may be difficult to decrease unnecessary referrals without also decreasing necessary referrals. There is scope for improvement in other aspects of referral quality:
 - ensuring that timely referrals are made (especially in cancer care)
 - the quality of referral letters
 - getting patients to the right destination
 - involving patients in decisions about referral options.
- **Prescribing** Variation in the level of prescribing between general practices is common and widely reported. Much of the practice-level variation in prescribing results from differences in the clinical case-mix of patients and socio-economic factors. There are opportunities for quality improvement to address inefficient or inappropriate prescribing – for example, through:
 - reducing medication errors
 - improving adherence to what is prescribed
 - standardising prescribing practices for certain treatments, such as the prescription of low-cost statins.

- **Acute illness** Appropriate and effective diagnosis and management of acute illnesses are key aspects of high-quality care. The evidence suggests that GPs are more likely to make a misdiagnosis of acute illness compared to non-acute illness. More needs to be done to monitor the quality of acute care – for example, through peer-reviewed audit of referral letters and case notes, and to reach out to those patients whose acute illness is not being managed.
- **Long-term conditions** Improvements in the care of patients with long-term conditions have been made over the years, but the evidence suggests that recommended care is not delivered reliably to all patients – especially those with multiple long-term conditions. There is significant scope for primary and community care providers to undertake more proactive preventive activities that can lead to earlier diagnosis and treatment and can prevent unscheduled hospital admissions.
- **Health promotion** There is a need to target childhood immunisations at those groups where uptake is low. Most general practices meet targets related to smoking cessation advice, but there is evidence that a more proactive approach to supporting patients may help people to quit smoking. Approaches to the management of people with obesity are inconsistent, and obesity is often seen as a lifestyle issue rather than as a priority for general practice. More evidence is needed for appropriate health promotion interventions in general practice.
- **Access** Most people, most of the time, report good access to care. However, there are wide variations across all dimensions of access. Since people's preferences about access to general practice vary, retaining a set of measures to examine the broad picture appears reasonable. General practice needs to reach out to all those in their local community who need care but who are not currently receiving it.
- **Continuity of care** Enabling patients to see the same doctor and other clinical practitioners with whom they build a relationship over time is regarded as a priority by GPs and patients. There is evidence to show that the ability to see a preferred GP has become more difficult in recent years. There is a need to improve co-ordination of care, particularly for those patients with complex and long-term care needs. Greater priority needs to be given to continuity of care and care co-ordination, and innovative ways need to be found to assess the quality of such care in practices, and between practices and others providing public services.
- **Patient engagement and involvement** Patients report high levels of confidence and trust in general practice, but patients' experiences of involvement in decisions about their care and treatment vary. Overall, patients and carers remain poorly engaged in making decisions about their own health. More effort and attention in general practice needs to be placed on enabling patients to be engaged in decision-making, and in supporting people to care for themselves. As GP commissioning is implemented, involving patients and the public in making decisions about services and in evaluating their success will be a key aspect of delivering high-quality services.
- **End-of-life care** There is confusion about the roles and responsibilities of general practice and other care providers in providing end-of-life care. Evidence suggests that there are problems with out-of-hours care and meeting a patient's preferred place of care, and that GPs lack confidence in communicating prognosis and discussing care planning with patients and their families. General practice needs to

be encouraged to support the co-ordination of health and social care for people at the end-of-life and to promote continuity of care.

- **Maternity care** There has been a dramatic decline in the role of GPs and general practice in maternity care –in terms of both involvement and skills. There is a need to re-skill GPs in maternity care and to develop a shared care approach with midwives (except for intrapartum care).
- **Health inequalities** Practice-level variations in achievement of quality targets in general practice tend to show that, although the differences are small, poor-performing practices are in areas of the highest deprivation. GPs working in such areas are faced with a challenging case-mix of patients and high levels of demand. Practices in deprived areas might benefit from additional support and investment.

There is evidence of inequalities in provision of general practice care for some patient subgroups. GP commissioning consortia will have a key role to play in assessing the needs of local populations and in tackling health inequalities. There needs to be a greater focus on health inclusion and reaching out to those in local communities who remain unregistered with general practice and lack access to care.

Examining the causes of variation

From the evidence presented here it is clear that quality varies widely on many dimensions of care between general practices. In the knowledge that such wide variations exist in the quality of care it becomes imperative to identify and address variation where this is unwarranted. We believe that general practice and GP consortia must do this to improve the quality of care for patients, to maximise health outcomes, to minimise inequalities, and to ensure value for money. As the BMA has argued:

There is insufficient emphasis on trying to understand the reasons for variation between practices, or in offering patients an explanation for this.

(British Medical Association 2009)

More sophisticated analyses are needed to explore whether observed variations in how different GP practices organise and deliver care can be justified on clinical grounds. For example, case-mix adjustment can be applied to practice populations in order to create practice-level severity-adjusted referral rates. One such system – the Johns Hopkins Adjusted Clinical Groups (ACG) case-mix adjustment system – has been used to examine variations in prescribing between practices (Omar *et al* 2008). This type of approach can be used to pinpoint the instances where variation persists and does indeed need to be addressed.

As we have shown, observed variations in specialist referral rates are due to a range of factors of which clinical need is but one. Local variations in service availability, GP perceptions of risks and skills, and patient preferences can make a difference to the appropriateness of a referral in any given context. There is, therefore, no ‘right rate’ of referral. In this area of care, data on variations should be used as a way to examine in more depth whether particular referrals were appropriate or not. Crude rates of prescribing need to be treated in a similar way.

On many of the dimensions of care that the inquiry has examined, we have not been able to adjust for need or to assess the quality of care against defined standards, necessary for the purposes of comparative judgement. Rather, we have highlighted the variations

in the performance of practices, or PCTs, in order to identify where the potential for improvement lies.

Ensuring that recommended care standards are met

The evidence presented to the inquiry suggests that there is considerable scope for improvement in ensuring that all patients receive the recommended care, as defined in clinical best-practice guidance. Where patients are not receiving care in line with best practice or are receiving some but not all elements of recommended care, the quality of care may be described as suboptimal. Clinicians must still be able to vary care from a protocol or guideline given particular clinical or patient characteristics but the reasons for doing so should be recorded and used to learn and adapt the protocol in a dynamic process of reflection. Examples where clear opportunities to improve quality of care include:

- **prescribing** Not all GPs and general practices prescribe in line with standards of best practice. There is a need to standardise prescribing practice for certain treatments where there is clear evidence for efficiencies – for example, in the prescription of low-cost statins.
- **long-term conditions** Care is not delivered reliably to all patients with long-term chronic illnesses, nor does each patient necessarily receive all recommended care. This is particularly true for people with multiple conditions, but we have also identified this to be the case for diabetes, where the incentives provided to general practice to manage patients are far stronger.
- **preventable emergency admissions** The prevalence of unscheduled hospital admissions for conditions that could have been prevented suggest there is potential to manage patients better in primary care.

The need to ensure that care standards are met also applies to a range of activities that cannot be examined through routine data, but need to be explored through local audit and peer review. Clinical guidelines and protocols are increasingly automated and we look in the next chapter at ways in which data and information can be used to support general practices to close ‘gaps’ in the quality of care and ensure patients routinely and reliably receive recommended care in line with best practice.

Responding to patient experiences

Patient experience data can also be used to judge the quality of care comparatively without the need for sophisticated systems of adjustment. However, as happens within the GPPS, there may be a need to weight the data to adjust for any response bias particularly if numbers of respondents are small. Otherwise, patient experience is an important source of comparative data for general practices to use locally to benchmark performance of practices and to track improvements over time.

The evidence presented to the inquiry suggests that there are wide variations in patient experiences in terms of access to care, continuity of care, and patient engagement. This suggests that patients get very different experiences locally, and that more effort and attention in general practice should be put into improving the experience of patients in these areas. For example, patients and carers remain poorly engaged in making decisions about their own health, and more could be done to support patients to enable patient choice, provide care continuity and support self-care.

Engaging with the wider system of care

A final key conclusion to be drawn from the evidence is that general practice will need in the future to engage more directly with other care providers to improve quality. Better standards of care would be gained from a focus on developing forms of integrated, co-ordinated and shared care between general practices and other care providers. This is particularly true for people presenting in general practice with complex symptoms and/or in co-ordinating care for people with long-term chronic and mental illness, to those at the end of life, and in maternity care. A key emerging theme is the need for those working in general practice to better co-ordinate and/or integrate the care and services they provide with other care providers, including a revitalised relationship with patients themselves.

Conclusions

The inquiry concludes that the quality of care in English general practice is generally good across most dimensions of care. However, the lack of longitudinal data makes it difficult for the inquiry to come to any definitive judgement as to the pace at which the quality of care has been improving. Moreover, there are wide variations in performance and gaps in the quality of care. Practices that perform poorly compared to others will need to be challenged to improve and, where appropriate, supported to do so. Where the level of quality falls below acceptable standards, it is important that further action is taken to improve quality.

Many of those working in general practice may not be aware of the variations in performance and of the gaps in the quality of care that we have highlighted. We believe that an important first step in addressing quality improvements in general practice is to create awareness among GPs and their colleagues of the extent of these variations and gaps. This would help motivate them to explore the reasons that these exist, and to identify where there is room for improvement. Transparency is vital, since every practitioner has a professional duty to demonstrate to colleagues, and to patients, what they are doing and how well they are doing it. This will require professionals to be more open to scrutiny by their peers and by the public.

Most general practices have responded positively to the challenge to improve quality when they have been made aware of standards of performance. For example, the majority of practices score well on QOF, and have put in place changes to meet access targets and offer longer opening times. Indeed, many innovative practices have been at the vanguard of developing and implementing quality improvement programmes. However, where there is evidence that quality of care could improve, practices should be expected and supported to take action to improve the quality of services.

Two challenges emerge. The first is to create an environment in which practices strive for excellence and continuously seek to improve and deliver care reliably to all patients. The second is to broaden the focus of quality improvement beyond the narrow areas that have dominated performance measurement (namely, access) to include other important aspects of quality, such as continuity and the therapeutic relationship – even though these might be harder to quantify.

Since high-quality care requires general practice to play an increasingly important role in co-ordinating care across multiple providers, there are significant opportunities for general practice in England to improve how it relates to the rest of the system of care. This should also be encouraged to work with general practice.

We have argued that more needs to be done to make those working in general practice aware of the need to improve quality of care. However, many of those working in general practice already know they could do better for patients but feel disempowered to do anything

about it. They find that the many initiatives intended to improve quality do not in fact support them in this regard. So, in the next chapter, we examine approaches to promoting, supporting and embedding a culture of quality improvement within general practice.

Key points

- The majority of care provided by general practice is good. However, wide variations in performance and evidence of gaps in quality of care suggest that there is significant scope and opportunity for improvement.
- In judging comparative performance based on rates of variation it is important to determine whether such differences can be justified; for example, more data need to be adjusted to take account of case-mix differences.
- More needs to be done to make those working in general practice aware of these variations in quality and to understand how much of this is unjustified.
- More needs to be done to ensure that where unacceptable standards of care exist, these are addressed so that a better and more consistent standard of care can be delivered to patients. Practices that perform poorly compared to others will need to be challenged to improve and, where appropriate, supported to do so.
- There is considerable scope for improvement in ensuring that all patients receive all their recommended care as defined in clinical best-practice guidance; for example, in the prescription of low-cost statins and in delivering recommended care to people with long-term chronic illness.
- Significant potential exists to reduce the number of emergency admissions for conditions that could have been managed in primary care.
- There are wide variations in patients' experiences in terms of access to care, continuity of care, and patient engagement. Patients remain poorly engaged in making decisions about their own health and more could be done to support patients to make choices, to be engaged in decision-making, and to care for themselves.
- There is considerable scope to improve the quality of care co-ordination for patients with long-term chronic and mental illnesses, for those at the end of life, and in maternity care. Links between general practice and other services need to be strengthened in areas where patients with complex problems receive care from multiple providers.

5 Developing an environment for quality improvement

In Chapter 4, we established that there is room for improvement in the quality of care currently provided by general practice in England. While most general practice professionals are committed to providing a high-quality service to their patients, quality improvement is not embedded in every practice.

There has been an increasing focus on quality improvement in recent years, greater availability and sharing of data and information, and various forms of peer review of practice as a result of organisational changes, such as practice-based commissioning and new federated models of working. General practices are also making greater use of evidence-based clinical guidelines and decision-support aids (such as the Map of Medicine). The QOF has demonstrated that general practice is prepared to change the nature of the care it provides in order to meet quality targets – for example, by making good use of practice nurses, investing in information technology, and employing ‘QOF leads’ to ensure targets are met (Dixon *et al* 2010).

However, the inquiry believes that if general practice is to improve the safety, experience and outcomes for all those whom it cares for – including those who directly access services in general practice and those who access services beyond general practice but for whom the practice is ultimately responsible (Batalden and Davidoff 2007), then general practice must make quality improvement intrinsic to its everyday activities.

In this chapter, we discuss what can be done to foster a culture within general practice that supports quality improvement. In particular, we examine how general practice can be more proactive in the use of data and information to support improvements in quality. The chapter draws on work commissioned by the GP inquiry (Dawda *et al* 2010) and discussions at an expert seminar hosted by The King’s Fund in July 2010 on quality improvement in general practice. The chapter includes examples of local initiatives to improve quality.

Developing an environment for quality improvement requires action at many different levels. Policy-makers, regulators and commissioners all have roles to play in facilitating quality improvement. The chapter begins by focusing on what can be done within a general practice. It then discusses how external actors (such as regulators, commissioners and professional bodies) can create an environment that predisposes, enables and, ultimately, reinforces the adoption of quality improvement in general practice.

Supporting quality improvement from within general practice

General practice can provide an environment that supports quality improvement by addressing a range of factors, including:

- culture
- leadership
- collaboration and teamwork
- data and information tools

- improvement skills
- incentives
- time.

This section looks at each of these in turn.

Culture

Attitudes

The introduction of medical audit and a shift to evidence-based medicine, coupled with contractual changes over the past 20 years, have raised awareness of the need to improve quality in general practice. However, some GPs remain ambivalent about further advances in assessing and improving quality – and particularly about the idea that they should continually and proactively seek new opportunities to improve. This attitude is expressed to those delivering training in improvement in general practice, and features in the medical press (Gillam 2010).

Lack of a systems mindset

Quality from a clinical perspective has traditionally been influenced by the ‘craft-based’ model that regards health care as an enterprise shaped chiefly by well-trained and highly autonomous clinicians, with individual performance and decision-making being the main determinant of quality and patient outcomes. The structure of general practice means that many GPs work in a degree of isolation from their peers, so perpetuating the view of doctors as ‘autonomous artisans’ (Bohmer 2010).

Indeed, much of general practice in England might be characterised as being a ‘cottage industry’ in need of modernisation (Swensen *et al* 2010), since the individualistic mentality is at odds with most improvement methods that employ systems-based approaches to learning, delivering and shaping care.

Resistance to management theory

There are a range of approaches and tools to support quality improvement and the management of change. They include Lean Manufacturing, Six Sigma and the Model for Improvement. Each of these frameworks has a unique focus, and addresses slightly different problems, but they all seek to help staff with the challenge of translating evidence and/or innovation into practice in a reliable and efficient manner. Organisations often adopt aspects of more than one framework in their quality improvement endeavours.

For many GPs, quality improvement is seen as belonging to the domain of the professional manager, and is pejoratively referred to as ‘management speak’. This view is reflected by Richard Smith (1990), who states that descriptions of the principles and processes employed in improvement ‘may sound annoyingly theoretical’. Those working in general practice need to be engaged with quality improvement and identify with it as something they relate to. This requires a shift in the mindset and culture of general practice to one that views quality as a high priority, and in which every member of staff sees delivering and improving quality as a core part of their job. GPs and other staff are more likely to be persuaded by their trusted colleagues.

Vision

Quality improvement approaches provide tools for sustainable improvement in structures and processes of care, but they do not determine what the goals of improvement should

be. Practices, federations and consortia will therefore need to agree a clear vision and strategy to guide their improvement efforts. This would be the basis for determining priorities for improvement and then aligning structures, capacity and skills with those (Dawda *et al* 2010).

There is a need to nurture and support a culture of professionalism within general practice that is open and self-reflective – a culture in which self-audit and critical examination of practice among peers is the norm. There needs to be a culture of continuous quality improvement, with a commitment to seek information to understand practice performance and learn from high-performing practices. The development of GP commissioning consortia and larger provider organisations (such as federations) may create an environment that is conducive to quality improvement, including a local culture of peer review, accountability and support. Giving GPs more responsibility for evaluating and shaping health services may also predispose them to consider new approaches to quality improvement.

Leadership

If team members are to embrace change, their practice leaders must have a demonstrable commitment to quality improvement. These leaders will need to:

- deliberately and explicitly embrace an ethos of putting patients first and seeking to provide excellent care
- involve every member of staff in the mission of continually improving care
- value and incorporate patients in measuring and improving their care.

The Medical Leadership Competency Framework (NHS Institute for Innovation and Improvement/Academy of Medical Royal Colleges 2010) clearly articulates the general leadership qualities that GP leaders need.

There is also a need to develop leadership skills that enable GP leaders to balance their role in supporting colleagues with the need to challenge them. The inquiry recognises that quality improvement in general practice requires knowledge that can be derived only from detailed understanding of the work of practices and the populations they serve. As such, peer challenge within and between practices is an important means of improving the quality of care. Yet it is often argued that doctors who choose a career in general practice frequently do so because of the autonomy of family doctors and their relative freedom from oversight and scrutiny.

Much hinges on the willingness of GP leaders to build effective relationships, to engage in difficult conversations with their peers, and to challenge, for example, unwarranted variations in practice or outcomes. The hope is that pressure from respected and credible peers will be a more effective means of improving performance than previous approaches. Evidence from previous approaches to GP-led commissioning (including the most recent practice-based commissioning schemes) underscores the need for credible and respected leaders who the local GP community is willing to follow.

The evidence would suggest that GP commissioning might lead to improved communication between general practices where relationships are good, but that it might equally inflame existing tensions where such relationships have not been developed (Curry *et al* 2008). Overall, history tells us that empowering general practice to take an active and innovative role in commissioning has tended not to stretch beyond a minority of enthusiasts.

Leaders of commissioning consortia will need a set of skills and capabilities that may differ from those required in leading provider organisations. There are likely to be a set of

specific commissioning skills that GPs working in consortia will either need themselves or will have to buy in. Moreover, the GP consortia themselves will need support to develop a wide range of new skills – in leadership, commissioning, management and finance – if general practice is to grasp the opportunity ‘to work with community leaders and their local authorities to take the reins and steer their local services to improve quality standards and outcomes’ (Department of Health 2010c).

Collaboration and teamwork

Building relationships within a practice is critical to quality improvement. As we saw in Chapter 2, general practice is increasingly a team-based activity, but GPs are commonly the owner–managers of the business. As such, they tend to shape and/or approve decisions about how a general practice is run. The lack of other professionals in leadership roles in general practice can create barriers to involving the whole team in quality improvement. Doctor-dependent cultures can stifle improvement (Lawrence and Packwood 1996; Baker *et al* 1995). Meanwhile, non-GP members of the practice team who are unused to being involved in planning or assessing improvement can be anxious about assuming greater responsibilities (Baker *et al* 1995). However, the evidence from experience suggests that collaboration and teamwork is critical in taking quality improvement forward in general practice (Dawda *et al* 2010).

Quality improvement flourishes best in a culture that promotes the engagement and empowerment of all staff in:

- measuring, understanding and improving quality
- accountability for improving, employing openness about performance and variability and incorporating rewards and penalties
- continual rather than periodic improvement, where improvement contributes to the ‘fabric of the practice’ and is a part of every person’s working day.

An example of team involvement in quality improvement is presented in the box below.

Case study: Team involvement

A six-partner practice felt that it needed to improve the contribution of its office staff to quality improvement. The practice felt that these staff would be a rich resource of ideas and contributory actions for the improvement efforts, but found them hard to engage. As a small-scale test of change, they put a staff suggestion box in the office. Several cards appeared in the box, but most were simply venting frustrations. Nothing much more happened.

As a second test, they added a section to the suggestion form asking for ideas for changes that would reduce the frustrations. There were more responses and several useful ideas for improvements. However, none of the office staff then acted on these ideas, as they felt they did not have the authority to do so.

The practice then provided staff with some training in the Plan/Do/Study/Act (PDSA) methodology. They were encouraged to operate the suggestion box within the office environment and were empowered to make small-scale changes and test them as they felt appropriate. This soon led to several ideas that were made mainstream, and led to improvements in quality.

Following the initiative, in appraisals staff said they felt more motivated, proud of the changes they had made, and more included in the way the practice was run.

Source: Adapted from Dawda *et al* (2010)

Using data to support high-quality care

In Chapter 3 we looked in detail at what the inquiry has learned about measuring quality in general practice, and our analysis in Chapter 4 shows the potential to use routine data to benchmark practices, highlight variations in performance and suggest areas for quality improvement. Here, we look at how this data can be used within practices to support quality improvement.

Quality measures are an important element in driving improvements in general practice, and can be used in a number of ways – for example:

- to enable patients to choose their general practice on the basis of comparative performance measures, thereby incentivising GPs to improve quality in order to attract patients (and income)
- to motivate the intrinsic professionalism of GPs and general practice professionals to aspire and reach improved standards of care
- to challenge the reputation of general practices through benchmarking their performance against their peers, driving a desire to protect or improve their reputations relative to others (Berwick *et al* 2003).

Most approaches to quality improvement require information and data to evaluate needs and opportunities to refine solutions and monitor outcomes. While there has been an increase in the amount of performance data collected about general practice, general practice still does not routinely and proactively use this data to support quality improvement (Dawda *et al* 2010).

We now consider four tools for quality improvement:

- point-of-care prompts
- predictive risk modelling
- benchmarking and peer review
- patient surveys and feedback.

Point-of-care prompts

Data tools are now available that enable care to be more proactive and anticipatory. Many of the IT systems in use in general practice incorporate point-of-care prompts and decision-support software. QOF has driven the development of point-of-care alerts that notify clinicians, during clinical consultations, where an activity rewarded in QOF has not been delivered. The possibility exists to use similar prompts for locally identified priorities and to identify gaps in care – for example, where a patient with a particular diagnosis is not receiving all of the recommended care in line with clinical standards.

Existing GP medical record systems could be adapted, through the use of templates, to embed evidence-based clinical standards into clinical practice. For example, Map of Medicine guidelines could be incorporated into EMIS templates. These could also be used to improve the quality of referral information. For example, GPs could be required to complete all fields of the template before referral, incorporating the template into the referral letter and providing an agreed minimum set of information to the receiving specialist.

By linking the data with Hospital Episode Statistics, it is possible to identify gaps in care where a presentation in one part of the system indicates an underlying health condition that may not be being proactively managed in general practices. For example, it might identify a patient who attended A&E with an asthma attack but who is not currently being prescribed a preventive inhaler.

Practices need to make full use of clinical decision-support tools in order to reduce variation that is caused by not practising in line with evidence-based guidelines. However, clinicians must be able to use decision support appropriately so that it does not reduce the consultation with the patient to a series of mechanistic prompts and responses.

Predictive risk modelling

Predictive risk modelling uses statistical techniques to identify individuals at risk of ill health in the future, based on their past medical history and use of health services. Data from general practice and from hospital outpatient, inpatient and A&E departments, as well as potentially also pharmacy and social care data, can be combined to predict the risk of an emergency hospital admission during the following year (Wennberg *et al* 2006). There are simple tools that use only hospital data to predict the risk of readmission, such as the Patients at Risk of Readmission tool. These have most commonly been used to identify patients who could benefit from more intensive case management to prevent a further deterioration in their condition.

Tools that use more comprehensive data enable profiling of the whole population, allowing segmentation and more targeted approaches to case management, disease management and supported self-management. These tools are most often used to design community-based interventions that enable people with long-term conditions to be cared for at home, preventing clinical deterioration and the need for a hospital admission. The report to the GP inquiry on managing long-term conditions concluded that this approach had great promise. However, it noted that few general practices were proactively using risk prediction and risk stratification tools, and reported that the evidence base for the effectiveness of interventions was variable (Goodwin *et al* 2010a).

In future, general practice will increasingly need to take on population management, and to proactively identify individuals within the community who are at risk of developing disease. General practices need to make full use of data and access to information about the health and needs of their registered population, and to use tools to identify high-risk patients who might benefit from preventive advice or support.

Benchmarking and peer review

Peer review involves sharing clinical performance data among members of a professional peer group. This common approach to quality improvement uses data that can be collected and distributed within and between practices. *Measuring for Quality Improvement* (Information Centre for Health and Social Care 2011) sets out the Department of Health's aspiration to encourage local care teams to use quality indicators to benchmark their performance on a day-to-day basis, on the assumption that this will galvanise the professions to improve care.

The approach can be highly effective. For example, evidence from a review of evaluations of physician profiling found small but statistically significant improvements in clinical practice associated with doctors sharing comparative data on clinical practice (Balas *et al* 1996).

Benchmarked data can be the basis for feedback and challenge of existing behaviours and practices. However, particularly in areas such as referral and prescribing, the justification for a practitioner deviating from the norm should be used primarily for learning rather than judgement.

If data is to be used effectively for peer review, it must be presented in a way that helps staff to engage with it. Quality improvement methods make much of how to present data visually. There are a number of standardised methods that can:

- show linkages between multiple improvement projects
- measure wasted staff time
- illustrate variation over time and between items
- highlight 'high-impact' aspects of care.

Experience in other health care settings, and in early adopter GP practices, indicates that these are highly effective means of engaging and enthusing staff in service improvement. Two practical examples of approaches include the 'bundle' approach and 'statistical process control' (*see* the box below).

Two practical approaches to benchmarking data

The bundle approach

Triangulating data sources can be a powerful means of establishing a more rounded view of a practice's performance. Using multiple single measures often provides an impression of good performance. However, when these measures are viewed using bundles it often become clear that patients are not receiving care reliably (*see* pp 64–5). Bundles therefore highlight the opportunities for improving the reliability of care.

Statistical process control

Applying statistical methods to the monitoring and control of quality can help ensure that general practice operates at its full potential. For example, monitoring time-series data might enable the user to identify performance that falls outside of expected limits (control limits), an increasing or decreasing trend or an unusual trend or pattern, and to assess whether the process is unstable and unpredictable or whether variation is inherent in the process. This method leads to a more evidence-based approach to handling normal variation in data.

For more information on using and interpreting statistical process control, see NHS Institute (2010).

Patient surveys and feedback

Achieving quality – as perceived by the patient – is a central aim of quality improvement strategies, and requires the involvement of patients in evaluating care performance. However, a historic shortcoming of the NHS as a whole is that too little attention is paid to data on patients' experience, and too little time devoted to involving patients in decision-making (Parsons *et al* 2010).

Some general practices have been at the leading edge in developing and supporting the use of patient experience data, but the historically low profile of the public and patients in accountability and governance structures for general practice has meant that the patient voice has been relatively weak in the quality improvement environment.

We recommend that practices routinely collect and act on patient feedback on their experiences of care, using simple technologies that are available in the practice. Practices should also use standard instruments, such as the GP's Experiences Questionnaire (GPEQ) and Improving Practice Questionnaire (IPQ), to systematically gather patients' views of their care. Groups of practices can then use this data for benchmarking and improvement and, where appropriate, to identify and challenge poor performance. This data could form part of the multi-source feedback (from staff and patients) used regularly in appraisal, revalidation and practice accreditation.

The key point is that this data must not only be collected – they must be acted on. There is increasing use being made of patient-reported outcome measures, but their routine collection is currently limited to surgical procedures. Further work is needed to develop valid patient-reported outcome measures (PROMs) for use in general practice.

Pressure from patients to drive higher-quality services is important, and needs to be encouraged. This might be facilitated, for example, through providing patients with access to their own medical records and/or supporting them to make informed choices about the care they receive.

Improvement skills

In order to embed quality improvement within general practice, many staff will need to acquire new skills in measurement, service redesign and improvement methods. This may require considerable investment by practices. Historically in PCTs and SHAs, there has been a shortage of staff who have been able to facilitate improvement in general practice, and there is only limited provision for practices to access appropriate training (Dawda *et al* 2010). For example, the research literature suggests that staff in general practice receive a limited number of days' training, practical project support and ongoing coaching (Wilcock *et al* 2002; Geboers *et al* 1999; Hearnshaw *et al* 1998; Baker *et al* 1995). Practices need to schedule protected learning time each month for practice training, and incentives should be provided to support that.

However, training alone is unlikely to be sufficient to ensure that new ways of working are rapidly adopted. Facilitative, practical support may be needed to help practices implement the quality improvement techniques that they will learn about in training programmes (Dawda *et al* 2010). This approach to supporting quality improvement activity is similar to the Medical Audit Advisory Group (MAAG) model used in the 1990s, which was a key factor in the successful spread of audit in general practice. The experience with MAAGs suggests that external support such as that provided by Quality Improvement Support Teams (QISTs) can be developed locally, through multi-disciplinary groups of general practice-employed staff, patient representatives and other partners in care. Teams such as this offer the opportunity for quality to be integrated across all aspects of general practice, with an emphasis on meeting patient needs.

There is no 'magic bullet' for quality improvement (Oxman *et al* 1995). There is no definitive evidence that any single approach is superior, and the effects are highly context-specific (Boaden *et al* 2008; Walshe *et al* 2002). Walshe (2009) argues that little further knowledge is to be gained by researching which approach is most effective, and that further research should be directed at identifying the determinants of effectiveness. He suggests that implementation is the key success factor, regardless of the quality improvement initiative (Walshe and Freeman 2002). It has been shown that quality improvement strategies in primary care can make a difference, but that no single method is always effective (Lester and Roland 2009). Nevertheless, passive education appears to be the least effective approach, and multi-faceted interventions the most effective – especially when sustained over time (Bero *et al* 1998).

Incentives

Most of the incentives faced by practices and staff working in general practice are currently determined by external organisations. More attention needs to be paid to creating incentives for individual staff working within general practice. An increasing proportion of doctors are salaried while other practice staff, such as practice nurses, have generally not shared in performance-related bonuses – despite their significant

contribution to the attainment of levels of QOF achievement, for example. Practices may need to develop micro-incentive schemes to reward the behaviour that is desired. Some US medical groups with budgets have created locally determined financial incentives linked to quality metrics (Thorlby *et al* 2011). However, there is likely to be less scope for offering financial incentives in the future, due to tighter funding and a desire to control public-sector pay deals.

The focus on financial incentives has meant other non-financial incentives have largely been ignored. Indeed, to some extent they have crowded out more altruistic or professionally motivated behaviours (Le Grand 2003). A wide range of influences shape clinicians' behaviour – the desire to deliver quality care and to be seen in high standing by colleagues are particularly powerful forces, since these are core to most clinicians' professional identity (Mountford and Webb 2009). High-performing medical groups in the United States recruit and select clinicians not merely on technical competence but on values and behaviour. Groups make a point of celebrating and publicly acknowledging success, ensuring that professional pride is a motivating force. As larger, federated models of general practice develop, they need to be clear about the culture and values in which they are asking clinicians to work.

The proposals to give GP consortia responsibility for the commissioning budget will also change the incentives faced by practices. Making practices accountable for the financial consequences of their clinical decisions should create a greater incentive to drive improvement and challenge poor practice. While practices will be required to join consortia, consortia will largely be free to determine how they relate to member practices.

GP commissioning consortia will need to establish a system of rewards and penalties that are genuinely influential and can focus on local priorities. They need not be entirely, or even wholly, financial – and should be designed in collaboration with member practices. However, these need to be mindful of the potential conflicts, and of interests and public perceptions of these. There should be clearly differentiated consequences for high-performing and poor-performing practices. General practice will be more predisposed towards quality improvement if the consequences of poor performance are clear.

Time

All staff in general practice need time to train and to update their skills. Continuing professional development is currently an inadequate mechanism through which to do this, and protected time is not always given to all staff within general practice. Concerns about a lack of time for undertaking any new activity are prominent in the minds of many GPs when presented with ideas about quality improvement. Although proponents of improvement assert that, once embedded into an organisation, these approaches are both more effective and more efficient, these benefits rarely seem evident to GPs when they first hear about quality improvement.

Effective quality improvement requires an investment of time by practice staff to perform the tasks of reviewing and interpreting data, agreeing priorities for improvement, and planning change projects. It is essential that practices carry out these activities on a regular basis. It is suggested that most practices will need to devote half a day per month to such meetings (Dawda *et al* 2010). There is also a need to develop different modes of learning, such as short 'just in time' reminders, e-learning modules and team-based learning.

There is a real need for general practice to create space for reflection and learning – both individually and in teams. The current organisation of many general practices, including approaches to triage, skill-mix, appointment scheduling and demands for longer opening

times, mitigate against freeing up time to step back and think differently, and to trial approaches to measurement and system improvement. The contractual arrangements for staff need to build this in – perhaps adopting an initiative such as contractual programmed activities that are set out within the consultant contract and are agreed as part of job plans.

Bringing it all together

So far, this chapter has set out a number of enablers, drawn from our review of quality improvement in general practice, that we believe are needed to create an environment in general practice that supports quality improvement. It has also identified some of the challenges to embedding quality improvement in general practice. We now go on to consider two case studies of quality improvement in general practice that illustrate how a range of approaches and practical initiatives can be put together to support quality improvement locally.

Case study: NHS Tower Hamlets

NHS Tower Hamlets is a PCT that has adopted a multi-tiered approach to quality improvement, based on investing in the capacity to deliver services in primary care while developing GP leadership and robust frameworks for assessing and rewarding quality.

In 2005, the trust devised a comprehensive strategy for developing local health services called Improving Health and Well-being in Tower Hamlets. This was undertaken in partnership with local health care professionals (including GPs), the local authority, and representatives of the local community. Refreshed in 2009, this strategy forms the basis for the development of quality improvements of local primary and community care services.

Key elements of the strategy have included investment in more GP and nurse posts, to increase capacity to enable practices to register more patients and offer extended hours. Individual practices developed into clusters, and have sought to work more closely with other providers, including community health care teams, the local authority, the voluntary sector and with specialist care.

These integrated primary care networks have focused on key local priorities, including the management of people with diabetes and childhood immunisations. In each case, a hybrid Local Enhanced Service arrangement was developed, with clear performance criteria in terms of achieving better health outcomes. In diabetes, for example, some 70 per cent of the funding is provided upfront and 30 per cent held back to be allocated based on performance. The aims of the innovations have been:

- to tackle variations in care
- to ensure greater consistency
- to use the workforce more appropriately
- to focus on outcomes including patient satisfaction, better control of diabetes and a higher uptake of immunisations.

Supporting quality improvement

The health and well-being strategy has included a range of measures to improve the quality of general practice in Tower Hamlets, combined with remedial action to tackle instances of unacceptably poor performance.

The trust created a salaried post for a lead GP to take on responsibility for GP appraisal, alongside a team of GP appraisers competitively selected from local practices. The appraisal function has a written framework, with clear standards of performance.

A specific budget supports continuing professional development for GPs and their staff. Activities supported include:

- protected learning time of half a day a month for all practice staff (clinical and non-clinical) on topics related to newly commissioned services, local enhanced services, QOF domains, and learning needs identified from appraisal and personal development plans
- monthly forums for individual professional groups, including GPs, practice nurses and practice managers
- group-based consultation skills training led by RCGP College examiners and local GP trainers
- one-to-one coaching by GP trainers on consultation and clinical record-keeping skills
- one-to-one peer support, coaching and clinical supervision by GP educationalists, drawn from a panel (many of whom are GP appraisers), reporting back to the PCT
- mentoring by GPs trained in mentoring skills, undertaken in complete confidence, with no information being shared with the PCT
- encouragement and subsidy for practices to engage with the RCGP's Quality Practice Award
- external consultancies commissioned to work with practices to address dysfunctional teams and to support high-achieving practices to develop further.

Tackling poor performance

A key issue in NHS Tower Hamlets' case has been to support and address failing general practices. To tackle this, commissioners of GP services have made full use of their powers to ensure that general practice fulfils the terms of the quality of care as stipulated in their contracts. This has given the trust the levers to seek quality improvement and, ultimately, where all efforts have failed, to terminate contracts. NHS Tower Hamlets has also used the NHS Performers List Regulations as a tool for managing quality and through this has taken action at various times to refuse entry, suspend, contingently remove or ultimately remove doctors from the Performers List. The trust has used these mechanisms, as well as referral to the national regulator, to remove poorly performing GPs.

Case study: NHS County Durham and Darlington

NHS County Durham and Darlington are two PCTs that work together to form part of a regional quality improvement collaborative known as the North East Transformation System (NETS) coalition. The NETS coalition links NHS organisations in north-east England with the Virginia Mason Medical Centre (VMMC) in Seattle, United States, where 'lean thinking' principles have been used to improve the quality and safety of health care. Lean thinking is an approach to continuous quality improvement that seeks to satisfy customer needs by eliminating non-value-adding activities, or 'waste'. It originated in the Japanese automotive industry, but is being used increasingly in other sectors, including health care.

Supporting quality improvement

NHS County Durham has established an innovative initiative called the Primary Care Pathfinder Programme to implement NETS and lean thinking in general practice, to help improve quality and productivity. The programme is designed to deliver safer care and better patient experience by increasing the effectiveness of processes within general practice. It also focuses on freeing up time for staff to do their jobs more effectively, by removing unnecessary process steps.

To demonstrate how NETS and lean thinking can be applied, the trust has run a series of rapid process improvement workshops with general practices. For each workshop, practices identified a specific issue for improvement, chose metrics relevant to the process and provided baseline data in the run-up to the event. They were tracked for three months afterwards at 30, 60 and 90-day checkpoints.

Outcomes

The programme has resulted in a range of improvements in safety, patient experience, effectiveness of care processes, staff morale and productivity, including:

- safer care processes, such as reduced risk of error by simplifying process steps and improving work procedures
- more effective processes, such as improved flow of work and reduced waiting times
- improved patient experience – for example, with better room layouts and reduced interruptions
- better staff morale, and less stressful environments in which to practice.

To date, more than 300 primary care staff have been involved in the programme through improvement activities, training and other awareness-raising events. The trust has now produced a resource called *NETS for General Practice Toolkit* to aid implementation within general practice and provide examples of application. The toolkit provides simple, easy-to-use guides on tools and techniques of lean thinking within the context of general practice.

There were some barriers to implementation – predominantly resistance to change and a lack of perceived need to measure the current and future status. The trust used a combination of senior leadership, facilitation and coaching within each activity to overcome these barriers.

Supporting quality improvement from outside general practice

It is critical that the external environment of contracting, performance management, regulation and professional bodies support and nurture professionalism in general practice as the basis for quality improvement. In the remainder of this chapter we consider the external environment in which general practice operates, and discuss how this could support quality improvement, focusing on the roles of:

- commissioners
- regulators
- professional bodies.

The role of commissioners

Pay for performance

One of the main incentives for quality improvement for general practice has been the introduction of pay for performance in the 2004 GMS contract under the QOF. We have already reviewed how quality is measured under this contract (*see* Chapter 3, pp 32–3). Here, we consider its impact on the quality of care.

There is evidence to suggest that the QOF has led to changes in the behaviours of GPs to improve the quality of care for a number of important medical conditions (Calvert *et al* 2009; Campbell *et al* 2007; Majeed *et al* 2007). However, QOF has also been criticised for skewing the focus of attention, with poorer performance on non-incentivised areas of care (Gillam 2010; Campbell *et al* 2009; Steel *et al* 2008). This reinforces a view that performance management of particular measures risks creating tunnel vision and crowding out improvements in other areas of care (Guthrie 2008). QOF is also reported to have limited participation in audit and to have created an expectation among GPs that they should always be paid for engaging in quality improvement, rather than seeing it as their core business.

For pay-for-performance systems to have a long-term sustained impact on quality, the actual benchmarks themselves need to be suitably ambitious. With most GPs scoring over 90 per cent, the National Quality Board (2010b) has concluded that QOF 'is not sufficiently able to discriminate between performance'. There is evidence that the rate of improvement in QOF scores has slowed, 'probably due to general achievement of maximum payment levels' (National Audit Office 2010).

The ability to exclude patients from the pay-for-performance measure is justified in order to safeguard patients against inappropriate treatment, and to mitigate against the risk that practices shun 'difficult' patients. Monitoring of the use of exception reporting – where some registered patients can be excluded from the QOF calculations – found some evidence that a small number of practices had manipulated the figures in the first year (Doran *et al* 2006), but this did not persist (Doran *et al* 2008b).

While some exceptions are for clear-cut clinical or administrative reasons, there are also a large number of 'discretionary' exceptions (National Audit Office 2010). The challenge is to balance the realities of patient care (for example, avoiding a situation where an incentive will encourage a GP to continue prescribing statins to a terminally ill older patient, even though clinical judgement might indicate otherwise), while reducing the potential for a practice to manipulate its performance data or to exclude patients who are hard-to-reach.

Targets were set at below 100 per cent of registered patients, thus reducing the incentive for practices to proactively seek and treat patients once they have hit the target. Interviews with staff in practices in deprived areas suggest that QOF has not encouraged primary prevention or proactive case finding in general practice (Dixon and Khachatryan 2010). The National Audit Office highlighted the consequences for inequalities: 'GPs can achieve full payment of the additional [QOF] income... without covering the entire practice population and as a result the hardest to reach and most in need groups may not be helped through this framework' (National Audit Office 2010).

Overall, the experience with pay for performance 'emphasizes that there is no magic bullet for quality improvement and that initiatives that produce long-term change are usually multiple in number and multilayered, and must be sustained over time to make a real difference' (Doran and Roland 2010).

The reliance on externally defined quality objectives, and the use of periodic large-scale measurement, has stifled approaches which proactively seek continual small

improvements and which encourage local staff ownership of the problem and the solution (Dawda *et al* 2010). Finally, there can be a tension between GPs' concern to earn QOF points for their practice and the development of more ambitious goals for the health of the practice population – something that general practices will need to embrace actively in the future as they take on a role as commissioners as well as providers of care.

Currently most of the financial incentives, including QOF, national enhanced services (NES) and directed enhanced services (DES), are nationally negotiated and specified. Although QOF Plus allows some thresholds and indicators to be locally selected, the services and prices are nationally specified and negotiated and, like NES and DES, they are not obligatory for practices to provide or for PCTs to commission.

Local enhanced services (LES) have potentially allowed PCTs to commission services to meet local needs. However, when compared to the value of the other elements of the contract, both LES and QOF Plus have provided relatively little leverage to local commissioners, and they have therefore been reluctant to set them up (Millett *et al* 2011). This represents a lost opportunity to encourage local service innovation and tackle local health priorities. Future contract negotiations need to enable greater flexibility for local commissioners (with local authorities) to set the priorities that are to be incentivised.

Under the new contract, a proportion of practice income will be in the form of a 'quality premium' linked to the outcomes practices achieve together as consortia. The measures used in the national contract will need to be aligned to the outcomes framework by which practice consortia and in turn practices are to be held to account, in future. It should also reflect public health outcomes and social care outcomes as appropriate. QOF is too narrowly focused on itemised care processes and intermediate outcomes for individual patients.

There is a risk that with the transfer of public health funding to local authorities, and the health premium rewarding local authorities for improvements in health outcomes, that consortia will have no incentives to take seriously their responsibilities for prevention and health promotion. We therefore recommend that:

- practices are given incentives to achieve a wider set of quality (process and outcomes) measures
- general practice should take responsibility for these measures – even where these require working beyond the organisational boundaries of general practice
- these incentives should reward improvement.

Contract management

Most GP practices are in a contractual relationship with their local PCT, based on either a GMS or a PMS contract. If the terms of the contract are breached, the PCT can terminate the contract, require the practice to stop undertaking any other business considered to be detrimental to their performance under the contract, or issue 'contract sanctions'. So, local commissioners of GP services have a crucial part to play in supporting quality improvement through contract management, peer review of performance, and providing additional incentives. As the three case study examples show (*see* pp 118–120), it has often been proactive NHS commissioners (in other words, PCTs) that have been instrumental in supporting and driving through quality improvements in general practice.

In future, GP practices will have a contract with the NHS Commissioning Board. The content of these new contracts – performance requirements and associated sanctions – can be determined by the Secretary of State, or delegated to the NHS Commissioning Board to negotiate. It is not clear currently how the commissioning board will monitor performance against the contract, although recent government plans suggest that it will be able to delegate responsibility for this to local GP commissioning consortia. Consortia

will be expected to play a key role in working with individual GP practices to drive up the quality of primary medical care, and the NHS Commissioning Board may ask them to carry out some contract management work on their behalf.

GP consortia will be well placed to establish clinical governance procedures and to judge practice performance. If quality improvement is to be reinforced, clinical governance frameworks must deal effectively with issues of poor performance. Such frameworks need to define:

- the circumstances under which sanctions will be applied to practices not meeting clearly defined standards
- who will implement those sanctions
- what those sanctions will be
- how the performance of individuals within practices will be monitored and dealt with.

Promoting quality improvement requires a timely mechanism for closing down unacceptably poor performers and removing individual practitioners whose care falls below acceptable standards. However, governance should be placed within the wider improvement remit in such a way that it performs the function of addressing specific problems in the minority of practices who give cause for concern, without stifling innovation and improvement in the majority that do not. Thus, governance arrangements should ensure that minimum standards are met, while other systems ensure ongoing improvement (Dawda *et al* 2010).

Case study: NHS Hammersmith and Fulham's QOF Plus Scheme

NHS Hammersmith and Fulham's QOF Plus initiative is a pay-for-performance scheme modelled on the existing national QOF for general practice. The initiative was launched in December 2008, with a three-year budget of £6.6m, and aims to improve the quality of care in general practice by:

- setting higher targets for a selected number of existing national QOF indicators
- introducing new evidence-based QOF Plus indicators reflecting specific local health issues
- opening new avenues for support and engagement with practices, including individual practice training budgets and IT support.

The decision to raise the standard for national QOF indicators was prompted by local practice performance already exceeding existing targets, leading to a concern that the modest national targets offered too much leeway to general practices to leave more challenging patients untreated, thereby increasing the likelihood that health inequalities would widen.

New indicators were developed after consultation with public health and general practice. High local rates of smoking and alcohol-related harm prompted the introduction of indicators rewarding smoking cessation and a programme of prospective screening for alcohol misuse. Cardiovascular risk assessment and intervention was also introduced and incentivised under the scheme. Non-clinical indicators focus on improved practice systems for communication with patients, responding to patient feedback, and promoting care for particular groups, including carers and vulnerable children. In total, 48 indicators were introduced for QOF Plus in 2008/09 and extended in Year 2.

All 32 practices in Hammersmith and Fulham have participated in the 2009/10 scheme. Performance data is collected directly from practice computer systems under

a data-sharing agreement, and is used to generate patient lists and reminders within practices as well as to support monitoring and payment. Resource materials, training and support visits are arranged by the PCT to support practices.

The new QOF Plus indicators have generated high levels of desired activity. For instance, the alcohol screening programme resulted in 15,000 people screened (where effectively no screening was done prior to the programme) and 2,300 brief interventions offered for identified alcohol misuse.

QOF Plus was developed jointly by NHS Hammersmith and Fulham and the Department of Primary Care and Public Health at Imperial College London, who will undertake a formal evaluation of the impact of the programme.

Case study: NHS Stoke on Trent's 'aspirational standards'

In order to incentivise improved quality of primary care in general practice, Stoke on Trent set up a voluntary process called 'Quality Improvement Scheme: Exemplary general practice and aspirational standards'. The budget is £1.4 million for incentives plus £300,000 a year in support for at least the next three years. One-third of money up front will enable practices to take on additional staff to improve capacity and quality.

The scheme comprises two stages. First, practices compare themselves against descriptors of an exemplary practice. Then, they are assessed against a range of enhanced clinical aspirational standards.

A service-level agreement between the PCT and a participating practice defines the specific annual milestones that the practice should achieve. Practices must meet a range of pre-qualifying criteria in order to sign up for the incentive scheme.

'Exemplary practice' is assessed within the following categories:

- sustaining a robust clinical governance framework
- prevalence of patients with specific long-term conditions
- regular holistic structured reviews: all patients on specific chronic disease registers
- competence of staff delivering care
- capacity for provision of general practice care
- working with PCT to enhance service planning and improvement for the health economy
- continual work to minimise health inequalities
- patient and public involvement
- self-care.

For each exemplary standard there is an explicit explanation of how the PCT will judge whether the standard has been met. There are approximately 30 enhanced clinical indicators – some using QOF indicators, but with higher targets of achievement or tighter blood pressure or HbA1c targets. The points that are allocated to various fields and targets in the clinical aspirational component of the scheme will vary year on year, to match local and national priorities and the principle of continuous improvement.

Every practice has an 85-item practice development plan to achieve the health outcomes and exemplary standards over three years, with 100 points on offer for enhanced clinical targets.

Case study: NHS Nottinghamshire County's ADVANCE scheme

NHS Nottingham's Quality and Safety Team has developed the ADVANCE Quality Accreditation Scheme for general practice, to support the continuous improvement of the quality of care. The scheme for general practice operates with seven domains of quality:

- safety
- clinical and cost-effectiveness
- governance
- patient focus
- accessible and responsive care
- care environment and amenities
- public health.

Each domain has a set of quality indicators, spread across three levels of attainment, as follows.

- **Level one** contains indicators that have been selected as a priority, some of which also appear in the GMS contract or QOF.
- **Level two** contains indicators that will enable practices to reach the standard required by the CQC.
- **Level three** is an aspirational level as it enables practices to achieve a 'gold standard' based on best practice.

The indicators are largely procedural, rather than narrowly data-based.

By September 2010, around 80 per cent of the 94 general practices covered by NHS Nottinghamshire County had signed up to the scheme. Practices will receive £6,000 for compliance within four years.

The role of regulators

Regulators have an important role in setting, monitoring and enforcing standards of care. From 1 April 2012, all general practices that provide regulated activities will be required to register with the CQC.

Since autumn 2009, doctors have been required to hold a license to practice from the General Medical Council. When revalidation is fully introduced, doctors will need to be successfully revalidated every five years in order to retain the licence. The process of revalidation will begin from late 2012. All doctors will need to demonstrate that they are practising in accordance with the generic standards of practice set by the GMC, as set out in *Good Medical Practice*.

While the focus of both these systems is on ensuring that minimum quality standards are being met, these standards and the way organisations and individuals are assessed can have a profound influence on the environment for quality improvement.

The CQC's approach to registration for other providers is based on self-assessment against the standards, risk profiling and targeted inspections, with enforcement actions where they identify non-compliance. The body has already set out principles for how it will develop the registration standards for primary medical services (Care Quality Commission 2011). These state that it will:

- seek to reflect the views of those who use the services and the outcomes they experience
- engage stakeholders, including professionals and expert bodies
- use timely, relevant and reliable information and work with others to reduce duplication and the burden on providers.

This emphasis on patient views and evidence of outcomes suggests that registration will encourage practices to gather and report data on these aspects of the quality of care. It will also require practices to strengthen their own internal reporting and audit systems. It will be important that the regulator monitors the requirements for new data collection, and ensures that this does not detract from practices using and acting on the information collected to drive quality improvements.

The collection of multi-source feedback from patients and colleagues could be used locally as the basis for self-reflection and critical appraisal, which could identify areas on which to focus quality improvement efforts. There are requirements to conduct audits, and in the latest guidance a quality improvement project has been identified as a suitable alternative to one of the clinical audits (Royal College of General Practitioners 2010b).

To help promote quality improvement, regulators need to take a joined-up approach to the assessment and assurance processes within general practice. The Care Quality Commission has set out its commitment to working with others to reduce duplication and unnecessary regulatory burden on practices and other providers.

The role of the professional bodies

Professional representative bodies can also play an important role in fostering enthusiasm in general practice for quality improvement. The RCGP – along with the other Royal Colleges and specialist societies – has an important role in supporting doctors in the revalidation process, in developing methods for evaluating specialty practice and in supporting those responsible for implementing revalidation – for example, through defining and interpreting specialist standards for GPs. It also has a wider role in standard setting and promoting quality improvement.

In 2011, the RCGP will launch a practice accreditation scheme that aims to promote a focus on team performance and learning organisations. The scheme was piloted in summer 2008, with 36 practices. The evaluation found that there were observable improvements in patient safety, quality of care and service delivery. Feedback from practices was that the accreditation scheme was worthwhile, and that it had provided a useful opportunity for the team to reflect on quality in primary care and to develop as a team (Royal College of General Practitioners 2010a). The accreditation scheme has great potential to encourage quality improvement by providing a structured process by which practices can benchmark their performance against quality standards and invest in the development of the practice team.

Professional bodies also have a role in promoting professional values of excellence – for example, through programmes of continuing professional development, and through developing standards of care. They also have a role in highlighting where these standards are not being met. They could take a leadership role in encouraging professionals to understand variations in quality of care and, where these cannot be justified, highlighting areas where there is room for improvement. Professional bodies can also support the development of skills in leadership and quality improvement (which in this report are identified as vital to the success of quality improvement in general practice) and can ensure that learning about successful quality improvement initiatives is rapidly disseminated.

Our research identified a vast array of initiatives designed to support the improvement of quality in general practice, including:

- QOF
- practice accreditation
- revalidation
- registration by CQC
- an array of local schemes linked to the peer review of performance and local strategies for change.

GPs remain sceptical about the value of many of these initiatives – particularly to those seen as top-down and geared to external performance management (Goodwin *et al* 2010b). These external drivers for improvement in quality were not necessarily seen to support efforts to improve quality within practices. National decision-makers need to be clear about how the systems of regulation, accountability, incentives and organisational structures support practices to improve the quality of care.

Conclusions

There are currently a range of barriers to the widespread adoption of quality improvement approaches in general practice. However, this chapter demonstrates the potential for this area of work, and highlights case studies in which general practice is already engaged in quality improvement initiatives that are delivering improvements in care. We have identified a number of ways in which practices can create an environment that supports quality improvement. These include:

- a culture that supports systems thinking, encourages peer review, is open about performance and variability, and that balances challenge against support
- the transparent sharing of data on performance at a local level with patients, the public and with professional peers
- strong professional leadership and a team ethos that puts the quality of care first and recognises the need to continually strive to improve
- team-based approaches that engage all staff in measuring, understanding and improving quality
- use of data and information tools, such as:
 - decision aids and best-practice guidelines that can prompt general practice professionals in clinical real time
 - data-analysis tools that allow benchmarking of performance between practices or predict the risk of admissions
 - statistical techniques that help triangulate performance data and monitor trends over time
- training and support for the acquisition of improvement skills
- support structures that promote the regular sharing of ideas and experience between practices
- protected time and incentives for individuals and the team to think, train and undertake quality improvement
- for the minority of practices that perform poorly, governance arrangements to enable effective and timely remedial action.

The organisational context in which staff work must support the delivery of high-quality care and efforts to continuously improve quality. Practices need to know how well they are doing compared to other practices. This will spur them on to improve. We believe that practice performance needs to be benchmarked against the best, rather than against the average. Time and resources need to be invested in order to ensure that facilities are adequate, IT and data generate relevant information, technology (both new and

old) is used to support new ways of working, and there are people with the right skills working effectively together. Practices need to ensure that time for audit, reflection and development are valued and protected.

We have also shown in this chapter how the external environment can support quality improvement in general practice. It is vital that the wider system in which general practice operates helps good GPs to be great, stops bad GPs from practising, and challenges those in between to sit up and take notice about their need to improve. We believe that different approaches are needed for practices at different points on the quality curve.

GP commissioning provides a new opportunity to create a platform through which to drive improvements in quality, as well as to challenge poor performance. The GP commissioning role needs to be genuinely influential in its relationship with general practice. GP commissioners need to be given the powers to support, develop and reward practices – but also to challenge, and to penalise where necessary.

The challenge is to achieve the right balance between external drivers of quality improvement, such as performance management and contractual incentives, and peer-led approaches, such as peer review, open reporting and transparency. Fundamentally, general practice must ‘own’ the quality agenda and take professional leadership for quality improvement. External standards, targets and incentives must support general practice in its quest for quality.

Approaches to quality improvement need to take account of the heterogeneity in general practice. The extent of clinical governance structures, peer review and audit processes will depend partly on the size of the practice and how it is organised. In the next chapter, we consider how the organisation of general practice might need to change in order to support quality improvement.

Key points

- Many general practices are engaged in quality improvement initiatives and are proactive in seeking to deliver improvements in care. However, quality improvement is not yet routinely embedded as a way of working. Practices need to be supported in creating an environment within which quality improvement can flourish.
- GPs are often unaware of the variations in quality that exist within and between their practices and those of their peers. Making clinicians aware of such variations is a first step to encouraging them to explore the reasons for variable performance, and to act accordingly.
- Practices need to use data and information tools to provide clinicians with the information they need to identify and to prioritise areas for quality improvement.
- Strong clinical leadership is essential to foster a clear vision and set of common values through which effective collaboration and teamworking can operate.
- People working in general practice need training and support in order to acquire the necessary skills to implement quality improvement.
- Protected time and incentives, both financial and non-financial, are required for individuals to think about, train for, and reflect on the quality of care.
- Excellence needs to be recognised and rewarded. High-performing practices need to use their skills to support those that are weaker, and should ultimately be given the ability to expand and/or take over failing practices.

- Developing an environment for quality improvement also requires action to be taken at many different levels. Policy-makers, regulators, commissioners and the professional bodies all have roles to play in creating a better environment that supports general practice in its quest for quality.
- There is an opportunity for GP commissioning consortia to be provided with the levers to drive improvements and challenge poor practice. Member practices need a system of rewards and penalties that is genuinely influential and that focuses on local priorities.
- GP commissioning will create a responsibility among member practices to be accountable for the quality of care they provide and to take action where such quality is sub-optimal.
- An open culture needs to be developed that balances the ability to challenge as well as support practices. General practice is more likely to become engaged in driving improvements in care where there is transparency in the sharing of data at a local level with patients, the public and professional peers.
- Fundamentally, general practice must own the quality agenda and take on professional leadership for quality improvement.

6 The future of general practice

What struck us from reading the research we commissioned was the wide range of demands that are now placed on general practice, and the growing complexity of the care needed to address these demands. In future, general practice will be further required to extend the scope and range of services provided in the community or at home, and it will have to meet the needs of an ageing population where co-morbidity is the norm. The coalition government's proposals in *Equity and Excellence* (Department of Health 2010a) will have profound implications for general practice involving:

- new relationships with patients, including as co-producers of their own care
- new responsibilities for the GP team, including wider provision of services
- new types of relationships with other practices, through provider and commissioning consortia
- new stakeholder partnerships – particularly with other local services and local authorities
- new accountabilities, with greater responsibility for meeting population-based needs.

The dual role of the general practice as both commissioner and provider of care will also bring new challenges. In future, GPs will have to take responsibility for both the costs and outcomes of care.

In this final section we reflect on the shift that is needed to make general practice fit for the 21st century.

How does general practice need to change?

From solo practitioner to multi-professional team

Almost all general practices now work as health care teams, but the skill-mix needs to continue to evolve. As well as doctors, practice nurses, practice managers and other administration staff, other health professionals will need to be increasingly based within the general practice and/or the practice network to which it is affiliated. This might include hospital specialists doing outreach, health visitors, physiotherapists, speech therapists and counsellors. The exact configuration of the practice workforce will be affected by the interfaces with the wider primary care team, including district nurses, school health teams, and other community health professionals.

As more care is transferred from hospital to community, the volume of demand on general practice will increase. To accommodate these changes, a shift in roles and responsibilities between the different members of the general practice team is needed. GPs should focus more on patients with complex problems, and work closely with their practice team where the roles of practice nurses, health care assistants and other team members will be enhanced. With the creation of a 'team without walls' patients should be better able to access the skills and expertise that they need. GPs should therefore work in partnership with their practice team and other professions to ensure patients receive

a co-ordinated, seamless package of care. Such changes will have particular implications for the education of GPs and other practice-based staff, suggesting a need to develop a common curriculum in certain aspects of their training.

Valuing generalism while embracing specialist knowledge

The diversity and range of services that general practice is currently, and increasingly, expected to deliver makes it unrealistic for any individual practitioner to be able to meet all those demands. Thanks to technology, patients who previously had to be seen or treated in a hospital setting can now be treated and seen in a community or home setting. The growing complexity of general practice caseloads has precipitated the trend towards differentiation and specialisation.

GPs and general practice have been incentivised over the years to offer more specialist care within practices, and this has blurred the boundary between generalists and specialists. Among GPs, there is an ongoing philosophical debate about whether they should remain pure generalists (in other words, specialists in generalism), or whether it is appropriate for them to develop specialist expertise.

The NHS Plan (Department of Health 2000) committed to providing 1,000 GPs with a special interest (GPwSI) from among existing practitioners. These GPwSIs take referrals from fellow GPs for services that previously were usually carried out within hospital – particularly in areas such as dermatology, care for older people, epilepsy and respiratory medicine (Gregory 2009). There are moves for GPwSIs to perform some therapeutic procedures and minor surgery in primary care settings. When a practice is unable to offer these extended services, it will be able to refer a patient to another local unit or provider (Royal College of General Practitioners 2007b).

The evidence on the impact of GPwSIs is mixed. One study suggested that they had no impact on waiting times, and that costs were higher – partly because, on average, GPwSIs are paid more than the staff who might deliver equivalent care in hospitals (National Co-ordinating Centre for Service Delivery and Organisation 2006). However, other studies have formed a more positive view.

Rather than a strategy based around the development of GPwSIs, there is evidence to support multi-professional teams as a better means of delivering care to patients most effectively. In order to care for the range of patients now seen in general practice, GPs must have the ability to consult specialists in order to provide advice and expertise to enable a diagnosis to be made and appropriate treatment offered.

General practice will need to work with specialists in a variety of different ways. These may include commissioning sessional services from them, working in an integrated team, or differentiating activities across a pathway of care. General practice needs to include specialist support during the consultation process, during care planning, and in ongoing care, to support patients to manage their own illness. The consultant contract and the organisational incentives faced by trusts (including foundation trusts) must allow consultants to work flexibly and to collaborate with general practice to improve integration and reduce duplication and waste.

Developing shared care

The research we commissioned was consistent in showing a need for general practice to work more closely with hospital and community services in order to co-ordinate care – particularly for those with long-term conditions. Even in areas such as diagnosis of acute illness and subsequent referral, good communication with specialists and clarity

of roles are needed. For those with complex needs, including more serious mental health problems, general practice needs to see itself as the hub of a wider system of care, and must take responsibility for co-ordinating and signposting to services beyond health care – in particular, for social care, housing and benefits.

Although there are many standards and guidelines, these are not always explicit about the role of GPs and the contribution they can make to high-quality care in this area. However, we believe that there is often a role for general practice in models of shared care in which the responsibilities of different care givers are clearly defined, along with that of the patient and carer.

It is essential that general practices ensure good communication, undertake appropriate triage and referral, identify medical and social risk factors, and take appropriate action for ongoing medical management, even where they are not the lead professional. If there is no recognition of such roles and their limits, it is not possible to ensure that general practice staff have the capability and training to fulfil these roles. NICE standards must be clear about the role of different professionals (including GPs) in care pathways. Even where the main elements of care are to be delivered by other staff, there may be important roles and responsibilities – for example, to ensure communication, co-ordination and competence.

This means that achieving higher-quality care requires general practices to develop multi-specialty local clinical partnerships and a shared care model of working – as described in a recent Nuffield Trust/NHS Alliance report (Smith *et al* 2009). The opportunity presented by transforming community services to develop closer integration between general practice and community services has been limited by the transfer of many PCT provider arms to acute trusts.

As the evidence we presented on managing long-term conditions suggests, there is a need for closer integration between primary and community care teams (*see pp 61–74*). There is a risk, therefore, that these developments might undermine the potential for improvements in key areas of care. So, we recommend that a closer working relationship is forged between general practice and community services that meet the goals and aspirations of both parties while seeking to improve care to patients. Indeed, it is incumbent on general practice to establish such relationships with many other providers including consultant medical staff, community mental health teams, and midwives.

Various models have been suggested for this integration of general practice with other primary, community and outpatient services. For example, clinical networks, polyclinics and GP-led health centres have been put forward as a way of developing one-stop-shop care for people with multiple service needs (Gregory 2009).

Similarly, integrated care organisations (ICOs), in which professionals from primary, secondary and social care work together in teams that straddle traditional organisational boundaries, have also been piloted with the aim of better managing patients across the interfaces of care and developing packages of care that meet complex needs (Lewis *et al* 2010). In future, these ICOs may take on some shared risk for managing health care budgets with commissioners, thus enabling ‘make or buy’ decisions to be made and creating strong ties between partners in terms of meeting both the quality of care and cost-effectiveness goals.

From gatekeeper to navigator

The ICO model is a relevant one, since the evidence presented to the inquiry strongly suggests that higher-quality care in general practice will only arise when GPs and their teams begin to look beyond the care that takes place within surgery walls.

General practice has a vital role to play in co-ordinating the care of people with more complex needs. As GP commissioning develops, general practice will increasingly need to take more responsibility for the quality of the pathway that patients take, and for the care they receive from a variety of agencies. This may involve new roles for non-clinical staff – for example, to ensure that patients are signposted and referred to other relevant available services in order to meet their wider social needs as well as their health needs. This will require closer working with a wide range of external partners, including social and education services, the voluntary and private sector.

This is a new agenda for general practice, building on existing ways of working with a registered list of patients to act as their advocate and navigator across the system. Developing a care co-ordination capability is particularly important for people living with chronic long-term conditions or disabilities, and for those who are at the end of their lives. GPs ‘must be engaged fully in deploying their key skills of interpreting complex choices for patients’ (Royal College of Physicians 2010).

The co-ordinating role of primary health care teams, in close collaboration with other services, will play an important role in minimising any disruption to care when crossing between primary, secondary and social care, and in avoiding expensive duplication of investigations (Royal College of General Practitioners 2007b). Members of the general practice team need to facilitate timely access to the appropriate care and advice at all times, and practices will need to put in place active triage of patients to make sure appropriate use is made of available staff and services.

A new deal with patients

In taking on the care co-ordination function, there is also a need for a new dialogue between general practice and patients, to ensure that those patients who want to can become more active participants in decisions about the care and services they receive. Patients need to be able to take greater control (and with it, responsibility) over decisions about their care and for their health. This means clinicians actively supporting shared decision-making, self-care and self-management where patients so desire.

Armed with information about their health and care through access to their personal health records, patients can begin to take greater responsibility for their health and can start to shape the services they need. Shared decision-making requires clinicians to be more open about the risks, benefits and uncertainties associated with the available options. Practices need to make greater use of patient decision support in order to ensure that their patients understand the options and trade-offs they face, and to elicit patients’ preferences more systematically.

General practice also needs to develop a renewed dialogue with patients in order to empower patients to become fully engaged in managing their own care. Providing information to patients can effectively help patients to manage their own care or prevent deterioration in illness, but general practice needs to become more proactive in providing or signposting patients to receive support in caring for themselves – for example, through remote monitoring of their condition or joining an education or peer support group. Structured support for carers is also important in this regard, and general practices should be tasked with ensuring that carers are also offered access to education and support.

From treating illness to promoting health

General practice is regarded as uniquely well placed not just to provide medical care, but also to promote the health and well-being of the practice population (Boyce *et al*

2010b), and to address health inequalities (Hutt and Gilmour 2010). However, there has been little success in drawing GPs ‘beyond the surgery door’, and GPs still concentrate on what are essentially clinical activities (Gillam *et al* 2001; Gillam 1992). Generally, GPs focus their prevention-related actions on patients at high risk rather than taking a whole-population approach or maximising opportunities for health promotion advice to all patients who might benefit.

There is support within the profession for general practice to play a stronger role in health promotion, as argued by the Royal College of General Practitioners (2007b):

Practices are at the heart of their communities and could play a key role, with appropriate development and support, in tackling many aspects of the public health agenda ... Methods should be found to deliver the public health agenda within new models of care.

The ageing population and rising prevalence of obesity and other risk factors makes a focus on prevention an imperative for general practice. In future, this is likely to mean working more closely with local authorities.

The development of health and wellbeing boards provides an opportunity for general practices and GP commissioning consortia to engage more proactively with local authorities in addressing inequalities and the wider determinants of ill health. This will require practices to consider the needs of the population beyond those on their registered lists.

A significant amount of work is also required for data and information flows to be realigned, so that GP consortia and local authorities can effectively share data. While GP commissioning consortia will have a statutory duty of partnership with health and wellbeing boards, the legislation contained within the 2011 Health Bill to promote joint working more formally is weak. The evidence from our inquiry suggests that there is a great need for general practice to play a proactive public health role, but there is a significant risk that it may not do so.

Individual and population health

General practice is uniquely placed to take responsibility for population health and for addressing inequalities in the quality of care provided to a population, through its registered list and community-based focus. High-quality care is not only about meeting the needs of the individuals who present themselves – it is also about reaching out to meet the needs of people who need care but may not seek it actively from general practice. As GP-led commissioning consortia take on their new responsibilities, they will have to contribute to the health of the population they serve, working closely with local authorities.

The performance of general practices, as providers and commissioners of care, should not only be assessed in terms of whether individuals can access high-quality services. It also needs to be judged on the extent to which it meets the health needs of the wider population, including people experiencing homelessness, veterans, refugees and asylum seekers, people with mental health problems, and those with drug and alcohol problems, who may not actively seek care from general practice.

Practices will also need sufficient incentives to actively seek to register vulnerable and itinerant people, and to provide primary medical services. This may involve commissioning services from general practice – something that in future will be the prerogative of the NHS Commissioning Board. It is also expected that consortia will be responsible for commissioning services for patients who are not registered with a practice.

The government (and, depending on their powers, the commissioning board or local authorities) will need to ensure that the responsibility for commissioning high-quality care for these groups does not fall between consortia.

The role of general practice in GP commissioning, as outlined in the coalition's plans, rightly emphasises the importance of working in partnership to deal with the wider issues of public health and health inequalities. As such, it might enable the more population-focused approach that the inquiry's work suggests is necessary to improve quality.

Yet the size and structure of GP consortia will not be determined nationally. It is likely that at least some of the consortia will not be co-terminous with local authorities, limiting the potential for joint working – particularly between health and social services for children and older people and those with mental health problems, learning disabilities or dual diagnosis. It is likely for some groups this will involve commissioning jointly with other bodies, such as local authorities. More thought needs to be given to how consortia will collaborate to commission services that cannot be effectively commissioned by individual consortia. Allowing this to happen organically may not be sufficient.

From cottage industry to post-industrial care

The required modernisation agenda for general practice has been described in the United States as 'the transformation from cottage industry to postindustrial care'. This is because it combines three key elements – standardising care, measuring performance, and transparent reporting – and eliminates 'unwarranted clinical variation, waste, and defects' (Swensen *et al* 2010).

Under this prescription, the 'good doctor' of today 'must have a solid fund of knowledge and sound decision-making skills but also must be emotionally intelligent, a team player, able to obtain information from colleagues and technological sources, embrace quality improvement as well as public reporting, and reliably deliver evidence-based care, using scientifically informed guidelines in a personal, compassionate, patient-centered manner' (Swensen *et al* 2010).

In England also, doctors are talking in terms of primary care starting 'to look more "industrial" both in scale and remit' (Royal College of Physicians 2010).

Although there is growing interest in establishing federations and larger practice organisations, the dominant model remains one of small, independently contracted businesses. While there has been significant capital investment in new GP-led health centres, there are still parts of the country where general practice is operating out of premises that are not fit for purpose. At its heart, general practice in much of England remains a cottage industry, and we believe that this must change radically.

There needs to be much greater collaboration between practices in order to support the delivery of high-quality care. This is not about sweeping away small practices, but it does recognise the benefits that come from being part of larger organisations or networks. The advent of GP-led commissioning will make this a necessity.

We believe there is an urgent need to accelerate the work to establish federations and bring isolated practices into more formal accountability structures, as part of larger provider organisations. Such federations provide the building block for the development of a diverse primary health care team derived from a variety of organisations and providers. Nevertheless, there are aspects of small practices that patients value, and this factor needs to be balanced against the need for the support and challenge of peers and other organisational aspects that are better delivered for larger numbers of patients. So, while isolated practices are likely to find it difficult to deliver high-quality care, we believe

it is possible to balance the benefits of small practices with the benefits of being part of a larger organisation.

We also recognise that it is harder for practices to deliver high-quality care from sub-standard premises. There has been considerable investment in polyclinics and GP-led health centres in recent years. However, we do not believe that further investment should be made in facilities in primary care until it is clear that existing premises and community-owned infrastructure are being fully utilised. The focus must not simply be on creating bigger and better facilities, although if these facilitate multi-professional working, and enable patients to access a range of services under one roof, these can contribute to higher-quality care (Imison *et al* 2008).

The future model of general practice

General practice has come a long way in the past 62 years since the establishment of the NHS. We believe that if it is to rise to the challenges of the 21st century, and deliver the highest levels of quality that patients and the public expect, it must continue to evolve.

We believe that the change agenda outlined above means that general practice will be able to deliver high-quality, cost-effective care only by operating on a more industrial scale that makes full use of data and information to drive continuous quality improvements. To achieve this, the future model for general practice must address the fact that many general practices continue to be isolated in the system – both in terms of their relationships with other practices and, more fundamentally, with the care and services that other health and social care organisations currently provide.

To achieve such a future, an underpinning characteristic must be for general practices to work in larger groupings of providers, through polyclinics, federations of practices and/or provider networks. There has already been considerable movement and thinking in this direction. For example, the shift of care from hospital to community-based services requires the creation of a network of new facilities and organisational arrangements to support it.

Much of the drive behind these changes has come from general practice itself. The RCGP has championed the need for federated models of working, and even established a toolkit to encourage general practices to adopt the model (Imison *et al* 2010; Royal College of General Practitioners 2008). This toolkit sets out a vision in which general practices and primary care teams work together to share responsibility for developing high-quality services for their local communities, enabling them to offer more and better care than is possible in smaller independent units.

By acting collectively, and sharing data on comparative performance, general practices are more motivated to drive each other to improve performance. We strongly support the need for general practice to evolve in this way, and to establish better-networked and grouped practices. This is a priority for the way general practice needs to evolve.

We also feel that there is considerable scope for general practice to begin to consider how to work with other care providers to build up new associations and models of working – especially for patients such as those with long-term conditions, whose care requires a complex mix of support from a range of agencies. These new approaches might give rise to multi-specialty partnerships that incorporate a range of outpatient consultants, community nurses and other professionals (Smith *et al* 2009).

Another alternative would be to create integrated care organisations in which the activities of general practice are more formally integrated with those provided in the

hospital sector – an approach currently being piloted and/or developed in several locations across England with some success (Lewis *et al* 2010; Ham 2009).

It is unlikely that there will be one single, correct model into which all general practices will evolve. This is appropriate, given the need for practices to reflect and respond to the specific health needs of the local communities they serve. It is also clear that general practice, and the registered list system, provide the essential building blocks on which such a future should be based.

However, the road towards more integrated primary care will take time and careful steering. Stronger incentives are needed to support general practice to work in collaboration with other providers – not only to improve health, but to rise to the challenge of providing better value and more efficiency in the current context of growing demand in a period of financial austerity. GP commissioning presents general practice with an unprecedented opportunity to meet these challenges and to drive innovation.

Conclusions

The future of general practice is likely to herald the emergence of a radically different way of working. The skill-mix in general practice will become more complex, and practices will work across the federations of practices in which they operate and the GP commissioning consortia of which they are members. These changes will not only see a growing role for nurse practitioners; they will also facilitate a much wider range of professionals working alongside GPs. The basic unit of activity will no longer be a face-to-face consultation with a doctor but the provision of a co-ordinated and multi-disciplinary service that proactively supports patients in managing their own health. Within this vision, the core values of generalism, and the provision of patient and family-centred care, remain as important as ever.

Finally, general practice will need to build much stronger alliances and relationships with individuals and organisations – not only within the NHS but beyond. As commissioners of care with responsibilities for populations, general practice will need to work closely with local authorities, the voluntary sector and the private sector. These are not easy transitions to make, and those leading practice organisations and consortia in the future will have to set out this vision clearly and lead change from the front.

Key points

- Generalism lies at the heart of the future of the NHS, and the system needs to value this. Instead of general practitioners developing more specialist knowledge, general practice needs to make available specialist support during the consultation process, during care planning, and in ongoing care to support patients to manage their own illness.
- General practice needs to see itself at the hub of a wider system of care, and must take responsibility for co-ordination and signposting to services beyond health care – in particular, social care, housing and benefits.
- General practice needs to move from being the gatekeeper for specialist care to being the navigator that helps steer patients to the most appropriate care and support.
- Delivering high-quality care requires effective teamworking within general practice. The skill-mix in general practice will need to evolve, to include a wider range of professionals working within and alongside it. The GP should no longer be expected to operate as the sole reactive care giver, but should be empowered to take on a more expert advisory role, working closely with other professionals.

- Delivering high-quality care also requires new models of shared care to be developed with other care providers, including those working in the community, in hospitals, and in care and well-being services. Multi-specialty local clinical partnerships need to develop that integrate services across boundaries. Such models of care will need to articulate the roles and responsibilities of general practice clearly to ensure that care for patients is well co-ordinated.
- As referrers – and, in future, as commissioners of care – general practice will have a responsibility to ensure that the services to which they refer patients provide high-quality care (as well as care that gives value for money).
- These new responsibilities will require general practice to work with their partners within GP commissioning consortia, local authorities and wider public services to improve the health of the population and to reduce health inequalities. General practice needs to be far more proactive in preventing ill health and taking a population-based approach to care.
- In the transition of commissioning from PCTs to GP consortia, the Department of Health and the NHS Information Centre must ensure that information flows, and indicators derived from them, are appropriately and speedily realigned to consortia boundaries.
- General practice needs to strike a new deal with patients, in which patients are active participants in decisions about their care and the services they receive. This is important since effective engagement with patients is intrinsic to quality improvement.
- Overall, general practice needs to deliver ‘post-industrial’ care in which measuring performance, improving care standards, and transparent reporting are key features of the way care is provided. To achieve this, general practice will need to operate at a scale commensurate with the demands placed upon it.
- There is an urgent need to accelerate the work to establish federations, and to bring isolated practices more formally into larger provider organisations or networks. The advent of GP commissioning will make this a necessity.

7 Conclusions

General practice has played a vital role at the heart of the health care system in England, and with the introduction of GP commissioning this role is set to become even more critical. Indeed, the current NHS reform agenda has far-reaching consequences for general practice. While we believe that GP commissioning has the potential to provide a new platform through which improvements in the quality of care in general practice can be driven, there are a number of tensions to the current reform agenda that will impact on whether this will be the case.

- New integrated models of care are needed for patients with complex and long-term care needs. These can be best delivered when generalists and specialists work closely together. The focus on patient choice of, and competition between, general practices may act as a stimulating environment for quality improvement. However, unless a system of incentives is created where competition can act as a spur for improvement and integration, the ability of general practice to forge new partnerships with other care providers may be undermined.
- The creation of health and wellbeing boards provides a revitalised opportunity for the NHS and local authorities to work in partnership to promote health and address ill health and inequality. However, current legislation is weak, and there is a significant risk that the opportunity for effective joint working to address health inequalities and local public health needs will be lost.
- GP commissioning could provide a new platform through which improvements in the quality of care in general practice can be driven. However, there is a danger that consortia may not actively involve other professionals thus limiting the potential benefits of a multi-professional approach to quality improvement.
- Peer review of performance needs to be accompanied by the ability to challenge practices when quality of care falls below an acceptable standard. There is a risk that the membership arrangements and governance of GP commissioning consortia will allow practices to protect their members' interests, rather than seeking to challenge and improve quality. The accreditation process must be strong enough to ensure that robust governance systems are in place to promote internal performance management.
- Measures to assess performance, both nationally and locally, need to be aligned so that they promote integrated care between practices, and between practices and other providers. For example, there is a case to be made for GP commissioning consortia and local authorities to share responsibilities for public health outcome indicators.
- General practice and GP consortia must have the requisite information to support their responsibilities as both commissioners and providers. Since many GP consortia will not have coterminous boundaries with local authorities it will limit the routine production of meaningful statistics on populations and make it difficult for them to engage in joint strategic needs assessments.

- The current preoccupation with outcome measures as the only relevant criteria on which to judge quality may result in some important aspects of quality being overlooked. Examples include continuity of care, care co-ordination and patient engagement.

The inquiry

This inquiry has set out to:

- describe what constitutes high-quality care in general practice
- assess the current state of quality of care
- make recommendations about how quality could be improved and what changes might be needed to the way general practice is organised.

We have demonstrated how general practice has evolved over time in response to the changing social and political context in which it operates. The inquiry reports at a time of significant reform to the NHS which will require general practice to play a central role in its future, but also to develop new skills and take on new responsibilities. Therefore, in our analysis of quality of care in general practice, we have sought to set our findings and recommendations in this wider context and consider the future relationship of general practice with the wider health system.

Measuring quality

We were clear from the outset that we were interested in quality in its broadest sense – not just as narrowly defined by professionals. We firmly believe that the perspective of patients needs to be strengthened. GPs need to do more to put patients at the heart of what they do: they need to involve, listen and respond to them. So, a new deal with patients is required. However, it is also clear to us that patients' views and their choices are not sufficient to drive quality and drive out poor performance. Peer scrutiny and challenge are also vital.

We are also clear that the reason for measuring quality, first and foremost, must be to drive quality improvement among those closest to patients. So, our focus has been on the value of measurement for the purposes of improvement, and not for the specific purpose of external judgement, scrutiny and performance management. QOF has helped deliver improvement but has been narrowly focused on secondary prevention and the recording of clinical activities. There needs to be stronger focus on quality across all aspects of general practice.

The inquiry identified a wide array of initiatives to measure quality that could be used for the purposes of quality improvement, but concluded that these were poorly co-ordinated, overlapped in some areas, and left other areas (that were important to high-quality care) unmeasured. Available measures undervalue some of the harder-to-measure aspects of care. Many of the current approaches to measurement have been criticised for reducing general practice to a series of boxes to be ticked. Evidence was presented to suggest that aspects of the quality of care are often not as good as they should be because the focus is diverted to those aspects of care which are measured and rewarded.

We believe that if general practice is to focus on improving quality, it must be able to demonstrate it is doing things differently and better. It is no longer acceptable for professionals simply to claim there is no way of assessing what they do and that they should be trusted with the task. Greater transparency is a necessary prerequisite to a culture of improvement and to maintain public trust.

Balancing trust with control

Perhaps the greatest challenge then is for policy-makers and those working in and with general practice to find the equilibrium between trust and control (O'Neill 2003). Trust-based systems also need to be accountable. Measuring and reporting on performance and improvements in care is therefore a professional responsibility. In recent years there has been a tendency in the NHS to give greater emphasis to external control and performance management. We believe that this may erode an important part of the very professionalism that enables quality improvement initiatives to flourish. The values and professional ethos within general practice is strong. These need to be harnessed in order to address the quality challenges that we have identified, but must be accompanied by a new deal with patients to ensure their trust in general practice is deserved. General practice must listen to and involve patients actively to nurture trust and deliver quality from the patients' perspective.

We therefore believe that quality improvement needs to balance and combine external scrutiny and regulation with locally driven, peer-led and user-centred approaches. The key to achieving this balance is transparency. Reporting on quality – to patients, between peers, to other care partners, and to commissioners and regulators – helps to create a 'virtuous circle' of quality improvement.

Developing sophisticated indicators of quality

General practice is often seen to be as much art as science, but we are strongly of the view that this should not be an excuse for not measuring those aspects of care valued by patients such as continuity of care and the quality of the therapeutic relationship.

We set out to try to identify some new measures suggested by our research teams, and investigated the potential for developing these into indicators of quality. This was a difficult task, and one we were unable to complete. However, we have suggested some ways that practices could begin to audit their own practice in these areas, and made recommendations about how the work we have begun could be used as the basis for future development of quality indicators in general practice. While some of these are harder to define we think that many of these aspects of care can be captured by measuring how patients experience care.

Analysing variations

General practice needs to be challenged to ensure that it delivers its core functions to the highest standards, in the most efficient way. The data we examined was by no means comprehensive, but it became clear that there were gaps in the quality of care and wide variations in the quality of care received by patients. We concluded that more sophisticated analyses are needed in order to explore whether observed variations in the organisation and delivery of care between GP practices can be justified on clinical grounds.

However, we did find evidence for significant variation in the provision of care to patients where clinical best-practice guidance would recommend a specific course of action – for example, in prescribing low-cost statins and in providing patients with all the recommended care in the management of their long-term conditions.

The evidence presented to the inquiry also suggested that more could be done to improve quality through the use of practice audits (for example, in assessing and improving the quality of diagnosis or examining the clinical necessity of referrals) and in responding to

patient experiences and preferences (for example, in terms of access to care, continuity of care and patient engagement).

The evidence also supported the need for general practice to engage more directly with other care providers in order to improve quality. Better standards of care would be gained from a focus on developing forms of integrated, co-ordinated and shared care between general practices and other care providers. This was particularly true for people who present in general practice with complex symptoms, and for co-ordinating care for people with long-term chronic and mental illness. Joint working would also help to prevent emergency admissions for conditions that could be managed in primary and community care settings.

In areas of care where there are specialists who take a lead role (for example, in maternity care) the role and responsibilities of general practice and GPs need to be clearly defined, so that aspects of care do not fall through the gaps. Excellent communication and shared objectives are key to achieving this. In other areas of care, such as end-of-life care, where patients require services from a range of care providers, general practice has an increasingly important role to enable patients to navigate the system, in order to ensure that their care is co-ordinated along the clinical pathway and between organisations.

Celebrating good practice and addressing failure

It has become clear through the course of the inquiry that quality improvement needs to be supported by an organisational context in which data and IT facilitate an understanding of how well a practice and individuals working within it are doing relative to their peers. It is important that good practice is shared and celebrated, while poor performance is identified and support given to improve. Where standards continually fail to be met, appropriate sanctions must be applied.

Greater transparency and peer challenge will be vital to ensure that those practitioners who consistently fail to deliver acceptable standards of care are dealt with swiftly but fairly. Finally, general practice needs to operate within a system of incentives and regulation that supports quality improvement, and where competition can act as a spur for improvement rather than as a barrier to innovation.

Despite some major changes in the scope of services provided in general practice, the size of practices, the profile of the workforce, and the contracts under which general practice operates, general practice is largely made up of small, independently contracted businesses. This model of practice needs to change. The modern GP should be working as part of a multi-disciplinary practice, in larger federations of practices, and engaging more effectively with other public services to co-ordinate care.

General practice needs to embrace technology in a way that allows it to match the experience of patients when they consume other services. Practices will also be taking on new responsibilities as commissioners of care under the coalition government's health reforms. This means that GPs will need to see beyond the patient in front of them and reach out to the whole of their local population, including those who are vulnerable and unregistered. These responsibilities, and the requirements of implementing GP commissioning, must go hand in hand with a renewed emphasis on improving the quality of care in general practice.

This is a challenging agenda, and will need action on many levels in order to ensure that general practice in England maintains its international reputation for excellence and enjoys its position at the heart of the NHS in future. We hope this report inspires you to take action to ensure that general practice succeeds in its quest for quality.

Key points

- General practice has evolved significantly from its origins. Many practices have been at the vanguard of innovation and quality improvement. However, if general practice is to meet its new responsibilities and maintain its international reputation for excellence, it needs to adapt significantly.
- The transition will not be easy. Those leading practice organisations and GP consortia have the opportunity to build on the strong values and professional ethos to be found in general practice.
- General practice will need to have a relentless focus on improving quality of care to patients, supported by the proactive use of data and information to do so.
- Quality improvement needs to balance and combine external scrutiny and regulation with locally driven, peer-led and user-centred approaches. The key to achieving this balance is transparency. Reporting on quality – to patients, between peers, to other care partners, and to commissioners and regulators – can help create a ‘virtuous circle’ of quality improvement.
- GP commissioning could provide a new platform through which improvements in the quality of care in general practice can be driven.

References

- Abel GA, Friese CR, Magazu LS, Richardson LC, Fernandez ME, De Zengotita JJ, Earle CC (2008). 'Delays in referral and diagnosis for chronic hematologic malignancies: a literature review'. *Leukemia & Lymphoma*, vol 49, no 7, pp 1352–59.
- Adams J, White M, Forman D (2004). 'Are there socioeconomic gradients in stage and grade of breast cancer at diagnosis? Cross sectional analysis of UK cancer registry data'. *British Medical Journal*, vol 329, no 7458, pp 142–3.
- Addicott R (2010). *End-of-Life Care*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/endoflife_care.html (accessed on 28 October 2010).
- Ashworth M, Clement S, Sandhu J, Farley N, Ramsay R, Davies T (2002). 'Psychiatric referral rates and the influence of on-site mental health workers in general practice'. *British Journal of General Practice*, vol 52, no 474, pp 39–41.
- Ashworth M, Lloyd D, Smith RS, Wagner A (2007). 'Social deprivation and statin prescribing: a cross-sectional analysis using data from the new UK general practitioner "Quality and Outcomes Framework"'. *Journal of Public Health*, vol 29, no 1, pp 40–47.
- Baker R, Sorrie R, Reddish S, Hearnshaw H, Robertson N (1995). 'The facilitation of multiprofessional clinical audit in primary health care teams – from audit to quality assurance'. *Journal of Interprofessional Care*, vol 9, no 3, pp 237–44.
- Balas E, Boren S, Brown G, Ewigman B, Mitchell J, Perkoff G (1996). 'Effect of Physician profiling on utilisation'. *Journal of General Internal Medicine*, vol 11, pp 584–90.
- Batalden P, Davidoff F (2007). 'What is "quality improvement" and how can it transform healthcare?' *Quality & Safety in Health Care*, vol 16, pp 2–3.
- Bellamy D, Smith J (2007). 'Role of primary care in early diagnosis and effective management of COPD'. *International Journal of Clinical Practice*, vol 61, no 8, pp 1380–89.
- Bero L, Grilli R, Grimshaw J, Harvey E, Oxman A, Thomson A. (1998). 'Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings'. *British Medical Journal*, vol 317, pp 465–68.
- Berwick D, James B, Coye M (2003). 'Connections between quality measurement and improvement'. *Medical Care*, vol 41, no 1, pp 130–8.
- Bestall JC, Ahmed N, Ahmedzai SH, Payne SA, Noble B, Clark D (2004). 'Access and referral to specialist palliative care: patients' and professionals' experiences'. *International Journal of Palliative Nursing*, vol 10, no 8, pp 381–89.
- Bethell HJN, Lewin RJP, Dalal HM (2008). 'Cardiac rehabilitation: it works so why isn't it done?' *British Journal of General Practice*, vol 58, pp 677–79.

- Bjerager M, Palshof T, Dahl R, Vedsted P, Olesen F (2006). 'Delay in diagnosis of lung cancer in general practice'. *British Journal of General Practice*, vol 56, no 532, pp 863–68.
- Blomgren K, Pitkaranta A (2003). 'Is it possible to diagnose acute otitis media accurately in primary health care?' *Family Practice*, vol 20, no 5, pp 524–7.
- Boaden R, Harvey G, Moxham C, Proudlove N (2008). *Quality Improvement: Theory and practice in healthcare*. Coventry: NHS Institute for Innovation and Improvement.
- Bodek S, Ghori K, Edelstein M, Reed A, MacFadyen RJ (2006). 'Contemporary referral of patients from community care to cardiology lack diagnostic and clinical detail'. *International Journal of Clinical Practice*, vol 60, no 5, pp 595–601.
- Bohmer R (2010). 'Fixing health care on the front lines'. *Harvard Business Review*, vol 88, no 4, pp 62–69.
- Bouma J, Broer J, Bleeker J, van SE, Meyboom de JB, DeJongste MJ (1999). 'Longer pre-hospital delay in acute myocardial infarction in women because of longer doctor decision time'. *Journal of Epidemiology & Community Health*, vol 53, no 8, pp 459–64.
- Bowie P, Pope L, Lough M (2008). 'A review of the current evidence base for significant event analysis'. *Journal of Evaluation of Clinical Practice* 2008, vol 14, pp 520–36.
- Bowling A, Redfern J (2000). 'The process of outpatient referral and care: the experiences and views of patients, their general practitioners, and specialists'. *British Journal of General Practice*, vol 50, no 451, pp 116–20.
- Boyce T, Dixon A, Fasolo B, Reutskaja E (2010a). *Choosing a High Quality Hospital. The role of nudges, scorecard design and information*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/choosing_a.html (accessed on 16 February 2011)
- Boyce T, Peckham S, Hann A, Trenholm S (2010b). 'A proactive approach. Health promotion and ill-health prevention'. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/health_promotion.html (accessed on 29 October 2010).
- Boyle S, Appleby J, Harrison A (2010). *A Rapid View of Access to Care*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/access_to_care.html (accessed on 28 October 2010).
- British Medical Association (2010) *GP Consortia: The key issues*. Report of a GPC round-table meeting exploring the NHS White Paper commissioning proposals. London: BMA.
- British Medical Association (2009). *Focus on the Department of Health's 'Improving GP Services' guidance and Balanced Scorecards – GPC guidance for LMCS and GPs (England only)*. London: BMA. Available at: www.suffolklmc.co.uk/documents/Focus%20n%20the%20Department%20f%20Health_s%20_Improving%20GP%20Services_%20guidance%20and%20balanced%20scorecards.pdf (accessed on 31 October 2010).
- Broadbent J, Maisey S, Holland R, Steel N (2008). 'Recorded quality of primary care for osteoarthritis: an observational study'. *British Journal of General Practice*, vol 58, issue 557, pp 839–43.
- Broomfield N, Fleming P, Foot D (2001). 'An investigation of the correspondence between psychological problems diagnosed by GPs and those subsequently targeted for treatment by clinical psychologists'. *Health Bulletin (Edinb)*, vol 59, no 3, pp 178–87.
- Brunet K, Birchwood M, Lester H, Thornhill K (2007). 'Delays in mental health services and duration of untreated psychosis'. *Psychiatric Bulletin*, vol 31, pp 408–10.

- Burbach FR, Harding S (1997). 'GP referral letters to a community mental health team: an analysis of the quality and quantity of information'. *International Journal of Health Quality of Care Assurance Incorporating Leadership in Health Services*, vol 10, no 2–3, pp 67–72.
- Calder L, Gao W, Simmons G (2000). 'Tuberculosis: reasons for diagnostic delay in Auckland'. *New Zealand Medical Journal*, vol 113, no 1122, pp 483–85.
- Calvert M, Shankar A, McManus R, Lester H, Freemantle N (2009). 'Effect of the quality and outcomes framework on diabetes care in the United Kingdom: retrospective cohort study'. *British Medical Journal*, vol 338, p b1870.
- Campbell S, Reeves D, Kontopantelis E, Sibbald B, Roland M (2009). 'Effects of pay for performance on the quality of primary care in England'. *New England Journal of Medicine*, vol 361, pp 368–78..
- Campbell S, Reeves D, Kontopantelis E, Middleton E, Sibbald B, Roland M (2007). 'Quality of primary care in England with the introduction of pay for performance'. *New England Journal of Medicine*, vol 357, p 2.
- Care Quality Commission (2011). 'Guidance for Providers of NHS Primary Medical Services'. CQC website. Available at: www.cqc.org.uk/guidanceforprofessionals/primarymedicalservices.cfm (accessed on 15 February 2011).
- Chapman KR, Tashkin DP, Pye DJ (2001). 'Gender bias in the diagnosis of COPD'. *Chest*, vol 119, no 6, pp 1691–95.
- Clark MA, Thomas JM (2005). 'Delay in referral to a specialist soft-tissue sarcoma unit'. *European Journal of Surgical Oncology*, vol 31, no 4, pp 443–48.
- Clews G (2006). 'Demand management: destination unknown – which way now for GP referrals?' *Health Service Journal*, vol 116, no 6007, pp 14–15.
- Collings J (1950). 'General practice in England today: a reconnaissance'. *Lancet*, vol i, pp 555–85.
- Coulston JE, Williams GL, Stephenson BM (2008). 'Audit of referral patterns for hernia repair: are general practitioners aware of the changing face of herniorrhaphy?' *Annals of the Royal College of Surgeons of England*, vol 90, no 2, pp 140–41.
- Coxon JP, Harris HJ, Watkin NA (2003). 'A prospective audit of the implementation of the 2-week rule for assessment of suspected urological cancers'. *Annals of the Royal College of Surgeons of England*, vol 85, no 5, pp 347–50.
- Creed F, Gowrisunkur J, Russell E, Kincey J (1990). 'General practitioner referral rates to district psychiatry and psychology services'. *British Journal of General Practice*, vol 40, no 340, pp 450–54.
- Curry N, Goodwin N, Naylor C, Robertson R (2008). *Practice-based Commissioning. Reinvigorate, replace or abandon?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/pbc.html (accessed on 7 March 2011).
- Daly H, Collins C (2007). 'Barriers to early diagnosis of cancer in primary care: a needs assessment of GPs'. *Irish Medical Journal*, vol 100, no 10, pp 624–26.
- Davis K, Schoen C, Stremikis K (2010). *Mirror, Mirror on the Wall. How the performance of the US Health Care System Compares Internationally*. Update. New York: Commonwealth Fund.

Dawda P, Jenkins R, Varnam R (2010). *Quality Improvement in General Practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/quality_improvement.html (accessed on 28 October 2010).

Department of Health (2010a). *Equity and Excellence: Liberating the NHS*. London: Department of Health. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353 (accessed on 28 October 2010).

Department of Health (2010b). *GMS Statement of Financial Entitlements (SFE)*. London: Department of Health. Available at: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Healthcare/Primarycare/Primarycarecontracting/GMS/DH_4133079 (accessed on 16 November 2010)

Department of Health (2010c). 'Health Secretary outlines vision for locally led NHS service changes'. Press release. London: Department of Health. Available at: www.dh.gov.uk/en/MediaCentre/Pressreleases/DH_116290 (accessed on 29 October 2010).

Department of Health (2010d). *Liberating the NHS: Transparency in Outcomes – A framework for the NHS*. London: Department of Health. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_117591.pdf (accessed on 28 October 2010).

Department of Health (2010e). *The GP Patient Survey 2009/10, Summary report*. London: Department of Health. Available at: www.gp-patient.co.uk/results/download/y4q4/y4q4_Summary.pdf (accessed on 31 October 2010).

Department of Health (2010f). 'Quality Accounts for 2011–12'. Dear colleague letter, 10 December, Gateway no 15119. Department of Health website. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_122541.pdf (accessed on 15 March 2011).

Department of Health (2009a). *Cancer Reform Strategy. Achieving local implementation – second annual report*. London: Department of Health.

Department of Health (2009b). *Improving Quality in Primary Care*. London: Department of Health. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_107332.pdf (accessed on 15 February 2011).

Department of Health (2009c). *Primary Care and Community Services: Improving GP services*. London: Department of Health. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093830 (accessed on 31 October 2010).

Department of Health (2009d). *Primary Care and Community Services: Improving quality in primary care*. London: Department of Health. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_106575.pdf (accessed on 31 October 2010).

Department of Health (2009e). *Report of the National Patient Choice Survey – March 2009 England*. London: Department of Health.

Department of Health (2008a). *A High Quality Workforce: NHS next stage review*. London: Department of Health. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_085840 (accessed on 28 October 2010).

Department of Health (2008b). *High Quality Care For All – Measuring for quality improvement: the approach*. London: Department of Health. Available at: www.ic.nhs.uk/

webfiles/Work%20with%20us/consultations/CQI/MeasuringforQualityImprovement%20_2_.pdf (accessed on 31 October 2010).

Department of Health (2008c). *High Quality Care For All; NHS next stage review final report*. London: Department of Health. Available at: www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/DH_085825 (accessed on 28 October 2010).

Department of Health (2004). *Alternative provider medical services (APMS) – primary care*. Speech by Rt Hon John Hutton MP, Minister of State at NHS Confederation, London, 23 November 2004.

Department of Health (2000). *The NHS Plan: A plan for investment, a plan for reform*. London: Department of Health. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002960 (accessed on 29 October 2010).

Deverill M, Lancsar E, Snaith V, Robson S (2010). 'Antenatal care for first time mothers: a discrete choice experiment of women's views on alternative packages of care'. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, vol 151, pp 33–37.

Dixon A, Ham C (2010). *Liberating the NHS, The right prescription in a cold climate?* London: The King's Fund. Available at: www.kingsfund.org.uk/press/press_releases/too_far_too_fast.html (accessed on 28 October 2010).

Dixon A, Khachatryan A (2010a). 'A review of the public health impact of the Quality and Outcomes Framework'. *Quality in Primary Care*, vol 18, no 2), pp 133–8.

Dixon A, Khachatryan A, Gilmour S (2010b). 'Does general practice reduce health inequalities? Analysis of quality and outcomes framework data'. *European Journal of Public Health*, first published online December 8

Dixon A (2008) (Ed). *Engaging Patients in Their Health: How the NHS needs to change*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/engaging_patients_in.html (accessed on 7 March 2011).

Donabedian A (1988). 'The quality of care: how can it be measured?' *The Millbank Memorial Fund Quarterly*, vol 44, issue 3, part 3, pp 166–203.

Doran T, Roland M (2010). 'Lessons from major initiatives to improve primary care in the United Kingdom'. *Health Affairs*, vol 29, pp 1023–29.

Doran T, Fullwood C, Kontonpantelis E, Reeves D (2008a). 'Effect of financial incentives on inequalities in the delivery of primary clinical care in England: analysis of clinical activity indicators for the quality and outcomes framework'. *The Lancet*, vol 372, no 9640, pp 728–36.

Doran T, Fullwood C, Reeves D, Gravelle H, Roland M (2008b). 'Exclusion of patients from pay-for-performance targets by English physicians'. *New England Journal of Medicine*, vol 359, pp 274–84.

Doran T, Fullwood C, Gravelle H, Reeves D, Kontopantelis E, Hiroeh U, Roland M (2006). 'Pay-for-performance programs in family practices in the United Kingdom'. *New England Journal of Medicine*, vol 355, pp 375–84.

Downing A, Rudge G, Cheng Y, Tu Y K, Keen J, Gilthorp MS (2007). 'Do the UK government's new Quality and Outcomes Framework (QOF) scores adequately measure primary care performance? A cross-sectional survey of routine healthcare data'. *BMC Health Services Research*, vol 7, p 166.

- Dr Foster Intelligence (2010). *The GP Practice Index. Variation in non-elective admissions for conditions treatable in the community*. London: Dr Foster Intelligence.
- Duerden M, Millson D, Avery T (2011). *The Quality of GP Prescribing*. London: The King's Fund, forthcoming.
- Ellins J, Ham C, Parker H (2009). 'Opening up the primary medical care market'. *British Medical Journal*, vol 338, p b1127.
- Elwyn G, Edwards A, Gwyn R, Grol R (1999). 'Towards a feasible model for shared decision making: focus group study with general practice registrars'. *British Medical Journal*, vol 319, no 7212, pp 719–20.
- Epstein L, Ogden J (2005). 'A qualitative study of GPs views of treating obesity'. *British Journal of General Practice*, vol 55, pp 750–54.
- Esmail A, Neale G, Elstein M, Firth-Cozens J, Davy C, Vincent C (2004). *Case Studies in Litigation: Claims reviews in four specialties*. Manchester: Manchester Centre for Healthcare Management, University of Manchester.
- Evans J, Ziebland S, McPherson A (2007). 'Minimizing delays in ovarian cancer diagnosis: an expansion of Andersen's model of "total patient delay"'. *Family Practice*, vol 24, no 1, pp 48–55.
- Fabunmi L, Jacobson B (2009). 'Quality observatories: where are we? A discussion paper'. London: London Health Observatory. Available at: www.lho.org.uk/viewResource.aspx?id=14529 (accessed on 31 October 2010).
- Fertig A, Roland M, King H, Moore T (1993). 'Understanding variation in rates of referral among general practitioners: are inappropriate referrals important and would guidelines help to reduce rates?' *British Medical Journal*, vol 307, no 6917, pp 1467–70.
- Field M, Grigsby J (2002). 'Telemedicine and remote patient monitoring'. *Journal of the American Medical Association*, vol 288, pp 423–25.
- Foot C, Raleigh V, Ross S, Lyscom T (2011). *How do quality accounts measure up? Findings from the first year*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/quality_accounts_1.html (accessed on 14 March 2011).
- Foot C, Naylor C, Imison C (2010). *The Quality of GP Diagnosis and Referral*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/diagnosis_and.html (accessed on 28 October 2010).
- Forrest CB, Majeed A, Weiner JP, Carroll K, Bindman AB (2003). 'Referral of children to specialists in the US and the UK'. *Archives of Pediatrics and Adolescent Medicine*, vol 157, no 3, pp 279–85.
- Freeman G, Hughes J (2010). *Continuity of Care and the Patient Experience*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/continuity_of_care.html (accessed on 29 October 2010).
- Geboers H, Grol R, van den Bosch W, van den Hoogen H, Mookink H, van Montfort P, Oltheten H (1999). 'A model for continuous quality improvement in small scale practices'. *Quality in Health Care*, vol 8, no 1, pp 43–48.
- General Medical Council (2006). *Good Medical Practice*. London: General Medical Council. Available at: www.gmc-uk.org/static/documents/content/GMP_0910.pdf (accessed on 6 January 2011).

- Gilbert R, Franks G, Watkin S (2005). 'The proportion of general practitioner referrals to a hospital Respiratory Medicine clinic suitable to be seen in a GPwSI Respiratory Clinic'. *Primary Care Respiratory Journal*, vol 14, no 6, pp 314–19.
- Gillam S (2010). 'Should the Quality and Outcomes Framework be abolished? Yes'. *British Medical Journal*, vol 340, p c2710.
- Gillam S (1992). 'Provision of health promotion clinics in relation to population need: another example of the inverse care law?' *British Journal of General Practice*, vol 42, pp 54–56.
- Gillam S, Abbott S, Banks-Smith J (2001). 'Can primary care groups and trusts improve health?' *British Medical Journal*, vol 323, pp 89–92.
- Gnani S, Majeed A (2006). *A User's Guide to Data Collected in Primary Care in England*. Cambridge: Eastern Region Public Health Observatory. Available at: www.erpho.org.uk/viewResource.aspx?id=12899 (accessed on 31 October 2010).
- Goodwin N (2008). 'National health systems: overview' in Heggenhougen K, Quah S (eds), *International Encyclopedia of Public Health*, vol 4, pp 497–512. San Diego: Academic Press.
- Goodwin N, Curry N, Naylor C, Ross S, Duldig W (2010a). *Managing People With Long-Term Conditions*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/the_management_of_1.html (accessed on 29 October 2010).
- Goodwin N, Ross S, Smith A (2010b). *The Quality of Care in General Practice, Capturing opinions from the front line*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/the_quality_of_care.html (accessed on 3 November 2010).
- GP Patient Survey (2011). 'Practice report'. GP Patient Survey website. Available at: www.gp-patient.co.uk/results/weighted/practicereport/ (accessed on 18 March 2011).
- Grace JF, Armstrong D (1986). 'Reasons for referral to hospital: extent of agreement between the perceptions of patients, GPs and consultants'. *Family Practice*, vol 3, pp 143–47.
- Green J, McDowall Z, Potts HW (2008). 'Does Choose and Book fail to deliver the expected choice to patients? A survey of patients' experience of outpatient appointment booking'. *BMC Medical Informatics and Decision Making*, vol 8, no 1, p 36.
- Greenhalgh T, Heath I (2010). *Measuring Quality in the Therapeutic Relationship*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/the_therapeutic.html (accessed on 28 October 2010).
- Gregory S (2009). *General Practice in England: An overview*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/briefings/general_practice_in.html (accessed on 29 October 2010).
- Guthrie B (2008). 'Measuring the quality of healthcare systems using composites'. *British Medical Journal*, vol 337, a639.
- Ham C (2009). *Only Connect: Policy options for integrating health and social care*. London: The Nuffield Trust.
- Hansard (House of Commons Debates) (2009–10) 12 May 2009 col 671. Available at: www.publications.parliament.uk/ (accessed on 18 June 2010).
- Hasegawa H, Reilly D, Mercer S, Bikker A (2005). 'Holism in primary care: the views of Scotland's general practitioners'. *Primary Health Care Research and Development*, vol 6, pp

320–28. Available at: www.adhom.com/adh_download/Holism%202005.pdf (accessed on 1 November 2010).

Haslam D (2005). *The Future of General Practice, The role of primary care in the new NHS*. Available at: www.psmg.info/images/event27_2.pdf (accessed on 28 October 2010).

Haynes RB, Ackloo E, Sahota N, McDonald HP, Yao X (2008). 'Interventions for enhancing medication adherence'. *Cochrane Database of Systematic Reviews*, issue 2, article CD000011.

Hearnshaw H, Reddish S, Carlyle D, Baker R, Robertson N (1998). 'Introducing a quality improvement programme to primary healthcare teams'. *Quality in Health Care*, vol 7, no 4, pp 200–08.

Hibbard J, Stockard J, Mahoney E, Tusler M (2004). 'Development of the Patient Activation Measure (PAM): conceptualizing and measuring activation in patients and consumers'. *Health Services Research*. 39(4 Pt 1), pp 1005–26.

Hill CM, Mather M, Goddard J (2003). 'Cross sectional survey of meningococcal C immunisation in children looked after by local authorities and those living at home'. *British Medical Journal*, vol 15, no 326, pp 364–65.

Hippisley-Cox J, Vinogradova Y (2009). *Trends in Consultation Rates in General Practice 1995/1996 to 2008/2009: Analysis of the QResearch® database*. Leeds: Information Centre. Available at: www.ic.nhs.uk/webfiles/publications/gp/Trends_in_Consultation_Rates_in_General_Practice_1995_96_to_2008_09.pdf (accessed on 12 July 2010).

Holden JD (2004). 'Systematic review of published multi-practice audits from British general practice'. *Journal of Evaluation in Clinical Practice*, vol 10, pp 247–72.

Howie J, Heaney D, Maxwell M (2004). 'Quality, core values and the general practice consultation: issues of definition, measurement and delivery'. *Family Practice*, vol 21, no 4, pp 458–67.

Howie J, Heaney D, Maxwell M (1997). *Measuring Quality in General Practice*. London: Royal College of General Practitioners.

Howie J, Heaney D, Maxwell M, Walker J, Freeman G, Rai H (1999). 'Quality at general practice consultations: cross sectional survey'. *British Medical Journal*, vol 319, p 738.

Hutt P, Gilmour S (2010). *Tackling Inequalities in General Practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/inequalities.html (accessed on 29 October 2010).

Imison C, Naylor C, Maybin J (2008). *Under One Roof: Will polyclinics deliver integrated care?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/under_one_roof.html (accessed on 1 November 2010).

Imison C, Williams S, Smith J, Dingwall C (2010). *Toolkit to Support the Development of Primary Care Federations*. London: The King's Fund/Hempsons/The Nuffield Trust. Available at: www.rcgp.org.uk/PDF/Toolkit_Content_Final.pdf (accessed on 16 November 2010)

Information Centre for Health and Social Care (2011). *Measuring for Quality Improvement* [online]. Available at: www.ic.nhs.uk/services/measuring-for-quality-improvement (accessed on 7 March 2011).

Information Centre for Health and Social Care (2010). *General and Personal Medical Services: England 1999–2009*. Leeds: The Information Centre. Available at: www.ic.nhs.uk/

- webfiles/publications/workforce/nhsstaff9909/General_Practice_Bulletin_1999_2009.pdf (accessed on 28 October 2010).
- Information Centre (2009). 'Indicators for Quality Improvement'. NHS Information website. Available at: <https://mqi.ic.nhs.uk/> (accessed on 21 December 2009).
- Information Centre (2008). *Trends in Consultation Rates in General Practice 1995 to 2007: Analysis of the QRESEARCH database*. Leeds: The Information Centre. Available at: www.ic.nhs.uk/webfiles/publications/Trends%20in%20Consultation%20rates%20in%20General%20Practice%201995%20-%202007.pdf (accessed on 29 October 2010).
- Institute for Innovation and Improvement (2010). 'Statement About Benchmarking'. NHS Institute for Innovation and Improvement website. Available at: www.institute.nhs.uk/safer_care/primary_care_2/statement_about_benchmarking.html (accessed on 31 October 2010).
- Jenkins RM (1993). 'Quality of general practitioner referrals to outpatient departments: assessment by specialists and a general practitioner'. *British Journal of General Practice*, vol 43, no 368, pp 111–13.
- Jiwa M, Walters S, Mathers N (2004). 'Referral letters to colorectal surgeons: the impact of peer-mediated feedback'. *British Journal of General Practice*, vol 54, no 499, pp 123–26.
- Johnson GD, Smith G, Dramis A, Grimer RJ (2008). 'Delays in referral of soft tissue sarcomas'. *Sarcoma*, vol 2008, ID 378574.
- Jones E, Stott NC (1994). 'Avoidable referrals? Analysis of 170 consecutive referrals to secondary care'. *British Medical Journal*, vol 309, no 6963, p 1233.
- Jones R, White P, Armstrong D, Ashworth M, Peters M (2010). *Managing Acute Illness*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/the_management_of.html (accessed on 28 October 2010).
- Judge A, Welton NJ, Sandhu J, Ben-Shlomo Y (2010). 'Equity in access to total joint replacement of the hip and knee in England: cross sectional study'. *British Medical Journal* 341, no 7770, pp c4092.
- Kassirer JP, Kopelman RI (1989). 'Cognitive errors in diagnosis: instantiation, classification and consequences'. *The American Journal of Medicine*, vol 86, no 4, pp 433–41.
- Khattak I, Eardley NJ, Rooney PS (2006). 'Colorectal cancer – a prospective evaluation of symptom duration and GP referral patterns in an inner city teaching hospital'. *Colorectal Disease*, vol 8, no 6, pp 518–21.
- Khawaja AR, Allan SM (2001). 'Audit of referral practice to a fast-access breast clinic before the guaranteed 2-week wait'. *Annals of the Royal College of Surgeons of England*, vol 83, no 1, pp 58–60.
- King's Fund (2009) *Access to Palliative Care for Non-Cancer Patients*. Consultancy report for the Marie Curie Delivering Choice Programme. London: The King's Fund.
- Klein R (1990). *From Status to Contract: The transformation of the British medical profession*. International Congress and Symposium Series no 171. London: Royal Society of Medicine, pp 127–34.
- Knottnerus JA, Joosten J, Daams J (1990). 'Comparing the quality of referrals of general practitioners with high and average referral rates: an independent panel review'. *British Journal of General Practice*, vol 40, no 334, pp 178–81.

- Kostopoulou O, Delaney BC, Munro CW (2008). 'Diagnostic difficulty and error in primary care – a systematic review'. *Family Practice*, vol 25, no 6, pp 400–13.
- Lamden KH, Gemmell I (2008). 'General practice factors and MMR vaccine uptake: structure, process and demography'. *Journal of Public Health*, vol 30, no 3, pp 251–57.
- Lawlor DA, Keen S, Neal RD (2000). 'Can general practitioners influence a nation's health through a population approach to the provision of lifestyle advice?' *British Journal of General Practice*, vol 50, pp 455–59.
- Lawrence M, Packwood T (1996). 'Adapting total quality management for general practice: evaluation of a programme'. *Quality in Health Care*, vol 5, no 3, pp 151–58.
- Le Grand J (2003). *Motivation, Agency and Public Policy: Of knights and knaves, pawns and queens*. Oxford: Oxford University Press.
- Lester H, Majeed A (2008). 'The future of the quality and outcomes framework'. *British Medical Journal*, vol 337, p a3017.
- Lester H, Roland M (2009). 'Performance measurement in primary care' in Smith PC, Mossialos E, Papanicolas I, Leatherman S (eds) *Performance Measurement for Health System Improvement*, pp 371–405. Cambridge: Cambridge University Press.
- Lester H, Roland M (2007). 'Future of quality measurement'. *British Medical Journal*, vol 335, p 1130–1.
- Levin A (2000). 'Consequences of late referral on patient outcomes'. *Nephrol Dial Transplant*, vol 15, suppl 3, pp 8–13.
- Lewis R, Rosen R, Goodwin N, Dixon J (2010). *Where Next for Integrated Care Organisations in the English NHS?* London: The Nuffield Trust. Available at: www.nuffieldtrust.org.uk/publications/detail.aspx?id=145&prID=693 (accessed on 29 October 2010).
- Liddell A, Adshead S, Burgess E (2008). *Technology in the NHS. Transforming the patient's experience of care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/technology_in_the.html (accessed on 7 March 2011).
- Loudon I, Horder J, Webster C (1998). *General Practice under the National Health Service 1948–1997*. Oxford: Clarendon Press.
- Macdonald S, Macleod U, Campbell NC, Weller D, Mitchell E (2006). 'Systematic review of factors influencing patient and practitioner delay in diagnosis of upper gastrointestinal cancer'. *British Journal of Cancer*, vol 94, no 9, pp 1272–80.
- Majeed A (2006). *A User's Guide to Data Collected in Primary Care in England*. Cambridge: Eastern Region Public Health Observatory on behalf of the Association of Public Health Observatories.
- Majeed A (2004). 'Sources, uses, strengths and limitations of data collected in primary care in England'. *Health Statistics Quarterly*, vol 21, pp 5–14.
- Majeed A, Lester H, Bindman A (2007). 'Improving the quality of care with performance indicators'. *British Medical Journal*, vol 335, no 7626, pp 916–18.
- Mangtani P, Breeze E, Kovats S, Ng ES, Roberts JA, Fletcher A (2005). 'Inequalities in influenza vaccine uptake among people aged over 74 years in Britain'. *Preventive Medicine* 41, no 2, pp 545–53.

- Marshall M, Campbell S, Hacker J, Roland M (2002). *Quality Indicators for General Practice. A practical guide for health professionals and managers*. London: Royal Society of Medicine Press Ltd.
- Marshall M, Roland MO, Campbell SM, Kirk S, Reeves D, Brook R, McGlynn EA, Shekelle PG (2003). *Measuring General Practice: A demonstration project to develop and test a set of primary care clinical quality indicators*. London: The Nuffield Trust.
- McBride D, Walters K, Raine R (2010). 'Explaining variation in referral from primary to secondary care: a cohort study'. *British Medical Journal*, vol 341, c6267.
- McCaffery K, Wardle J, Nadel M, Atkin W (2002). 'Socioeconomic variation in participation in colorectal cancer screening'. *Journal of Medical Screening*, vol 9, no 3, pp 104–08.
- McKee M (2004). 'Not everything that counts can be counted; not everything that can be counted counts'. *British Medical Journal*, vol 328, p 153.
- McNeill A (2008). 'How accurate are primary care referral letters for presumed acute stroke?' *Scottish Medical Journal*, vol 53, no 4, pp 11–12.
- Mead GE, Cunningham AL, Faulkner S, Russell, KJ, Ford MJ (1999). 'Can general practitioner referral letters for acute medical admissions be improved?' *Health Bulletin (Edinburgh)*, vol 57, no 4, pp 257–61.
- Michie S (2007). 'Talking to primary care patients about weight: a study of GPs and practice nurses in the UK'. *Psychology Health & Medicine*, vol 12, no 5, pp 521–25.
- Middleton E, Baker D (2003). 'Comparison of social distribution of immunisation with measles, mumps, and rubella vaccine England, 1991–2001'. *British Medical Journal*, vol 326, p 854.
- Millett C, Majeed A, Huckvale C, Car J (2011). 'Going local: devolving national pay for performance programmes'. *British Medical Journal*, vol 341, p c7085.
- Mitchell E, Macdonal S, Campbell NC, Weller D, Macleod U (2008). 'Influences on pre-hospital delay in the diagnosis of colorectal cancer: a systematic review'. *British Journal of Cancer*, vol 98, no 1, pp 60–70.
- Mitchell E, Macleod U, Rubin G (2009). *Cancer in Primary Care: An analysis of significant event audits for diagnosis of lung cancer and cancers in teenagers and young adults 2008–9*. Report for the National Awareness and Early Diagnosis Initiative. Dundee: University of Dundee/University of Glasgow/Durham University.
- Molloy E, O'Hare JA (2003). 'Unravelling referrals to medical outpatients'. *Irish Medical Journal*, vol 96, no 5, pp 145–46.
- Moore AT, Roland MO (1989). 'How much variation in referral rates among general practitioners is due to chance?' *British Medical Journal*, vol 298, no 6672, pp 500–02.
- Moser K (2001) 'Inequalities in treated heart disease and mental illness in England and Wales, 1994–1998'. *British Journal of General Practice*, vol 51, no 467, pp 438–44.
- Mountford J, Webb C (2009). 'When clinicians lead'. *The McKinsey Quarterly*. Available at: www.mckinseyquarterly.com/When_clinicians_lead_2293 (accessed on 18 March 2011).
- National Audit Office (2010a). *Delivering the Cancer Reform Strategy. Report by the Comptroller and Auditor General*. HC 568 Session 2010–2011. London: The Stationery Office. Available at: www.nao.org.uk/publications/1011/cancer_reform_strategy.aspx (accessed on 9 March 2011).

National Audit Office (2010a). *Tackling Inequalities in Life Expectancy in Areas with the Worst Health and Deprivation*. London: The Stationery Office. Available at: www.nao.org.uk/publications/1011/health_inequalities.aspx (accessed on 31 October 2010).

National Audit Office (2009). *Improving Services and Support for People With Dementia*. London: NAO. Available at: www.nao.org.uk/publications/0607/support_for_people_with_dement.aspx (accessed on 26 August 2009).

National Audit Office (2008). *NHS Pay Modernisation: New contracts for general practice services in England*. London: National Audit Office. Available at: www.nao.org.uk/publications/0708/new_contracts_for_general_prac.aspx (accessed on 28 October 2010).

National Audit Office (2007). *Prescribing Costs in Primary Care*. London: National Audit Office. Available at: www.nao.org.uk/publications/0607/costs_in_primary_care.aspx (accessed on 28 October 2010).

National Co-ordinating Centre for Service Delivery and Organisation (2006). *An Assessment of the Clinical Effectiveness, Cost and Viability of NHS General Practitioners with Special Interest (GPSI) services*. London: National Coordinating Centre for the Service Delivery and Organisation (NCCSDO) research programme. Available at: www.sdo.nihr.ac.uk/files/adhoc/34-34-briefing-paper.pdf (accessed on 29 October 2010).

National Institute for Health and Clinical Excellence (2007). *Behaviour Change at Population, Community and Individual Levels*. NICE public health guidance 6. London: National Institute for Health and Clinical Excellence. Available at www.nice.org.uk/nicemedia/live/11868/37987/37987.pdf (accessed on 7 March 2011).

National Patient Safety Agency (2008). *Significant Event Audit: Guidance for primary care teams*. Available at: www.nrls.npsa.nhs.uk/resources/?entryid45=61500 (accessed on 16 November 2010).

National Quality Board (2010a). *Information on the Quality of Services – Final report*. London: Department of Health. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117315.pdf (accessed on 31 October 2010).

National Quality Board (2010b). *Information on the Quality of Services – Interim report*. London: Department of Health. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_115188.pdf (accessed on 28 October 2010).

Newbigging K, McKeown M (2007). 'Mental health advocacy with black and minority ethnic communities: conceptual and ethical implications'. *Current Opinion in Psychiatry*, vol 20, no 6, pp 588–93.

NHS Birmingham East and North (2009). *Birmingham Own Health*. Available at: http://benpct.nhs.uk/download/doc-type/board-papers/ben-tb-0909birmingham_ownhealthb.pdf (accessed on 28 October 2010).

NHS Institute for Innovation and Improvement (2006–11). 'Better Care, Better Value indicators'. NHS Institute website. Available at: www.institute.nhs.uk/quality_and_value/high_volume_care/better_care_better_value_indicators.html (accessed on 18 March 2011).

NHS Institute for Innovation and Improvement/Academy of Medical Royal Colleges (2010). *Medical Leadership Competency Framework: Enhancing engagement in medical leadership*, 3rd ed. Coventry: NHS Institute for Innovation and Improvement. Available at: www.institute.nhs.uk/images/documents/Medical%20Leadership%20Competency%20Framework%203rd%20ed.pdf (accessed on 29 October 2010).

- NHS Right Care (2010). *The NHS Atlas of Variation in Healthcare. Reducing unwarranted variation to increase value and improve quality*. Oxford: Information Press. Available at: www.rightcare.nhs.uk/atlas/qipp_nhsAtlas-LOW_261110c.pdf (accessed on 7 March 2011).
- NHS Workforce Review Team (2008). 'Workforce Summary – General practitioners: July 2008 – England'. NHS Workforce Review Team website. Available at: www.cfwi.org.uk/intelligence/previous-projects/workforce-summaries/general-practitioners (accessed on 28 October 2010).
- Noone A, Goldacre M, Coulter A, Seagroatt V (1989). 'Do referral rates vary widely between practices and does supply of services affect demand? A study in Milton Keynes and the Oxford region'. *Journal of the Royal College of General Practitioners*, vol 39, no 327, pp 404–07.
- Nunes V, Neilson J, O'Flynn N, Calvert N, Kuntze S, Smithson H, Benson J, Blair J, Bowser A, Clyne W, Crome P, Haddad P, Hemingway S, Horne R, Johnson S, Kelly S, Packham B, Patel M, Steel J (2009). *Clinical Guidelines and Evidence Review for Medicines Adherence: involving patients in decisions about prescribed medicines and supporting adherence*. London: National Collaborating Centre for Primary Care and Royal College of General Practitioners.
- Nutting PA, Goodwin MA, Flocke SA, Zyzanski SJ, Stange KC (2003). 'Continuity of primary care: to whom does it matter and when?' *Annals of Family Medicine*, vol 1, pp 149–55.
- O'Neill O (2003). 'Trust with accountability?' *Journal of Health Services Research and Policy* vol 8, no 1, pp 3–4, cited in H Lester, M Roland (2009) 'Performance measurement in primary care' in Smith PC, Mossialos E, Papanicolas I, Leatherman S (eds) *Performance Measurement for Health System Improvement*, pp 371–405, Cambridge: Cambridge University Press.
- O'Sullivan CO, Omar RZ, Ambler G, Majeed A (2005). 'Case-mix and variation in specialist referrals in general practice'. *British Journal of General Practice*, vol 55, no 516, pp 529–33.
- Ogden J, Flanagan Z (2008). 'Beliefs about the causes and solutions to obesity: a comparison of GPs to lay people'. *Patient Education and Counselling*, vol 71, pp 72–78.
- Omar R, O'Sullivan C, Petersen I, Islam A, Majeed A (2008). 'A model based on age, sex, and morbidity to explain variation in UK general practice prescribing: cohort study'. *British Medical Journal*, vol 337, p a238.
- Oxman AD, Thomson MA, Davis DA, Haynes RB (1995). 'No magic bullets: a systematic review of 102 trials of interventions to improve professional practice'. *Canadian Medical Association Journal*, vol 153, pp 1423–31.
- Parsons S, Winterbottom A, Cross P, Redding D (2010). *The Quality of Patient Engagement and Involvement in Primary Care*. London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/patient_engagement.html (accessed on 31 October 2010).
- Patel NN, D'Souza J, Rucker M, Townsend E, Morris-Stiff G, Manimaran M, Magee TR, Galland RB, Lewis MH (2008). 'Prioritisation of vascular outpatient appointments cannot be based on referral letters alone'. *Surgeon*, vol 6, no 3, pp 140–43.
- Patel RS, Smith DC, Reid I (2000). 'One stop breast clinics – victims of their own success? A prospective audit of referrals to a specialist breast clinic'. *European Journal of Surgical Oncology*, vol 26, no 5, pp 452–54.

- Picker Institute Europe (2009). *Patient and Public Engagement – The early impact of World Class Commissioning – a survey of primary care trusts*. Oxford: Picker Institute Europe.
- Pirmohamed M, James S, Meakin S, Green C, Scott A, Walley T, Farrar K, Park B, Breckenridge A (2004). 'Adverse drug reactions as cause of admission to hospital: prospective analysis of 18,820 patients'. *British Medical Journal*, vol 329, pp 15–19. Available at: www.bmj.com/content/329/7456/15.full.pdf (accessed on 26 November 2010).
- Potter S, Govindarajulua S, Shere M, Braddon F, Curran G, Greenwood R, Sahu AK, Cawthorn SJ (2007). 'Referral patterns, cancer diagnoses and waiting times after introduction of two week wait rule for breast cancer: prospective cohort study'. *British Medical Journal*, vol 335, no 7614, p 288.
- Preston C, Cheater F, Baker R, Hearnshaw H (1999). 'Left in limbo: patients' views on care across the primary/secondary interface'. *Quality in Health Care*, vol 8, pp 16–21.
- Public Health Intelligence North East (2011). NETS for General Practice Toolkit. Available at: www.phine.org.uk/group.php?gid=178&cal&month=2&year=2011 (accessed 16 February 2011).
- Purdy S (2010). *Avoiding Hospital Admissions, What does the research evidence say?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/avoiding_hospital.html (accessed on 17 February 2011).
- Purdy S, Griffin T, Salisbury C, Sharp D (2010). 'Prioritizing ambulatory care sensitive hospital admissions in England for research and intervention: a Delphi exercise'. *Primary Health Care Research & Development*, vol 11, pp 41–50.
- Raleigh V, Foot C (2010). *Getting the Measure of Quality*. London: The King's Fund. Available at: www.kingsfund.org.uk/applications/site_search/?term=The+Good+Indicators+Guide&searchreferer_id=21546&submit.x=24&submit.y=12 (accessed on 28 October 2010).
- Roderick P, Jones C, Drey N, Blakeley S, Webster P, Goddard J, Garland S, Bourton L, Mason J, Tomson C (2002). 'Late referral for end-stage renal disease: a region-wide survey in the south west of England'. *Nephrology Dialysis Transplantation*, vol 17, no 7, pp 1252–59.
- Roland M (2004). 'Linking physicians' pay to the quality of care – a major experiment in the United Kingdom'. *New England Journal of Medicine*, vol 351, p 14.
- Roland M, Marshall M (2001). 'General practice in an age of measurement'. *British Journal of General Practice*, vol 51, pp 611–12.
- Roland MO, Porter RW, Matthews JG, Redden JF, Simonds GW, Bewley B (1991). 'Improving care: a study of orthopaedic outpatient referrals'. *British Medical Journal*, vol 302, no 6785, pp 1124–28.
- Royal College of General Practitioners (2010a). 'Introducing RCGP Practice Accreditation.' *RCGP News*. September issue. Available at: www.rcgp.org.uk/news_and_events/rcgp_news.aspx (accessed on 27 September 2010).
- Royal College of General Practitioners (2010b). 'Revalidation'. London: RCGP. Available online at: www.rcgp.org.uk/revalidation.aspx (accessed March 7 2011).
- Royal College of General Practitioners (2008a). *The RCGP and Lord Darzi's Review of the NHS*. London: RCGP. Available at: www.rcgp.org.uk/pdf/Darzi%20Factsheet%202.pdf (accessed on 28 October 2010).

- Royal College of General Practitioners (2008b). *Primary Care Federations. Putting patients first*. London: RCGP. Available online at: www.rcgp.org.uk/PDF/Primary%20Care%20Federations%20document.pdf (accessed March 7 2011).
- Royal College of General Practitioners (2007a). *Being a General Practitioner*. Royal College of General Practitioners curriculum statement 1. London: RCGP. Available at: www.rcgp-curriculum.org.uk/pdf/curr_1_Being_a_GP_v1_2_jan10.pdf (accessed on 29 October 2010).
- Royal College of General Practitioners (2007b). *The Future Direction of General Practice, A roadmap*. London: RCGP. Available at: www.rcgp.org.uk/PDF/Roadmap_embargoed%2011am%2013%20Sept.pdf (accessed on 28 October 2010).
- Royal College of General Practitioners (2004). *The Future of General Practice. A statement by the Royal College of General Practitioners*. London: RCGP.
- Royal College of Physicians (2010). *Future Physician: Changing doctors in changing times*. London: RCP. Available at: <http://bookshoprcplondon.ac.uk/details.aspx?e=314> (accessed on 29 October 2010).
- Royal College of Surgeons: Association of Upper GI Surgeons, British Society of Gastroenterology, National Clinical Audit Support Programme (2009). *National Oesophago-Gastric Cancer Audit 2009* [online]. Available at: www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/NHS%20IC%20ESOPHAGO-GASTRIC%20CLINICAL%20AUDIT%20FINAL%20ART%20PDF%20no%2010go.pdf (accessed on 16 November 2010).
- Salisbury C, Noble A, Horrocks S, Crosby Z, Harrison V, Coast J, de Berker D, Peters T (2005). 'Evaluation of a general practitioner with special interest service for dermatology: randomised controlled trial'. *British Medical Journal*, vol 331, no 7530, pp 1441–46.
- Sandars J, Esmail A (2003). 'The frequency and nature of medical error in primary care: understanding the diversity across studies'. *Family Practice*, vol 20, no 3, pp 231–6.
- Schoen C, Osborn R, How S, Doty M, Peugh J (2008). 'In chronic condition: experiences of patients with complex health care needs, in eight countries, 2008'. *Health Affairs*, Web Exclusive (13 November, 2008).
- Seddon M, Marshall M, Campbell S, Roland M (2001). 'Systematic review of studies of quality of clinical care in general practice in the UK, Australia and New Zealand'. *Quality in Health Care*, vol 10, pp 152–58. Available at: www.ncbi.nlm.nih.gov/pmc/articles/PMC1743427/pdf/v010p00152.pdf (accessed on 28 October 2010).
- Shah S, Cook DG (2001). 'Inequalities in the treatment and control of hypertension: age, social isolation and lifestyle are more important than economic circumstances'. *Journal of Hypertension*, vol 19, no 7, pp 1333–40.
- Simpson CR, Wilson C, Hannaford PC, Williams D (2005). 'Evidence for age and sex differences in the secondary prevention of stroke in Scottish primary care'. *Stroke*, vol 36, pp 1771–75.
- Singh H, Thomas EJ, Khan MM, Petersen LA (2007). 'Identifying diagnostic errors in primary care using an electronic screening algorithm'. *Archives of Internal Medicine*, vol 167, no 3, pp 302–08.
- Smith A, Shakespeare J, Dixon A (2010). *The Role of GPs in Maternity Care – What does the future hold?* London: The King's Fund. Available at: www.kingsfund.org.uk/current_projects/gp_inquiry/dimensions_of_care/maternity_care_in.html (accessed on 29 October 2010).

- Smith J, Wood J, Elias J (2009). *Beyond Practice-based Commissioning: The local clinical partnership*. London: The Nuffield Trust. Available at: www.nuffieldtrust.org.uk/publications/detail.aspx?id=145&PRid=659 (accessed on 29 October 2010).
- Smith R (1990). 'Medicine's need for kaizen'. *British Medical Journal*, vol 10, no 301, no 6754, pp 679–80.
- Soljak M, Lonergan K, Hayward J (2009). *Systematic Review of Methods of Patient and Public Contact for Screening Programmes*. London: PHAST. Available at: www.improvement.nhs.uk/vascularchecks/DocumentsforSharing/tabid/61/Default.aspx (accessed on 20 June 2010).
- Speed CA, Crisp AJ (2005). 'Referrals to hospital-based rheumatology and orthopaedic services: seeking direction'. *Rheumatology*, vol 44, no 4, pp 469–71.
- Starfield B (1998). *Primary Care: Balancing health needs, services and technology*. Oxford: Oxford University Press.
- Stationery Office (1995). *OPCS Morbidity Statistics in General Practice. Fourth national study, 1991–1992*. Series MB5 no 3. London: HMSO. Cited in Royal College of General Practitioners (2007b). *The Future Direction of General Practice, A roadmap*. London: RCGP.
- Steel N, Bachmann M, Maisey S, Shekelle P, Breeze E, Marmot M, Melzer D (2008). 'Self reported receipt of care consistent with 32 quality indicators: national population survey of adults aged 50 or more in England'. *British Medical Journal*, vol 337, no 132, pp 438–52.
- Steward K, Land M (2009). *Perceptions of Patients and Professionals on Rheumatoid Arthritis Care*. London: The King's Fund.
- Swensen S, Meyer G, Nelson E, Hunt G, Pryor D, Weissberg J, Kaplan G, Daley J, Yates G, Chassin M, James B, Berwick D (2010). 'Cottage industry to postindustrial care – the revolution in health care delivery'. *New England Journal of Medicine*, January 20. Available at: <http://healthcarereform.nejm.org/?p=2836> (accessed on 29 October 2010).
- Taylor SC, Markar TN (2002). 'Audit of the quality of general practitioner referral letters to a learning disability service'. *British Journal of Developmental Disabilities*, vol 48, part 2, no 95, pp 101–06.
- Thorlby R, Rosen R, Smith J (2011). *GP Commissioning: insights from medical groups in the United States*. London: The Nuffield Trust. Available at: www.nuffieldtrust.org.uk/publications/detail.aspx?id=145&PRid=756 (accessed 7 March 2011).
- Tudor-Hart J (1971). 'The inverse care law'. *The Lancet*, Feb 27, vol 1, no 7696, pp 405–12.
- Turner D, Tarrant C, Windridge K, Bryan S, Boulton M, Freeman G, Baker R (2007). 'Do patients value continuity of care in general practice?: an investigation using stated preference discrete choice experiments'. *Journal of Health Services Research and Policy*, vol 12, no 3, pp 132–37.
- Turner KM, Shield JP, Salisbury C (2009). 'Practitioners' views on managing childhood obesity in primary care: a qualitative study'. *British Journal of General Practice*, vol 59, no 568, pp 856–62.
- Walsh N, Maybin J, Lewis R (2007). 'So where are the alternative providers in primary care?' *British Journal of Healthcare Management*, vol 13, no 2, pp 43–6.
- Walshe K (2009). 'Pseudoinnovation: the development and spread of health care quality improvement methodologies'. *International Journal for Quality in Health Care*, vol 21, no 3, pp 153–59.

- Walshe K, Freeman T (2002). 'Effectiveness of quality improvement: learning from evaluations'. *Quality & Safety in Health Care*, vol 11, no 1, pp 85–87.
- Wanless D, Appleby J, Harrison A, Patel D (2007). *Our Future Health Secured? A review of NHS funding and performance*. London: The King's Fund.
- Watson E, Austoker J, Lucassen A (2001). 'A study of GP referrals to a family cancer clinic for breast/ovarian cancer'. *Family Practice*, vol 18, no 2, pp 131–34.
- Webb E, Shankleman J, Evans MR, Brooks R (2001). 'The health of children in refuges for women victims of domestic violence: cross sectional descriptive survey'. *British Medical Journal*, vol 323, pp 210–13.
- Webb J, Khanna A (2006). 'Can we rely on a general practitioners' referral letter to a skin lesion clinic to prioritise appointments and does it make a difference to the patient's prognosis?' *Annals of the Royal College of Surgeons of England*, vol 88, no 1, pp 40–45.
- Weingart S, Saadeh M, Simchowitz B, Gandhi T, Nekhlyudov L, Studdert D, Puopolo A, Shulman L (2009). 'Process of care failures in breast cancer diagnosis'. *Quality & Safety in Health Care*, vol 24, no 6, pp 702–09.
- Wennberg D, Siegel M, Darin B, Filipova N, Russell R, Kenney L, Steinort K, Park T-R, Cakmakci G, Dixon J, Curry N, Billings J (2006). *Combined Predictive Model, Final report*. London: Health Dialog/King's Fund/New York University. Available at: www.kingsfund.org.uk/research/projects/predicting_and_reducing_readmission_to_hospital/#resources (accessed on 1 November 2010).
- Werner R, Asch D (2007). 'Clinical concerns about clinical performance measurement'. *Annals of Family Medicine*, vol 5, pp 159–63.
- West D (2011). 'One in five GP practices are underperforming'. *Health Service Journal*, 23 January, pp 4–5.
- White P, Singleton A, Jones R (2003). 'Copying referral letters to patients: the views of patients, patient representatives and doctors'. *Patient Education and Counseling*, vol 55, no 1, pp 94–98.
- Wilcock P, Champion-Smith C, Head M (2002). 'The Dorset Seedcorn Project: interprofessional learning and continuous quality improvement in primary care'. *British Journal of General Practice*, vol 53, pp S39–44.
- York Health Economics Consortium and University of London School of Pharmacy (2010). *Evaluation of the scale, causes and costs of waste medicines*, York/London; YHEC/University of London. Available at: http://php.york.ac.uk/inst/yhec/web/news/documents/Evaluation_of_NHS_Medicines_Waste_Nov_2010.pdf (accessed on 2 February 2011)
- Yorkshire and Humber Public Health Observatory (2009). 'Health Intelligence Practice Profiles and PCT Level Profiles'. YHPHO website. Available at: www.yhpho.org.uk/resource/view.aspx?RID=10319# (accessed on 28 October 2010).