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).
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**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Facilities</td>
<td>• Management</td>
<td>• Patient satisfaction</td>
</tr>
<tr>
<td>• Equipment</td>
<td>• Records</td>
<td>• Health status</td>
</tr>
<tr>
<td>• Personnel</td>
<td>• Diagnosis</td>
<td>• Completion of treatment</td>
</tr>
<tr>
<td>• Administration</td>
<td>• Treatment plan</td>
<td>• Recall pattern</td>
</tr>
<tr>
<td>• Protocols</td>
<td>• Sequencing</td>
<td>• Needs of recall</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>The benefits</th>
<th>The risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows comparisons to be made between practices against set standards over time to stimulate and motivate change</td>
<td>Encourages a fragmented, rather than holistic and integrated, approach in general practice</td>
</tr>
<tr>
<td>Facilitates an objective evaluation of a quality improvement initiative</td>
<td>Fails to encompass important yet subjective aspects of general practice</td>
</tr>
<tr>
<td>Can be used to identify unacceptable performance and improve accountability</td>
<td>May be based on data and information that is of poor quality, is difficult to access</td>
</tr>
<tr>
<td>Stimulates an informed debate about the quality of care</td>
<td>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</td>
</tr>
<tr>
<td>Focuses attention on improving the quality of information in general practice</td>
<td>May be expensive and time-consuming to produce. The cost-benefit ratio of measuring quality is largely unknown</td>
</tr>
<tr>
<td>Is a quicker and cheaper tool than other quality improvement methods, such as peer review</td>
<td>Encourages a culture of blame rather than internal professional motivation</td>
</tr>
<tr>
<td>Helps target resources to areas where quality needs improving to meet needs</td>
<td>Can lead to a short-term rather than long-term response to quality improvement</td>
</tr>
<tr>
<td>May improve public engagement and professional pride when quality targets are met and exceeded</td>
<td>If deficiencies of care are highlighted, may erode public trust and professional morale</td>
</tr>
<tr>
<td></td>
<td>If the results of indicators are published, encourages manipulation of data</td>
</tr>
<tr>
<td></td>
<td>May encourage clinicians to focus on the counted rather than the patient, while areas of care not covered by indicators risk being ignored</td>
</tr>
<tr>
<td></td>
<td>Indicators tend to persist even where the evidence of benefit is not strong</td>
</tr>
<tr>
<td></td>
<td>Indicators cover only a minority of clinical activity</td>
</tr>
</tbody>
</table>


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).
Defining and measuring the quality of general practice

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
Improving 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.


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...
Improving the quality of care in general practice

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.
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.

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.

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.