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Quality in General Practice

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Towards a holistic approach

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Executive Summary

The challenge to develop valid measures of quality in general practice has attracted interest from a wide range of professional and lay groups. The aim of this monograph is to promote urgent and informed debate on the measurement and implementation of quality in general practice. Its central theme is that the widely differing perspectives of those who plan, fund, deliver, receive, record and administer care, while often at odds with one another, may each be valid in particular contexts, and a holistic approach to quality must incorporate these multiple perspectives.

The notion of a unitary, one-dimensional index that can be used for the assessment of all aspects of quality in general practice is a dangerous illusion. Different interest groups increasingly concede that their different objectives necessarily require different measures of quality, and this paper is, first and foremost, a recognition of the plurality of perspectives that are already beginning to exist. Acknowledging the lack of universality of one's own paradigm, as well as understanding and respecting alternative perspectives on the issue, is a more important step towards constructive dialogue than any attempt to achieve a forced consensus.

Chapter One of this Paper describes the historical and political context of the current drive for quality in UK primary care. It introduces some traditional frameworks for classifying quality indicators (such as the 'Donabedian triad' of structure, process and outcome), and suggests that all such frameworks rest to some extent on the flawed assumption that it is possible to present a single, internally consistent model or framework within which quality can be defined and measured. In reality, we argue, the concept of quality in health care draws on multiple, overlapping and at times mutually exclusive perspectives (illustrated in Figure 1.1 on page 18), which do not lend themselves to any unifying paradigm.

Chapter Two illustrates with hypothetical examples the notion that the 'core features' of general practice remain difficult to define and even more difficult to measure, and argues that the reflective practitioner should be conscious of the inevitable tendency of formal quality assessment programmes to 'measure the [easily] measurable' and unwittingly exclude the essence of good general practice.

Chapters Three to Nine explore a number of individual perspectives on quality in general practice, including

- Measures of the 'good consultation', 'good doctor', or 'good practice' derived either from patients' declared values (introduced in Chapter Two) or from the perspective of the reflective practitioner (Chapter Three)
- Measures of task-oriented activity, either within general practice, expressed as targets and performance indicators (Chapter Four), or at the primary-secondary care interface - the 'gatekeeper role' (Chapter Five)
- Measures of effective and cost-effective prescribing (Chapter Six)
- Measures of clinical audit, and in particular, of the extent to which clinical practice is "evidence-based" - a dimension of performance often wrongly equated with adherence to guidelines (Chapter Seven)
- Measures of professional standards and achievement in education and training, and entry or reaccreditation criteria derived from these (Chapter Eight)
- Measures of how well the primary health care team functions as an organisation (Chapter Nine)

In Chapter Ten we summarise the different potential approaches for using quality initiatives as levers for change in general practice, and offer a critical review of the 'story so far' with the UK government's quality initiative in the late 1990s. We argue that the approach taken in the National Performance Framework is constraining and inflexible, that local differences in starting points, priorities and resources must be recognised, and that the important drive towards quality improvement in health care systems should take place within an interpretive and developmental paradigm, rather than a biomedical, one.

In Chapter Eleven we describe our own work with health authorities and GP practices in the months before the formation of Primary Care Groups to develop a methodology for defining, measuring and improving quality at a local level. We present a preliminary model for a "postmodern" approach to quality indicator development suitable for use by Primary Care Groups. This briefly involves

a) Assembling a group of key stakeholders (most usually, using the infrastructure of the Primary Care Group itself)

b) Agreeing what the indicators to be developed will be used for (taking particular note of strategic priorities such as Health Improvement Programmes)

c) Agreeing criteria for how indicators will be selected and classified

d) Looking at existing data sources and assessing how well they meet the criteria

e) Selecting the best for use as indicators, aiming for a balance between different aspects of quality

f) Devising a method for looking at combinations of indicators.

We argue in Chapter Eleven that both the delineation of domains of quality, and the standards for poor, acceptable, good and excellent performance, should be devised through extensive dialogue with key stakeholders.

Finally, in Chapter Twelve, we conclude by summarising the political context of quality indicator development for UK health care, and invite readers to try out, and improve on, the 'postmodern' model offered in Chapter Eleven.

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CHAPTER ONE: What is quality - and why measure it?

The quality framework: a political imperative

The Labour government swept to power in the UK in May 1997 and publicly resolved to reform, improve and revitalise the National Health Service. They unveiled a formidable agenda for change whose central focus was on standards, efficiency and quality improvement. The December 1997 white paper *The New NHS: Modern, dependable*[1] introduced the notion of clinical governance, which was defined as "a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish"[2]. For the first time, there will be direct accountability of clinicians and managers for the health outcomes their service produces[3] [4]. The subsequent white paper *A first class service: quality in the new NHS*, published in July 1998[2], announced that setting, delivering, and monitoring standards would be the routes to consistent, prompt and high quality services throughout the NHS.

From April 1999, Primary Care Groups will be responsible for assessing the health needs of their population and planning, delivering and commissioning appropriate care *against agreed performance targets*.[1] Two new statutory bodies, already dismissed as 'quangos' by some commentators[5], are being established in England - the National Institute of Clinical Excellence (NICE), which will provide national standards based on assessment of best research evidence on the effectiveness and cost-effectiveness of different procedures - and the Commission for Health Improvement (officially CHI, but already nicknamed CHIMP) - which will ensure these standards are met.[2]

The drive to set and enforce quality standards for clinical performance is both welcome and, at the same time, threatening. Few could contest the vision of an adequately funded service delivering uniformly high standards through effective clinical governance, underpinned by national and local frameworks for lifelong learning and by a reformed, open, and accountable system of professional self regulation[2]. Many questions, however, remain unanswered[6], including the adequacy of funding arrangements for NICE and CHI, the practicalities (and indeed, the advisability) of producing and disseminating large numbers of clinical guidelines, the mechanistic assumptions made in the white paper about how to achieve professional

behaviour change, the operational problems inherent in the promise to integrate "at every level" financial control, service performance, and clinical quality,[2] and the political acceptability of a move towards central policing for professional performance.

Whatever the ambiguities, the cards have been dealt and the ground rules laid. Quality is, and will remain, a central issue in all aspects of the National Health Service, and the development of valid indicators of quality must be a major priority in both academic and service sectors.

What are quality indicators for?

The challenge to develop quality indicators for general practice, as in other sectors, begs the question of what those indicators will be used for (see Figure 1.1, page 18), and immediately raises important clinical, political, and ideological issues. Such indicators, for example, may serve as:

1. A focus for individual GPs, practice nurses, or groups of general practice professionals, to reflect on their own practice and plan their professional development
2. A framework for describing the current status of general practice at a district, regional, or national level
3. A means of assessing whether particular policy interventions (for example, the introduction of GP fundholding or clinical governance) have been effective in raising standards
4. A tool for measuring (and, implicitly, penalising or rewarding) the performance of individual health professionals or practices, and recording improvement or deterioration over time
5. A means of defining standards and identifying individuals, practices or health authorities who fail to meet them - i.e. a means of accountability (upwards) and performance management (downwards)
6. A way of informing or justifying the allocation of limited resources to practices
7. A source of information for service users

Although there is some debate in health management circles about the precise definition of primary care,[7] and in professional circles about the current[8] and future[9 10 11 12] role of the general practitioner, we have taken the pragmatic view that primary care is what primary care practitioners currently do. Good primary care is accessible, ongoing, comprehensive and co-ordinated front-line care that improves wellbeing, extends life expectancy and keeps people

out of hospital where appropriate.[7] Although this serves well as a working definition, it is surely true that the lack of consensus on what counts as quality in primary care results partly from the lack of consensus on precisely what primary care is or should be.

In this preliminary paper, we have focussed on the role of general practitioners. We have not attempted to incorporate in our analysis other general practice team members such as practice nurses, or other primary care workers such as dentists, community nurses and midwives, or professions allied to medicine, though this important task needs to be addressed.

We also recognise that in the UK at least, primary care services are provided from a limited budget and that the most effective care may not be the most cost effective care (or indeed affordable at all). The measurement of quality legitimately includes a dimension of 'cost-effectiveness' but we would argue for a pluralist view of this term. 'Cost' means more than the direct financial cost to those who pay for health care. It may include indirect costs and savings to government; and the costs in time, money or anxiety to a clinician and a patient. 'Effectiveness' includes more than that which is measurable and attributable, and it should be comparative. The question, "How effective is £1 spent in general practice compared to a £1 spent in secondary, tertiary care or health promotion?" is beyond our scope but we have tried to acknowledge both the importance and the complexity of the cost dimension throughout this paper.

Traditional classification schemes for quality assessment in health care and other organisations

The "W.H.O Four": an early framework for assessing health service delivery

In 1983, a working group of the World Health Organisation divided health service quality into four main areas[13]:

a) Professional performance (technical quality)

b) Resource use (efficiency)

c) Risk management (the risk of injury or illness associated with the service provided)

d) Patients' satisfaction with the service provided

This somewhat outdated WHO definition now appears very producer-focused and technically driven. It does not, for example, include any dimension of relatedness to needs or fitness for purpose, nor does it include a measure of choice or control of processes by the service users.

The "Donabedian Three": structure, process and outcome

The best established taxonomy of quality indicators is probably the Donabedian triad[14] of

a) Structure (what exists in terms of staff and resources)

b) Process (what is done)

c) Outcome (what happens, usually to patients, as a result of these activities).

Some examples of potential indicators grouped in this way are shown in Table 1.1 below.[15]

Structure	***Process***	***Outcome***
Size and state of repair of premises Disabled access Presence of a treatment room Computerisation Patient to staff ratio Presence of particular items of equipment (autoclave, ECG machine, minor surgery equipment, etc) Languages spoken in the surgery	Waiting times Consultation length Rate of uptake of services (e.g. cervical smear rates) Patient satisfaction Prevalence of health-damaging behaviours (e.g. smoking) Equity of access to services (e.g. across different ethnic groups)	Levels of physical, psychological or social health status Quality of life Equity in health status (e.g. across different socioeconomic groups).

Table 1.1: Examples of potential quality indicators grouped in terms of the Donabedian triad of structure, process and outcome

Donabedian's approach is very popular and has much intuitive appeal, but it is sometimes felt to sacrifice validity for neatness. For example, 'patient satisfaction' in general practice is closely related to what Howie and colleagues have described as 'enablement' (see Chapter Two), a variable which might be viewed as an aspect of *outcome* rather than of *process*.

Whereas in commercial sectors the 'customer care' aspects of quality are often readily separable from the product itself, the same cannot be said of quality in clinical care.

The "Maxwell Six" for organisational performance

Maxwell[16] has proposed a comprehensive framework for assessing the quality of any organisation:

a) Effectiveness i.e. success in meeting policy and programme objectives
b) Efficiency i.e. optimum use of the resources needed to reach those objectives
c) Acceptability (to users and professionals)
d) Access
e) Equity
f) Relevance

This framework is widely used outside the health service sector for the analysis of organisational performance in the management literature.

Organisational learning: doing things right and doing the right things

Argyris and Schon[17] define quality of service delivery in terms of organisational learning, which, they argue, has two loops. The first loop is detection and correction of errors in *doing things right* – for example, perfecting the technical and administrative aspects of taking a cervical smear. This includes the domains of

a) Effectiveness
b) Efficiency
c) Respect and caring
d) Safety
e) Timeliness

The second loop is *doing the right thing*. This asks "Is taking a cervical smear the right thing to do?" This might introduce questions about whether there are alternative methods for

detecting cervical neoplasia or preventing its development, and whether there are other aspects of preventive care that might be addressed in preference to this one. This loop includes the domains of:

a) Appropriateness

b) Availability

c) Efficacy

These eight dimensions have been adopted by the National Library of Health Care Indicators in the USA[18]. Flood and Ramm[19] add a third loop of organisational learning which is about the interplay of power, knowledge and justice in deciding what the 'right' thing is. Note that many writers, including Donabedian (see above) and the modern evidence based medicine movement[20], define 'efficacy' and 'effectiveness' somewhat differently, but the distinction remains between the technical and 'customer care' aspects of a procedure and its appropriateness in a given situation.

The UK National Performance Framework

The white paper *A first class service: quality in the new NHS*[2] set out the structures and processes for addressing quality in the UK, including the delineation of six specific areas of performance which the government wished to see addressed:

a) **Health improvement** - e.g. reducing variations in death rates and risk factors across different populations

b) **Fair access** - i.e. ensuring that services are provided fairly in relation to need, for treatments of proven efficacy

c) **Effective delivery** of appropriate health care - e.g. ensuring that patients receive the best treatments

d) **Efficiency** - e.g. reducing bureaucracy, waiting times, and, where appropriate, length of hospital stay

e) **Patient/carer experience** - i.e. increasing satisfaction with care and its delivery

f) **Health outcomes** of NHS care - e.g. success in increasing survival rates and reducing occurrences of illness

The consultation document published in May 1998, *Clinical effectiveness indicators: a consultation document*[21] and discussed further below (see in particular pages 26, 31 and 54) covered quality indicators in four broad areas:

a) Health promotion and disease prevention

b) Early detection

c) Diagnostic assessment and investigation

d) Treatment and rehabilitation

Most of these considered indicators of both primary care, secondary care and activity at the primary-secondary care interface. Surprisingly, none considered community care, and there was remarkably little consideration of the core features of general practice discussed in Chapter Two.

Quality frameworks developed specifically for the core work of general practice

The "Baker One": summing up what general practice is

In an attempt to devise a single, unitary score that summed up the level of quality in general practice, Baker measured 76 items divided into eight categories (equipment, clinical activities, team members, records, organization, premises, availability, and clinics) in all GP practices in three English counties.[22] He used this unitary development score to rank practices and then measured the correlation of this ranking with explanatory variables such as mean age of the partners, list size, and Jarman deprivation index,[22] and, in a later longitudinal study, to track practice development and innovation over time.[23] To our knowledge, this unitary index of quality has not been taken up in practice or adopted by other research teams.

The Dutch inventory - a checklist for structural aspects of practice management

Van den Hombergh and colleagues have recently developed (using a consensus method) and validated (by means of an extensive field study with detailed factor analysis and construction

of scales) a list of 284 indicators of practice management that discriminate well between extremes of practice[24]. The inventory is intended for use in formal interpractice peer assessment visits. It includes six different dimensions of the managerial (i.e. not strictly clinical) aspects of general practice - premises and equipment, delegation and collaboration, service and organisation, record keeping, organisation of the quality improvement process, and workload and job stress. The authors argue that performance as measured by these subscales gives results that are highly consistent with other dimensions of quality and that the inventory gives a rapid, direct and achievable list of possible measures to improve practice.

The Manchester quality programme: measuring what general practice does

Professor Martin Roland and his team at the National Primary Care Research and Development Centre (NPCRDC) in Manchester are currently working on a programme of quality indicator development for general practice which defines five broad fields:[25]

For the individual, quality measures should address

a) Access to care

b) Quality of clinical care received

c) Quality of inter-personal care received

For the general practice population, quality measures should address

a) Equity

b) Efficiency

This framework is discussed further in Chapters 3 and 4.

The Patient Enablement Instrument: measuring outcomes in the consultation

The Patient Enablement Instrument developed by Professor John Howie and colleagues in Edinburgh attempts to address what is perhaps the most elusive aspect of quality in general practice: whether patients (who, in general, have minor self-limiting illness and do not require investigation, referral or even formal categorisation) are, overall, better off for having

consulted the doctor. The 'enablement' approach is reproduced in the Appendix, and the results of a major ongoing validation study are awaited.

Beyond a single framework for quality - the postmodern approach

The above classifications are a great temptation for those who seek a single, internally consistent model or framework within which quality can be defined and measured. Our own view, which may well be shared by many of the authors whose work we have cited above, is that quality is not a fixed property in all situations. Rather, it is contextual and depends on the perspective of the 'stakeholder'. Hence, however rigorous and all-encompassing a particular quality framework may be, all such frameworks suffer from the same drawback - namely, that they obscure the reality of multiple overlapping, conflicting, and even mutually exclusive perspectives on the nature of quality in health care.

Those who develop quality indicators are often keenly aware of this fact, but in our experience 'quality indicators' are sometimes naïvely adopted by those who seek a single, mechanistic model to distinguish between good, medium and poor practice. We argue in this paper for stakeholders to abandon any such model (and with it, any claim to a comprehensive taxonomy of quality measures or to absolutism in the ranking of performance).

It is important to remain aware that any indicator of quality, whether taken from the existing literature or developed *de novo*, cannot exist in a social, cultural or political vacuum. Quality indicators may be, in some sense, 'objective' in that what they measure can be expressed quantitatively and shown to be reproducible. But the temptation to reify such indicators (i.e. see them as a unitary, all-encompassing and pure reflection of external truth) should be strongly resisted.

Those who define quality from within a single discipline or role tend to have little difficulty reaching consensus with their contemporaries on what counts as good, mediocre and poor performance. Indeed, there is remarkable agreement *within* different professional, administrative and lay groups on the principles for measuring quality in general practice, and a number of recent publications have addressed the quality issue from the point of view of the reflective GP,[8 26 27 28 29] service users and their advocates,[30 31 32 33] purchasing authorities,[15] management consultants,[34] undergraduate educators,[35] postgraduate educators,[36 37 38 39 40 41 42] research planners,[43 44] health economists and budget-setters,[45 46] epidemiologists,[11 47] social

scientists,[48] politicians,[1 2 49 50 51] philosophers[52 53 54] and experts on the planning and delivery of health services either within the UK[55 56 57 58] or internationally.[9 59 60 61]

Difficulties occur when these different groups come together and find that each has built their definition of quality, and proposed system of evaluation, around a different set of underlying values and priorities. What is largely absent from the published literature is an analysis that recognises, and attempts to integrate, the perspectives that define the 'good consultation', 'good doctor', 'good service', 'good patient-centred care', 'good [evidence based] clinical practice', 'good prescribing', 'good referral patterns', good teamwork', 'good use of resources', and 'good professional [or organisational] development'.

In this paper, we have made no attempt to unite these different perspectives into a single framework. Instead, we would encourage the reader to join us in tolerating the untidiness of a postmodern and holistic perspective on quality.

Features of the ideal quality indicator

We recognise that there are dimensions of quality that are not easily measurable, and some that may not be measurable at all. Hence, the indicators which we or others choose to develop necessarily introduce a distortion: we can do no more than measure the measurable. To ensure that the measurable aspects of quality reflect its fundamental essence as closely as possible, the indicators we choose to use should have the following properties:

a) They should be reliable, reproducible, easily quantifiable using readily available information, affordable, and exhibit a 'dose-response' effect (i.e. increases in the level of the indicator should indicate better quality).

b) They should measure a useful, important and relevant aspect of care.

c) The indicators should be true predictors of quality and not merely express exposure to a covariable.

d) Each indicator should be both sensitive - i.e. a high score on the indicator should indicate quality in a particular aspect of care, and specific – i.e. a low score should indicate that the quality of this aspect of care is inadequate.

e) They should be amenable to quality control monitoring designed to distinguish cosmetic changes from genuine improvements.

f) They should be amenable to manipulation to produce comparative and aggregated data between and across practices.

g) Changes in the levels of quality indicators should rapidly and accurately reflect the success of attempts to improve the quality of care.

The UK government broadly reflected these principles in its consultation paper *The development of high level performance indicators*, published in January 1998[62] which set out six essential attributes which indicators should have. They should be, it said:

a) Attributable (i.e. effect should be attributable to NHS intervention)

b) Important

c) Avoid perverse incentives

d) Robust

e) Responsive to change and measurable

f) Readily available within a reasonable timescale

We would argue that the criterion 'responsive to change' needs to reflect not just the fact that a change in practice produces a change in the indicator, but also reflect achievable change by the person or group whose performance is being assessed. For example, cervical cytology uptake rates may be influenced by practice staffing levels, specifically the availability of female practice nurses or GPs. The presence of such staff could be used as a quality indicator for a practice, but as clinical staffing levels and financial reimbursement for practice nurses are currently set by health authorities, this dimension of quality may in reality be something which the health authority has far more control over than the practice itself.

In response to the practicalities and specific needs of general practice, Roland and colleagues have consciously restricted their research programme in quality indicators to those which are[25]

a) Valid

b) Easy to apply at practice level

c) Applicable to all practices within a defined area (e.g. a primary care group)

d) Designed to address the performance of the average or typical practitioner or practice rather than the lower extreme (the poorly performing doctor or

nurse) or the upper extreme (identified by markers of excellence such as the Royal College of General Practitioners' Fellowship by Assessment scheme or the King's Fund Health Quality Service awards).

As the remainder of this paper illustrates, the above features of the 'ideal' quality indicator are rarely if ever achieved in practice, and in reality we must understand, and work with, the imperfections of the ones that are available.

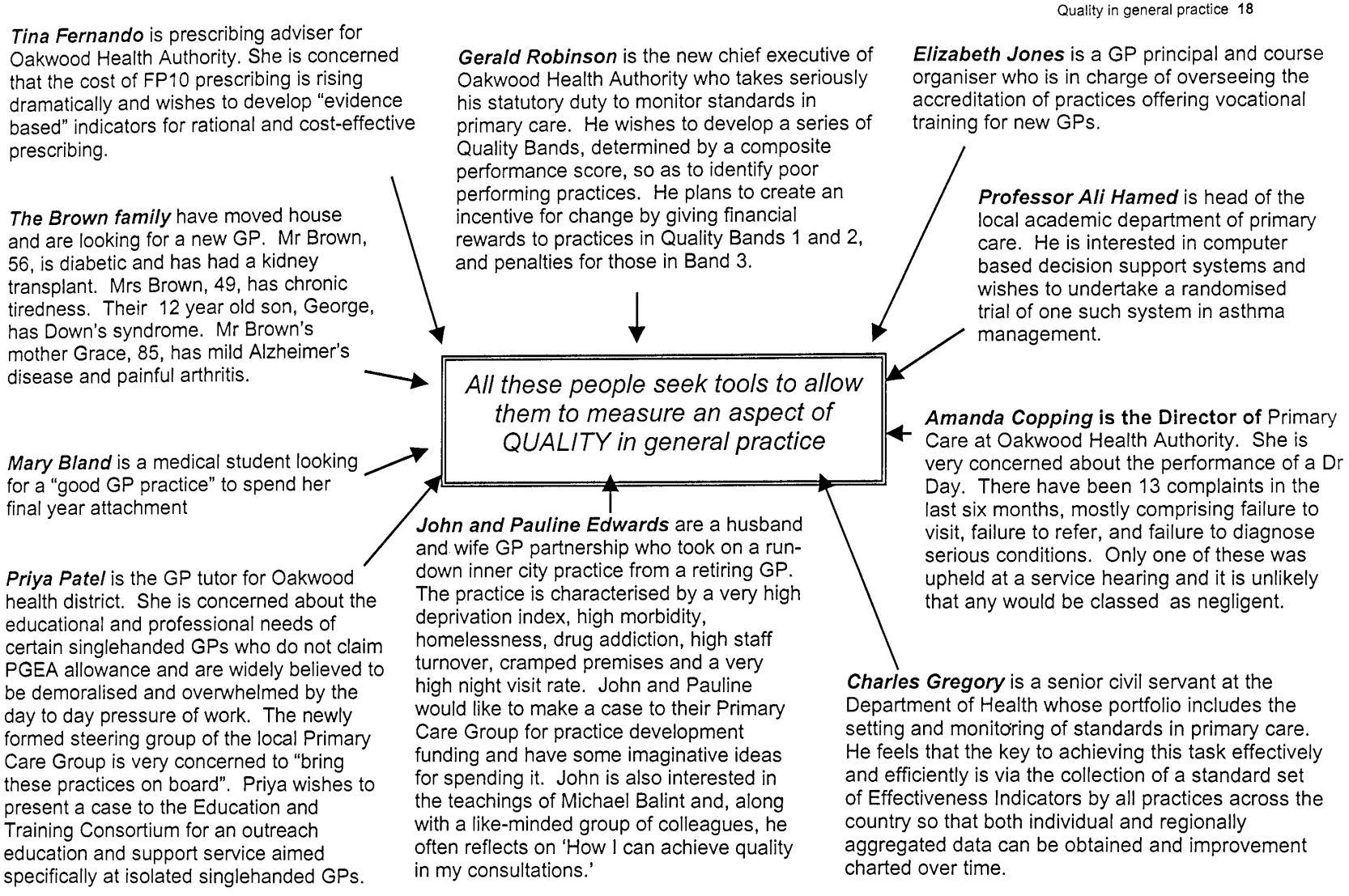

Figure 1.1: Quality indicators – whose perspective?

CHAPTER TWO: The reflective practitioner's perspective - recognising the "unfathomable" dimension of our work

The Brown family in Figure 1.1 (page 18) illustrate a number of issues central to the definition of quality in general practice. Mrs Brown does not fulfil the official criteria for depression, but she has a sad and difficult life and is a 'familiar face, fat file' patient at the surgery. As a carer of two dependent relatives, she is herself critically dependent on an accessible, responsive and sympathetic primary care team. She is moderately overweight, menopausal, and 'tired all the time'. The management of her frequent non-specific symptoms will be a skilled combination of psychological and practical support, selective investigations to exclude organic disease, and judicious referral.

George Brown, aged 12 with Down's Syndrome and a congenital heart defect, has complex needs. Neither his learning difficulties nor his heart disease are curable. The same can be said of his grandmother's Alzheimer's disease. Physiotherapy, occupational therapy, and respite care for these family members are the visible features of a support package which also includes an important element of shared experience, expressed by John Berger as follows:

> ***"He [the GP] does more than treat them when they are ill; he is the objective witness of their lives. .... He represents them [and] becomes their objective (as opposed to subjective) memory."*** [63]

In recent years, there has rightly been increasing emphasis on the 'evidence based' management of patients in primary care,[64] but the 1990s have also brought a vigorous resurgence of the subjective aspects, or what some have dubbed the 'human side' of general or family practice.[29 38 65] The ability to 'bear with' the suffering of the chronically sick and disabled, and, when appropriate, to simply hear the patient's (or carer's) illness narrative rather than investigating or treating particular symptoms, while traditionally a celebrated feature of primary care,[66 67] has only latterly been offered a substantial theoretical basis. [27 52 54 68]

Balint's view that trivial illness is merely the packaging for the presentation and negotiation of emotional dialogue between patient and doctor [66] suggests that the true essence and priorities of general practice are poorly reflected in the official 'curriculum' for GP training [69]

[70] and in the current system through which standards in general practice are defined and policed.

It is well recognised that the empathic, listening, witness-bearing aspect of care is difficult to define and difficult to measure. How, asks Pereira Gray, does one decide whether a generalist doctor relating to a whole person has or has not made an impact, has or has not done a good job, and whether or not the patient is any better?[28] Given that the sharing of the patient's illness experience is also a uniquely private event that may not be consciously recognised by patient or doctor, nor recorded systematically in casenotes, it is small wonder that this aspect is all too easily ignored when constructing a set of competencies for the modern general practitioner. As Carl Rudebeck has written:

> ***"General practice was pushed into defining itself at its own margins, leaving its very centre, its specific priorities, unfathomed by both critics and spokespeople."*** [71]

It is important for the debate on quality standards to reflect, in addition to measures of visible activity, the essence of this "unfathomable" dimension. The extent to which this dimension is truly either unfathomable or unmeasurable is controversial[8 27 28 52 68].

CHAPTER THREE: The patient's perspective: finding a "good doctor"

In the eyes of most patients, the chief role of the family doctor is for patient-initiated consultations. Some years ago it was shown that patients' three most important features of a good GP were that 'doctor listens to me', 'doctor sorts out my problems', and 'I usually see the same doctor'.[72] These intuitively sensible priorities are reflected in more recent overviews[73] and surveys,[31] in a study which showed that small practices and personal lists are associated with higher scores on a validated patient satisfaction scale,[74 75] and in Howie's work on consultation length[28] described below.

The consultation is the core unit of general practice, and there is still much to recommend the seminal paper in which Stott and Davis defined different aspects of its quality.[76] They suggested that a good consultation includes attention not just to the presenting complaint but also to comorbidity (such as follow-up of chronic illness), preventive care, and exploration of the patient's concerns and expectations.

In a series of preliminary observational studies on GPs, and using each GP as his or her own control, John Howie and colleagues in Edinburgh defined higher quality care as occurring in the consultation when more attention was given to physical and psychosocial comorbidity, when preventive care was offered, when less medication was prescribed for trivial illness, and when patients expressed greater satisfaction with the consultation.

Howie et al demonstrated that, thus defined, quality of care was inversely related to the doctor's own perception of stress, and also directly related to consultation length. They showed that longer consultations (i.e. those lasting 10 minutes or more) were associated with more specific benefits to patients compared with short ones (lasting 5 minutes or less), and offered the long to short consultation ratio as a proxy measure of quality in the consultation.[77] More recently, they have accepted that the long to short consultation ratio may be no more discriminatory than the mean consultation length, and they recommend the latter as a more practical and more measurable construct.[78]

In a further study, Howie et al grouped doctors into 'more' or 'less' patient centred, and showed that doctors who combined a patient-centred consulting style (which tended to be slower) with either overbooked surgeries or poor time management were also those who were

the most stressed. These doctors regularly ran late and felt that they had short-changed their patients.[79]

Howie and colleagues subsequently developed and validated a number of more definitive instruments for the measurement of quality in the consultation:

a) A patient-completed needs questionnaire, comprising information on a range of marker physical conditions, a four-item 'social problems' scale (family/partner, money, housing, and work or unemployment), an expression of whether or not the patient wished to talk about their social problems, and an adaptation of the Nottingham Health Profile;

b) A process variable comprising consultation length as assessed by the doctor;

c) A patient-completed outcome questionnaire, developed from an earlier satisfaction instrument and comprising a scale of 'enablement' (how well the patient perceives that he or she can cope with life and their illness, and whether the doctor was felt to have had enough time for them), as well as their prior expectations for prescription, investigation and referral and whether these expectations had been met.

Their results suggest that at patient level, longer consulting time is generally associated with greater enablement (i.e. greater satisfaction and greater ability to cope with the illness and life in general), that at practice level, practices who allocated more time for consulting generally had higher levels of enablement in their patients, and that, at doctor level, those who spent longer with their patients produced more enablement than 'faster' consulters. Given that this was an observational study, it must be remembered that subtle differences in case mix may explain part or all of the variation between doctors, even though case mix as measured by the needs questionnaire did not differ between doctors.

Howie and colleagues have shown that the Patient Enablement Instrument is reliable and has strong content and construct validity in the Scottish population used in their studies so far. They have also demonstrated that it is related to, but different from, ordinary satisfaction measures[80], and are currently piloting the instrument in different ethnic groups. In an ongoing validation project, the social aspects of the needs questionnaire are being compared with deprivation indices such as the Jarman index. The authors are enthusiastic about the potential for the Patient Enablement Instrument to provide a marker for 'holistic' care in general practice.[28]

Roland and colleagues have attempted to incorporate a number of dimensions of the patient's perspective - perceived availability and accessibility, technical competence, trust, communication skills, inter-personal attributes of care, nursing care, co-ordination of care, access to secondary care, and a range of on-site services - into a single instrument. They took the Primary Care Assessment Survey from the Boston Health Institute, which is widely used in the USA, and modified it for use in UK general practice. The resulting instrument, the General Practice Assessment Survey (GPAS) is reproduced in Appendix 1. It has been tested in pilot studies and is currently being extensively validated in a sample of 24000 patients throughout the UK.[25 81]

This large study will help to address questions about which the current literature is conflicting - for example, the ability of patients to assess the technical competence of their doctors. The GPAS is a generic measure of perceived quality and does not address the needs of particular user groups. Preliminary studies to develop disease-specific quality measures from the patients' perspective are underway at the National Primary Care Research and Development Centre for psoriasis and mental health problems.[25]

The notion of patient centredness as an indicator of quality has been developed by Moira Stewart and colleagues at the University of Western Ontario[30] and is summarised in a recent BMJ review.[82] Intuitively, a patient-centred consulting style will be more acceptable and more effective in terms of behaviour change, [83] as well as improving the quality of shared decision making,[84] but in reality, the research literature is conflicting on this.[85] For example, the agreement between different measures of patient centredness used to evaluate quality of communication in 300 videotaped consultations was poor, and a more patient centred consulting style was, surprisingly, not associated with an increase in enablement.[25] Further analysis of this complex dataset is currently underway at the NPCRDC.

Another instrument to address the patient's agenda has recently been published by a group from Norway. The Patient Perspective Survey (PPS), a 102-item self administered questionnaire which aims to evaluate the quality of the consultation from the patient's point of view, comprises a number of dimensions: a biopsychosocial (physical, psychological and social) patient perspective, patient centredness, patient resources, involvement and coping, and quality of life orientation[86]. The potential of this new instrument, and its relevance to UK general practice, has yet to be explored.

The PPS and other measures of patient centredness focus on the broad structure of the clinician-patient consultation rather than its detailed content. A novel approach to quality assessment in the consultation involves the detailed microanalysis of the actual text of the encounter, using the techniques of discourse analysis that include attention to tone, pauses, coughs and other utterances. Such analysis is unlikely ever to be more than a research tool but offers a uniquely detailed evaluation of the quality of communication in the clinical encounter.[87]

CHAPTER FOUR: The 'activity' perspective: performance indicators and targets

Health authorities have traditionally had a statutory duty to monitor the quality of GPs' performance with limited resources for achieving this task. They generally try to assess quality by means of routinely collected data such as levels of immunisation or cervical smear uptake, or the nature and cost of prescribed drugs. The use of routine quantitative data as a quality indicator has intuitive appeal. The validity, reliability or comprehensiveness of whatever package of measures is currently being used may not be questioned by those who receive or process the data.

Roland and colleagues recently undertook a large study into the agreement between GPs and health authority managers on what counts as a good performance indicator for use by health authorities in monitoring general practice. In an initial survey of all health authorities in England, they identified a total of 240 relevant indicators that were in use for assessing performance. They then used a Delphi approach[88] to gain a consensus view from a group of 57 GP course organisers and 47 health authority managers. Agreement on what is an acceptable indicator of quality was achieved for only a tiny minority of conditions, and for many of these, performance data were not routinely available[25].

The stance often taken by health authorities (and that which may be taken by the new Primary Care Groups to whom the task of quality assessment will be devolved) defines general practice as a set of task-oriented activities, which Bosanquet[45] has classified into:

a) Demand-led consultations

b) Disease management

c) Screening and risk factor assessment

d) Referral to (or co-ordinating) secondary care

The General Medical Services Committee (now the General Practitioners Committee) of the British Medical Association has suggested a similar classificatory system as a basis for financial negotiations between GPs and health authorities:[89]

Category A: services normally provided by GPs when responding to perceived need

Category B: proactive care such as health promotion or new patient medicals

Category C: practice services commonly provided but not included in core category, such as immunisations, child health surveillance, cervical cytology, and monitoring of diabetes and asthma

Category D: additional services provided by GPs with specialist training e.g. minor surgery, intrapartum care

Category E: organisation of care e.g. administration of out of hours, screening programmes, etc.

Category F: recruitment and organisation of practice staff

The most notable feature of the GMSC document *Defining core services* is that it explicitly avoids offering an all-encompassing definition of "the services normally provided by every GP when responding to patients" (Category A services above). Much of the document, as with performance targets for practice-based activity so far introduced at health authority level, concern additional services such as those in Categories B to F in the GMSC classification. In the light of the discussion on the "unfathomable" essence of general practice and the patient's perspective discussed in Chapter 2, performance indicators constructed from items in these supplementary categories should be viewed, at best, as measuring only a small part of what goes on in primary care.

The 1990 GP contract[90] was the first to set specific targets for certain operational goals in general practice, and linked GP incomes to achievement of these goals. The previous government's long-term health strategy document *The Health of the Nation*[91] also took a firm target setting approach at a national level, particularly in relation to proactive, preventive care and health education. Recent health strategy documents[1,2] promised to extend and formalise the use of performance indicators and target setting, and to monitor these at local level. The green paper *Our Healthier Nation* stated specific targets for a number of the indicators.[92]

Building on this rapidly escalating drive to manage professional performance, the NHS Executive's recent publication, *Clinical effectiveness indicators: a consultation document*[21] suggested that performance within general practice might be measured by the indicators listed below.

1. ***Health promotion/disease prevention***

   a) Prescribing rate of statins in general practice (more is better)

   b) Uptake of childhood measles, mumps and rubella vaccination (more is better)

2. ***Early detection of disease***

   a) Cervical cytology screening rates in women aged 20-64 (more is better)

   b) Mammography screening rates in women aged 50-64 under the National Breast Screening Programme (more is better)

3. ***Treatment and rehabilitation***

   a) Prescribing rate of benzodiazepines in general practice (less is better)

The publication of this list has sparked debate about the evidence base of the proposed indicators,[93] and about the feasibility of developing any set of valid performance indicators derived from routinely collected data. The research literature on target setting in primary care has been reviewed by Elkin and Robinson,[94] who conclude that targets in general have a number of drawbacks as quality indicators:

a) Targets focus on things that are easily measured

b) They may be unrealistic or even unattainable in certain population groups

c) They may foster complacency among those who have already achieved the upper target level

d) Targets may act as a disincentive, since those who perceive even the minimum target level as unattainable may abandon all activity in this particular area

e) National targets may skew local priorities

f) Targets may fail to reflect the variation in needs, access to health services or willingness to accept services between different practice populations

g) Targets may widen inequalities in health, since efforts may be directed not at those most in need but rather at those most likely to accept the services offered

h) Achievement of targets may not be associated with better patient-relevant outcomes

i) Targets can be manipulated, sometimes to the detriment of patient care (for example, one way to meet a target for childhood immunisations is to remove all unimmunised children from one's list)

j) The opportunity cost of efforts to achieve targets (i.e. the effect on health gain in other areas) should be assessed as well as performance against the target itself

k) Targets as currently constructed tend to reflect the agenda of doctors (i.e. crude measures of illness levels and premature death in populations) rather than that of nurses and patients (i.e. symptom control, psychological health, and quality of life for the individual)

This summary of the drawbacks of targets brings us to two politically sensitive conclusions. Firstly, the quality agenda, especially when addressed mainly or exclusively via activity targets, is potentially at odds with the *inequality* agenda. Incentives to produce unadjusted activity figures encourages practices to focus on a stable and responsive denominator and creates a perverse incentive to exclude 'difficult to reach' groups such as patients who are highly mobile, homeless, the wrong side of a language barrier, or even those who ask awkward questions.

This is illustrated by the effect of target setting for childhood immunisation. Two studies found that in general, high rates of immunisation reflected high quality care in this area, but some practices who provided a high level of service to a deprived or especially needy population still performed poorly against uptake targets[95] [96]. The authors of both studies called for quality statistics on immunisation rates to be presented in the context of practice population characteristics (especially some index of deprivation) rather than as raw uptake figures.

Secondly, the concept of targets is predicated upon a 'medical' view of illness that conspicuously neglects the social determinants of ill health such as poverty, unemployment and poor housing. Thus, as addressed in the 1990 GP contract, for example,[90] the health needs of the isolated, housebound elderly are defined as being partially met by an annual visit from the GP rather than by an increase in state pensions or fuel subsidies. This argument, and its implications for quality provision in primary care, is considered in more detail by the Royal College of Nursing report on the white paper[97] and by the Radical Health Statistics Group.[98]

Nevertheless, there is evidence that target setting for particular aspects of care has been successful in changing practice and achieving health gain, most notably in the field of cervical cytology. Overall uptake rates in many health districts rose after the new target system was introduced[99]. A sustained increase in coverage has been achieved in those most at risk (older women from socioeconomically deprived groups)[100] and that increased smear coverage was followed by a reduction in the incidence of, and mortality from, invasive cervical cancer[101]. However, the gap between 'leading edge' and 'trailing edge' practices in this area shows no sign of narrowing.[102] Huge numbers of women are recalled for further investigation of minimal abnormalities,[103] and coverage of minority ethnic groups remains inadequate, partly for administrative rather than 'cultural' reasons.[104]

In summary, cervical cytology coverage of women aged 20-64 is a valid indicator of an aspect of care that should be measured. The construction of quantitative targets improves the process of care virtually across the board, and this improvement benefits patients directly. However, the current system may unfairly penalise practices with 'hard to reach' populations. Furthermore, the system creates no incentive, and may act as a disincentive, for the focusing of efforts on particular high risk groups. Finally, it has not been shown that achieving high rates of cervical screening is the best or most cost-effective use of time and resources.

The authors of the immunisation studies cited above[95 96] offer a warning that might apply to any set of externally imposed quality indicators: a system that unfairly imposes financial or other penalties on primary care teams who do their best in difficult circumstances will threaten both professional morale, service relationships, and, potentially, care of the most vulnerable groups in society. A wider debate on the usefulness in practice of the suggested 'clinical effectiveness indicators' from the NHSE[21], taking account of both the quality agenda and the inequalities agenda, remains to be held.

CHAPTER FIVE: The 'gatekeeper' perspective: investigation, admission and referral rates

In health care, more is not always better. Much of the illness (and perceived illness) seen in primary care is self-limiting. It is often good practice to dissuade patients from having the blood test, X-ray or specialist opinion they seek. Referral rates for cataract removal, tonsillectomy, and uterine dilatation and curettage (procedures that may be requested more often than they are needed) have long been cited as suitable markers of the 'gatekeeping' function of the GP. [2 105]

But low referral rates are not always a sign of excellence, since the assiduous search for unmet need almost always uncovers conditions that require a secondary care input. For example, practices who commence a programme of systematic registration, recall and regular review of asymptomatic patients with diabetes usually show a sustained increase in investigation rates (such as microalbuminuria screening) and a temporary increase in referral rates as treatable complications are detected.[106] Furthermore, higher investigation and referral rates might be expected in populations with high morbidity rates such as the elderly, the poor and the homeless.[107]

A simplistic view of how GPs work holds that they refer patients to specialists for one of two reasons: either for the assessment or treatment of a condition that needs specialist management, or to get out of doing the work themselves. In reality, referral to a specialist occurs for a complex set of reasons which include uncertainty about diagnosis, concern about length of waiting lists, inadequate information exchange between primary and secondary care, and the GP's inability to gain access to certain investigations (such as endoscopy or echocardiography) without an initial outpatient consultation.[108] The situation is made more complex by the fact that GPs' referral data are not universally available, and hospital activity statistics are usually used as a proxy.[114] It is debatable whether the appropriateness of referrals can ever be determined on the basis of routinely collected hospital episode statistics. Random variation in morbidity might explain much of the variability between practices.[109]

There is limited evidence, for example, that acute admission rates for asthma are a reliable reflection of the adequacy of a practice's asthma service,[110] and the same can probably be said of the so-called neglect-related complications of diabetes (foot ulceration, sight-threatening

retinopathy, and acute metabolic decompensation).[106] Other conditions for which avoidable acute admissions have been used as quality indicators are epilepsy, heart failure, urinary tract infection and gastroenteritis. All of them were addressed by the NHS Executive in its pilot study in 1996[111]. However, acute hospital admissions are relatively rare even in patients receiving inadequate care, and incidence figures will be markedly skewed by a single atypical case. These indicators are therefore, at best, an extremely crude measure of quality, especially in small practices and over short timescales.

The search continues for specific procedure-related statistics that reflect appropriate (or excessive or inadequate) referral by GPs (and, in addition, appropriate filtering in the outpatient clinic). In the document *Clinical effectiveness indicators: a consultation document*[21] (see Chapter Ten), the NHSE suggests a number of indicators of performance at the primary-secondary care interface and at the 'gatekeeping filter' within secondary care, which are listed in Table 5.1 below and discussed further in Chapter Ten.

Table 5.1: Performance indicators for 'gatekeeping' role suggested by the NHS Executive

Diagnostic assessment and investigation

1. Dilatation and curettage rates in women aged 15-39 for menorrhagia (less is better)

Treatment and rehabilitation

2. Cochlear implantation for certain types of deafness (more is better)
3. Total hip replacements in those aged 65 and over (more is better)
4. Total knee replacements in those aged 65 and over (more is better)
5. Grommet insertion in children under 15 (less is better)
6. Wisdom teeth extraction (less is better)
7. Coronary artery bypass grafting (more is better)
8. Hysterectomy in women under 50 for menorrhagia (less is better)

One condition that has superficial appeal as a performance indicator is acute back pain. It is a well researched condition with unexplained variability in management across practices.[112] Routine X-rays are not indicated,[113] nor, generally, is specialist referral. Early mobilisation improves outcome. The condition is common, and evidence based guidelines written by GPs for GPs now exist.[114] This condition is therefore perhaps uniquely suited to become a quality indicator expressed in terms of investigation and/or referral rates, with the assumption that a low score on this indicator always or usually indicates better quality care. Even here, however, the denominator (the incidence of acute back pain) is unknown and likely to vary considerably across practices.

The examples given above illustrate that even conditions that have intuitive appeal as 'markers' of the GP's gatekeeping role (referrals for cataract removal, acute admissions for asthma or epilepsy, requesting of X-rays for low back pain) may in reality be poor discriminators between good and poor performance. They meet few of the requirements of indicators set out in Chapter One and expressed in the government's own white paper[62]. Few if any fulfil the criteria of being reliable, useful, important and relevant, and many of them do not predict or reflect a meaningful aspect of quality.

CHAPTER SIX: The prescriber's perspective: effective and cost effective prescribing

Medication, like investigation or referral, is often not strictly necessary, and some researchers have used high prescribing rates *per se* as an indicator of quality.[28] However, this general principle is more valid in some prescribing situations than others. For example, whereas a high rate of cephalosporin prescribing for acute respiratory illness in a general practice population is not easily justified, there is good evidence to support the claim that a low rate of prescribing of inhaled steroids (and other preventive medication) compared to bronchodilators indicates poor asthma care,[115] and that underprescription of drugs such as aspirin and warfarin contributes to avoidable strokes in high risk patients.[116] Once again, the active search for unmet need in conditions such as diabetes, hypertension and hyperlipidaemia will increase costs.

Lipid lowering treatment, especially with statin drugs, is expensive but, in the long term, cost effective in carefully defined groups of patients.[93 117 118] However, the potential benefit from prescribing a statin depends not so much on the cholesterol level *per se* as on the patient's overall cardiovascular risk profile. If this is not estimated, expensive drugs will be given to patients who are highly unlikely to benefit from them and may come to harm. Hence, high crude rates of statin prescribing cannot be equated with either good or poor quality care,[119] despite this being offered as a performance indicator by the NHSE.[21]

Different individuals, and different subgroups within a practice population, have different needs (and different expectations) for prescribed medication. The question of whether it is possible to derive a mathematical formula that successfully predicts legitimate variation in prescribing costs between practices and exposes (with a view to penalising) idiosyncratic variation is a controversial subject.[120 121] Adjustment for demographic variables, socioeconomic status and standardised illness indicators accounts for only a minority of the variation in prescribing costs between practices.[122] But these same variables account for 81% of the variation in net ingredient cost between patients at health authority level,[123] suggesting that factors other than illness rates and sociodemographic factors explain most of the variability in prescribing costs between individual GPs.

The total prescribing costs of a GP practice will be determined by an interplay of factors acting at different levels:[120]

At national level:	National morbidity trends, new therapeutic advances
At health authority level:	Local morbidity trends, specific incentives set by health authority, hospital initiated prescriptions, confounding commercial factors (e.g. a mail order appliance centre situated within a health authority's geographical area and supplying a wider regional or national customer group, all of whom will claim reimbursement from that health authority rather than locally)
At practice level:	Fundholding status, dispensing status, training/teaching practice status, repeat prescribing system, specific morbidity (e.g. proportion of drug addicts), deprivation, list inflation, use of locums/deputising service, use of practice formulary
At prescriber level:	Personal policy on screening and preventive care, treatment for particular conditions, adherence to guidelines and protocols (including decision support systems), policy for dealing with drug company representatives, postgraduate education and continuing professional development
At patient level:	Morbidity (e.g. expensive-to-treat conditions), deprivation, expectations, health education, and demand for high-cost medications

Although this complex interplay of factors mitigates against the computation of a unitary, one-dimensional index of prescribing quality, particular aspects of prescribing have been identified by the Audit Commission as explaining a high proportion of idiosyncratic variation in GP prescribing.[124] If the 'worst'-performing practices were brought up to the level of the 'best', considerable savings could be made at no detriment (and some benefit) to patient care. The four aspects of prescribing defined by the Audit Commission as valid indicators of quality in GP prescribing were:

1. Generic prescribing rate
2. Use of a preferred list of drugs (formulary) to ensure that the most effective and cost effective medication is selected for a particular condition
3. Rate of prescribing of drugs identified as having limited therapeutic efficacy (e.g. appetite suppressants) or having cheaper therapeutic equivalents

4. Rate of prescribing of drugs in certain defined therapeutic areas where overprescribing is known to occur (e.g. minor respiratory illness)

Some would argue that, in addition to these factors, sustained release preparations and combination drugs are over-prescribed relative to the standard single-drug formulations. The proportion of prescribing accounted for by sustained release drugs or combination drugs has been used as a quality indicator along with the above measures. However, the notion of 'appropriateness' in prescribing is a surprisingly controversial concept.[125] In one qualitative study, prescribing 'experts' drawn from general practice and community pharmacy agreed on remarkably few potential indicators (a total of nine) in the field of long term prescribing, only one of which (presence of an asthma clinic) was disease-specific.[126] The conclusion from a systematic review by the same authors[127] that there is "little evidence of widespread inappropriate prescribing by GPs" is likely to reflect the limitations of the indicators used as much as the adequacy of GP prescribing *per se*.

In summary, crude prescribing rates and costs are certainly a poor indicator of quality in prescribing, and the derivation of a capitation-based 'formula' for the calculation of prescribing budgets according to need is controversial. But there is considerable theoretical justification for the development of generic prescribing rates and prescription of certain 'marker' drugs as quality indicators in the field of prescribing. Attempts to do this using consensus panels of 'experts' have so far produced blunt instruments. Further research in this area is clearly needed.

CHAPTER SEVEN: The 'evidence based' perspective: measuring quality of care against the findings of clinical research trials

The growing popularity of evidence based medicine has brought an expectation that clinical management in primary care should be based on the best available research evidence.[128] Evidence based practice is a term with at least two meanings:

- An approach to clinical care that includes a systematic reflection on day to day practice, a search for the best research evidence from clinical trials, and the application of these findings in the clinical encounter.
- The use of guidelines, protocols and summaries that have been prepared and disseminated by others to guide both policy and day to day clinical practice.

The former approach, introduced by Sackett and colleagues[129], includes five essential steps in lifelong, self directed learning:

a) Identify one's learning needs and express them in terms of focused and potentially answerable clinical questions

b) Approach the literature (including electronic databases) systematically to search for relevant research or review papers

c) Appraise those papers for their validity and usefulness

d) Apply the results in clinical practice

e) Evaluate one's performance

This sequence requires a fairly high level of training and a reflective, dynamic approach to practice. It might be termed **proactive** evidence based practice and it is probably fair to say that only a minority of clinicians feel confident in all the steps listed.

The second approach, using 'off the peg' guidelines and reviews based on the activities of 'experts' in literature searching and appraisal of evidence, is often more practicable for the busy clinician than the time-consuming search for primary evidence. It does not require specific skills in database searching or research appraisal, though in the absence of such skills the evidence base (and hence the validity) of the guideline or review must be taken on trust.

This approach might be termed **reactive** evidence based practice. In reality, of course, practitioners must use a combination of both methods.

A fundamental feature of evidence based practice, however defined, is the use of numerical estimates of benefit and risk (and the precision or confidence intervals of those estimates) in clinical decision-making. The algebraic derivation of figures such as the relative risk reduction (by what proportion a particular treatment reduces the risk of an adverse outcome such as death) and the number needed to treat (how many patients would have to receive a particular treatment to prevent, on average, one adverse outcome) is beyond the scope of this paper, but has been well illustrated by others.[130]

As one of us has argued elsewhere, the evaluation of whether a clinician's practice is 'evidence based' should not centre exclusively on the question, "Has this clinician followed the guideline?" [131] [132] or "was the clinical decision based on a valid and accurate estimate of the number needed to treat?".[133] Rather, this question should incorporate the individual and contextual aspects of the patient's unique experience, and might be phrased, "How effectively can this clinician deal with new problems by performing a competent and sensitive assessment of the patient's needs and priorities and integrating a thorough synthesis of relevant research literature with clinical experience and judgement?".[134] [135]

In some clinical encounters, this last question can be answered *qualitatively* but not (in any meaningful sense) quantitatively. Hence, the formal, summative assessment of evidence based practice is all but impossible in the 'grey zones' of clinical practice - of which primary care is undoubtedly one. One of the 'unfathomable' aspects of general practice (see Chapter Two) is the case mix of ill-defined problems and what Murdoch has called "non-symptoms and non-disease"[54]. The issue of how to develop appropriate guidelines which reflect the realities of primary care is complex, but some researchers have begun to address it.[136]

McColl and colleagues have recently attempted to develop 'evidence based' performance indicators for primary care.[93] In a large study based on systematic review of the literature (mainly the Database of Abstracts of Reviews of Effectiveness, DARE[137]), they first identified primary care interventions of proven efficacy for which general practitioners had a key responsibility. For each of these (using a technique first developed by Mant and Hicks for outcome indicators in myocardial infarction)[138], they estimated the number of preventable deaths or events in a Primary Care Group locality (assumed to be covering a population of

100, 000) if all those eligible received the intervention. Finally, they compared the results of this exercise for their 'evidence based' indicators with those of the same exercise for the indicators suggested in the NHS Executive's consultation document.[21]

The resulting eight indicators in McColl's study were:

a) Warfarin for stroke prophylaxis in non-valvular atrial fibrillation (33 preventable deaths per PCG per year if all eligible patients received the intervention)

b) Influenza immunisation for all those over 65 years (146 preventable deaths)

c) Secondary prevention of coronary heart disease with statins (69 preventable deaths)

d) Primary prevention of coronary heart disease with statins (14 preventable deaths)

e) ACE inhibitors for heart failure (76 preventable deaths)

f) Control of hypertension (360 preventable deaths)

g) Aspirin for those at high risk of occlusive vascular disease (48 preventable deaths)

h) Smoking cessation advice or nicotine replacement therapy (120 preventable deaths)

McColl and colleagues argue that there is sound evidence for the effectiveness (in research studies), the efficacy (in terms of health outcomes), the cost effectiveness, and the practicality of all these indicators. Indicators that were initially considered but subsequently rejected by these authors include structured care for diabetes, cervical screening, brief interventions to reduce alcohol consumption, contraceptive prescribing with family planning advice, immunisations other than influenza, and the treatment of obesity in adults. Most of these were rejected on the grounds that the authors were unable to translate the evidence of effectiveness from research trials into evidence of improvement in health outcomes at a population level.

However, concentrating on the handful of interventions that are unequivocally both 'evidence based' and demonstrably linked to outcomes is a counsel of perfection that unfairly dismisses many potentially useful indicators (for example, the cervical screening example discussed in Chapter Four). A less stringent approach might be to develop indicators systematically using

a combination of expert consensus, *a priori* reasoning, and research trial evidence. Roland and colleagues used the Delphi method[88] to establish an expert consensus on the management of diabetes, asthma, and angina[25].

Of the criteria which experts agreed were good indicators of quality, well under half were rated by panel members as strongly supported by research evidence. We support the principle of basing performance indicators on sound research evidence, and of concentrating efforts to some extent on those interventions that have been shown to produce the greatest good for the greatest number. But we also support Roland and colleagues' call for the development of systematic ways of combining evidence with expert opinion.[25]

CHAPTER EIGHT: The educational perspective: measuring the quality of training and professional development

Traditionally, indicators of quality in GPs' education have addressed one of four types of indicator:

1. **Degrees and diplomas**
   a) Postgraduate examinations such as MRCGP, DRCOG, DCH
   b) RCGP Fellowship by Assessment[139]
   c) Certification or accreditation in particular topics (e.g. minor surgery)

2. **Attendance on courses**
   a) PGEA (Postgraduate Educational Allowance) approved courses
   b) Practice-based multidisciplinary education programmes

3. **Professional development**
   a) Attachments to academic departments of primary care[140]
   b) Clinical assistantships in hospitals

4. **Education through audit**
   a) Participation in specific audit initiatives through local Medical (or Multidisciplinary) Audit Advisory Groups
   b) Similar activities organised via academic links, topic-based interest groups (e.g. the Asthma in Primary Care group) or primary care research networks

Such tangible and measurable indicators of 'education' have been heavily criticised. The notion that true education is analogous to the lighting of a fire rather than the filling of a vessel casts doubt on the validity of using courses attended, paper qualifications or activities completed as even a crude index of professional education and competence[141 142]. Indeed, one study demonstrated that the number of reported 'CME' (continuing medical education) hours

attended was *inversely* correlated with doctors' competence[143], and the last Chief Medical Officer described the current system of predominantly lecture-based continuing medical education for UK GPs as showing little evidence of convincing benefit to patient care[144].

As the previous chapter indicated, there is a growing literature supporting the notion that effective professional education requires practitioners to reflect on their own day to day practice in order to effect change in their own knowledge, attitudes and behaviour.[37] The most powerful drive to learn is probably not administrative sticks and carrots but the desire to be more competent in treating patients.[145]

Sustained improvement in any aspect of job performance in general practice requires insight, motivation, means, and opportunity for change as well as good morale and time to reflect and plan. It is becoming a cliché that general practitioners are at high risk of professional isolation, disillusionment and burnout.[146] It is self evident that the burnt-out professional is a poor learner and potentially dangerous practitioner. The ongoing debates about summative assessment of GP registrars,[147] professional reaccreditation of established GPs,[148] [149] and the lack of a formal career structure after completion of vocational training,[150] are all relevant to the debate on professional education in general practice. Hence, the issues of 'education', 'development' and 'support' must be considered together rather than separately, a point that is discussed further below and in Chapter Nine.

One increasingly significant source of distress amongst GPs is the inability to keep abreast of developments in medical knowledge, especially the results and implications for practice of clinical research trials. As we argued in Chapter Seven, the fundamental measure of educational quality in a health professional might be expressed, "How effectively does this doctor reflect on their practice, recognise and respond to their personal learning needs, and measure his or her progress against standards set by professional bodies, patient expectations, and the research evidence?".[151] This task is now impossible without protected time for study, a systematic approach to the published literature, access to electronic databases, and specific skills in critical appraisal.[152]

Unsurprisingly, there is some evidence that doctors who have been trained in self directed, problem-based learning remain more up to date, effective and safe in their practice than those trained in traditional didactic methods.[153] It would be stretching the evidence, however, to say unequivocally that training in the five steps of 'proactive' evidence based practice listed in

Chapter Seven reliably and predictably improves performance. For one thing, clinical competence in evidence based practice is a more elusive entity than is sometimes assumed.[41] [135] For another, surprisingly few educational or professional development initiatives have been directly linked in rigorous research studies to patient-relevant outcomes.[154]

Nevertheless, it is now widely accepted that quality in professional development must be defined in terms of reflective, adult learning.[39] A programme of postgraduate education through peer supported personal learning plans and a lifelong, flexible strategy of personal development has been proposed for general practice in the UK[149] [155] [156], a model that has been successfully introduced in other European countries.[157] A parallel initiative has been the introduction of portfolio based learning,[158] sometimes supported by co-mentoring in pairs or small groups.[159]

It has also been suggested that the financial incentive of the Postgraduate Education Allowance for individual GP principals in the UK should be replaced by an incentive for the practice team to produce a cohesive multiprofessional practice development plan, define the educational and training needs of all staff, recognise that the team as well as the individuals within it has development needs (akin to Argyris and Schon's loops of organisational learning described in Chapter One). This should aim to fill the gap between continuing medical education and professional and practice development[160]. The challenge to monitor the progress and document the success of such programmes will require the development of less mechanistic indicators of educational achievement than those listed at the beginning of this chapter.

CHAPTER NINE: The management perspective: measuring the quality of organisation and teamwork in a multidisciplinary health service team

Poor organisation leads to poor care. As Donald Berwick expressed it, "a result lost, a specialist who cannot be reached, a missing requisition, a misinterpreted order, a vanished record, a long wait for a CT scan: these are all too familiar examples of waste, rework, complexity and error in a doctor's life"[161]. General practitioners are increasingly required to address the reality of quality improvement in organisational terms: if the goal is ever higher quality and lower cost for health care, the key to achieving it lies in better organisational structures and processes[162]. The recent paper by a Dutch team describing a potential framework for this approach to quality in general practice[24] is described in Chapter One.

It is politically fashionable to speak of teamwork in primary care.[10 51 163 164 165], but this important area has been relatively neglected in the development of specific indicators of quality. Teamwork can be evaluated in terms of:[166]

a) Task effectiveness - the extent to which the team achieves its task-related objectives

b) Mental health - the well-being, growth and development of team members

c) Team viability - the probability that the team will continue to work together and function effectively

It has, however, been suggested that the nature of primary care is ill-suited to team working and that general practice should stop trying to provide team-based care when patients do not want it and usually fail to benefit from it[167 168]. We agree that the confidentiality and unique interpersonal aspects of the GP-patient consultation should not be sacrificed to some political or ideological ideal of 'skill mix' or 'teamwork', but it is not hard to find anecdotal examples of poor teamworking within a GP practice leading to poor care and preventable morbidity. There are remarkably few studies of the effectiveness of teamwork in general practice[166]. Most are of limited generalisability, or have examined single issues such as the effect of teamwork on the detection and management of hypertension.

Poulton undertook a longitudinal study of 68 British primary health care teams and found a strong positive association between measures of good teamwork (for example, clear objectives, participation in decision-making, task orientation and support for innovation) and the effectiveness of the practice as measured by ease of communication, organisational efficiency, quality of patient services and a needs-based approach to care delivery.[169] Elwyn and colleagues[166] describe a number of studies which support the thesis that primary care teams often exist in name only and score poorly on standard measures of team functioning compared with mental health or social services teams.

Both Elwyn and colleagues[166] and West and Poulton[170] suggest that the objective of primary care should not be teamwork *per se* but personalised care from a single practitioner coupled, where appropriate, with task-focused activity by ad hoc groups of staff with specific skills. The growing interest in measures of functioning for general practice 'teams' should perhaps be modified by consideration of the wider literature on teamworking in general.

The principles of good teamworking described above are highly relevant to the functioning of the latest and most ambitious multidisciplinary and inter-agency organisation in UK health care: the Primary Care Group. Quality improvement is a highly complex process and will occur only if health care systems explicitly demand and support it.[171 172] Success will depend on clarifying roles and responsiblities, and on the availability of data, appropriate incentives, and valid performance indicators. Failure is likely if, as commonly occurs, players look at only one part of a process and follow simple cause-and-effect logic without consideration of how change to one part of the system might affect the system as a whole. Quality in organisational behaviour, argues Koeck, needs to be measured in terms of how well the organisation is able to roll out a series of continuous learning cycles, thereby adapting to a changing environment.[162] He concludes that we have little to fear, and much to learn, from the management literature in this area of performance.

CHAPTER TEN: Quality indicators as a lever for change: an analysis of the National Performance Framework

The achievement of clinical governance - defined as the means by which organisations ensure the provision of quality clinical care by making individuals accountable for setting, maintaining and monitoring performance standards[173] - depends on the availability of effective methods of changing performance[174]. In this chapter, we first consider a range of perspectives on how the use of quality indicators might help to effect change in the delivery of health care. At the end of the chapter, we examine the UK government's National Performance Framework of 1998 in the light of these different perspectives. We suggest that, if clinical governance is to succeed, the government must devise a more valid and representative set of indicators and also (as we propose in Chapter Eleven) stand back and allow individual localities to devise some of their own.

Effecting change through quality initiatives

1. Professional self regulation: more than closing ranks?

The imposition of standards on a profession may be attempted either internally (by professional authority) or externally (by managerial authority). Currently, the clinical performance of doctors is regulated largely through professional self-regulation via the General Medical Council (GMC). This elected body of doctors (with a small minority of lay members) produces written standards, such as *Duties of a Doctor*[175]. It has statutory power in cases of documented underperformance to suspend or permanently remove ("strike off") doctors from the medical register, impose periods of further training, or restrict their area of practice (e.g. stop a surgeon from operating). In theory, the coming of clinical governance both legitimates and enforces professional self-regulation[2].

The 1998 Bristol case, following which two cardiothoracic surgeons were removed from the medical register, has raised a public furore about the ability (and willingness) of the medical profession to regulate itself.[176] Mortality statistics showed that the surgeons involved had an unacceptable fatality rate compared with colleagues with a similar caseload. Yet this poor performance was tacitly accepted by the profession for years, and individuals who attempted

to speak out were discouraged if not silenced. The GMC, said critics, did too little, too late, and conspicuously placed doctors' interests above patients' welfare.

At the time of writing, the official enquiry into the Bristol affair has only just begun, and there is already controversy surrounding the relationship of the legal enquiry board with medical 'expert' advisers[177]. The current political climate is such that GPs, in common with hospital consultants, believe not only that they must urgently develop systematic methods of upholding professional standards, but also that these methods must be far more explicit and transparent than they have been in the past - otherwise they will fall victim to external control[178].

2. 'Offsick': the command and control approach

The various regulatory systems set up by the Conservative government between 1979 and 1997 for the finance industry, privatised utilities (gas, electricity, water, rail) and education combined a high degree of independent operation of services with prominent inspection and regulation by state-appointed authorities. It was suggested at the time that an 'Offsick' should be created to regulate doctors in the same way that Ofsted regulated education and Ofwat the water services. The new Commission for Health Improvement[2] (CHI) is considered by many (and feared by some) to embody the 'Offsick' ethos.

Even before CHI, the NHS had a long tradition of imposing "quality standards" through the introduction of legislative changes, executive letters, and financial incentives and penalties, which were highly unpopular with doctors and other health professionals. The targets for cervical cytology and childhood immunisation, for example, were introduced in the 1990 GP contract after the government failed to persuade the profession to accept a more generic Good Practice Allowance incentive. Cervical cytology target payments were intended as an explicit reward for 'good' practice[90].

As described in Chapter Four, cervical cytology targets had a definite and measurable effect on health, but they were unpopular at the time. They did not reduce inequalities and they came with a substantial opportunity cost. They are also one of only a very few clinical examples where any measurable benefit has resulted from what doctors see as administrators moving the goalposts. The introduction of routine urine testing for newly registered patients remains widely derided as a waste of time and money.

As Koeck has argued, the notion of improving quality through the top-down control model of a machine bureaucracy is out of step with modern thinking about organisational behaviour[162]. Although a number of advisory bodies (notably the Audit Commission, the Health Advisory Service and the Commission for Health Improvement) have statutory powers to impose behaviour standards on clinicians, it is foolish to 'roll out' a scheme of inflexible incentives and penalties to effect widespread change in the clinical practice of GPs and their staff. Fortunately, these bodies have a wider remit and may choose to influence behaviour by other means.

3. Competition: the 'league table' approach

The last Conservative government adhered strongly to the ideology that competition is an effective way of improving quality. League tables for schools and hospitals were introduced as part of this. GP fundholding was seen as a vehicle for improving both secondary care (by promoting competition between secondary care providers) and, less directly, primary care (by requiring general practices effectively to 'compete' for secondary care services and allowing patients to move more easily between GPs). The policy statements published in the last eighteen months of the Conservative government[179 180] were all part of its general strategy of deregulation and competition. The possibility was raised, for instance, of nurses and pharmacists taking on roles traditionally performed by GPs, with the assumption that would improve quality by encouraging greater responsiveness to patients.

The success or otherwise of the Conservatives' expensive experiment in competition (in particular, the introduction of fundholding and the internal market) as a vehicle for improving health services has been widely debated and is beyond the scope of this paper. Most critics are agreed on one thing - that these changes were introduced rapidly without sound evidence that they would produce health gain. In our opinion, subsequent assessments of the efficacy of fundholding produced only more 'grey' evidence based on highly suspect indicators of success, whose interpretation depends on one's ideological point of view[181]. The dissolution of the internal market for health, and the abolition of fundholding, has closed one chapter of competition, but the move to publish 'league tables' of clinical performance amongst secondary care providers has opened another[182].

4. Guidelines and guidance: a mountain of instructions

It is now well established that a prerequisite for optimum clinical performance is up-to-date research evidence presented in an accessible, user-friendly format[154]. The evidence based medicine movement, and in particular the international Cochrane Collaboration, has made enormous strides over the past decade in its quest to produce a single database of all medical interventions and procedures with a systematic summary for each of all relevant research evidence.[183]

The Cochrane database, as well as journals like *Evidence Based Medicine* and *Bandolier*, the *Clinical Effectiveness Bulletins* from the Centre for Reviews and Dissemination at the University of York, and the new British Medical Journal publication *Clinical Evidence*[184] are designed to provide the busy clinician with a 'clinical bottom line' expressed as benefits and risks in quantitative and comparative terms. These secondary sources aid the production of evidence-based guidelines and protocols, which many GPs believe are becoming ubiquitous.

However, high quality summaries of best research evidence, while a prerequisite for professional behaviour change, do not themselves guarantee such change[185186]. Evidence may be painstakingly gathered into reviews and guidelines, but in the absence of an effective dissemination strategy, they simply gather dust. As the PACE[187] and GRIPP[188] projects (among others) have shown, the successful implementation of evidence requires a number of additional factors (see Tables 10.1 and 10.2).

Table 10.1: Barriers to change identified in the PACE (Promoting Action on Clinical Effectiveness) projects[187]

1. *Lack of perception of relevance.* Practitioners believe there is no need to change and/or that their practice is already evidence based
2. *Lack of resources.* Stakeholders feel they do not have the time or money to become involved.
3. *Short term outlook.* Stakeholders are driven by short term incentives, e.g. an annual contracting round, which may conflict with the timescale needed for effecting change.
4. *Conflicting priorities.* Stakeholders have other demands on their energies - such as reducing waiting lists or dealing with specific complaints.
5. *Difficulty in measuring outcomes.* Health outcomes are notoriously difficult to measure, yet many stakeholders mistakenly seek to measure the success of the project in terms of bottom line health gains.

Cont/...

6. *Lack of necessary skills.* Unfamiliar skills may be needed for effective clinical practice, such as those for searching and critical appraisal of research.
7. *No history of multi-disciplinary working.* Members of different disciplines may not be used to working together in a collaborative fashion.
8. *Inadequate or ambiguous evidence.* If the validity or relevance of the research literature itself is open to question, change will (perhaps rightly) be more difficult to achieve.
9. *Perverse incentives.* Stakeholders may be pulled in a different direction to that required for clinical effectiveness - e.g. by a drug company "research" project or because of an outdated item-of-service payment scheme.
10. *Intensity of contribution required.* Changing practice requires a lot of enthusiasm, hard work and long-term vision on the part of the project leaders.

Table 10.2: Lessons from the GRiPP (Getting Research into Practice and Purchasing) project[188]

1. Prerequisites for implementing changes in clinical practice are *nationally available research evidence* and *clear, robust and local justification for change.*
2. There should be *consultation and involvement* of all interested parties, led by a respected product champion.
3. The *knock-on effect* of change in one sector (e.g. acute services) onto others (e.g. general practice or community care) should be addressed.
4. *Information* about current practice and the effect of change needs to be available.
5. Relationships between purchasers (or commissioners) and providers of health care need to be good.
6. Contracts (e.g. between purchasers and providers) are best used to *summarise agreement* that has already been negotiated elsewhere, not to table points for discussion.
7. Implementing evidence *may not save money.*
8. Implementing evidence takes more time than is usually anticipated.

Evidence derived from clinical research trials pertains to populations, not individuals, and it tends to address only one dimension of care at a time. A 'number needed to treat' (NNT) for a particular therapy may give an accurate estimate of its *average* effect in a population, but the NNT is often frustratingly imprecise - i.e. it cannot predict how an *individual* patient's response will be modified by physiology, 'compliance' with medication, coexisting illness, ethnic and cultural influences, and socioeconomic factors. Hence, a GP's decision to follow an 'evidence based' guideline must not be a mechanistic one. Rather, as we argued in Chapter

Seven, the application of evidence must be tempered by clinical judgement and a knowledge of the detailed personal and social circumstances of the patient[134] [135] [189]. Not following guidelines is partly a matter of political and cultural resistance, but it may also be because the guidelines were designed for a different problem from that presented in the consultation[190].

For this reason, we believe that, whilst evidence from clinical research trials has a distinct potential for the production of evidence based quality indicators *at a population level* (such as those proposed by McColl and colleagues discussed on page 37), the use of NNTs and similar summary statistics as levers for change in the individual consultation is more restricted.

5. Continuing education: promoting adult learning

Incentives for education can be divided into those that are

a) ***encouraged*** - such as the Postgraduate Education Allowance and the recent LIZ Education Incentives in London

b) ***required for subspecialisation*** - such as the evidence of courses attended or clinical attachments undertaken that are required for inclusion on health authorities' Child Health Surveillance lists, or the personal development plans required for GPs undertaking Primary Care Act pilots

c) ***mandatory for continued practice*** - such as when the General Medical Council requires doctors to have retraining as part of a disciplinary process

As Chapter Eight showed, 'adult' learning (based on the cycle of reflection on current practice, identification of learning needs, active search for information, assimilation of new knowledge, modification of practice, and evaluation of performance) is increasingly viewed as central to professional behaviour change[37] [145]. The use of quality indicators to measure the effectiveness of education has moved from the documentation of attendance ("bums on seats") to the clinical outcomes themselves (has clinical practice changed - and has it made a difference to anyone's health?)[151].

Calls are increasing for general practice to move from *encouragement* of basic and continuing education to a *required* or *mandatory* model. Many GPs believe that to gain equal status with hospital specialists, their profession should have strict entry criteria based on examination success (in the MRCGP) as well as a compulsory system of regular reaccreditation based on portfolios of courses and in-service training attended and, perhaps, examples of practice-

based audit and service development plans. However, Elwyn's suggestion that professional and practice development plans based on the principles of adult learning might replace the Postgraduate Education Allowance (currently awarded for lectures attended) was met with suspicion and cynicism from rank and file GPs, who viewed the idea as ill thought-out, coercive and unworkable[160].

We agree that the pedagogical arguments supporting self-directed education through practice-based experience and audit are compelling. But a reflective, adult learning style must be adopted rather than imposed, and we suspect that the profession as a whole may not yet be ready to accept it as a lever for achieving change in clinical practice.

6. Listening exercises: "involving" stakeholders

"Ensure the involvement of all local stakeholders" may be a cliché in the rhetoric of change management in the health service, but it deserves to be taken seriously, and has obvious application in the development of quality indicators that are owned by those who are to be assessed by them. Of all the reasons why initiatives in the GRIPP project failed (see Table 10.1), the most consistent was the lack of involvement of key stakeholders[188]. Arguably, when the NHS (nationally or locally) engages in a 'consultation exercise' on the acceptability to staff or patients of a proposed change in policy, it is involving stakeholders. The NHS Executive has ostensibly engaged in an extensive consultation exercise over its proposed National Performance Framework of quality indicators (see below).

However, the validity of such exercises is often questionable, and the minority who declare themselves "satisfied" should not be taken to represent the views of the majority who do not respond at all. Conversely, the vocal minority (which may represent a particular interest group) may be dissatisfied and the silent majority satisfied. Finally, it is futile to seek the views of stakeholders only to ignore them. A mechanism must be in place to consider the responses and incorporate them, where appropriate, into a revised proposal.

Stakeholder involvement not only encourages ownership of change, but it may also achieve unexpected benefits. In one case, for example, discussions were held between representatives from a London health authority, people with multiple sclerosis and their carers, GPs, and neurologists about the appropriate use of β interferon. The health authority's agenda was cost containment and the relatively poor evidence of effectiveness for this expensive drug. The

GPs' agenda was to respond to a perceived clinical need of particular patients. The consultants sought cautiously to explore the clinical impact of a potential new treatment for an incurable condition. But the patients themselves accepted both the limited amount of research evidence for β interferon and the reality of limited resources. They did not need formal quality of life indicators to establish where to spend those resources. Their own immediate priorities were for an additional incontinence nurse and a more efficient transport service to get them to their day centres.

7. Consensus and partnership: New Labour's untested recipe for clinical governance?

As described in Chapter One, the present Labour government has replaced overt competition with an ideological commitment to collaboration as a lever for change. The centrepiece of local health policy in England and Wales in the late 1990s is the Health Improvement Programme. This should be owned by Primary Care Groups, health and local authorities, and secondary care providers. But the new emphasis on partnership is no substitute for individual accountability. The statutory requirement for clinical governance has made the chairs of Primary Care Groups and the Directors of Public Health personally liable for the delivery of high standards of clinical quality to the local population.

At the time of writing, there are many unknowns about how the rhetoric of clinical governance will be translated into strategic and operational policies for improving clinical care at local level[173]. Many commentators doubt the ability of the National Institute for Clinical Excellence to deliver on its remit - to produce model 'evidence based' National Service Frameworks for local adaptation - within a tight time frame and with a relatively small complement of full time staff. The ability of Primary Care Groups and their partners to produce service level agreements that reflect both best evidence and local needs and priorities is also doubted. In particular, concerns have been raised about the lack of management training and confused lines of accountability for individual PCG board members.

A rudimentary infrastructure for effecting clinical change through partnerships between health authorities and primary care was established by the previous government in the shape of Medical [now Multidisciplinary] Audit Advisory Groups (MAAGs). In some areas, MAAGs became powerful and well respected bodies with strong representation by GP opinion leaders, and they effected comprehensive and sustained changes in clinical fields

such as child health, hypertension management, and structured care for diabetes[191]. In other areas, MAAGs were viewed as ineffectual paper-pushing committees whose activities were largely ignored by opinion leaders. Primary care teams complied through gritted teeth with instructions to produce process-oriented 'audits' that addressed non-priority clinical topics and were only dimly connected to a vision for improved care.

The challenge to produce valid indices to measure the success of clinical governance at local level is already proving a headache for fledgling Primary Care Groups[174]. In a worst-case scenario, these new partnerships will allow themselves to be driven by invalid and limited indices of success handed down from the NHS Executive (see below), and hence become seriously distracted from the broader clinical and social agenda which it is their remit to address. We hope, however, that the quality agenda will come to be interpreted sufficiently flexibly at national level to allow locality-based groups to develop more holistic and responsive approaches to quality by adapting the model described in Chapter Eleven below.

The National Framework for Assessing Performance: deficiencies and drawbacks

The background to the Labour government's quality initiative in health care is described in Chapter One, and examples of the indicators used in its new National Framework for Assessing Performance (listed in the consultation document of May 1998[21]) are given in Table 5.1. We believe that these indicators have major drawbacks, and that they are unlikely to be effective as levers for change, for the following reasons:

1. The chosen indicators have low validity

The indicators in Table 5.1 do not meet the validity criteria listed on page 15 or the government's own criteria for performance indicators published in its white paper of January 1998[62]. For example, the use of data on wisdom teeth extraction based on NHS hospital records does not take into account the wide use of private dentistry, particularly in more affluent areas, and the community dentistry service for some highly vulnerable groups. Furthermore, the denominators for the indicators are based on a mixture of GP registered populations, which may be distorted by high patient mobility (common in inner city areas) or list inflation, and figures from the Office of National Statistics which assume a smaller population.

The detailed evidence base for the indicators suggested in the NHSE consultation document[21] has been reviewed by McColl et al, who conclude that, overall, the evidence is inadequate and the choice of topics appears to have been led by the availability of data[93]. A major criticism is that the relationship between a health care intervention and recorded change in the indicator is often poorly established. In principle, the more at-risk women who are screened for cervical or breast cancer, the more cancers will be diagnosed and treated, but in reality the bottom-line clinical outcome depends on the effectiveness of the analysis and the presentation of the results, as well as what action both the women and the health service decide to take.

2. The framework favours a fragmented, unidimensional approach to quality

An individual health authority, trust, Primary Care Group or primary health care team is looked at through a series of indicators, but all the indicators are intended to be used as isolated items. Performance on any indicator is compared with the performance of another similar unit or with a group average for that particular indicator. The influence of explanatory variables - such as the proportion of patients seeking care in the private sector, the proportion of the population that moves into and out of the catchment area annually, or the number of clinical and ancillary staff allocated to practices - is not considered.

Trade-offs between 'good' performance on one indicator and 'poor' performance on another (for example as part of an explicit policy to address a particular local need) will not be evident, nor will attention to clinical areas that are not reflected in the government's handful of chosen indicators. This will produce particular distortions in areas where clinical need varies markedly from the national average upon which the government's 'benchmarks' are supposedly predicated. For example, a decision to focus on active case finding and early treatment of diabetes in an area of high south Asian ethnicity can be justified as a good use of resources, whereas this activity may take lower priority where the ethnic mix is different and the prevalence of diabetes much lower.

3. Stakeholders have not been adequately engaged

We have argued above that quality indicators must be 'owned' by clinicians, providers, users and managers if they are to be of any value. There is ample evidence that it is not possible to change people's behaviour unless they are actively engaged in setting the targets or identifying the issues.

The NHS Executive claims to have received 550 responses to the consultation exercise on the National Framework for Assessing Performance from health authorities, NHS Trusts, professional and academic bodies, general practitioners, Community Health Councils, local authorities, voluntary organisations, commercial organisations and individuals (NHS Executive official letter to the authors of responses, 3rd September 1998). Given that there are over 100 health authorities, 30,000 GPs, 450 acute trusts, and so on in England and Wales, the response is very poor in quantitative terms.

4. The tension between establishing national minimum standards and recognising local differences in starting points, priorities and resources has not been resolved.

It is no secret that different parts of the UK enjoy different health outcomes for different conditions. This is partly due to differences in expertise, resource allocation and priorities between regions and districts. The Department of Health has said in relation to the quality agenda that it seeks to establish the same standards of clinical care in East London as in East Surrey, and that high quality care should not depend on geographical accident[2]. On the other hand, the government's own recent policy document on the *inequalities* agenda rightly recognises the influence of socio-economic, environmental and cultural conditions on health and health care[192].

Health outcomes in East London are lower than those in East Surrey, but it would be facile to attribute this wholly or mainly to poor standards of care by doctors and nurses. We support the theoretical validity of a common benchmark for clinical care, but it is unhelpful to view clinical performance in a vacuum. Health care policies that fail to acknowledge overriding economic, environmental, social and cultural determinants of health and illness have no chance of producing worthwhile change.

CHAPTER ELEVEN: Towards a "postmodern" approach to quality indicators at PCG level: the story so far

It is easy to be dismissive of efforts to grapple with the complex problem of measuring quality in the delivery of health care. This chapter offers an innovative model and describes our efforts so far to put that approach into practice. The model was developed in pilot form in 1997-8 at health authority wide level in two London districts. Since that time, as described in the previous chapter, the new structures of Primary Care Groups and the requirements for clinical governance and Health Improvement Programmes have emerged. Our approach lends itself to this new context, and we therefore present the model in terms of how it might fit in with these new structures.

Background to the development of this method

Since the early 1990s, many health authorities have been trying to develop performance indicators for primary care, especially general practice. From the managers' perspective there were several pressures to do so:

- They needed to make decisions about where to invest development money such as London Implementation Zone (LIZ) awards, one-off development grants, and cash-limited General Medical Services budget. Primary health care teams had stated that they wanted transparency and fairness in the allocation of these funds
- They had information which raised concern about some practices but much of this information was anecdotal or comprised data the interpretation of which might be contested
- The NHS centrally and regionally was developing performance indicators, and some managers were concerned that a 'top down' agenda might not be popular or useful; they felt that locally sensitive and relevant indicators should also be developed

Within the health authorities there was often a wide range of opinions about the usefulness of existing data sources and the feasibility of asking for additional data. Some staff felt it was essential to create new, rigorous data sources on which to base a quality assessment; others felt strongly that such an approach was unnecessary.

At the same time, many GPs were suspicious of performance indicators. A major concern was that such indicators would be used by managers in a coercive fashion to expose variation in performance, punish perceived failings, and direct GPs towards or away from particular patterns of clinical behaviour.

Several health authorities individually approached one of the present authors (JE) to explore these issues as an independent consultant. He suggested that a number of questions needed to be addressed by each health authority and other stakeholders:

a) Why did anyone want (or not want) indicators?

b) What could and should the indicators be used for?

c) By what criteria should indicators be selected?

d) What data were available already, and how valid and reliable were they?

e) How should indicators be analysed or interpreted?

These issues were explored in workshops involving health authority managers, specialist advisers (public health, prescribing, medical and nursing), and local GPs (usually representatives from the Local Medical Committee). One health authority also included nurses and therapists from a local community trust. Whatever the formal scope of the workshops, they invariably focussed mainly on general medical practice. Although debate in these workshops was lively, consensus was generally achieved.

After several of these workshops had been held, a number of common themes became apparent:

- The punishment/reward model was unpopular and perceived to be unhelpful
- Transparency, clarity and fairness in health authority decision-making were given high priority
- GPs wished to have information fed back to them about their own practice's performance compared to that of other practices, in order to promote reflection by teams and individuals
- It was generally felt that asking for additional information when staff are overworked and health authorities already have so much data was undesirable and impractical

- Participants felt that indicators should reflect the context and the resources of a practice or locality as well as its activities and 'bottom line' results
- A focus on the entire package of indicators was favoured, since it was felt that looking at individual indicators could have a misleading effect

The above preliminary work, together with theoretical considerations on adult learning[193], led us to conclude that a holistic or 'postmodern' approach was both desirable and possible. Its guiding principles are as shown in Box 11.1.

Box 11.1: Guiding principles of a postmodern approach to developing quality indicators

1. Quality criteria should be developed locally by those who will be judged by them
2. Multiple perspectives on quality should be actively sought, and incorporated into the model
3. The activities of primary care should be viewed from an interpretative or developmental perspective, rather than a narrowly biomedical one
4. Changes in behaviour should come about through deep learning rather than through the mechanistic summation of guidelines, protocols and instructions or through stick-and-carrot incentives

Preliminary results of using this approach in practice

We would like to be able to report that this process has already been followed through from initiation to completion with extraction of data on hard outcomes and analysis of results, and that it has been found useful. Unfortunately, the preliminary work at local level which led to the establishment of the above guiding principles was overshadowed by a number of new developments in 1997-8:

a) National and regional work on indicators, in particular the National Performance Framework, escalated in the late 1990s;

b) Other policy initiatives took priority locally, in particular the establishment of Primary Care Groups, Health Improvement Programmes and clinical governance. Even though all these initiatives will require quality indicators, the immediate pressures have been for other activity;

c) Health authorities were given little or no encouragement from the centre to develop their own performance indicators, whereas they were under considerable pressure to address other agendas by NHSE Regional Offices, practitioners, partner organisations and the public. Dedicated resources from the centre to help develop the work initiated above were not made available.

In addition, organisational politics within local groups have impeded progress. In particular, there has been contested or absent leadership, rivalry between individuals, professions and departments, and confusion over the role of project leaders in the direction of people outside their official line management. All these problems have, to some extent, been exacerbated by the strong climate of organisational and political change leading up to the establishment of Primary Care Groups, into which the energies of many key players have been distracted. It is hoped that once the new structures for interagency working are in place, and collaborative working on Health Improvement Plans becomes a reality, some of these barriers to progress will be addressed and resolved.

What follows, therefore, is not an established success story but a suggested model for a developmental approach to quality which we hope to test over the next few years.

Producing quality indicators for general practice using a developmental ['postmodern'] approach

1. Under the aegis of a Primary Care Group, **representation should be established** from a broad range of local interests (perhaps those already taking the lead on clinical governance), including

   - health authority and acute trust managers
   - GPs and practice staff (including nurses and managers)
   - community health service staff and managers
   - postgraduate education
   - audit
   - research
   - public health

- users (Community Health Councils or patient self help groups)

2. The group should then decide on its **criteria for selecting** individual components of a package of quality indicators. An example is given in Figure 11.1. The criteria should reflect local strategic priorities, especially those of the Health Improvement Programme.

3. **Potential individual indicators** should then be identified. Priority should be given where possible to using information routinely available and to making realistic demands for any additional data collection by practices and teams.

4. The individual indicators should then be **scored** by how well they fit the criteria identified under 3 above.

5. From the scoring, the group should **select** the indicators that have the highest scores but also achieve a **balance** between different areas of quality. One of the classificatory schemes outlined in Chapter One might be used. For example, indicators might be divided into those relating to 'structure', 'process' and 'outcome' as shown in Figure 1.1. These can, if necessary, be given different weighting in an overall package of indicators.

6. The results of this exercise will produce a 'cake' which is segmented into a number of broad areas, each containing a group of indicators.

7. Each one of these indicators can then be banded so that the 'cake' becomes a 'dartboard'. Band A, at the periphery of the dartboard, represents a minimum standard (which may be 'allowed but unacceptable'). Band E, at the centre, represents the highest level of performance (which may be well in excess of any required standard and is probably 'leading edge' practice). Exactly how each indicator band is defined will vary from case to case. Some indicators may have fewer than five bands.

8. The practice's performance can be presented on the 'dartboard' as shaded areas corresponding to the band achieved. Each indicator, segment or the whole board can have comparator figures superimposed, for example:

   - like areas
   - like practices (e.g. small practices)

- other Primary Care Groups in a district
- local averages
- national averages.

A practice should aim to score as near the "bull's eye" as possible for all aspects of quality. It should generally try to focus on areas of performance where its initial score lies near the periphery of the dartboard, and work towards the centre.

We have presented here a potential model for applying these principles at the level of a GP practice. The same model can, of course, be modified to develop quality indicators for performance at the level of the individual practitioner or at Primary Care Group level (though cross-PCG comparison will be problematic).

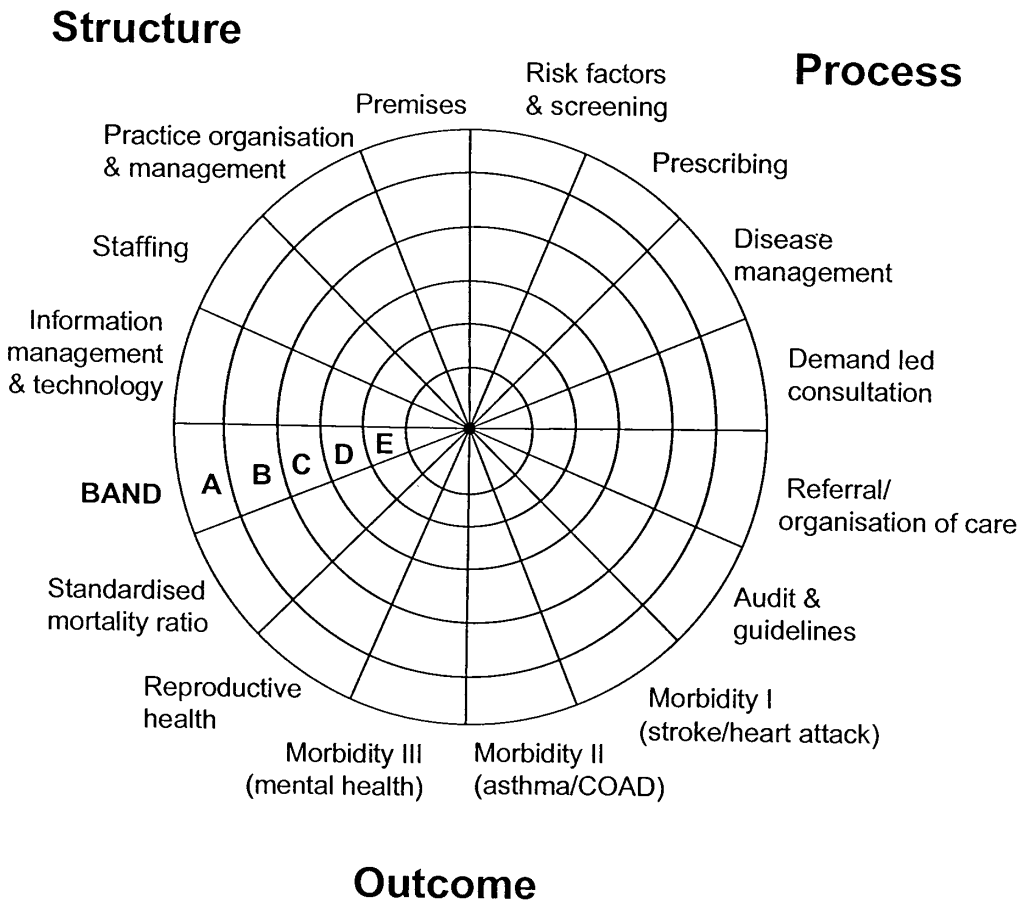

Figure 11.1: Example of locally developed quality indicators presented as a 'dartboard' with up to five performance bands

CHAPTER TWELVE: Conclusion

We hope that this paper has shown that there are no easy answers to the question "How do we measure quality in general practice?" Instruments developed in response to the objectives of one particular interest group may not serve the purposes of other groups, and indeed perspectives on quality can and do conflict across different professions. It is reassuring to note that the danger of the false objectivity engendered by one-dimensional numerical estimates of quality is increasingly recognised and a more pluralist and flexible approach increasingly supported.

We hope we have also shown that the many types of data that are presented as indicators of quality in general practice do not speak for themselves, and conclusions drawn from them are never self-evident. Rather, such 'facts' are always theory laden and inextricably bound with the values and priorities of those who have chosen to measure quality in a particular way. Our position is not a relativist one that all viewpoints are equally valid or legitimate in all contexts, but a pragmatic one that no single indicator (or combination of indicators) can serve as shorthand for the 'truth' about quality or take the politics out of decision-making in primary care.

Initially through GP fundholding, and now through Primary Care Groups and Health Improvement Programmes, the UK government is trying to link 'better' general practice to 'better' hospital and community health services. The objective of offering a seamless service and aligning the interests of different stakeholders is laudable. In these early stages, however, the vision of co-ordinated action and explicit accountability for clinical governance looks threatening to many of the parties.

Quality is central to the issue of clinical governance but it has been inadequately addressed by official guidance on the subject. On the one hand, evidence based decision-making, clinical effectiveness, and clinical governance exist purely as a means towards the goal of quality. The government has expressed its intention to justify organisational upheaval by the 'results' as demonstrated by quality indicators[2]. On the other hand, very little attention has so far been paid to the process of establishing quality targets which are owned by all the parties or to the stages and processes by which quality will be improved. In Chapter Eleven, we presented a developmental model for achieving this through Primary Care Groups, and we hope that readers of this paper will experiment with, and modify, this preliminary model.

In order to deliver clinical governance in Primary Care Groups, there is a central expectation that GPs will operate instruments of quality in order to gauge the position of their peers against a common standard. This introduces a new "peer review" function within the Primary Care Group which is as yet untried and untested. If the leadership of Primary Care Groups adopts a narrow, unidimensional approach to quality assessment, then the opportunities offered by accountability to one's peers may be lost.

As a postscript, it should be noted that any attempt to gain an impression of quality in general practice and monitor its change over time will have cost implications. Primary Care Groups will need to allocate a budget for this task, but funds may also be available from a wide range of different interest groups, including health authorities, Multidisciplinary Audit Advisory Groups, Postgraduate Centres, Hospital Clinical Audit Groups, academic departments of primary care, and Education and Training Consortia. The cost of the quality agenda must be balanced against the costs, for example, of poor prescribing, unnecessary referrals and admissions to hospital, complaints and negligence cases. The financial implications of different quality initiatives will need to be evaluated with these indirect costs in mind.

APPENDIX: Some quality instruments used in general practice

1. *The patient enablement instrument (PEI) (Howie et al[28])*

As a result of your visit to the doctor today, do you feel you are...

	Much Better	Better	Same or Less	Not Applicable
Able to cope with life	☐	☐	☐	☐
Able to understand your illness	☐	☐	☐	☐
Able to cope with your illness	☐	☐	☐	☐
Able to keep yourself healthy	☐	☐	☐	☐

	Much More	More	Same or Less	Not Applicable
Confident about your health	☐	☐	☐	☐
Able to help yourself	☐	☐	☐	☐

2. *The General Practice Assessment Survey (GPAS): 'You and your doctor'*

The GPAS questionnaire, produced by the UK National Primary Care R & D Centre, follows overleaf. We are grateful to Professor Martin Roland and his team for permission to reproduce the GPAS in full here.

You and Your Doctor

The General Practice Assessment Survey (GPAS)

Thank you for taking the time to complete this questionnaire. Please try to answer every question and not leave any out. Please mark the box that applies to you clearly. If you have any comments please write them on the final page.

1. How **long** have you been registered with your practice?

→ 1 **Less than 1 year** → 2 **1 to 2 years** → 3 **3 to 4 years** → 4 **More than 4 years**

2. In the **past 12 months**, how many times have you seen a doctor or a nurse from your practice?

→ 1 **None** → 2 **Once or twice** → 3 **Three or four times** → 4 **Five times or more**

3. How would you rate the convenience of your practice's **location**?

→ 1 **Very Poor** → 2 **Poor** → 3 **Fair** → 4 **Good** → 5 **Very Good** → 6 **Excellent**

4. How would you rate the way you are treated by the **receptionists** in your practice?

→ 1 **Very Poor** → 2 **Poor** → 3 **Fair** → 4 **Good** → 5 **Very Good** → 6 **Excellent**

5. a) How would you rate the **hours** that your practice is open for appointments?

→ 1 **Very Poor** → 2 **Poor** → 3 **Fair** → 4 **Good** → 5 **Very Good** → 6 **Excellent**

b) What **additional** hours would you like your practice to be open? (Please tick all that apply)

→ 1 **Early morning** → 2 **Evenings** → 3 **Week-ends** → 4 **None, I am satisfied**

6. Thinking of times when you want to see a **particular** doctor:

a) How quickly do you get an appointment?

→ 1 **Same day** → 2 **Next day** → 3 **2 - 3 days** → 4 **4 - 5 days** → 5 **More than 5 days** → 6 **Does not apply**

b) How do you rate this?

→ 1 **Very Poor** → 2 **Poor** → 3 **Fair** → 4 **Good** → 5 **Very Good** → 6 **Excell-ent** → 7 **Does not apply**

7. Thinking of times when you are willing to see **any** doctor:

a) How quickly do you get an appointment?

✈ 1	✈ 2	✈ 3	✈ 4	✈ 5	✈ 6
Same day	**Next day**	**2 - 3 days**	**4 - 5 days**	**More than 5 days**	**Does not apply**

b) How do you rate this?

✈ 1	✈ 2	✈ 3	✈ 4	✈ 5	✈ 6	✈ 7
Very Poor	**Poor**	**Fair**	**Good**	**Very Good**	**Excell-ent**	**Does not apply**

8. If you need an urgent appointment to see your GP can you normally get one on the same day?

Yes ✈1 **No** ✈2 **Don't know/never needed one** ✈3

9. a) How long do you have to wait at the practice for your appointments to begin?

✈ 1 **Not at all, they begin on time**
✈ 2 **Less than 5 minutes**
✈ 3 **6 to 10 minutes**
✈ 4 **11 to 20 minutes**
✈ 5 **21 to 30 minutes**
✈ 6 **31 to 45 minutes**
✈ 7 **More than 45 minutes**

b) How do you rate this?

✈ 1	✈ 2	✈ 3	✈ 4	✈ 5	✈ 6
Very Poor	**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**

10. Thinking about the times you have phoned the practice, how would you rate the following?

	Very Poor	**Poor**	**Fair**	**Good**	**Very Good**	**Excell-ent**	**Don't know**
a) Ability to **get through to** the practice on the phone.	✈ 1	✈ 2	✈ 3	✈ 4	✈ 5	✈ 6	✈ 7
b) Ability to **speak to** a doctor on the phone when you have a question or need medical advice.	✈ 1	✈ 2	✈ 3	✈ 4	✈ 5	✈ 6	✈ 7

11. a) In general, how often do you see your **usual doctor** (not an assistant or partner)?	✈ 1 **Always**	✈ 2 **Almost always**	✈ 3 **A lot of the time**	✈ 4 **Some of the time**	✈ 5 **Almost never**	✈ 6 **Never**	
b) How do you rate this?	✈ 1 **Very Poor**	✈ 2 **Poor**	✈ 3 **Fair**	✈ 4 **Good**	✈ 5 **Very Good**	✈ 6 **Excellent**	

12. **The next questions ask you about your <u>usual doctor</u>. If you don't identify one doctor as your usual doctor answer the questions about the doctor in the practice who you feel you know best. If you don't know any of the doctors, go straight to question 25.**

13. Thinking about the **<u>technical aspects</u>** of your care, how would you rate the following:

	Very Poor	**Poor**	**Fair**	**Good**	**Very Good**	**Excell-ent**	**Don't know**
a) Your doctor's **medical knowledge**.	✈1	✈2	✈3	✈4	✈5	✈6	✈7
b) Thoroughness of doctor's **physical examination** of you to check a health problem.	✈1	✈2	✈3	✈4	✈5	✈6	✈7
c) Arranging the **tests** you need when you are unwell (e.g. blood tests, x-rays etc).	✈1	✈2	✈3	✈4	✈5	✈6	✈7
d) Prescribing the right **treatment** for you.	✈1	✈2	✈3	✈4	✈5	✈6	✈7
e) Making the right **diagnosis**	✈1	✈2	✈3	✈4	✈5	✈6	✈7

14. Thinking about **talking** with your usual doctor, how would you rate the following:

	Very Poor	Poor	Fair	Good	Very Good	Excellent
a) Thoroughness of your doctor's **questions** about your symptoms and how you are feeling.	✈1	✈2	✈3	✈4	✈5	✈6
b) **Attention** the doctor gives to what you say.	✈1	✈2	✈3	✈4	✈5	✈6
c) Doctor's **explanations** of your health problems or treatments that you need.	✈1	✈2	✈3	✈4	✈5	✈6

15. How often do you leave your doctor's surgery with **unanswered questions**?

Always	Almost always	A lot of the time	Some of the time	Almost never	Never
✈1	✈2	✈3	✈4	✈5	✈6

16. Thinking about the **personal aspects** of the care that you receive from your usual doctor, how would you rate the following:

	Very Poor	Poor	Fair	Good	Very Good	Excellent
a) Amount of **time** your doctor spends with you.	✈1	✈2	✈3	✈4	✈5	✈6
b) Doctor's **patience** with your questions or worries.	✈1	✈2	✈3	✈4	✈5	✈6
c) Doctor's **caring and concern** for you.	✈1	✈2	✈3	✈4	✈5	✈6

17. Thinking about how much you **TRUST** your doctor, how strongly do you agree or disagree with the following statements:

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
a) I completely trust my doctor's **judgements** about my medical care.	✈1	✈2	✈3	✈4	✈5
b) My doctor would always tell me the **truth** about my health, even if there was bad news.	✈1	✈2	✈3	✈4	✈5
c) My doctor cares more about **keeping down** costs than about doing what is needed for my health.	✈1	✈2	✈3	✈4	✈5

18 All things considered, how much do you **trust** your doctor? (Please tick one number)

✈	✈	✈	✈	✈	✈	✈	✈	✈	✈
1	2	3	4	5	6	7	8	9	10

Not at all **Completely**

19. Thinking about how well your doctor **knows you**, how would you rate the following:

	Very Poor	Poor	Fair	Good	Very Good	Excellent
a) Doctor's knowledge of your **medical history**.	✈1	✈2	✈3	✈4	✈5	✈6
b) Doctor's knowledge of what **worries** you most about your health.	✈1	✈2	✈3	✈4	✈5	✈6
c) Doctor's knowledge of your **responsibilities** at home work or school	✈1	✈2	✈3	✈4	✈5	✈6

20. Have you seen a **nurse** in your practice in the last year? Yes ✈1 No ✈2

If **YES** please go to **question 21**. If **NO** please go to **question 22.**

21. Thinking about the nurses you have seen, how would you rate the following:

	Very Poor	Poor	Fair	Good	Very Good	Excellent
a) The **attention** they give to what you say.	✈1	✈2	✈3	✈4	✈5	✈6
b) The **quality** of care they provide.	✈1	✈2	✈3	✈4	✈5	✈6
c) Their **explanations** of your health problems or treatments that you need.	✈1	✈2	✈3	✈4	✈5	✈6

22. Thinking about the last 12 months, was there any time when your doctor didn't send you to a **specialist** when you thought you needed it? Yes ✈1 No ✈2

23. Does your doctor **co-ordinate** care that you receive from outside the practice?

✈1	✈2	✈3	✈4
Yes a lot	**Yes a little**	**Not at all**	**Does not apply**

24. Would you **recommend** your usual doctor to your family and friends?

✈1	✈2	✈3	✈4	✈5
Definitely not	**Probably not**	**Not sure**	**Probably yes**	**Definitely yes**

25. All things considered, how **satisfied** are you with your practice?

- ✈1 **Completely satisfied, couldn't be better**
- ✈2 **Very satisfied**
- ✈3 **Somewhat satisfied**
- ✈4 **Neither satisfied nor dissatisfied**
- ✈5 **Somewhat dissatisfied**
- ✈6 **Very dissatisfied**
- ✈7 **Completely dissatisfied. couldn't be worse**

26. Are you: **Male** ✈1 **Female** ✈2

27. What is your **date of birth**?

Day Month Year

____ ____ ____

28. Are you ✈1 **Single** ✈2 **Married/cohabiting** ✈3 **Widow/er, divorced or separated**

29. To which of these groups do you consider you belong? (Please tick one box only)

White	✈1	
Black - Caribbean	✈2	
Black - African	✈3	
Black - Other	✈4	Please describe .....
Indian	✈5	
Pakistani	✈6	
Bangladeshi	✈7	
Chinese	✈8	
Any other ethnic group	✈9	Please describe .....

30. Do you have any **long-standing illness, disability or infirmity**? By long-standing I mean anything that has troubled you over a period of time or that is likely to affect you over a period of time.

Yes ✈1 No ✈2

31. How is your health in general? Would you say it was:

✈1 **Very good** ✈2 **Good** ✈3 **Fair** ✈4 **Bad** ✈5 **Very bad**

32. Is your accommodation.....

✈1 **Owner-occupied?**
✈2 **Rented from local authority/housing association?**
✈3 **Rented from a private landlord?**
✈4 **or is it under other arrangements? if so, please describe:**

33. Is there a car or van normally available for use by you? **Yes** ✈1 **No** ✈2

If yes, how many are normally available? **One** ✈1 **Two or more** ✈2

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