Checking-Up on Doctors

A Review of the Quality and Outcomes Framework for General Practitioners

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&
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Needless to say, we accept full responsibility for any errors or infelicities that remain.

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Foreword

In one of Somerset Maugham's plays a rather elegant lady announces that she intends to see her doctor. 'I didn't know you were ill', says her friend. 'I'm not,' she replies, 'but half a guinea is very little to pay for the pleasure of talking about yourself without fear of interruption for fifteen minutes.'

As James Gubb and Grace Li argue in this examination of the way in which the government funds primary health care, there is more to a consultation with your GP than getting a diagnosis and a prescription. The satisfaction people feel about their relationship with their GP has as much to do with manner as with technical expertise. A good GP listens to what you have to say then asks you about what you haven't said. The GP probes the symptoms for the cause, and considers what you are saying now in the light of what you said on your last visit to the surgery. The calm satisfaction that is gained from a consultation with a GP who you really feel cares about your welfare is probably as great as the benefit you are going to get from the drugs. As the motto of the Royal College of General Practitioners puts it, GPs must mix science with compassion.

This causes problems in the climate of targets and incentives that currently pervades public services. It may not improve the patient/doctor relationship if the doctor is under pressure to boost the practice income by taking blood pressure and offering advice on smoking and diet, while the patient wants to talk about something that is not incentivised by extra payments.

On the other hand, do we want to return to the days of relying on the professionalism of doctors and expecting them to do the best for their patients without any external form of monitoring? There have been dramatic swings in the way in which we regard doctors, from the sawbones and charlatans of eighteenth-century satire to the self-sacrificing idealists of Victorian novels and the Golden Age of Hollywood. The truth probably lies somewhere between the quacks of Hogarth's engravings and *My Brother Jonathan*. Doctors are still members of *homo sapiens*, and have as keen an awareness of what they are earning as the rest of us, but if there were not a measure of idealism mixed in, why would they have chosen to make a career out of healing the sick?

The way in which the Quality and Outcomes Framework operates may seem a technical matter for health professionals, but is really of great significance for patients. Ninety-five per cent of medical problems are dealt with by GPs. The way in which we view the standard of health care that is available to us is therefore closely related to the sort of treatment we receive when we visit our GP's surgery. We all know that doctors have to earn a living like everyone else, but at the same time we are always hoping, as we face our GPs in the consulting room, that they are putting our welfare first.

Robert Whelan
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Executive Summary

Following a comprehensive review of the evidence for and against the Quality and Outcomes Framework (QOF) and numerous conversations with GPs, nurses and key stakeholders, it is our belief that the opportunity cost of the framework as it currently stands, particularly in terms of the interpersonal, patient-centred and holistic strengths of general practice, is too high.

As a result it should be downscaled, both in terms of the number of indicators and in terms of the proportion of income it represents for general practice.

The **Quality and Outcomes Framework** was introduced as part of the new General Medical Services (GMS) contract for GPs that came into play in 2004. It makes up to a third of general practice income conditional on performance against a maximum of 1,050 (now 1,000) points based on (largely) evidence-based quality indicators across four 'domains'; clinical, organisational, patient experience and additional services. The greatest weight is given to the clinical domain.

This represents a significant change on what went before, when the GP contract was predominantly based on statutory terms of service and contained very few pay-for-performance elements.

Ultimately, the QOF aims to use financial incentives to induce providers to improve quality of care, while also encouraging a more pro-active approach to preventative medicine and the management of chronic conditions. In time, it was hoped this would bring better recording of data, falling health inequalities, fewer avoidable hospital admissions and, above all, a healthier population.

However, advisers also anticipated negative and unintended consequences if the attention of GPs was inappropriately diverted to 'getting the points'. Many conditions are not included in the framework and quality general practice involves both the focus of the QOF on technical effectiveness (largely concerned with clinical performance) *and* interpersonal effectiveness (largely concerned with people skills). On balance, we find these concerns tend to outweigh the benefits of the framework as it currently stands.

On the positive side:

- General practice has scored highly on indicators included in the QOF, returning 91.3 per cent of the maximum possible score in the first year (2004/05), rising to 96.8 per cent in 2007/08. This is significantly higher than was anticipated by the Department of Health.
- Independent studies suggest this has been associated with real improvement in clinical quality for patients with particular chronic conditions, especially diabetes and asthma.
- The QOF has helped general practice apply evidence-based medicine in a more structured way and made GPs more pro-active in seeking out conditions and addressing them.
- There have been improvements in the recording of data and use of IT. GPs knowing at the touch of a button what proportion of diabetic patients have their HbA_{1c} glucose levels controlled is a positive development on what went before.
- Inequalities in quality as measured by the QOF have also fallen. Faster improvement in practices in the most deprived areas has meant the difference in performance between the most and least deprived quintiles has fallen from 4.0 per cent to 0.88 per cent between 2004/05 and 2006/07.

However:

- Evidence of whether or not the QOF has been directly responsible for the improvement is unclear. Data for certain key indicators, particularly those relating to coronary heart disease, show clinical quality was already improving quite rapidly. There is a sense in which the QOF paid out for quality that was already there, but not well recorded.

- Payment against QOF indicators is linked to likely workload rather than the likely benefit of the intervention. The ability of the QOF to deliver meaningful population health gain is therefore questionable.

- Payment in the clinical domain uses an *Adjusted* Disease Prevalence Factor rather than true prevalence, which has penalised those practices, often in deprived areas, with large numbers of patients suffering from the chronic conditions included in the QOF.

- Evidence suggests the QOF has been gamed; that some practices have artificially boosted their QOF scores, and thus income, by either falsely adjusting the reported prevalence of disease and/or 'exception reporting' patients for no good clinical or other reason who would otherwise have counted towards their scores.

- Quality of care is typically worse and has improved less for conditions not in the QOF. For example, achievement across 15 indicators concerning depression and osteoarthritis (not in the original QOF) increased by just one percentage point from 35 per cent to 36 per cent between 2003 and 2005.

- With little attention paid to interpersonal effectiveness, quality at the level of the individual patient is at risk of being crowded out under the weight of the QOF's focus on the technical side of general practice. This is despite the most frequent failing in general practice being the initial recognition of patients' problems and needs.

- The QOF is associated with an incremental loss of professional identity:

    - The QOF can place a 'second voice' in the clinician's head that may produce a wedge between the doctor and patient when patients present with problems that do not neatly fit into QOF 'boxes'.

    - Medicine is an inexact science. In encouraging more of a 'medicine-by-numbers' approach, there is a risk that in the long-run the QOF could inadvertently cause a decline in general practice's ability to deconstruct symptoms, explore probabilities and give proper attention to psychosocial elements.

    - The impact of pay-for-performance on the intrinsic motivation of GPs is complicated and likely to depend on continuing support for the QOF's evidence-base, which is threatened by recent government intention.

Not discounting the importance of technical effectiveness and the improvements the QOF has engineered, it is the lack of evidence for the *net* benefit of the QOF, particularly in terms of the interpersonal, patient-centred and holistic strengths of general practice, that is cause for concern.

To minimise such effects:

- **The proportion of income it is possible to derive from the QOF should be reduced**, so as to provide an incentive to GPs over and above the administrative and other costs, but not an imperative that risks creating unacceptable conflicts of interest in the professional encounter with the patient.

  The optimal level would require further analysis, but the seven per cent suggested by Professor Martin Marshall following the Health Foundation's comprehensive review of pay-for-performance schemes would appear reasonable. The difference should be redistributed as capitation or salary, so that income does not fall overall.

- **As per the recent agreement reached between the BMA and NHS Employers on the 2009/10 QOF, payment should be linked to true prevalence** rather than adjusted prevalence in order to stop the framework penalising practices with high numbers of patients suffering from chronic conditions.

- **The number of indicators in the QOF should be cut and – while open to new evidence – confined to clinical indicators, such as ACE in heart failure or influenza immunisations in over 65s, which have been rigorously proven to deliver significant, cost-effective, health gain to many**.

- This will require an extended analysis of the likely (actual) health gain from indicators that could be incentivised for common disease areas, set against the opportunity costs of the framework that have been outlined. **The reallocation of 72 QOF points for the 2009/10 QOF to a range of new interventions does not support this principle.**

  Such an assessment might be carried out by the National Institute for Health and Clinical Excellence (NICE), as proposed in the Department of Health's consultation document, but *must* be overseen by the profession and take account of general practice's interpersonal nature.

- **Any assessment of general practice by Primary Care Trusts (PCTs) or the new Care Quality Commission should be based solely on whether a surgery is able to show it is working to understand and improve what they are doing for patients.**

The QOF has a purpose, but should not become an end in itself. We should not lose sight of the truism that regulation can only achieve so much; that effective change in general practice, particularly in interpersonal effectiveness, must be led by general practice itself *in response to patients*. The QOF should stand as a guarantor of basic, core, clinical standards, but no more. As Dr Ian Bogle, a former chairman of the BMA once said, 'if you remove the responsibility, you remove the job'.

1. Introduction

Until as late as the 1980s, the beneficence of general practitioners (GPs) and within-profession initiative was generally considered sufficient guarantee that general practice was providing a quality service to patients.[1] This is no longer the case. The 21st century has ushered in a new era of evidence-based medicine, of random control trials and of clinical guidelines, where the ability to apply sound research findings to patient care have become almost as essential as the use of a stethoscope.[2] Fantastic advances in technology have converted the once fatal into the chronic and the untreatable into the treatable. The *Dr Finlay's Casebook* analogy of the interaction between the young and the old learning from each other to solve this week's problem is considered quaint and inadequate.

Running across these advances is a feeling that the medical profession has failed to keep up with the times. The Harold Shipman case is often cited as a powerful catalyst for change – and indeed it was, with professional organisations lambasted for operating a closed shop and 'patently failing to protect patients'[3] – but the reality is that it formed part of a long-term trend away from purely professional self-regulation. The failure of the medical profession always to police and manage its work effectively, a more information-hungry public, and government frustration with a service perceived to be irresponsive and inward-looking have produced calls for increased accountability and a more explicit guarantee of minimum standards of competence for some years. Indeed, ten years prior to Shipman, much time in the latter years of the Thatcher administration was devoted to an attempt to establish managerial control over general practice,[4] with GPs' rejection of a 'good practice allowance' seen in some quarters as a failure of the profession to move with the tide.[5] By the time New Labour entered government in 1997, the debate was less whether there should be increased oversight of general practice and the medical profession more generally, but what form it should take.

Initially, New Labour focused on more general initiatives such as the creation of the National Institute for Clinical Excellence (NICE) and National Service Frameworks (NSFs), along with an increased emphasis on clinical guidelines and governance. However, with large increases in funding for the NHS,[6] the renegotiation of the General Medical Services (GMS) contract opened new avenues. From 2004, the GP's contract for the first time contained a substantial pay-for-performance element, the Quality and Outcomes Framework (QOF), linking up to a third of GPs' income to their achievement against a series of (largely) evidence-based quality indicators. The majority of these relate to clinical standards, but the framework also rewards good organisation, the provision of additional services and (to a lesser degree) attention to patient experience. The aims, broadly, were to correct the traditional pattern of variation in clinical standards, focus attention on the importance of chronic disease management, encourage a more pro-active approach to health care and increase accountability. Each quality indicator is allocated a maximum payment and, typically, points are awarded in proportion to the achieved level of the indicator, with a graduated scale of payments that starts above a minimum threshold and ends once a maximum threshold level has been reached.[7] 'Incentives', the Department of Health (DH) argued, 'are the best method of resourcing work, driving up standards and recognising achievement.'[8]

It is important to recognise just how much of a change this represents from what went before, when statutory terms of service, rather than performance-related pay, underpinned the contract between general practice and the state. Quality assurance and continuing education is no longer seen as just a professional responsibility, but also that of the government. The QOF is also without precedent. One American commentator went so far to describe it as 'an initiative to improve the quality of primary care that is the boldest such proposal attempted anywhere in world', suggesting 'in one leap, the NHS has

vaulted over anything being attempted in the United States, the previous leader in quality improvement initiatives'.[9]

However, the likely impact of the framework is not as straightforward as the DH might have us believe. The QOF cuts across a complex discipline and a complex profession; it is not easy to pick out one thing without affecting many others. Indeed, in health care, recent literature reviews have found the relationship between financial incentives and quality improvement unclear,[10] not least because financial incentives do not always run in tandem with trust and the intrinsic motivation vital to high-performing health systems. Key to their productive use is the type, context and whether or not the incentive aligns with what most would conceive of as quality-enhancing practice.[11]

The intricacy here is that quality of care is hard to conceptualise and measure in ways which capture the full range of issues that matter to patients and can be applied day-to-day. Once a person has accessed the service, quality in general practice – and health care more generally – is likely to contain two principal components: technical effectiveness (largely concerned with clinical performance) and interpersonal effectiveness (largely concerned with people skills).[12] Technical expertise is important, but is not the whole story. Otherwise sound clinical guidelines may not be appropriate in treating patients with multiple health problems and addressing people's problems as they experience them. Such things as holism, the amalgamation of appropriate consulting skills and styles, the identification of patients' priorities and concerns, and the involvement of patients in decision-making, as well as pure technical quality, are all associated with positive outcomes.[13] As the German physician Martin H. Fischer once said: 'In the sick room ten cents' worth of human understanding can equal ten dollars' worth of medical science'.[14]

Herein lay the anticipated problem with the QOF. In focusing primarily on technical effectiveness – on health promotion and the evidence-based treatment of particular chronic conditions in the biomedical model – the financial reward offered by the QOF does have 'exceptional potential' to drive clinical performance in general practice, particularly in chronic disease-management, and to iron out the traditional picture of variable standards.[15] However, the concern was that in doing so it may crowd out that which was not included, specifically: the interpersonal nature and complexity of general practice; quality care for patients with conditions not in the framework; and professional integrity.[16]

It is for these reasons that the QOF has attracted so much attention and controversy, simultaneously hailed as 'offering the promise of a quantum change in performance'[17] and derided as 'Quite Obviously Flawed'.[18] A flurry of academic papers, column space and comment on the topic has followed, with one analysis in the *British Medical Journal* attracting as many as 23 online 'rapid responses' from around the globe.[19] However, for all this, the vast majority that are not opinion-based tend to focus on one or two particular aspects of the QOF and its impact; for example on the effect the framework has had on certain clinical indicators, on exception reporting, or on inequalities. Very few have attempted to provide an overview of the net impact of the framework *as a whole*, looking both at the benefits of the contract and at the opportunity costs. Here, we attempt to do this.

The first leg of our research involved a comprehensive review of the literature on the subject, based on a *PubMed* search for 'quality and outcomes framework' and 'qof', and relevant citations in articles and papers that were subsequently read. Where gaps in primary evidence were found, we conducted analysis of QOF data, as collected by the Information Centre for Health and Social Care (http://www.qof.ic.nhs.uk/). The second part involved interviews. Primarily these were conducted with practising GPs and nurses – including academics and representatives from the Royal College of General Practitioners (RCGP) and the British Medical Association (BMA) – with the aim of comparing the opinions they voiced, and primary evidence they presented, with that in the literature. In doing so, we focused particularly on the interpersonal elements of general practice and on professionalism, because, being so

difficult to measure and largely excluded from the QOF, these are not as well represented in the literature. On top of this, we spoke to a smaller number of PCT representatives and the NHS Confederation to gauge their impressions. All the interviews were conducted under the Chatham House Rule, using a general guide approach. The majority were by telephone.

The combination of the two strands, informed by academic works on pay-for-performance regimes, quality in health care and the nature of consultation in general practice, forms the basis for our conclusions. There are limitations to what we find, not least due to the inherent difficulty in quantifying the opportunity costs of the QOF. Complicated knock-on effects throughout the health system, the lack of meaningful data on health outcomes, likely time-lags and the 'unmeasurable' nature of the consultation and the doctor/patient relationship are all important things to bear in mind. Analysis was also carried out prior to the announcement of the new funding package for the QOF in 2009/10, which adopts one the report's recommendations: to calculate QOF points according to true, rather than adjusted prevalence. However, this, and the reallocation of 72 QOF points, does not alter the broader, and more fundamental, recommendations we make; recommendations we hope will inform the Department of Health's current consultation on the framework.[20]

In essence, we find the net benefit of the QOF as it stands tilted towards the wrong end of the scale; that improvements in technical effectiveness, while commendable, have come at too high a cost in terms of the interpersonal, patient-centred and holistic strengths of general practice. To reset the balance, the QOF should be downscaled and downsized, confined to indicators which have been rigorously proven to deliver significant, cost-effective, health gain to many, and representing a smaller proportion of general practice income.

2. General Practice and the Quality and Outcomes Framework

Since the inception of the NHS, general practice has been the first port of call for the vast majority of non-emergency patients seeking medical advice, with every NHS patient required to register with a GP. According to the RCGP, general practice deals with around 95 per cent of healthcare problems and carries out over one million consultations per day.[21] GPs also act as 'gatekeepers' to secondary care and, since the market-reforms of the 1990s, have been expected to lead in local health economies. The organisation and delivery of primary care thus has a very significant impact on a patient's experience of the NHS across the board.

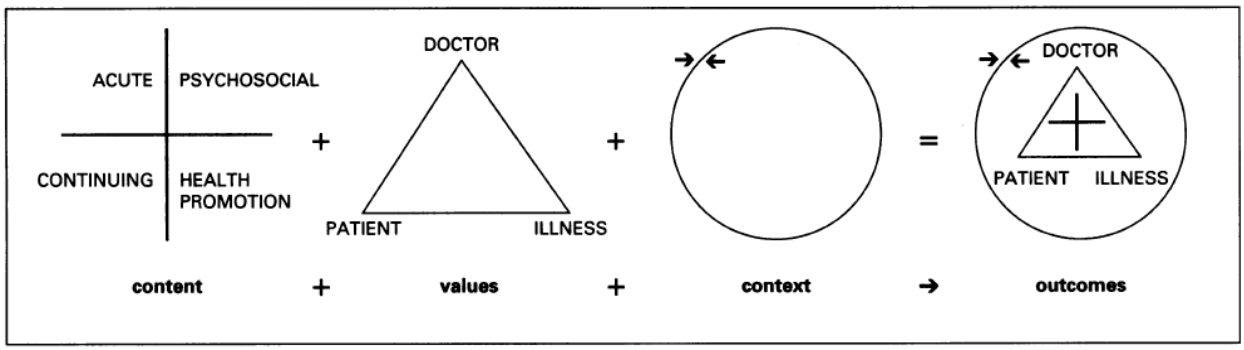
However, GPs have never been salaried employees of the state; instead operating rather as *de facto* private businesses contracted by the NHS to provide primary care. This status has made GPs broadly sensitive to economics, but has also enabled them to preserve a significant degree of professional autonomy – considered necessary due to the complex nature of their work.

The role of the GP

The character of general practice is something often forgotten in policymaking circles, but should always be at the forefront of our minds. The role of a GP is very different from the role of the hospital doctor; as one commentator shrewdly observed, 'in hospitals patients come and go, but in general practice patients stay and diseases come and go'.[22] While all medicine should have values at its centre,[23] general practice has an inherently more holistic and patient-centred function in consciously aiming to be open-ended, inclusive, personal and relationship-building. It is founded on science and evidence, but also embodies a rejection of the inhuman and formulaic and is happy to explore probabilities and incompatibilities. The GP's priority is to be accessible as health needs arise, to focus on individuals over the long-term, to offer comprehensive solutions to all common problems and to coordinate services from elsewhere when they are needed.[24]

At its simplest, an effective consultation requires both effective interpersonal skills and effective application of technical (clinical) expertise. The latter is obviously important, but so is the former, allowing a diagnosis to be made in holistic (bio-psychosocial) terms, and achieved through the amalgamation of appropriate consulting skills and styles, the identification of patients' priorities and concerns, and the involvement of patients in decision-making.[25] A good outcome for the patient is likely to be a function of the content of the consultation, but also a positive interaction between the values and beliefs held by the doctor and patient, and the context in which the consultation takes place (such as practice staffing, incentive structures and time).[26]

Fig.1. The GP consultation



Source: Howie, JGR, (1996)

The majority of a GP's time is, in fact, spent dealing with patients with complex chronic conditions. Although relevant medicine is considered in all consultations and although the GP must always make an assessment of why the patient has come that particular day, it is estimated that a new diagnosis is made in only 50 per cent of primary care consultations, and, if this happens, in only 25 per cent of these is there an evidence-based treatment available.[27]

History of the GP contract

The nature of general practice, along with its historic background, has meant it has traditionally been lightly regulated. As previously mentioned, GPs have never been salaried employees of the state. In fact, the origins of their independent status can be found in the negotiations that took place prior to the National Health Insurance Act of 1911. In return for accepting patients under the insurance scheme (previously all GP work was private or voluntary), government agreed to respect GPs' autonomy in the way they ran their practices. When the NHS was formed in 1948, this principle was carried over through the GMS contract. As part of this agreement, GPs received payment for treating NHS patients via a capitation system based on the number of patients on their lists; an arrangement that survived, with a few alterations to include a salary element and provisions for direct payment for additional services, until 1990.[28]

From this date, performance-related financial incentives, rather than statutory terms of service, have increasingly been used by the government to steer GPs' behaviour, particularly out of concern for population-based medicine and public health. The new era was heralded when the Conservative government negotiated a GMS contract that – in addition to greater weight being given to capitated payments as a proportion of total income – introduced both dedicated payments for health promotion activities and target-based payments for cervical screening and immunisation programmes.[29] Then, in 1998, came the first explicit link between payment and quality of care when Labour introduced the Personal Medical Services (PMS) contract, which included provisions for remuneration based on adherence to quality standards in the new National Service Frameworks (NSFs). However, the impact of the move was limited by take-up of the locally-negotiated contracts at the time, which stood at just three per cent.[30] It was 2004 before fee-for-performance became mainstream.

The new GP contracts

Budgetary increases accompanying the *NHS Plan* of 2000 provided the necessary resources for the government to introduce a series of new contractual arrangements for GPs, including a drastically changed GMS contract. Taking advantage of new developments in informatics, a significant proportion of GPs' income was, for the first time, to be conditional upon the quality of care they provided.

The rationale

The re-negotiation of the GP contract was considered widely necessary. Many GPs felt unable to control their workload, insufficient resources were provided to reward extra work and funding arrangements tended to discourage the development of new services. Junior doctors in particular were being deterred from entering the profession, leaving it with something of a recruitment crisis.[31] The provision of primary care also remained stubbornly inequitable, with the Inverse Care Law first articulated by Dr Julian Tudor Hart some thirty years previous still very much in evidence.[32] There was widespread concern over low quality primary care provision in disadvantaged areas; capitation payments were considered crude; and risk adjustment (for age and patients living in rural or disadvantaged areas) rudimentary. In principle, the system discouraged GPs from seeking out high-risk patients.[33]

BOX 1. GMS Contract: A UK-wide contract for general practice with the protection of national negotiations involving the government, NHS Confederation and BMA.

PMS Contract: A locally agreed alternative to GMS for providers of general practice negotiated between primary care organisations and general practice to allow greater flexibility on service provision and pricing.

APMS Contract: A means to allow primary care organisations to commission services (whole practice or specific) from which GMS/PMS practices have opted out, such as enhanced and out-of-hours services. Contracts can be held by the independent sector, voluntary sector, social enterprises and traditional providers.

PCTMS Contract: Enables primary care organisations to provide services themselves by directly employing staff.

New contractual arrangements

In order to allow for greater flexibility in the way in which primary care services could be procured, two additional contracting routes were drawn up. The Alternative Provider Medical Services (APMS) and Primary Care Trust Medical Services (PCTMS) contracts hoped to give Primary Care Trusts (PCTs) greater scope for commissioning new and enhanced services in under-doctored areas (see box 1).

The most significant changes, though, were reserved for the GMS contract (see box 2), which still covered about two thirds of GP practices. Accompanying a major injection of funds into primary care of around 33 per cent over three years, a new remuneration system called the global sum was introduced with the aim of distributing resources to general practice more closely according to need. Practices are now allocated their non-performance-related funding according to list size, adjusted more sensitively –

but probably still not sensitively enough – for local population characteristics such as patient age, gender, morbidity, mortality and cost of living via the new Carr-Hill formula.[34]

However, by far the most radical aspect of the new contract – and indeed the new PMS contracts – was the level on which GPs were to be offered pay-for-performance.

The Quality and Outcomes Framework

The Quality and Outcomes Framework links up to a third of a general practice income to performance against a maximum of 1,050 (now 1,000) 'quality' points. These are based on a set of 146 indicators that measure a variety of practice standards, focused on technical effectiveness. Indicators and points are spread across four 'domains' – clinical, organisational, patient experience and additional services – with the greatest weight, initially of 550 points, given to the clinical domain (see box 3). Bonus points were also offered for high scores across all four domains, plus an extra 50 points based on access.

BOX 2. Main provisions of the new GMS Contract (2004)

- Spending on general practice to rise by 33% over three years, totalling £8bn by 2006, with the particular aim of modernising practice infrastructure and IT.
- New remuneration system using the Carr-Hill funding formula to take account of local population characteristics.
- Minimum practice income guarantee (MPIG) to smooth introductory phase of new funding system.
- Large proportion of GP pay (up to a third) linked to the quality of care provided through Quality and Outcomes Framework.
- GPs able to opt-out of providing additional services and out-of-hours care, with responsibility shifting to primary care organisations (typically PCTs).
- Opportunities for practices to apply for money to provide a range of additional services, such as specialist clinics.

How it works

The QOF was designed for the Department of Health (DH) by a group of academic and health experts commissioned by the negotiating parties – the BMA and the NHS Confederation.

Organisational indicators were partly based on points of merit in pre-existing GP practice awards given out by the RCGP, such as the Quality Practice Award; with patient experience indicators linked to pre-existing patient surveys.[35]

Clinical indicators, on the other hand, focused on areas of high prevalence or burden of disease, with most chosen on the basis of clinical evidence that the recommended intervention leads to improved health outcomes. As a result, areas where large volumes of clinical trial data were already available, such as coronary heart disease (121 points), hypertension (105 points) and diabetes (99 points) featured strongly, although – consistent with academic literature on pay-for-performance[36] – a broad range was purposefully included in an attempt to minimise the likelihood of any quality improvement being concentrated in just one area. Greater weight was also given to outcome measures rather than process, structural and diagnosis-related indicators. For example, in the original QOF, for patients with hypertension a maximum of 10 points were on offer for recording smoking status compared with 20 points for a patient's blood pressure being checked in the past nine months.

BOX 3. Quality and Outcomes Framework (2004/05)

- **Clinical domain** (*up to 550 points*): 76 indicators in 11 areas (coronary heart disease, stroke or transient ischaemic attack, cancer, hypothyroidism, diabetes, hypertension, mental health, asthma, chronic obstructive pulmonary disease and epilepsy);
- **Organisational domain** (*up to 184 points*): 56 indicators in five areas (records and information, patient communication, education and training, practice management and medicines management);
- **Patient experience domain** (*up to 100 points*): four indicators within two areas (patient survey and consultation length);
- **Additional services domain** (*up to 36 points*): 10 indicators within four areas (cervical screening, child health surveillance, maternity services, contraceptive services)

Also:

- **Holistic care payments** measuring overall clinical achievement (*up to 100 points*)
- **Quality practice payments** measuring measure overall achievement in the organisational, patient experience and additional services domains (*up to 30 points*)
- **Access standards** (*up to 50 points*).

Crucially, after adjustment for list population characteristics and practice caseload, financial reward is linked directly to the scores obtained on such indicators. So, above a 25 per cent threshold (now 40 per cent) and below a 90 per cent threshold, the lower the percentage of hypertensive patients who have had their blood pressure checked in the last nine months, the lower the points scored and the lower income the practice will garner from the QOF. Payments are made to the practice, rather than individual GP, in order to encourage a culture of teamwork,[37] with a point originally worth £75 to the average surgery with a patient population of 5,500 and three whole-time principals (though this has subsequently increased to £125).[38]

Provision for review

The DH made it clear from the outset that the QOF would not remain static, with the need for updating in line with the development of clinical evidence, healthcare advances and new legislation. Indeed, *Investing in General Practice* outlined proposals for a formal review process via a UK-wide independent group.[39]

The first overhaul of the QOF came in 2006, when the maximum number of points was reduced to 1,000; the minimum and maximum thresholds for point-scoring were raised to 40 per cent and 90 per cent respectively for the majority of indicators; and a total of 166 points were redistributed (the vast majority to new indicators such as atrial fibrillation, chronic renal disease, depression, dementia, obesity, palliative care, mental health, learning disability, and the management of patient records). The net effect was a 105 point increase in the number of points allocated to the clinical domain.[40] Further changes have followed in subsequent years. For example, in the 2008/09 QOF, 58.5 points were recycled to incentivise access.[41]

The aims and possible pitfalls of the QOF

Aims

Ultimately, the QOF aims to use the promise of financial reward to drive providers to improve quality of care, particularly for chronic conditions.[42]

According to the DH, 'the core philosophy underpinning the [framework] is that incentives are the best method of resourcing work, driving up standards and recognising achievement'. The QOF, it said, 'is not about performance management of GMS [and PMS] contractors, but resourcing and rewarding good practice.'[43] The theory was simple: incentivise evidence-based indicators across general practice and the quality of care received by patients would – at least in biomedical terms – improve.[44]

Concomitant with this, the QOF was expected to encourage a more pro-active approach to general practice, re-focus attention on chronic care and spread good preventative medicine across the board. It was hoped that in time this would bring not just better recording of data, but falling health inequalities, fewer avoidable hospital admissions (due to better management of disease) and, above all, a healthier population. In this sense it is the ultimate public health framework.

Risks

However, for all the grand aims, advisors also anticipated certain negative and unintended consequences.[45] The QOF cuts across fundamental disputes both in the philosophy of medicine – particularly between the more utilitarian concept of public health and the deontological view of patients as the ends in themselves – and the proper role of general practice. For this reason, it has been criticised for lacking an intellectual overview and a meaningful attempt to map out what patients want or need and what doctors should or should not be doing.[46]

At the heart of this is Deming's famous warning that in most cases 97 per cent of what is important either isn't measured or isn't measurable;[47] the QOF neither includes all medical conditions nor captures the essence of a primary care consultation, interpersonal effectiveness.[48] Many feared what might happen if the attention of GPs was inappropriately diverted to getting QOF points.[49] In focusing on technical expertise would the QOF threaten the patient-centred and holistic strengths of general practice? What effect would it have on patients with conditions not in the QOF; or with complex co-morbidities that do not fit neatly into QOF 'boxes'? And what would be the impact on GPs and nurses themselves; would professionalism be compromised?

The impact of the QOF – and the inherent tension between improving the health of the population and caring for the individual patient – deserves careful analysis.

3. Quality in the QOF

The QOF presents a picture of improved and improving clinical quality in general practice, but the extent to which this can be attributed to the financial incentives it provided remains unclear and varies from condition to condition.

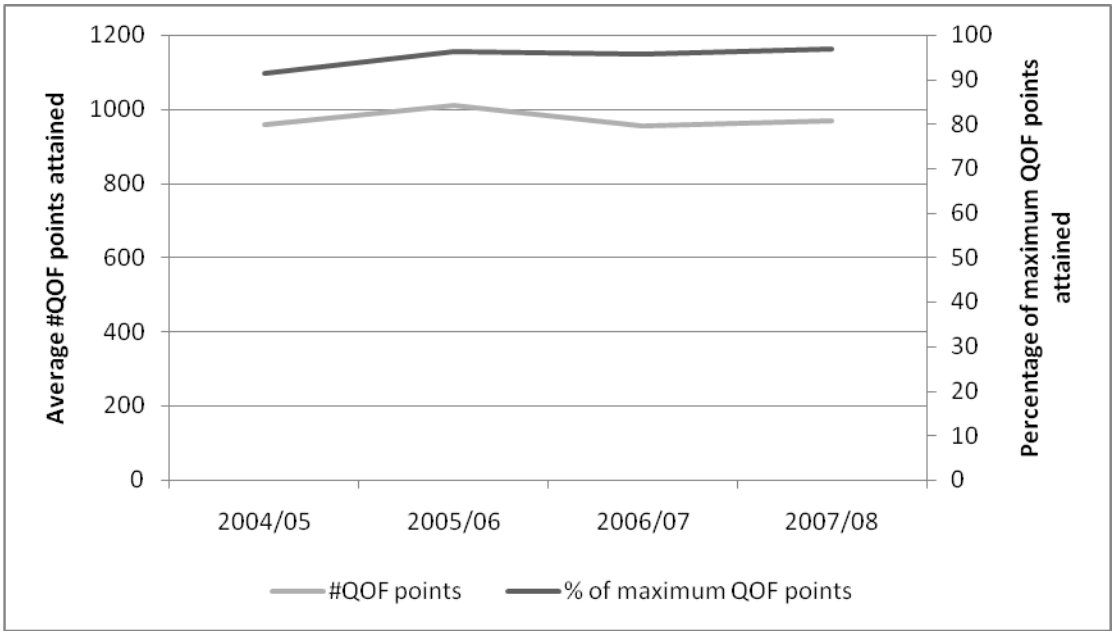
There is a real case to be made that in certain instances the QOF simply paid out for quality that was already there, but not well recorded.

QOF surprise

The Department of Health's initial funding allocation for the QOF was based on the expectation that GP practices would score an average of 75 per cent of the maximum 1,050 points possible. However, in 2004/05, GP practices had a nasty surprise for central planners – though a pleasant surprise for patients – by returning an average score of 958.7 points, or 91.3 per cent of the maximum possible. The trend continued; in 2005/06 practices scored an average of 96.2 per cent; in 2006/07 it was 95.5 per cent (slightly lower scores this year reflect changes made to the QOF and the raising of thresholds); and in 2007/08 it was up again to 96.8 per cent.[50]

Depending on practice size and list characteristics, as much as a third of general practice income can now derive from the QOF – considerably higher than was originally expected – with QOF payments totalling some £2.8 billion in the first three years of the scheme; an overspend of £384 million.[51]

Fig.2. Attainment of QOF points by GP practices in England*



Source: The Information Centre (2008) **In 2006/07 maximum possible points were cut from 1,050 to 1,000.*

This was largely the result of two things. Firstly, the QOF was rolled out nationally without any meaningful piloting and benchmarking, making it very difficult for the government to predict how practices would perform against the framework[52] (although the government chose not to believe the

BMA when they consistently warned that GPs would score highly[53]). And secondly, with the QOF announced over a year before it actually came into being, many practices used the time in between to prepare for its introduction.[54] The quality of care that resulted was apparently much higher than the government dared hope.

Rising quality

That said it would be wrong to say the QOF had no impact. It is clear that prior to 2004 a significant proportion of practices were not obtaining the standards the QOF laid down; instead, the picture was one of variation.[55] Subsequent high scoring in the QOF suggests the framework helped to erode this and drive improvement across the board.

Interestingly, most GPs feel the QOF has had a real impact in terms of improving disease-specific patient care (technical effectiveness), as well as improving information technology and data capture.[56] In fact, the IT systems now in place in general practice, with their in-built ability to 'prompt' GPs, are somewhat envied across Europe. As the current chair of the BMA's General Practitioners Committee, Dr Hamish Meldrum, said recently: 'I think the discipline of the QOF has helped even the good practices try to apply [evidence-based medicine] in a more structured way...[and] made us more pro-active in seeking out conditions and addressing them, rather than just being fairly reactive.'[57]

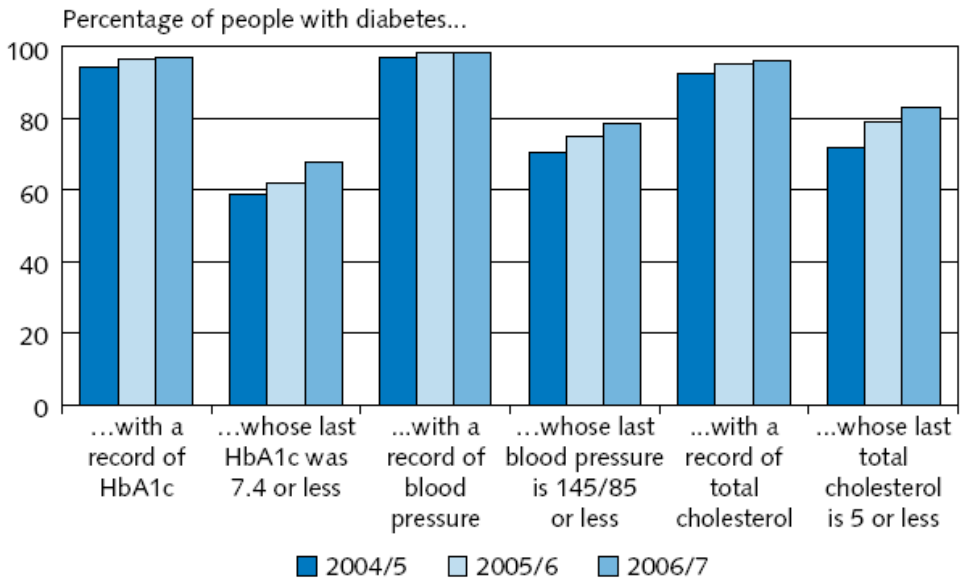
Independent studies tend to suggest their impression is founded in reality; there is little doubt that quality, in terms of indicators in the QOF, has improved since its introduction. However, evidence of any direct causal link depends on the disease.

Diabetes and asthma

First, the positive side. Longitudinal studies of English practices between 1998 and 2005 show quality of care for diabetes and asthma increased markedly post-QOF, with greater improvement shown between 2003 and 2005 (11 and 14 percentage points respectively) than in the five years prior to that (8.8 and 10.1 percentage points respectively).[58] Indicative of this, among 26 practices in South London, the median practice-specific proportion of diabetic patients with desired HbA_{1c} glucose levels increased from 38 per cent in 2003 to 57 per cent in 2005.[59] The DH lists diabetes as 'one of the outstanding achievements of the QOF', pointing to the number of people with diabetes receiving essential tests and measurements and a 600,000 increase in the number of people diagnosed in the past five years as evidence of improved performance.[60]

Neither is this just statistical trickery. Although some commentators do contend treatment is still 'ad hoc rather than systematic',[61] face-to-face interviews with 8,688 participants in the English longitudinal study of ageing show the QOF's impression of improved quality of care for both diabetes and asthma is reflected in the experience of patients.[62] It is reasonable to suggest the jump in QOF-related quality for these conditions is unlikely to have happened without the framework.

Fig.3. Performance of general practice on key diabetes indicators

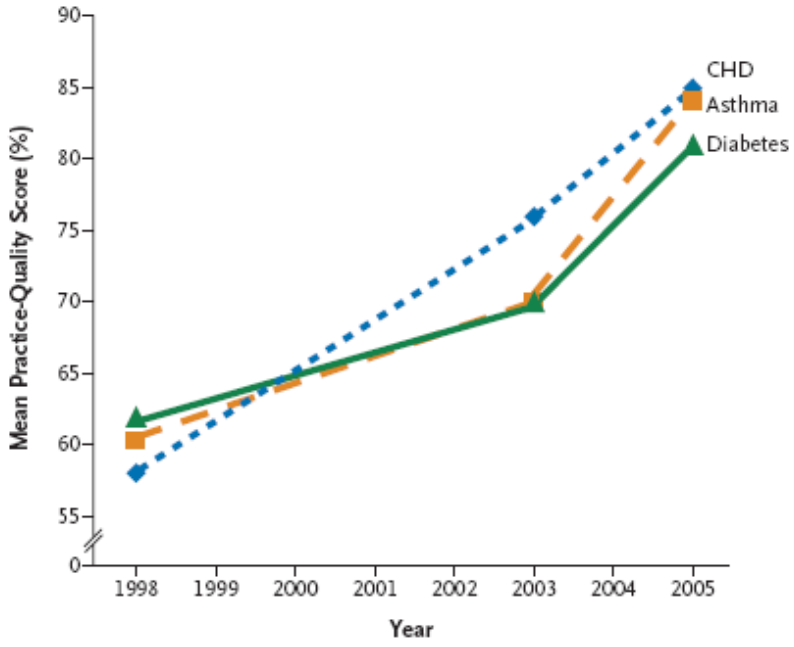


Source: Department of Health (2008)

Coronary heart disease (CHD)

However the impression with CHD, another disease heavily targeted in the QOF, is somewhat different. While quality of care – both on QOF indicators and as reported by participants in the longitudinal survey of ageing – continued to improve, rates of improvement remained little different to that pre-QOF.[63]

Fig.4. Performance of general practice pre-QOF and post-QOF for CHD, diabetes and asthma



Source: Campbell et al. (2007)

This probably reflects the fact that 98 per cent of PCTs had previously introduced initiatives to tackle CHD and that the disease was already the subject of strong national guidance.[64] For example, the prescription of statins, the lipid-busting drugs used to control cholesterol levels, continued to increase post-QOF, despite not being explicitly targeted in the framework.[65]

Missed opportunities?

It is clear the QOF has, in many instances, led to improved quality of care, at least in terms of technical effectiveness. However, it remains unclear whether the framework was necessary to induce this change and whether or not it could have been more ambitious. As Professor Martin Roland, one of the leading authorities on the QOF, said in recent evidence to the House of Commons Health Committee: '[the] QOF has made a difference in [that there has been] a modest increase in the rate at which quality is improving, but it is not a staggering one *simply because care was already improving pretty rapidly*'.[66] Step-changes in quality of care are observed for particular diseases, such as diabetes and asthma, but not in CHD where quality was already quite high. Although many practices may well have prepared up to a year in advance for the QOF's introduction,[67] the fact as many as 80 per cent of practices achieved the maximum score of 100 points for breadth of care in the first year does imply a significant proportion of the QOF paid out for quality that was already there but not well recorded. At the very least the government could have set payment thresholds higher; GPs have typically returned a standard of care on QOF indicators above the threshold required to get maximum points.[68]

The biggest direct impact of the QOF was probably, in the words of one primary care nurse interviewed for this study, to have focused attention and 'given underperforming practices a kick up the backside'. This is no mean feat – at least there is now a guarantee that the basics are done and recorded in a standard way – but perhaps falls short of what might have been achieved.

4. Population health and health inequalities

In focusing on population health and the management of chronic conditions, the government anticipated the QOF would not just be a framework to incentivise general practice to follow evidence-based guidelines, but would also carry wider benefits for the health of patients and help to cut health inequalities.

While it is too early to perform a proper assessment in this field, both, so far, have tended to prove either somewhat out of reach or hampered by the QOF's design.

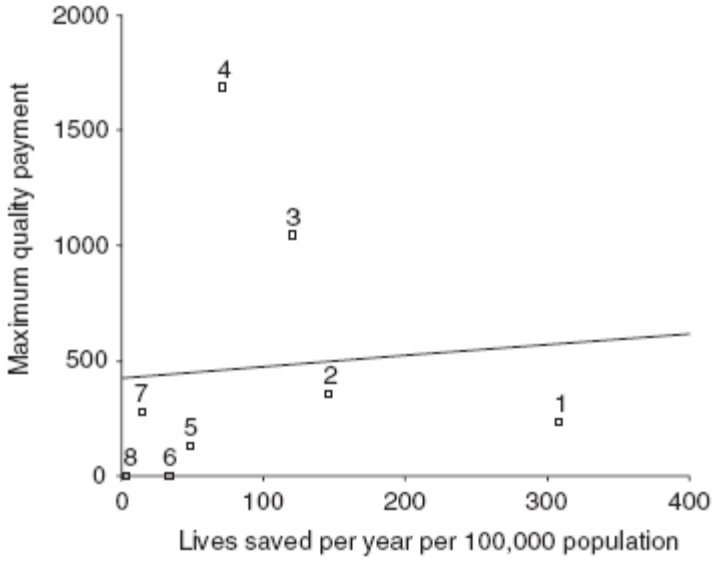
Healthier people?

At the most basic level, it is clear that simply controlling the intermediate indicators that the QOF focuses on, such as blood pressure and cholesterol, does not automatically lead to healthier lifestyles or better quality of life. Many patients may actually feel worse on antihypertensives and cholesterol reducing drugs. While CHD patients in Northern Ireland (which has the QOF) have significantly better controlled blood pressure (37 per cent *vs.* 28 per cent) and cholesterol levels (24 per cent *vs.* 17 per cent) than those in the Republic of Ireland (which has no equivalent of the QOF), CHD patients in the Republic of Ireland actually report much higher levels of physical activity (62 per cent *vs.* 44 per cent) and better physical and mental health.[69]

Indeed, the QOF may struggle to deliver meaningful population health gain. Firstly, the value assigned to clinical indicators is *not* directly linked to the likely health gain of the intervention, but to anticipated workload.[70] There is no threshold that has to be met for an indicator to be included in the QOF. The original framework included, for example, the prescription of statins in CHD (maximum of 13.8 lives saved per 100,000 of the population per year), but not warfarin in atrial fibrillation (maximum of 33.0).[71] On top of this, where an intervention is included, payment can be *inversely* related to health gain. For ACE in heart failure the typical practice will receive a maximum payment of £2,400, compared with £2,760 for the prescription of statins in CHD, despite the former intervention being associated with saving nearly ten times as many lives per 100,000 of the population per year (308.0 *vs.* 33.0).[72] This is significant for it means that the QOF is almost certainly skewing clinical practice to high-workload activities that may be marginally effective, to the detriment of low-cost and more beneficial care (see fig. 5).[73]

Secondly, even if the QOF was more closely linked to likely health gain, it is by no means a certainty that health gain would actually be realised. There will always be limitations to supporting evidence; the person presenting in front of a GP is unlikely to be representative of the otherwise healthy individuals that have determined the efficacy of treatment in population-based trials; and may not respond to the treatment. One reason why large trials are needed for certain treatments is that the actual effect in each patient is small.[74] Similarly, although the word 'outcomes' is included in the acronym, the QOF does not attempt to measure some of the most important: whether the problems that patients are experiencing are actually improved as a result of the interventions of general practice and whether QOF interventions have worked. Practices may be achieving near-perfect scores for CHD, but they cannot prove they have reduced the number of heart attacks.[75]

Fig.5. Likely health gain associated with key clinical indicators in the QOF



1. ACE in heart failure
2. Influenza immunisation in over 65s
3. Stop smoking advice and nicotine replacement
4. Screening and treatment of hypertension
5. Aspirin in ischaemic heart disease
6. Warfarin in atrial fibrillation
7. Statins in ischaemic heart disease
8. Statins in primary prevention

Fleetcroft, R, and Cookson, R, (2006)

One proxy measure might be the number of avoidable admissions to hospital. In encouraging better management of chronic conditions, one would expect the QOF to lead indirectly to fewer patients presenting at A&E with symptoms generally considered 'avoidable', such as hypoglycaemic coma or in-status asthmaticus. However, evidence remains sparse. Studies focusing on epilepsy have found a significant and relatively strong relationship between the quality of epilepsy management in primary care and decreased epilepsy-related emergency hospitalisation, suggesting the QOF could have a noticeable impact.[76] Indeed, an analysis of QOF scores from GP practices in two English PCTs did show that higher clinical domain scores *are* generally associated with lower admission rates, but the relationship was only statistically significant in the case of cancer. Also, somewhat counterintuitive, higher scores in the additional services domain were actually associated with higher emergency admission rates.[77] Some commentators warn that if in the long-run the QOF harms person-focused relational care (see chapter 5), this could occur across the board.[78]

Finally, there is the issue of identification. The QOF can only hope to deliver population health gain if it succeeds in encouraging a more pro-active stance to the identification of those at risk from a particular disease. Yet evidence suggests it has only been partially successful here; the Yorkshire and Humber Public Health Observatory recently estimated that around 16 per cent – or as many as 400,000 – diabetics remain undiagnosed.[79] Effective identification of many diseases is also likely to depend on wider systems being in place to provide direct care and advice to patients. Yet, for diabetes, only 57 per cent of PCTs have such systems.[80]

For more comprehensive evidence of the QOF's impact on health we must literally wait and see.

Health inequalities

Although the QOF was not strictly designed to tackle health inequalities, the government expected that through introducing national standards the QOF would pull up the worst performing practices and result in a decrease in inequality over time, at least in technical effectiveness. This was not an unreasonable expectation, as around 60 per cent of the difference in mortality between deprived and affluent areas is due to conditions the framework addresses.[81] Indeed, progress has been shown.

The downside is that the good work is in danger of being undone by the funding mechanisms underlying the QOF that risk entrenching wider inequalities.

Inequalities in the QOF

To the extent that the QOF has engineered a convergence in quality, as represented by scoring against the framework, health inequalities have fallen. Studies do find lower QOF scores still associated with more socially deprived areas,[82] but there is evidence of a catch-up. Although they started from a lower standard, improvement in overall median reported achievement on QOF scores in the most deprived practices (7.6 per cent) outstripped those in the least deprived (4.4 per cent) between 2004/05 and 2006/07. As a result, the difference in performance between the most and least deprived quintiles of practices fell from 4.0 per cent to 0.88 per cent;[83] a small difference between areas of markedly different social profile, especially when set against a national picture of entrenched health inequalities. Indeed, the report's authors conclude 'financial incentive schemes have the potential to make a substantial contribution to the reduction of inequalities in the delivery of clinical care related to area deprivation'.[84]

A similar picture is reflected for particular conditions. While achievement in quality of care for diabetes remains higher in more affluent areas, signs are promising. After one year of the QOF, attainment of glucose levels $HbA_{1c} \leq 7.4\%$ across 26 practices in south London was just three per cent less in the most deprived areas than the least.[85] Similarly, after adjusting for practice size, the disparity in the quality of care for cardiovascular disease on the vast majority of QOF indictors is generally found to be no more than two or three percentage points.[86] In fact, more up-to-date data shows it is now probably less than this. Looking at blood pressure control in 99.3 per cent of practices in England across the first three years of the QOF, a study by King's College London showed that the achievement gap between least and most deprived areas had nearly disappeared.[87] This is consistent with an analysis of general practice in Rotherham, which found socioeconomic inequality in quality of care for CHD to be non-existent.[88]

Such findings are significant for at least two reasons. Firstly, a reasonable time-lag would normally be expected for practices in deprived areas to catch up.[89] Secondly, pre-QOF, the difference in performance between practices in deprived and wealthy areas tended to be static or widening. In 2003, variance in clinical quality across practices was estimated to be 15.9 percentage points in the case of asthma; roughly the same as in 1998. Diabetes also presented a static picture and in CHD the gap increased, with greater improvement in affluent areas considered statistically significant.[90] Yet, low scoring practices in deprived areas now seem just as able to improve the quality of their care (as measured by the framework) as low scoring practices in more affluent areas.[91]

However, before the champagne is popped, it is important to point out that for specific QOF quality indicators significant inequalities between the least and most deprived quintiles do remain. In 2005/06 a 21 percentage point gap existed for the recall of severely mentally ill patients not attending appointments for long-lasting injections (79 *vs.* 58 per cent); a 16 percentage point gap was found in terms of practices opening greater than 45 hours per week (90 *vs.* 74 per cent); and a 12 percentage

point gap existed in the proportion of epileptics who were seizure-free for greater than 12 months (77 *vs.* 65 per cent).[92] There may also be a 'ceiling effect' in quality achievement for practices in more affluent areas.[93] For one, higher rates of exception reporting (addressed in more detail in chapter 6) are evident in more deprived areas, a trend not properly explained by socioeconomic or demographic factors, and possibly indicating lower standards of care.[94] Most worrying, however, is the impact the QOF is having on wider health inequalities.

Inequalities in health

It is likely that equity in primary care falls into two categories: equality of care among patients (i.e. those who have accessed the service) and equality of care across the overall population, which includes access to the service, the incidence and prevalence of disease, and wider socioeconomic inequalities linked to health.[95] The QOF cannot capture the latter adequately, because it refers only to particular conditions, says little of care in relation to need and is a post-access measure.[96]

Given this, the picture of falling inequality that the QOF presents could well be an illusion. In secondary care, for example, there is a gap of some magnitude in mortality from myocardial infarction between deprived and affluent groups, yet there is no equivalent association in rates of hospital admission.[97] Similar trends are evident in primary care; the percentage of diabetics who are undiagnosed, for example, is estimated to be as high as 48 per cent in Kensington & Chelsea compared with near zero in some PCTs.[98] Indeed, studies have shown that the QOF has failed to iron out patient-level differences beyond its immediate scope. For example, in the Wandsworth Prospective Diabetes Study, the prescription of statins to black African patients and insulin to black African and south Asian patients remained lower than to white British patients, even after the QOF's introduction.[99] Worse blood pressure and blood glucose control also persisted in black Caribbean patients.[100]

In broad terms, the essence of the Inverse Care Law – that 'the availability of good medical care tends to vary inversely with the need for it in the population served' – is as true now as in the 1970s when it was first articulated.[101] As Lord Darzi's *Interim Report* acknowledged, 'the breadth and scale of inequalities in England are still striking'. It identified major inequalities in life expectancy, infant mortality and cancer mortality, and showed that areas with the lowest life expectancy correlate quite closely with areas where there are the fewest GPs per head.[102] This is unlikely to be a coincidence; studies in the US have shown that the more primary care physicians an area has, the better the health of its population tends to be.[103]

Worse, the payment structure of the QOF has exacerbated the likelihood of this holding true. Concessions made in negotiations mean payment in the clinical quality domain uses an *Adjusted* Disease Prevalence Factor rather than true prevalence, which – while ironing out variation in overall payment between practices – has penalised those practices with large numbers of patients suffering from QOF-related conditions. Two practices with the same CHD 'workload' (number of patients on their CHD disease register) and achieving the same quality of care (by QOF points) will get paid drastically different amounts under the QOF if they have a different overall list size.

Table 1. The effect of using adjusted, rather than true, disease prevalence

	Practice A	**Practice B**
List size	23,324	560
# on CHD list (equivalent to CHD 'workload')	30	30
QOF points achieved	101	101
QOF payment if True Prevalence	=	=
Actual QOF payment (Adjusted Disease Prevalence Factor)	*£25,063*	*£850*

Source: Guthrie, B, et al. (2006)

This example is not a particularly extreme case; variation in payment per person with a given QOF-related disease can be as much as 44-fold.[104] Given that the prevalence of disease is typically higher in deprived areas, the government has predictably and systematically penalised the practices that serve them;[105] a distortion that is not adequately ironed out by the non-QOF part of funding.[106] Whatever the QOF has managed to achieve in terms of improving equality in terms of standards of care, the funding system behind it is in danger of producing the reverse effect in institutionalising wider inequalities in health. It is welcome that the negotiating parties for the 2009/10 QOF have sought to address this.

5. Quality outside the QOF

The QOF – as with all statistically-based indicators[107] – must always remain a proxy measure for true quality of care for a whole host of reasons: QOF data is ultimately reported for payment purposes; only reflects relative year-on-year performance in selected areas; does not cover conditions excluded from the scheme, carried out in secondary care, or provided in the independent sector; and pays only lip-service to the experience of patients and interpersonal effectiveness.[108]

There is a further dimension too. While the DH insists that the QOF is not about performance management, in attaching points to the achievement of particular indicators of quality of care it nonetheless creates a series of targets that GPs are expected to hit and will want to hit; no-one wants to be at the bottom of the league table. Such a regime – as has been well documented in other areas of health care[109] – risks perverse consequences. This goes back to the heart of Goodhart's Law: that once something becomes a target it ceases to be a good measure.[110] In laying down an arbitrary number (the QOF threshold) any target will tend to drive a degree of distortion into the system, allowing parts to 'win' at the expense of the whole. Crudely, if a target is set beyond current capability, it will tend to cause GPs to either redesign their practice to the detriment of care elsewhere, or cheat to make up the numbers. Alternatively, if a target is set below current capability, there is little incentive to do better.[111]

As we shall see, the QOF has not been immune to such a hypothesis; gaming is in evidence – though not widespread – and quality can be substantially worse outside the QOF.

Gaming and exception reporting

GPs agreed to the introduction of the QOF on the grounds that it was to be a 'high trust' framework, that is self-reported and with proportionate inspection by PCTs. However, one of the fears was that this might encourage less scrupulous GPs to maximise their scores – and thus income – not necessarily by providing better standards of care, but by gaming (or more accurately cheating) the system where they saw the chance. The DH recognised two means by which this might occur: through maintaining inaccurate disease registers and through the abuse of exception reporting.[112]

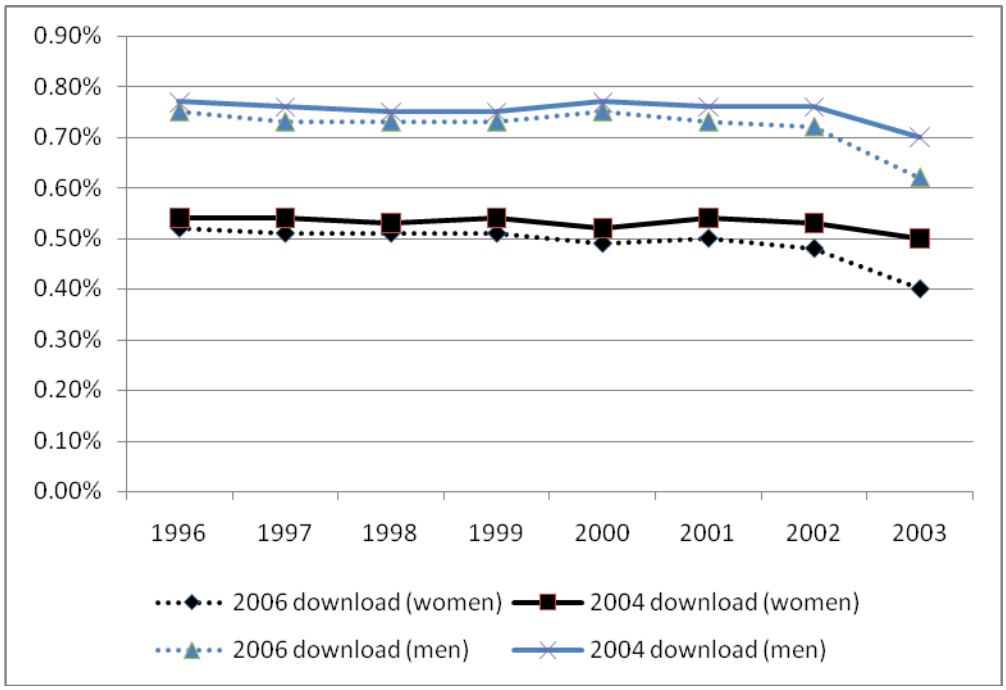
Disease registers

The financial incentives built into the QOF create perverse incentives when it comes to the registering of disease; no-one wants a diabetic patient on their list whose condition is not yet controlled, because the points will start to tumble. The fact that patient data is in some cases self-reported leaves open the potential for GPs to say that a patient's HbA_{1c} glucose level is controlled when it is not, and to say decent advice has been provided about smoking, when it has not. However, such deliberate miscoding of indicators is probably very small-scale and would be fairly easy to pick up through unusual spikes in the distribution of the readings.

What appears more common is unexplained variation in putting cases on disease registers in the first place. Many GPs in private conversation admitted that if a patient presents with a QOF-related disease at the tail end of a financial year, thereby leaving little time for them to be treated, there is a very real incentive to delay putting them on the disease register until the next financial year. This is almost certainly just an administrative trick not indicative of a *real* delay in treatment that will have started, but does raise questions about the adequacy of the framework.

Related to this is the subtle gaming of reporting prevalence per se. The sensitivity a practice applies as to when a patient has a chronic condition varies, with practices scoring above QOF thresholds having the incentive to increase reported prevalence to gain more income and those below the reverse. In Scotland, for example, practices that performed worse in 2004/5 had lower reported prevalence in 2005/6.[113] Across the board, recorded incidence rates for coronary heart disease (CHD) also fell quite considerably post-QOF as opposed to pre-QOF, with CHD codes being removed in the run-up to the new contract.[114] This could be entirely innocuous, or it may not. The new contract undoubtedly triggered a major data clearing exercise, which will have corrected many incorrect diagnoses with no corroborative evidence. However, it could also have resulted in the removal of a few correct, but unsubstantiated, diagnoses to maximise points. These patients would then be hidden from the QOF and with them any evidence about the quality of care they are receiving.

Fig.6. Reported incidence rates of CHD pre and post-QOF



Source: Carey et al. (2007)

Exception reporting

Of greater concern is exception reporting; a phenomenon now known far beyond health circles, thanks to recent press coverage. Exception reporting is both the most obvious means of gaming and the one that has received the most attention, enabling GPs to remove certain patients from the list that counts towards their QOF scores, either for a whole domain or a specific indicator. This may sound like a recipe for disaster, but does have a good clinical rationale. There are many things beyond the control of a GP where treating a patient along QOF guidelines would be inappropriate; such as age, a lack of responsiveness to treatment, an unwillingness of the patient to be treated, and contra-indication for therapy.[115] If such patients were included in the QOF, it could unfairly penalise practice income, produce perverse incentives for inappropriate treatment, or encourage practices to remove 'unusual' patients from their lists in order to maximise payment.

However, it is equally possible for GPs to use exception reporting to cheat the system; to strike awkward patients off the QOF register to boost scores, leaving obvious question marks about the quality of care

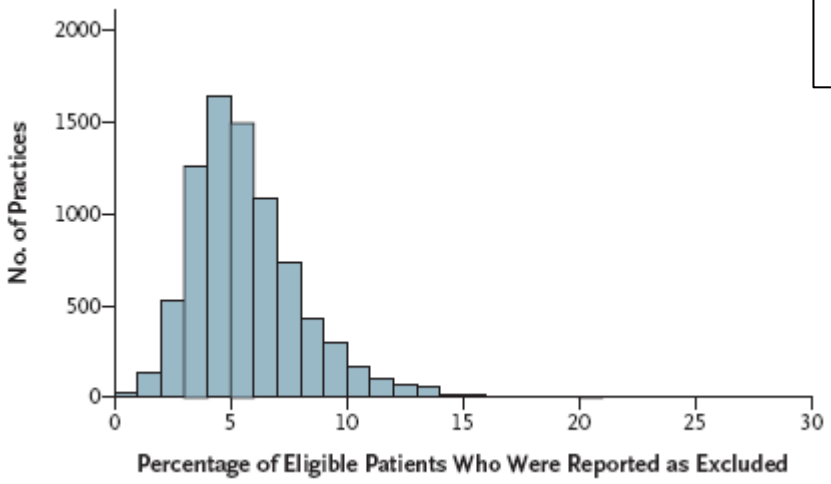
such patients might be receiving. Indeed, the monetary incentive to game more complex indicators, such as those relating to mental health (worth up to £1,748), is found to be quite strong.[116] Exception reporting has also proved costly for the taxpayer: in 2004, £17 million less would have been paid out to GPs had they not been able to exception report at all.[117]

That said the proportion of exception reporting that represents gaming is a complex issue. In 2008, the *Health Service Journal* showed that while the average rate of exception reporting stood at around seven per cent of patients in 2006/07, nine practices had rates three times as high. Variation in individual indicators was even more noticeable, with 20 practices exception reporting at more than ten times the average for measuring a patient's blood pressure once every 15 months.[118] However, this is likely to be misrepresentative. The *HSJ* used raw data with little consideration of legitimate reasons for variations in exception reporting, such as practice list turnover and the number of patients with complicated co-morbidities. Looking more closely at the data, the most common indicator to be exception reported overall, the prescription of beta blockers for CHD, reflects the fact that they are contraindicated for many conditions including asthma, peripheral vascular disease and chronic obstructive pulmonary disease (COPD).

Still, it would be difficult to explain away all variation on such reasons alone. An academic study along similar lines as the *HSJ*'s looking at exception reporting in the first year of the QOF in England (2004/05) did, after all, show similar variation *and* – after controlling for legitimate factors – considered that 1.1 per cent of practices required further scrutiny.[119] A re-run of the analysis for the second year (2005/06) confirmed a similar picture. While the report found no correlation between the mean rate of exception reporting and level of financial reward and concluded 'rates of exception reporting have generally been low, with little evidence of widespread gaming', rates were found to range from 0 to 28 per cent according to practice. Only 2.7 per cent of variance was explained by characteristics of patients and practices.[120]

Fig.7. Variance in exception reporting in 2005/06

This graphic has been clarified in relation to the original report.



Source: Doran, T, et al. (2008)

The fact other studies have found a positive correlation between exception reporting and performance, with a one per cent increase in exception reporting associated with a 0.31 per cent increase in performance on the QOF, does suggests gaming is happening in some practices.[121] Indeed, the worse a GP practice is performing, the more likely it has been found to game the next year. In Scotland as many

as 0.87 per cent of patients in underperforming practices, or 10.9 per cent of the overall number of patients exception reported, were found to be inappropriately excluded.[122]

The inevitability of gaming

That such gaming exists – whether or not it is as conclusive, exciting and prevalent as projected by the media – is symptomatic of the QOF's design. All patients are different; many with co-morbidities – particularly the elderly and those from more deprived backgrounds – do not align well with the QOF, leaving the door open to gaming. Any target-based regime, particularly where linked to monetary reward, will have perverse consequences as subjects struggle towards the goal; you can never pass enough regulations to make everyone ethical.

PCT representatives acknowledge as much, suggesting when interviewed for this paper that exception reporting and a degree of gaming is to be expected. It is a testament to GPs' professionalism that the inevitability has not led to widespread abuse.

Outside the QOF: outside our thinking?

The financial weight attached to the QOF inevitably focuses general practice's attention on the indicators and conditions it incentivises, opening the real possibility that patients not fitting neatly into the QOF framework might be someway disenfranchised. This is not just a concern for those suffering from conditions not included in the QOF, but also for those cutting across it with complex health problems. Many also worried that 'ticking boxes' may distract doctors from dealing with important topics during a consultation and adversely affect interpersonal effectiveness.[123]

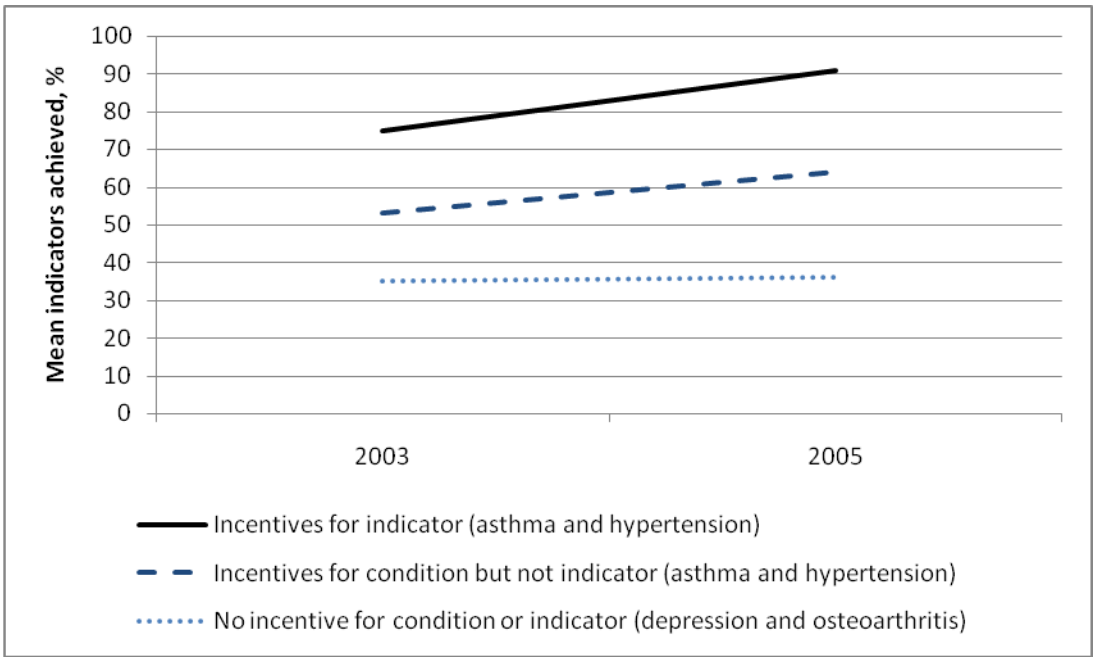
The evidence suggests that these concerns have been borne out. Quality of care is typically worse and has improved far less for conditions not in the QOF – a fact that is not wholly explained by historic trends – and there is anecdotal evidence that person-centred holistic care is being compromised. This is unlikely to be the result of conscious decision, more an implicit opportunity cost of the time required to 'get those points'. In private conversation, many GPs estimate the administration associated with the QOF can take up to 20-30 hours per week for the average practice, including 2-3 hours of clinical time.

Conditions outside the QOF

On the positive side, studies suggest that the rate of improvement in quality of care for those conditions not covered by the QOF continued on a similar trajectory post-QOF as pre-QOF; they have not been left 'to neglect' as was the ultimate fear. There is also evidence of a so-called 'halo effect', that where a related condition or indicator has been incentivised in the QOF it has had a positive knock-on effect on non-incentivised interventions and indicators (see fig.8).[124]

However, rates of improvement in non-incentivised clinical areas have typically been some way behind those included in the QOF. Across eighteen practices between 2003 and 2005, academics showed that, whereas achievement across six indicators incentivised in the QOF relating to asthma and hypertension increased from 75 per cent to 91 per cent, achievement across fifteen indicators concerning depression and osteoarthritis (not in the original QOF) increased by one percentage point from 35 per cent to 36 per cent.[125] Concurrent with this, consultation rates for depression and anxiety have fallen since the start of the framework.[126]

Fig.8. Comparison in improvement between quality indicators included and not included in the QOF



Source: Steel et al. (2007)

This is not an isolated example. Participants in the English longitudinal study of ageing revealed a similar impression, reporting better quality of care for conditions included in the QOF than those excluded; 75 per cent attainment of endorsed quality of care indicators compared with 58 per cent respectively. [127] For certain non-incentivised conditions, such as falls management (41 per cent) and osteoarthritis (29 per cent), the picture is worse, with geriatric care in general faring particularly badly.[128] Two recent studies commissioned by the Healthcare Commission and The Information Centre found fewer than 20 per cent of over-65s presenting with non-hip fracture following a fall received the recommended care in general practice; and that falls assessments were often not provided for high risk fallers.[129]

Much concern is also attached to dementia care. Although 20 points are given out in the QOF for registering and reviewing patients with dementia, this does not refer to actual clinical quality such as looking for potential reversible causes. In a recent report the National Audit Office (NAO) estimated only a third of people with dementia ever receive a formal diagnosis; the average time taken to diagnose is up to twice as long as in some other countries; too few dementia patients receive anti-dementia drugs; and only 31 per cent of GPs thought they had enough training to manage the disease.[130]

Of course, some of this reflects complex historic, medical and societal trends – performance in cardiac care has long outstripped that for dementia or osteoarthritis – but the comparative lack of improvement is a worry. Loud calls to include osteoarthritis, urinary incontinence and more extensive dementia indicators in the QOF now abound, but the plea itself must be seen as recognition of the limitations of the framework. Although the QOF does cover the major chronic diseases, it can never contain everything (nor was it intended to); if it did it may as well not be there at all. Even if osteoarthritis and incontinence are subsequently included, there will always be other 'Cinderella' conditions left on the outside. Many would stand by the concern expressed in a recent letter to the *British Medical Journal*: 'outside the QOF, outside our thinking?'[131]

Patient experience and patient-centred care

Quality in health care has always had two dimensions: one is objective and technical; the other is subjective and qualitative, principally concerned with interpersonal effectiveness. 'However dazzling the technological achievements of medical science over the last fifty years', concluded one of the most comprehensive patient studies, 'the patient's experience of illness and medical care [remains] at the heart of the first purpose of clinical medicine – to relieve human suffering.'[132]

In any general practice consultation there are complex behavioural skills involved; of connecting, of summarising, of handing over information and of safety-netting, broadly what the former chair of the RCGP Roger Neighbour has described as 'an attention to the right things in the here-and-now'.[133] Interpersonal effectiveness (see chapter 2), in facilitating freer and more complete communication between GP and patient, is essential to many important things such as the initial recognition of patients' problems (that tends to be the rate-limiting step in quality of care), [134] more accurate diagnosis, better concordance with treatment advice, more appropriate decisions about preventative behaviour and less use of emergency services.[135] It is also what the vast majority of patients want; in systematic reviews of patient priorities in general practice, humaneness and relational continuity tend to be ranked either ahead of, or on a par with, competence and accuracy (although many patients do take the liberty of assuming the latter).[136]

The QOF partly recognises this, with a total of 100 points having typically been available for aspects of care relating to patient experience, including length of consultation and 70 (now 55) points linked to patient surveys in the form of the Improving Practices Questionnaire (IPQ) and the General Practice Assessment Questionnaire (GPAQ).[137] In this domain, GP practices are apparently doing well and improving; the number of practices achieving maximum scores rising year-on-year from 79.3 per cent in 2004/05 to 97.2 per cent in 2007/08,[138] with corresponding statistically significant improvements in patient survey results.[139]

However, taking the framework as a whole, there is little attention paid to many things patients value: compassion (as seen in the motto of the RCGP *cum scientia caritas*), appreciation of context, trust, reassurance, empathy, relational continuity, and the effective management of multiple conditions with their attendant intricacies.[140] Even in the patient experience domain, points are rewarded for having undertaken an approved patient survey and having produced an action plan based on the results, *not* on the actual scores achieved (though this may not be a bad thing given the wider critique of the use of financial incentives in chapter 6).[141] Of course, this is partly due to the inherent difficulty of measuring the benefits of personal care, but the danger is that the emphasis of the QOF on technical effectiveness risks crowding out important interpersonal elements and quality at the level of the individual patient.[142] Indeed, the leading architects of the QOF now express concern that 'linking such a large proportion of practice income to measurable aspects of care has threatened the holistic and patient-centred focus of traditional general practice'.[143]

The root of the problem is that the framework's priorities may not be the same as the patient's when they consult their GP.[144] This can be justified. A GP consultation can be seen as having 'exceptional potential' not just to deal with the patient's presenting complaint and to review pre-existing conditions, but also to offer opportunistic health promotion and advice about future help-seeking behaviour.[145] It would also be hard to argue that a GP checking that a diabetic had his/her HbA_{1c} glucose levels properly controlled is not concerned with patient need, regardless of the underlying reason for the consultation.

However, in representing something of 'a shift from patients and the diseases that make them suffer, to the diseases themselves and their measurement within the patient',[146] such an approach can produce perverse results. This is particularly the case when patients do not fit neatly into 'QOF boxes': children,

those with a combination of physical and mental illness, the elderly and those living in adverse social circumstances where holistic and patient-centred elements are most important.[147] For example, the effective treatment of an elderly person with multiple co-morbidities that compromise disease-orientated norms will necessarily mean suppressing QOF-related warnings.[148] Teasing out issues relating to depression will involve more than simply filling out the QOF's standardised questionnaire, which may actually medicalise distress and unhappiness, and disrupt authentic dialogue between doctor and patient.[149] Addressing obesity, particularly in children, is likely to be constrained by a lack of time, training and resources necessary to build effective interpersonal relationships – that the QOF may well cause to be diverted elsewhere – as well as evidence for effective interventions.[150]

Such concerns are consistent with the findings of previous studies into the impact of disease-specific financial incentives in general practice. In Scotland, a degree of financial reward for providing more pro-active care for particular conditions, such as diabetes, cardiovascular disease and chronic respiratory disease, was introduced in parallel with fundholding in 1990. In the two years following, holistic care was found to suffer. While 'enablement' (broadly, a patient's self-assessed ability to cope and understand their illness after having seen a doctor) increased for patients with diseases that were incentivised, it decreased for those suffering from conditions that were not, despite these patients reporting a larger increase in social problems associated with their condition. If doctors were practising holistic care effectively, more consulting time would have been given to those in the latter category, but it was not.[151]

Table 2. The relationship between incentivised indicators and holistic care*

	Percentage increase in social problems	Change in consultation length	Percentage change in 'enablement'
Diabetes	3.7	+0.5	+6.7
Angina	3.7	-0.4	+3.1
Digestive	8.3	0	-13.5
Hearing	11.0	-1.0	-10.3
Skin	7.5	+0.1	-7.3
Pain	11.6	+0.1	-5.2

Source: Howie, JGR, et al. (1995) **Darker shading refers to incentivised indicators.*

Reductio ad absurdum, a QOF consultation could run:

> ***Patient**: I'm so sad my husband died.*
>
> ***GP**: Are you smoking more a result?*
>
> ***Patient**: I don't smoke.*
>
> ***GP**: I wonder if you are drinking more?*
>
> ***Patient**: NO.*
>
> ***GP**: I suspect your blood pressure has gone up; may I check it?*

Of course, this is extreme, but, as one anonymous GP said in an academic study: 'There have been one or two occasions where I went through the cholesterol, the depression, the CHD, and everything else and the patient said "well, what about my foot then?" "What foot?" I replied'.[152] Anecdotally, patients have reported concern at GPs having one eye on the computer screen and of the consultation being

interrupted by too many questions not necessarily related to their health concerns.[153] One remarked that the first time her GP had contacted her in some years was over the phone to ask whether she smoked. There is little doubt that these instances represent poor-quality personal care, yet a review of QOF attainment would mark it down as satisfactory.

Given the value patients attach to interpersonal care – and its link to clinical effectiveness – the potential 'crowding out' of this aspect of quality under the technical weight of the QOF deserves more careful analysis. The real test of the framework must be its effect on the many cases that lie outside its remit, not just conditions not covered, but the expected and unexpected, explained and unexplained, and whether it truly supports all the needs of the individual patient. Here, it is clear there are opportunity costs.

6. Medical professionalism

Professionalism is a difficult concept to describe and to define, yet remains at the heart of the practice of medicine as we know it. Medical professionalism, according to the Royal College of Physicians (RCP), signifies 'a set of values, behaviours and relationships that underpins the trust the public has in doctors'. 'Medicine', it continues, 'is a vocation in which a doctor's knowledge, clinical skills and judgement are put in the service of protecting and restoring human well-being; a purpose realised through a partnership between patient and doctor, one based on mutual respect, individual responsibility and appropriate accountability.'[154] *In effect it represents the fusion of technical expertise with the duty of care; day-to-day practice should be the embodiment of integrity, compassion, altruism, continuous improvement, excellence and partnership.*

There is something special about this notion, in that it forms a basis for a moral contract between the medical profession and society. In general practice, the integrity of GPs and their associated professional bodies has often been seen as sufficient to have few intermediaries, minimal outside guarantee, and little need for the state to enter into proceedings.[155] *The concomitant benefit of this is that it has enabled the GP to focus primarily, if not solely, on the patient in front of him or her. However, the downside is that the medical profession has failed always to police and manage practice variations adequately; the hallmark of general practice has too often been variability and inconsistency in standards.*[156]

It is a tightrope between these elements that the QOF attempts to walk. Being (largely) evidence-based it attempts to bring an accountability and benchmark to general practice that, operating in monopoly system with professionally-defined norms, has not always been there. Yet, in creating a 'second head' in any consultation (getting the QOF points), it does also carry a risk of regulating out the benefits of autonomy.

One step removed from the patient

The views of GPs on the QOF are passionate and, at times, ambiguous. While many are concerned about the framework's effect on their professional ability to respond to the 'real' needs of patients, others see the objections as a flawed defence of the GP's ability to ignore evidence and practice medicine on little more than personal whim.[157]

The opinion of the majority, however, is probably somewhere between the two; most concede that professional autonomy and the doctor/patient relationship have been impeded, but that negative consequences have – at least so far – been limited by the (largely) evidence-based make-up of the framework. An investigation into a precursor to the QOF showed five main drivers of GP activity: improved patient care, retained autonomy, professional pride, resources and government intentions.[158] All were taken into account in the design of the QOF to some extent. GPs have returned such high scores because they have been paid well, but also because on the whole they have thought it more of a help than a hindrance to improving care, and have been left to their own devices to achieve the points.

In a recent survey published in the *British Journal of General Practice,* GPs reported an increase in mean overall job satisfaction since the introduction of the framework (though admittedly this is probably more the result of shorter working hours and better pay than the QOF) and many were also more positive about the impact of the QOF on quality of care than they had anticipated being.[159] Most acknowledge that for the typical case if they weren't following most of the guidance implicit in the QOF, they probably wouldn't be doing their jobs properly.[160] As one GP said, 'it's just an additional motivation to make sure

that we are practising good practice'; and another 'it's definitely an improvement on the previous system of payment . . . [being] much more in line with good medical practice [which] you get rewarded for'.[161]

However, at least two of the aforementioned drivers behind GP activity – resources and government intention – do not always dovetail neatly with professionalism and patient care. In the same survey, 71 per cent of GPs reported a decrease in clinical autonomy and 94 per cent said their administrative workload had increased.[162] GPs are no less immune to money than the rest of us. While there are inevitably limits to the extent to which GPs will respond to financial incentives, if you pay them to record something, they will generally record it; in some cases the substantial pay-for-performance element in the QOF has been sufficient to change clinician behaviour even when points are not necessarily aligned to professional priorities and values.[163]

This has meant that in certain areas professionalism has been compromised. At the extreme, some practices have reportedly started to neglect cultural attitudes towards patients and 'bish-bang-whallop through the scoring' – though this is rare.[164] More commonly, the QOF has caused the inadvertent diversion of attention or the odd bit of gaming the system. Many would sympathise with the sentiment of one nurse, who said: 'I think we're very hung up on figures and numbers and whatever, and sometimes not actually looking at what people want or giving them what they want'.[165] In one survey, 75.9 per cent of nurses reported that they felt performance-related pay was undermining the patient focus of the NHS.[166]

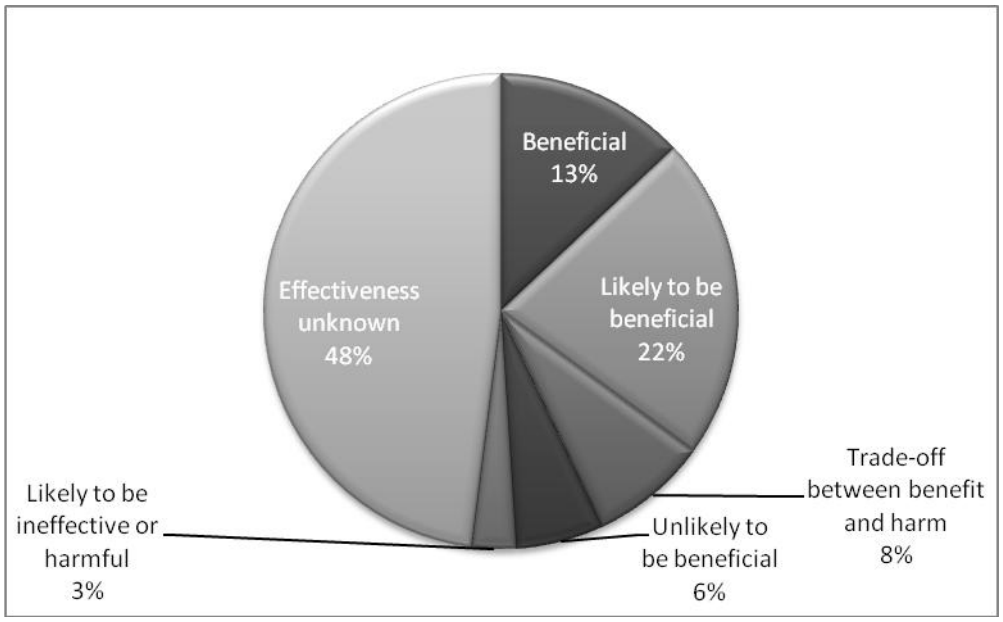
In interviews for this study, GPs also spoke of subtle changes in the way they present evidence to patients. There any many different ways in which this can be done – all of which can be justified – but the one chosen will tend to provoke a particular choice. For example, the efficacy of reducing lipids for the prevention of CHD over a five year period can be presented in terms of relative risk reduction (31 per cent), absolute risk reduction (98.8 per cent still alive *vis-à-vis* 98.3 per cent), number needed to treat to prevent a death (111 people) or the patient's personal probability of benefit (less than 1 per cent).[167] To get maximum points, the former is most likely to be used, but is it presenting the whole picture?

The real difficulty comes where the otherwise sound clinical evidence presented in the QOF does not fit easily with what the vast majority of doctors would see as good practice; or indeed with what the patient needs or wants. Given that the QOF is typically focused on defined endpoints in the chronic care of particular conditions, not the individual patient's (often complicated) health problems, this will happen. As the former chair of the RCGP, Roger Neighbour, analogises: 'it's like having two heads – one in charge, and another whispering instructions, advice and criticisms in your ear like a back-seat driver'.[168] This can be intrusive and unhelpful. The as yet evidence-based core to the framework constrains this, but if being a doctor injuncts one to place the needs of the patient before all else, the QOF can sit somewhat uncomfortably.

Free inquiry

The evidence base about 'what works' in medicine is surprisingly slim. In fact, over 45 per cent of the medical activity commonly carried out in health systems lacks an evidence-base, and only 13 per cent is *proven* to be beneficial. This is not to say much of it is not clinically effective, but that it needs to be explored. Even less prevalent is evidence of cost-effectiveness.[169]

Fig.9. The evidence-base of medical activity



Source: BMJ (2007)

A proper understanding of the implications of this, particularly in general practice which by its nature deals with uncertainty and complex co-morbidity, is vital insofar as the QOF is concerned. With 2,000 plus new research papers added to *Medline* each day, a farsighted editorial in the *BMJ* recently asserted that 'the skills needed to find potentially relevant studies quickly and reliably, to separate the wheat from the chaff, and to apply sound research findings to patient care have today become as essential as skills with a stethoscope'.[170] The thing about evidence of any sort – even where proven – is that there are likely to be limitations to it; trials may not be conducted properly, they may measure outcomes that are not useful, be conducted on patients with different characteristics and health status to the patient presenting in front of their GP, or make 'much of not much'.[171] As the philosopher Karl Popper warned: 'we can never establish the truth of any scientific theory, the most we can claim is that it has not so far been proved false'.[172]

This is not an argument against the use of evidence-based medicine. Unacceptable variations in standards of general practice have been far too prevalent;[173] the American physician Dr Jack Wennberg's assertion that the amount of hospital treatment depends more on 'the procedures physicians prefer than the health of the population' equally applies to the UK.[174] However, any pay-for-performance regime must be flexible enough to preserve free inquiry; keeping blood pressure low may generally be a laudable outcome, but the elderly patient who cannot function vertically if her blood pressure is below 170/95 is likely to disagree.

The QOF permits this, but only to an extent. Examples such as Dr Tim Reynolds's observation in the *BMJ* that many elderly patients have recently been referred to his lipid clinic 'because they do not meet the government targets set in the QOF despite high doses of statin and the consequent myalgia [and who] frequently after a discussion of the meaning of risk, opt not to be treated because the likely benefits are so small they do not outweigh the adverse side effects'[175] must be cause for concern. Equally, while the provision to exception report is there, it is too easily vilified; and while the framework is generally focused on conditions where large-scale clinical trials have produced the strongest evidence-base, payment is only weakly linked to likely health gain (see chapter 4). Sometimes the QOF also lags behind

the evidence-base; for example, new draft NICE guidance on chronic kidney disease asks GPs to measure and treat proteinuria where the QOF does not.[176]

This is significant. In encouraging more of a 'medicine-by-numbers' approach to primary care, there is a risk that in the long run the QOF could inadvertently cause a decline in general practice's ability to deconstruct symptoms, explore probabilities and give proper attention to psychosocial elements.[177] An analogy is provided by one GP from using sat nav to drive around the Coventry ring road; quite a useful tool until you get to 'a roundabout about the size of Basildon' and as busy as London on New Year's Eve. Carried along by the traffic and trying to adhere to the computer, our GP friend is unwittingly spat out on the M1 by accident.[178] Without it, she may well have had a broader idea of where she was coming from and going to.

Of course, this may be over-stated. A significant proportion of QOF-related work is, in fact, carried out by nurses (though they are far from immune to the described effects on professionalism and have sometimes been handed work they are unqualified to do) and the provision to exception report means there are no overt financial incentives to ignore clinical judgement. No-one has said the QOF should replace the vital ability of GPs to conduct free inquiry; in the analogy, no-one has stopped our GP from taking a wider view of where she was coming from and going to. Indeed, the QOF can be seen as merely prompting clinicians to consider the evidence-based measures it endorses, which may well offer up the opportunity of improved decision-making. The danger comes if the reward to following the prompts becomes an end in itself; no-one equally wants what Raymond Tallis has termed 'sessional functionaries robotically following guidelines'.[179]

Decreased internal motivation

In creating a pay-for-performance framework, the QOF reflects an internal belief that financial incentives are an effective means to lever improvement in quality of care. However, recent literature reviews suggest this relationship is not straightforward and varies according to the level and type of incentive being offered. From a *PubMed* search, US researchers found the majority of financial incentive schemes to have produced small improvements in care, but that at least some of this resulted from better documentation rather than better processes of care. They also uncovered a number of unintended negative effects, such as gaming and adverse selection.[180] An updated review by the Health Foundation's QQUIP team mirrored such findings, in discovering the 'effect of payer initiatives that reward providers for quality improvements or the attainment of quality benchmarks to be mixed' with 'relatively few significant impacts reported'.[181]

This reflects the fact that incentives – particularly those with financial weight attached – can produce perverse outcomes that may frustrate, as well as enhance, policy objectives. In any relationship there is a complex interplay between external motivation (incentives), internal (moral) motivation and the role of trust. Where external incentives conflict with internal motivation and damage trust, patient care can be compromised.[182]

As far back as the 1970s, the professor of social policy Richard Titmuss recognised that in cases where altruism is concerned, responses to financial incentives are complex. He documented this in the famous example of donor blood supply; when a cash payment for donor blood was introduced, this led to a decrease in the quantity and quality of blood given compared to when no payment was existed.[183] A further example specific to GPs can be found in the provision of out-of-hours care. Historically, the majority were happy to provide this as part of their professional obligation to patients. However, when the government allowed them to opt out of the responsibility in return for a reduction in income of £6,000, 90 per cent did so – and adverse consequences for patient care ensued.[184] This could be portrayed as GPs being far more aware of financial trade-offs than many would like to admit, but most

also felt the monetary valuation devalued their professionalism, time and status. External incentives are most likely to 'crowd out' intrinsic motivation if they impair self-determination, damage self-esteem, displace trust and create an impression that professionalism is no longer valued.[185] If they do, rule following becomes a means to an end other than that intended.[186]

The extent to which this has happened with the QOF is unclear. Where a practice is actively engaged in the framework and GPs are willing to chase up colleagues about achieving targets, they are more likely to regard it as benefiting patients.[187] Indeed, the trade-off with intrinsic motivation is likely to be minimised by the fact most GPs support the majority of the QOF's evidence base (if not its application); financial incentives are likely to be more effective if they are owned by their target audience and aligned to professional values.[188]

Nonetheless, we should be wary. The QOF, for any benefit it has had on quality of care, does seem to erode the principle of 'doing the right thing' because it is clinically or morally right, in favour of 'doing the right thing' because the financial incentive is there. Managing GPs in this way may in the long-run cause them to behave in unproductive ways, which will then be interpreted as representative of their inherent nature and act as a justification for further regulation.[189] It is not a good place for the medical profession to be if the public increasingly believes they will only do something if they are paid for it.

Beware of meddling

As we have seen, for all the uneasy relationship the QOF has with professionalism, any 'threat' it poses has been countered somewhat by the reasonable consensus among GPs over its evidence-base. What is worrying in this respect is the apparent intention of the government to use the framework more widely in the future, to tackle societal and other more political health issues. This is a deep fear among clinicians; as one GP put it, in signing up to the QOF there was a feeling that, whatever the original evidence-base, we had 'sold our soul to the devil to some degree, because [the government] can change the goal posts later'.[190]

With trust at an all-time low following the polyclinics saga, the government provoked further discontent by rejecting the BMA General Practice Committee's proposals to include new evidence-based clinical indicators in the 2008/09 QOF for peripheral arterial disease, osteoporosis, heart failure and a new points ratio for chronic kidney disease, in favour of recycling 58.5 points to incentivise access – a largely political measure.[191] It is now likely that, in the future, clinical and health improvement indicators in the QOF will be developed and reviewed at some distance from GPs by the National Institute for Health and Clinical Excellence (NICE),[192] with general practice also within the inspection remit of the new Care Quality Commission. Lord Darzi believes that 'QOF points were never done in the most transparent, evidence-based way'; which may be true, but is an ironic assertion given that it was a response to a question about why osteoporosis was not in the framework.[193]

In addition, the framework may well be used to 'provide better incentives for maintaining good health as well as good care... with new and enhanced indicators to promote health and greater clinical quality'. The Secretary of State for Health, Alan Johnson MP, has announced a particular focus on obesity.[194] This is controversial.[195] For one, obesity is often a result of *individual* lifestyle choices outside the control of GPs and not particularly susceptible to treatment, let alone evidence-based treatment. Secondly, people who are obese – along with the elderly – are much more likely to have complex and intertwined co-morbidities; something we have seen the QOF is not well equipped to deal with. Such moves create the risk of cutting the QOF adrift from professional values, with unknown and potentially worrying consequences. Structure, process, targets and regulation mean nothing unless reform genuinely engages with the feelings, thoughts and behaviours of staff.[196]

7. Conclusion

Dr James Willis once argued that: 'the great challenge facing contemporary medicine is for it to retain... or perhaps *regain* its humanity – without losing its essential foundation in science'.[197] In walking a tightrope between technical effectiveness and interpersonal effectiveness, public health and individual health, accountability and professionalism, the QOF cuts to the heart of all the most important debates surrounding general practice at present.

Across the board, the framework can be justified in a number of different ways, among the most important of which are to: improve quality and focus attention on the importance of chronic disease management; reduce the relevance of the Inverse Care Law (see chapter 2); and encourage a more pro-active approach to health care. Enhanced rates of improvement on key QOF quality indicators should not be frowned at, particularly given the historic picture of variable standards in general practice. Standards of technical effectiveness and clinical quality have got better post-QOF, inequalities on QOF indicators have fallen and, as an important by-product, the framework has made general practice more accountable and transparent. GPs and auditors knowing at the touch of a button what proportion of diabetic patients have their HbA_{1c} glucose levels controlled is a significant development on what went before.

Nonetheless, for all the improvement, data on certain key indicators, particularly relating to CHD, showed considerable strides had been taken before the QOF was introduced. This calls into question whether the framework was really necessary, and whether existing methods such as NSFs would have been sufficient. Payment against QOF indicators is not linked to likely health gain, which has distorted its effectiveness. The positive evidence of improved performance on individual QOF indicators must also be weighed against its impact elsewhere; after all, it is the *net* effect of the framework that we should be concerned with. Here, evidence is equivocal. Though often unquantifiable because they are concerned with more subjective elements of health care, the opportunity costs of the framework should not be discounted. The diversion of attention from interpersonal elements; the time now unavailable to address conditions not in the framework; and the incremental loss of professional identity all tend to tip the scales the other way.

On balance, it is likely that the marginal improvements in technical effectiveness, while commendable, have come at too high a cost in terms of the interpersonal, patient-centred and holistic strengths of general practice. Incomplete attention has been given to the context in which patients receive their care,[198] to consulting skills vital to the proper recognition of patients' problems and needs,[199] and to the outcome of care as patients perceive it and whether the experience of patients is a good one.[200] None of this is to say clinical quality improvement at the practice level is not important, but it is not the whole story. Poor quality may be the result of systemic factors outside any one GP's control[201] and success measured against the QOF does not always mean success for the patient. As one GP wryly put it: 'What's it actually like to be 90 and multi-medicated when for 89 years you ate nothing for breakfast but a pickled onion and a bottle of stout and felt perfectly well on it, without ever knowing your systolic BP was 106?'.[202]

Downscaling the QOF

With net benefit unclear, it is possible to ask whether the QOF should be scrapped entirely, in favour, for example, of leaving the responsibility for the uptake of evidence-based medicine to peer-led education and review.[203] However this both ignores past problems with variable standards, and the improvements the framework has engineered. Moreover, an element of pay-for-performance may not be a bad thing

per se. As the American academic Professor J.C. Robinson shrewdly observed: 'There are many mechanisms for paying doctors. Some are good and some are bad. The three worst are fee-for-service, capitation and salary'.[204] Crudely, too much salary allows the GP to just rely on income coming in; too much capitation creates the incentive to take on too many patients and do too little for them; and too much pay-for-performance gives rise to the phenomenon of the commission-hungry salesman, with the upcoding of incentivised indicators. Both economic (agency) theory and large parts of healthcare literature suggests that a blended approach offers meaningful improvement over pure capitation, pure salary or pure pay-for-performance.[205]

One alternative would be to keep the QOF – the pay-for-performance element of the contract – but adjust it in order to correct the imbalance of incentives between technical and interpersonal aspects of care. For example, a tool called HowRU™ has been developed that records the level of each patient's physical symptoms, feelings, limitations and dependency on four levels that could enable GPs to assess the effectiveness of their intervention as patients perceive it.[206] Another, CQI-2, engineered by academics in Scotland, combines empathy, patient enablement, continuity and consultation length to measure holistic, interpersonal care and appears to differentiate quite well between below-and above-average doctors.[207] Its architects suggest the tool could be used as part of the QOF to 'redistribute from low CQI scorers to high CQI scorers'.[208]

However, this is likely to open a new can of worms. As the authors themselves admit, 'interpersonal effectiveness is hard to define in a way that lends itself to measurement'.[209] However good the measure, it cannot capture the essence of human kindness.[210] The net effect of tying financial reward to humanity and interpersonal relations is unclear, but examples from other fields suggest it could well devalue trust and the intrinsic motivation to do one's best – undermining the very thing it is aimed at supporting.[211] Without proper adjustment for case-mix, any introduction of such a tool would be inequitable and morale-sapping because such measures risk both false-positive and false-negative signals of actual quality.[212] The incentive to game where possible, such as on consultation times, would be strong. Local population factors, such as ethnic fractionalisation, high deprivation, the proportion of young people and 'London' are all associated with lower ratings of satisfaction in primary care, independent of objective performance.[213] It is probably sensible to accept we cannot quantify everything. 'Healthcare', as the chair of the NHS Alliance Dr Mike Dixon said, 'cannot be measured in the same way you might measure the production of widgets'.[214] Such tools are useful, but are best used at the individual practice level as a screening mechanism to prompt enquiry, training and constant improvement.

Instead, a better course of action would be to retain the QOF and its focus on technical effectiveness, *but only in proportion to its opportunity cost*. By reducing its scope, and the proportion of income a given practice can derive from the framework, it may be possible to have the best of both worlds: the core benefits of the QOF with minimised inappropriate incentives, less of the 'second voice' in a consultation and create more space for general practice to focus on interpersonal elements. Studies have shown that smaller incentives both minimise the likelihood that extrinsic financial rewards will 'crowd out' intrinsic motivation[215] *and* reduce the gain from diverting attention to fulfilling indicators targeted at the expense of other aspects of care.[216] As such:

- **The proportion of income it is possible to derive from the QOF should be reduced**, so as to provide an incentive to GPs over and above the administrative and other costs, but not an imperative that risks creating unacceptable conflicts of interest in the professional encounter with the patient.

  The optimal level would require further analysis, but the seven per cent suggested by Professor Martin Marshall following the Health Foundation's comprehensive review of pay-for-

performance schemes would appear reasonable. The difference should be redistributed as capitation or salary, so that income does not fall overall.

- **As per the recent agreement reached between the BMA and NHS Employers on the 2009/10 QOF, payment should be linked to true prevalence** rather than adjusted prevalence in order to stop the framework penalising practices with high numbers of patients suffering from chronic conditions.

- **The number of indicators in the QOF should be cut and – while open to new evidence – confined to clinical indicators, such as ACE in heart failure or influenza immunisations in over 65s, which have been rigorously proven to deliver significant, cost-effective, health gain to many**.

- This will require an extended analysis of the likely (actual) health gain from indicators that could be incentivised for common disease areas, set against the opportunity costs of the framework that have been outlined. **The reallocation of 72 QOF points for the 2009/10 QOF to a range of new interventions does not support this principle.**

  Such an assessment might be carried out by the National Institute for Health and Clinical Excellence (NICE), as proposed in the Department of Health's consultation document, but *must* be overseen by the profession and take account of general practice's interpersonal nature.

- **Any assessment of general practice by Primary Care Trusts (PCTs) or the new Care Quality Commission should be based solely on whether a surgery is able to show it is working to understand and improve what they are doing for patients.**

The QOF has a purpose, but should not become an end in itself. We should not lose sight of the truism that regulation can only achieve so much; that effective change in general practice, particularly in interpersonal effectiveness, must be led by general practice itself *in response to patients*. The QOF should stand as a guarantor of basic, core, clinical standards, but no more. As Dr Ian Bogle, the former chairman of the BMA once said, 'if you remove the responsibility, you remove the job'.[217]

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