The King's Fund

Ideas that change health care

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Impact of Quality and Outcomes Framework on health inequalities

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Key points

- The Quality and Outcomes Framework (QOF) has incentivised general practices to have a more organised approach to chronic disease management, and provides a strong incentive to engage in secondary prevention. However, it has not given general practices incentives to undertake primary prevention and public health activities.
- GPs have not made full use of disease registers, which can give a more systematic profile of population need. Instead, QOF has entrenched a medicalised and mechanistic approach to managing chronic disease that does not support holistic care or promote self-care and self-management.
- Future revisions to the QOF and GP contract need to provide more incentives for primary prevention. They must promote a more patient-centred approach to chronic disease management, which recognises that patients may have multiple co-morbidities and includes incentives to promote more effective self-care and self-management.
- Differences in performance on QOF between the least and most deprived practices have gradually narrowed and all but disappeared in recent years. However, there is limited evidence of the direct impact of QOF on improving health or reducing health inequalities.
- QOF indicators and the weighting of points need to be aligned to the objective of reducing health inequalities. Other pay-for-performance frameworks may need to be developed to reward deprived practices for delivering care that meets the needs of vulnerable and hard-to-reach populations.
- QOF has provided an incentive for deprived practices that were not well organised and lacked resources to adopt a more systematised approach. However, overall, QOF rewards practices that are more organised, better able to attract and retain good staff, and able to focus on maximising their QOF scores.
- In future, pay-for-performance schemes should be linked to improvements in performance above an established baseline rather than achievement of absolute thresholds in order to ensure that inequalities in practice resources are not worsened. They should also reward population outcomes such as reduced emergency admissions.

- While our research did not find evidence of gaming (ie, making inappropriate exclusions in order to maximise points and income) in deprived practices or areas, the QOF does not provide incentives for practices to case find. For a number of conditions, deprived practices and areas are failing to identify all cases of disease within their practice populations.
- Thresholds within the QOF need to be set so that there are sufficient incentives for proactive case finding, particularly in deprived areas where prevalence is higher. Practices also need to reach out to individuals and find ways of providing services to those patients who are less likely to attend the practice.

Introduction

The General Medical Services (GMS) contract implemented from April 2004 introduced a pay-for-performance scheme known as the Quality and Outcomes Framework (QOF). Despite these incentives, the recent inquiry into the quality of general practice commissioned by The King's Fund highlighted the wide variations that persist in the quality of care provided by general practice in England (The King's Fund 2011). It called for a greater focus on quality improvement and the need for quality to be defined more broadly from the patient's perspective. It also called for general practice to take a wider responsibility for populations and to contribute to improvements in health, working with others to reduce inequalities. The report highlighted some of the shortcomings of the current contract but stopped short of detailing how the incentives for general practice need to change. The government's proposals to hand commissioning responsibilities to GPs and the desire to link part of practice income to the performance of the commissioning consortia through a 'quality premium' suggest substantial changes to the GMS contract from April 2013. The government has already announced the changes agreed as part of the 2011/12 GMS contract negotiations (Department of Health 2011).

This short paper summarises the findings of a recent research study conducted by The King's Fund, together with researchers at the London School of Hygiene & Tropical Medicine, which looked at the impact of the QOF on public health and health inequalities (Dixon *et al* 2011).

The previous Labour government made a commitment to reduce health inequalities and set national targets to reduce the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators (known as the Spearhead Group) and the population as a whole by at least 10 per cent by 2010. Primary care trusts (PCTs) in Spearhead areas were offered extra finances, although not all of the additional funding was allocated to reducing health inequalities. As the deadline approached, the government put significant pressure on the NHS, and in particular Spearhead PCTs, to deliver on the national targets to reduce health inequalities. Despite significant improvements in the life expectancy of the most socially and economically deprived population groups, the gap between the poorest and the richest has actually widened and the national targets were not met. There was a clear belief (and some evidence) that primary care and, in particular, secondary prevention activities in general practice could make a significant contribution to the achievement of these targets. While the QOF was not explicitly developed to address wider public health goals or health inequalities, there has been interest in its potential to achieve these goals. Our research aimed to examine whether the GMS contract and, in particular, the QOF was contributing to improvements in public health and reductions in health inequalities. The focus of our research was on health inequalities as determined by income deprivation.

Key features of the QOF

Under the QOF, GPs are financially rewarded for meeting a range of quality targets in four main areas:

- improving the management of chronic diseases such as asthma and diabetes (clinical)
- improving how practices are organised (organisational)
- enabling patients to feed back their views of the surgery
- offering 'additional' services such as maternity and child health.

Practices are awarded 'points' for delivering against each indicator. Many of the measures are process measures, requiring that GPs keep a record of data such as smoking status, cholesterol, blood pressure and body mass index for patients in the relevant disease areas. However, there are also a number of treatment and outcome indicators, such as treatment of coronary heart disease with beta blockers, or achieving low levels of cholesterol or blood pressure. We include both treatment and outcome indicators in our definition of clinical indicators.

For each indicator, there is a lower threshold that has to be reached in order to get any points; more points are available for meeting higher levels, up to a maximum threshold. The average practice, containing four GPs, stood to gain around £130,000 per year in 2005/6 if it achieved all indicators to the maximum extent. Payments account for around one-third of average practice earnings (National Audit Office 2008).

Until changes introduced in 2009/10, payment per point scored on the clinical indicators within QOF was not linear but calculated using the square root of prevalence. This meant that practices with higher disease prevalence, particularly smaller practices, received a lower level of remuneration per patient than practices with low prevalence. As well as penalising practices in deprived areas, which are more likely to be small and have high disease prevalence, this system was also seen to reduce the incentives to case find (Whitehead *et al* 2010).

Practices can exempt patients from inclusion in the QOF – so-called 'exception reporting' – for a range of documented reasons, including clinical grounds such as medication tolerance but also non-attendance by the patient despite being invited on at least three occasions in the past year. The scheme is monitored by PCTs who seek to identify inappropriate exclusions, and penalties are in place for gaming. Data are not available on the reasons for exception reporting.

What does the evidence tell us?

From our review of the literature, we established that:

- GPs have an important public health role and contribute to improving population health
- pay-for-performance schemes are effective in changing doctors' behaviour, but may lead to some gaming
- pay-for-performance schemes can result in a focus on areas of activities within the scheme, sometimes at the expense of other activities.

Research demonstrates that there are small and declining absolute differences in performance on QOF, and that the performance gap between the least and most deprived practices is gradually narrowing (Doran *et al* 2006; Ashworth *et al* 2007; Doran *et al* 2008a; Ashworth *et al* 2008). There is limited evidence of the direct impact of the QOF on improving public health or reducing health inequalities.

Specifically, the evidence as to whether the QOF is influencing improvements in clinical care is equivocal. Time series analysis of selected clinical indicators suggests that improvements may have predated the introduction of the QOF in April 2004 (Information Centre 2007). Analysis of the first two years of the QOF suggested an increase in pre-target improvements in the quality of care for asthma and diabetes, but not for heart disease (Campbell *et al* 2007). However, more recent analysis suggests that improvements have slowed (Campbell *et al* 2009).

Studies that have linked QOF data with hospital admission figures suggest that, while higher clinical QOF scores are generally associated with lower hospital admission rates, the strength and significance of association varied geographically and by clinical condition assessed. Deprivation was shown to be more strongly correlated with admission rates than the QOF (Bottle *et al* 2008; Downing *et al* 2007).

Key questions

The specific aims of this study were:

- to assess practice performance on key public health and health gain indicators in England
- to explore differences in practice performance on key public health and health gain indicators by characteristics of practices and their populations
- to examine whether improvements in practice performance on the QOF are associated with other measures of health gain as measured through hospital admissions
- to explore how GPs and other practice staff in deprived areas respond to the incentives within the QOF, and how they see their role in delivering public health and reducing health inequalities
- to explore the influence of the PCT on the public health activities of practices in deprived areas
- to identify the potential for the QOF to support the delivery of national health inequalities targets as measured by the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators (the 'Spearhead areas') and the population as a whole.

What we did

The study combines quantitative analysis of routine data at national level with in-depth qualitative interviews at practice and PCT level in four case study areas in England. We used routine data to assess the extent to which the QOF encouraged activities that, according to the evidence, contribute to improved population health, and whether this was more evident in practices serving deprived populations. We conducted interviews with staff from PCTs and practices to understand in more detail how different practices serving deprived populations had responded to the QOF and the impact they felt the QOF had had on their activities locally – in particular, those that contributed to improved health and reduced inequalities.

Further detail of the methodology and data sets employed can be found in the main report (Dixon *et al* 2011).

What did we find?

This section summarises what we found in our research.

Incentives for prevention and public health activities

While the QOF has incentivised practices to have a more organised approach to chronic disease management, and provides a strong incentive to engage in secondary prevention, it has provided only limited incentives for primary prevention or public health activities. Where practices were engaged with reducing health inequalities and improving public health, other factors – such as GP leadership, values and political commitment, and a concomitant sense of responsibility for the health of their patients and practice population – seemed important. If preventive activities were in place at all, they usually pre-dated the QOF.

The PCT staff we interviewed often regarded general practice as a barrier to the delivery of public health objectives. They pointed to the limitations of the GMS contract, practitioner intransigence, and the pressure on resources arising because of the needs of deprived populations. In particular, they felt that the contract entrenches a model whereby general practice is financially motivated and focused on activity rather than on population health.

Where GPs were prioritising activities incentivised by the QOF, they felt this was a legitimate response to the incentives they faced. Even if GPs are predisposed to preventive approaches, the QOF appears to entrench a medicalised approach. Practice staff we spoke to expressed concern about the 'tick box' approach promoted by the QOF and the impact this has had on consultations. The QOF has, to some extent, promoted a mechanistic approach to managing chronic disease. This is surprising given that one of the key benefits in its early stages was the creation of disease registers, which have the potential to enable GPs to have a more systematic profile of their practice population's needs and to develop appropriate responses.

Furthermore, there appeared to be a genuine tension between achievement on the QOF and a desire, on the part of some GPs, to provide care that is more appropriate to the complex needs of the population they serve and their interest in the social determinants of health. While the biomedical focus of the QOF might be appropriate for some patients, some GPs we interviewed raised concerns that some patients feel threatened by closer monitoring and may need a more holistic and sensitive consultation style than that promoted by the QOF.

The QOF, as currently structured, has not given general practice incentives to undertake primary prevention and public health activities. It has promoted a medicalised and mechanistic approach to managing chronic disease, which does not support holistic, patient-centred care, or promote self-care and self-management.

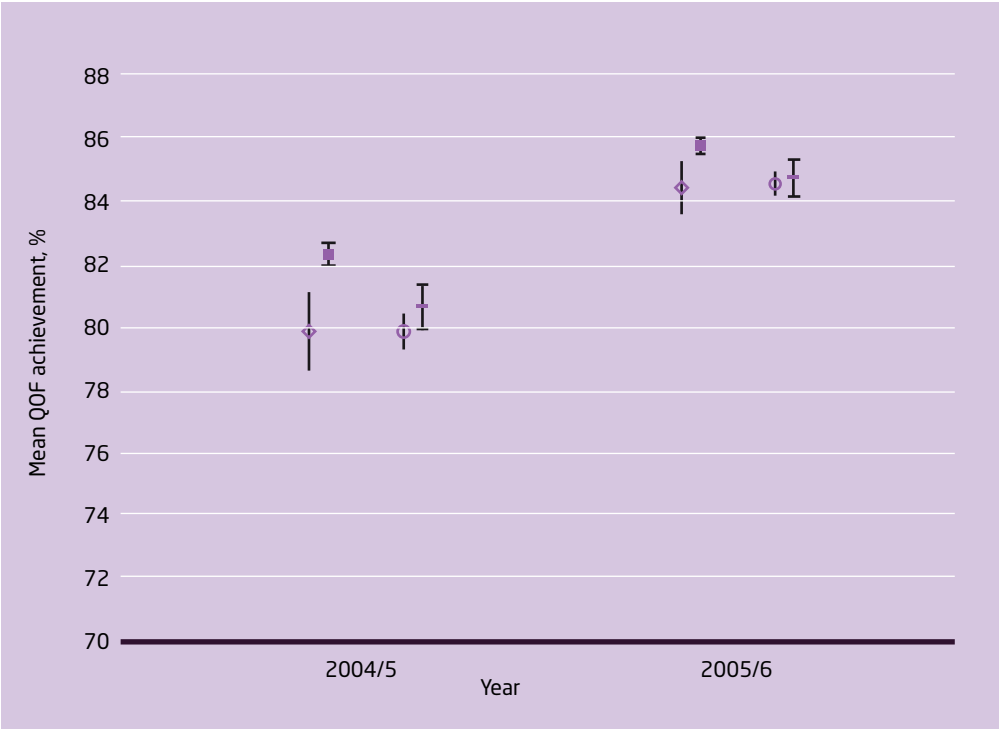
Differences in performance by deprivation

Over the first three years (2004/5 to 2006/7), there was an upward trend in mean reported QOF achievement on similar clinical indicators across practices in England. The level of achievement then stabilised and remained unchanged from 2006/7 to 2007/8.

We found that practices in non-Spearhead areas slightly out-performed practices in Spearhead areas on the set of clinical indicators in the first two years of the QOF, but that practices in Spearhead areas improved more. Similarly, we found that the most deprived practices achieved less but improved more on QOF indicators than the least deprived practices. Consequently, the differences in average performance on clinical indicators

within the QOF narrowed between Spearhead and non-Spearhead areas and between the least and most deprived practices. These differences virtually disappeared by years 3 and 4. In 2006/7 and 2007/8, there were no significant differences in QOF achievement by deprivation or Spearhead status. However, this analysis masks large variations in performance at individual practice level and between clinical domains/indicators.

Figure 1 Mean reported QOF achievement by Spearhead status and income quintile



Note: the scale on the y-axis starts at 70 per cent

Analysis of deprivation *within* and *between* Spearhead and non-Spearhead PCTs means we have identified more specifically the way in which deprivation and area-based inequalities interact. Observed differences in mean reported QOF achievement between Spearhead and non-Spearhead PCTs appear to be mainly driven by differences in performance between the least deprived practices. The least deprived practices in Spearhead PCTs performed significantly worse than similar practices in non-Spearhead PCTs (*see* Figure 1 above). We observed no difference in performance among the most deprived practices between those in Spearhead and non-Spearhead areas. Given that close to a third of practices in non-Spearhead areas are deprived practices, it points to limitations of area-based initiatives to tackle health inequalities.

Overall, although practices that serve deprived populations and those in Spearhead areas performed less well on average than practices serving less deprived populations in the first year of QOF, the differences in performance narrowed over the first four years.

Differences in performance on QOF between the least and most deprived practices have gradually narrowed and all but disappeared, but there is little evidence that the QOF has reduced health inequalities.

Impact on population health

Despite these improvements in performance on QOF, if general practice is to have an impact on population health, there needs to be a demonstrable link between QOF performance and other measures of population outcomes. Given the QOF's focus on chronic illnesses, we looked at the relationship between practice performance in specific clinical domains (again, using only clinically relevant indicators) and the (standardised) rates of ambulatory care sensitive (ACS) hospital admissions.

In line with previous studies, we found that, while higher levels of achievement on clinical indicators are associated with lower hospital admission rates, the strength and significance of association varied by clinical condition (Bottle *et al* 2008; Downing *et al* 2007). This is perhaps not surprising given the lack of variation within QOF achievement and the small number of admissions per practice within any given year.

We found a significant inverse relationship for coronary heart disease (CHD), hypertension, congestive heart failure (CHF), diabetes and chronic obstructive pulmonary disease (COPD). We found no relationship for asthma and stroke. The lack of relationship for these conditions can be explained by the selection of indicators for inclusion in the QOF. Indicators relating to stroke care focus on better management following an admission, and are therefore not likely to prevent admission. However, another recent study has found that improvements in QOF performance on stroke are associated with fewer deaths and lower hospital costs, and suggests that stroke quality metrics capture preventive care that has a measurable impact on outcomes (Martin *et al* 2010). For asthma, where management in primary care is likely to prevent acute emergency admissions, it might have been surprising that no relationship was found. However, in the early years of the QOF, asthma indicators related to smoking cessation and flu immunisation; there were no direct, clinically relevant indicators for asthma management.

We looked at how these relationships varied by area and practice deprivation by pooling data across practices by deprivation and Spearhead status. However, in multiple regression models, we found that deprivation and Spearhead status are more strongly associated with ACS admissions than QOF achievement. The significant socio-economic gradient in ACS admissions for all conditions we examined suggests that the QOF has not provided sufficient incentives for deprived practices to identify and successfully manage these patients to prevent admission.

The weak relationship between higher QOF performance and lower ACS admissions suggests that the QOF is having a limited impact on population outcomes.

Practice characteristics

We also wanted to understand whether practices in more deprived areas or serving more deprived populations faced any barriers to monitoring and reporting activities in order to achieve high levels of performance on the QOF. Unfortunately, we were limited in our quantitative analysis to those practice variables that are routinely available: GP caseload, number of GPs per practice, contract status, and proportion of GPs who received their GP education in the UK. We were not able to access routine data on factors such as facilities, information technology (IT) or the range and skill-mix of practice staff. Our qualitative interviews suggest that other factors such as strong leadership, professional drive, and effective teamworking are important determinants of high-quality general practice.

In the multivariate analysis, we found that the following variables were significantly associated with higher QOF achievement: having a higher proportion of GPs who underwent their GP education in the UK, not being a Personal Medical Services (PMS)

practice, and having a smaller caseload of patients per GP. After adjusting for practice characteristics, Spearhead status was not strongly associated with achievement or improvement, and deprivation was significantly associated only with achievement but not with change over time. When considered together, these factors were able to predict only a small proportion of the variation in practice performance; however, when we included the previous year's performance on the QOF, the predictive power of the model increased significantly. This suggests that other unobserved factors relating to practice or population characteristics explain most of the variation in achievement.

From our interviews with practice staff, it was clear that practices that had invested in staff and premises achieved higher QOF scores; however, not all practices whose staff expressed concerns about capacity had achieved poor QOF scores. Some practices overcame organisational shortcomings to achieve good QOF scores, without being reliant on high levels of exception reporting. Others found their circumstances more challenging – poor performance was, in part, seen to be a consequence of inadequate premises and an inability to retain good-quality staff, given the highly deprived and demanding nature of the practice population.

Looking across the qualitative and quantitative findings, it is possible to observe a relationship between well-resourced practices and high QOF achievement; in some cases, these systems and processes were in place before the QOF was introduced. In particular, there was evidence that practices that had employed QOF managers performed better, whereas poor performers tended to be disorganised, have high staff turnover, and lack effective leadership. We found that in deprived practices that were not well organised and lacked resources, the QOF has provided an incentive to adopt a more systematised approach. However, practices serving deprived populations have had to balance the desire to perform well on the QOF with other pressures such as lack of facilities and staff, uneven practice leadership, and more transitory populations with complex needs.

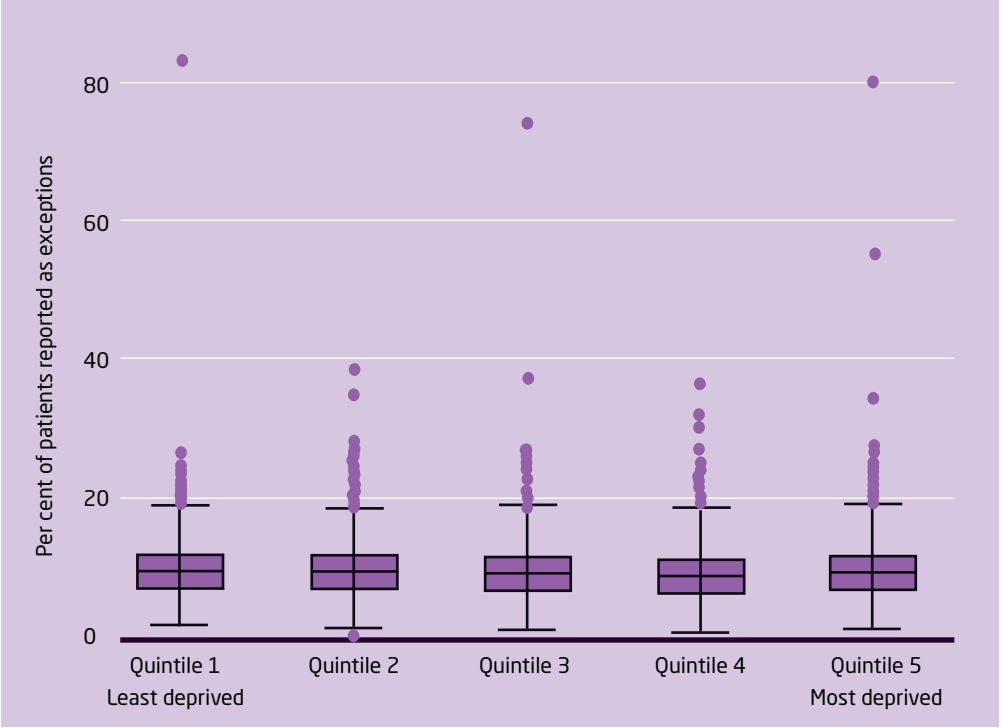
The QOF appears to reward practices that have more resources and are therefore more organised, better able to attract and retain good staff, and able to focus on maximising their QOF scores.

Exception reporting

Exception reporting (allowing certain patients to be excluded from the performance figures) has been justified as part of pay-for-performance schemes when goals are set at or near 100 per cent of patients in order to safeguard against inappropriate treatment, to mitigate the risk that practices shun 'difficult patients', and to acknowledge doctors' professional judgement in clinical matters. However, there is also a danger that exception reporting can be used to game the scheme, and may result in difficult patients simply being excluded. If gaming through the use of exception reporting was higher in more deprived areas and practices, this would have a negative impact on reducing health inequalities.

The range of variation in the levels of exception reporting on the clinical indicators we examined has narrowed steadily over the three years for which data are available. However, the mean rate increased in the second year and, although it decreased again in 2007/8, it remained above the levels in the first year of the QOF.

Figure 2 Exception reporting across practices in England (2005/6) by income quintile



However, the average level of exception reporting disguises variation at individual practice level, between conditions and between individual indicators. Other studies have found that exception reporting is higher for more complex conditions, is lowest for offering treatment, and highest for providing treatment; and while exceptions are low for reviewing people with chronic disease, they are higher for achieving outcomes (Doran *et al* 2008b).

While other studies have found mixed evidence of gaming (Gravelle *et al* 2008; Doran *et al* 2008b), our findings suggest that the majority of practices are not using exception reporting as a means of achieving high performance on the QOF. We also found no significant association between exception reporting and deprivation (Index of Multiple Deprivation (IMD) 2004 income quintile) (*see* Figure 2 above) or between exception reporting and Spearhead status of PCTs. Our findings suggest that the use of exception reporting is not, on average, more of a problem in deprived practices or areas.

Looking at our case studies, it was difficult to see a systematic explanation for why certain practices had levels of exception reporting that were either much higher or lower than the local or national average. No one we spoke to admitted using exception reporting to game the QOF or exclude difficult patients. Most saw exception reporting as an important 'protection' against non-attending patients. Factors that appeared to be important included the ethos and attitude of the practice, how well the practice was organised, the competence of the manager responsible for the QOF, and the nature of the practice population (eg, university students).

The ability to exception report, together with the fact that thresholds are set below 100 per cent, mean that practices can achieve points (and the associated financial reward)

while still failing to manage a minority of patients effectively. It is therefore possible that patients who were already well controlled benefited from more systematic monitoring, whereas harder-to-reach patients were either not identified or were exception reported for having not attended. The lack of data on reasons for exception reporting means we were not able to explore this further.

Our findings suggest that the use of exception reporting is not, on average, more of a problem in deprived practices or areas. However, some practices have levels of exception reporting that are much higher than average.

Case finding

While the QOF did not explicitly aim to reduce health inequalities, one could assume that given levels of unmet need in areas of deprivation, improved case finding would contribute to reduced health inequalities. We sought to examine this issue by examining the gap between reported and estimated prevalence and whether it varied by area and practice deprivation. We also examined whether differential performance in the QOF could, in part, be explained by different levels of unmet need (as measured by the gap between reported and estimated prevalence).

There was a wide variation among practices in the size of the gap between reported and estimated prevalence. At least some of this variation may be due to the accuracy of the estimation methodology employed by the Association of Public Health Observatories (APHO). However, differences were greatest for hypertension and smallest for stroke. Given that hypertension is asymptomatic and patients may self-treat, this is not surprising. As previously noted, management of stroke in primary care usually follows an acute episode; there is, therefore, unlikely to be a problem of unrecorded disease. Identification of patients at risk of stroke is likely to be more variable. The gap between estimated and reported prevalence increased with deprivation and was greater in practices in Spearhead areas for CHD, COPD and stroke. However, the relationship was reversed for hypertension. This suggests that for a number of conditions, despite incentives within the QOF to keep a register of these patients, deprived practices and areas are failing to identify all cases of disease within their practice populations.

We observed weak negative associations between difference in QOF-recorded and APHO model-estimated prevalence of selected clinical conditions and QOF achievement in multiple regression models. In other words, practices that performed better on QOF also had more complete recording of disease prevalence after adjusting for other factors. This suggests that practices are not gaming by failing to register patients. A more likely explanation is that well-organised practices that are able to achieve better QOF scores may also be more systematic in their approach to case finding.

The combination of thresholds and exception reporting means there is a risk that practices focus on managing those patients who were already known to them, who attend when invited to do so, do not have complex social or medical needs, and are already managing their condition effectively. Our qualitative research found that most practices have a passive and opportunistic approach to case finding. Even though practices had responded to the incentives by systematising their approach to the management of chronic disease, there was little evidence that these practices had uncovered more undiagnosed disease as a result of the QOF. This is not surprising given that practices in deprived areas faced a disincentive to actively case find: they received less remuneration per patient than practices in affluent areas with lower prevalence. Since 2009, QOF payments are fully adjusted to reflect relative disease prevalence (Department of Health 2009).

For a number of conditions, deprived practices and areas are failing to identify all cases of disease within their practice populations. Incentives employed when the QOF was

first introduced and the information systems used to manage the QOF do not support a proactive approach to case finding in deprived areas.

Implications of our research findings

Future revisions to the QOF and GP contract need to provide more incentives for primary prevention.

Unfortunately, many of the approaches to tackling major public health issues lack the evidence required by the National Institute for Health and Clinical Excellence (NICE) to be included in the QOF. There is limited evidence for the efficacy of primary prevention activities in general, and specifically for those delivered by GPs. Prevention-related indicators may take months or years to be apparent. Future revisions to the contract may, therefore, need to provide GPs with incentives to refer patients for the appropriate support (eg, weight-loss programmes) and to improve outcomes (eg, reducing alcohol consumption). The latest set of QOF indicators currently being consulted on by NICE includes the requirement to record whether a brief intervention to promote physical activity has been made, such as weight management advice or inclusion in a weight management programme (National Institute for Health and Clinical Excellence 2011).

Future revisions to the QOF and the GP contract need to ensure that they promote a more patient-centred approach to chronic disease management, which recognises that patients may have multiple co-morbidities and includes incentives to promote more effective self-care and self-management.

The approach to chronic disease management promoted by the QOF is professionally led and disease-focused rather than patient-centred. It does not promote self-care and self-management, despite strong evidence that these result in better outcomes for patients. The QOF requires annual measurement and recording of patient-level outcomes – for example, blood sugar levels or blood pressure. This approach runs counter to the evidence that ongoing patient monitoring (through remote devices, for example) is effective in the management of patients with chronic illness. Finally, the division of the QOF into domains promotes an approach that focuses on the disease rather than the patient, and is unlikely to promote a holistic approach for the growing number of patients with multiple co-morbidities.

QOF indicators and the weighting of points need to be aligned to the objective of reducing health inequalities.

The latest set of QOF indicators currently being consulted on by NICE includes statins prescribing for people with newly diagnosed hypertension with a 10-year risk of developing cardiovascular disease of 20 per cent or more. Increased prescribing of statins and hypertensives was identified by the National Support Team as a way to meet the targets for reducing health inequalities.

Other pay-for-performance frameworks may need to be developed to reward deprived practices for delivering care that meets the needs of challenging populations.

We found that the QOF is not relevant to some practices that serve particularly challenging populations such as refugees, homeless, or drug- and alcohol-dependent patients. Some practices made a case for a different method of supporting public health activity that is not target-driven, but that provides funds to support practices to provide adequate services for patients and to engage in activities beyond the QOF that would benefit their populations. Local authorities will, in future, receive funding allocations for health improvement, and the responsibility for contracting for primary medical services will rest with the NHS Commissioning Board. It is vital that there is sufficient funding

and incentives for practices serving deprived populations to invest in appropriate services for their more vulnerable and needy patients.

The resource allocation and pay-for-performance framework for primary care needs to reward population outcomes such as reduced ACS admissions.

The new GMS contract for 2011/12, as part of the productivity indicators, includes payments for reducing emergency admissions. Practices will need to use data and risk prediction, together with more proactive approaches to admission avoidance, to ensure that unnecessary admissions are prevented.

Primary care needs to radically re-orientate from a focus on the patient in the surgery to a focus on population health and the needs of all registered and unregistered patients. The development of federations of practices and the introduction of GP commissioning provide opportunities to make such a shift, though there is also a danger that the configuration of consortia may result in a lack of clarity about area-based population responsibilities. Local authorities, and health and wellbeing boards specifically, will have an important role to play in ensuring that the needs of all local people are being met.

In future, pay-for-performance schemes should be linked to improvements in performance above an established baseline rather than achievement of absolute thresholds in order to ensure that inequalities in practice resources are not worsened.

It is difficult to be certain whether high performance in the QOF represents a real difference in clinical activity or simply reflects differences in the organisational capacity of practices and their ability to monitor and report activities. If practice factors mainly explain performance, it would suggest the need to provide support to poor-performing practices to invest in staff, systems and processes to improve practice management. High-performing (and well-resourced) practices with little room for improvement were better rewarded financially by QOF than poor-performing practices where the need for improvement (and investment) was greater. Consequently, through the QOF, the NHS has paid a princely sum for activity that was already taking place.

There may need to be a review of practices' ability to exempt patients who have been sent at least three invitations in the preceding 12 months but did not attend. Practices need to reach out to individuals and find ways of providing services to those patients who are less likely to attend the practice or respond to written invitations to attend.

The National Support Team has been encouraging PCTs to use QOF data to identify poor performers. However, it is not clear what the consequences are for having a high (unjustified) level of exception reporting. Commissioners should be given clear responsibility for ensuring equity of access to high-quality primary care and reducing health inequalities. Commissioners working with general practices should make full use of data to manage poor-performing practices, and practices should be clear about the consequences of being unable to justify high levels of exception reporting.

Thresholds within the QOF need to be set so that there are sufficient incentives for proactive case finding, particularly in deprived areas where prevalence is higher.

There is a wealth of data available, both from the QOF and from other routine sources. More thought needs to be given as to how these data will be used in future to drive improvements. As part of the support that commissioners will need, there may be an important ongoing role for public health observatories to ensure that practices and consortia have information about the health needs of their populations that is based not only on clinical activity data but also on epidemiological data.

Analytical tools are now available that allow practices to identify patients with or at risk of disease who are not on their disease registers. It would, therefore, be possible to move the focus of pay for performance from managing the majority of easy patients (the current

position) to effectively managing the few high-risk, high-cost patients in each practice population. Given that there are likely to be more of these patients in deprived practices, the rewards for improving outcomes for these individuals would be higher.

Conclusion

General practice has an important contribution to make to improving public health and reducing health inequalities. The GP contract, and the QOF specifically, have provided strong financial incentives for general practices, but these have not necessarily resulted in changes in clinical activity, improved health outcomes, or reduced health inequalities. Changes to the GP contract and the role of GPs as commissioners may provide an opportunity to ensure that the needs of their local populations are met, and that deprived practices are sufficiently and appropriately rewarded in order to reduce health inequalities. There is also a risk that the changes proposed by the government will put the focus (and funding) for public health in the hands of local authorities, thereby reducing the role of the NHS and general practice in public health.

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