Discussion paper

The impact of the Quality and Outcomes Framework on practice organisation and service delivery: summary of evidence from two qualitative studies

Kath Checkland MBBS BMedSci MRCGP MA(Econ) PhD Walport Clinical Lecturer in Primary Care

Stephen Harrison PhD AcSS Professor of Social Policy

National Primary Care Research and Development Centre, University of Manchester, Manchester, UK

ABSTRACT

Background In 2003, the new General Medical Services Contract introduced a pay-for-performance programme know as the Quality and Outcomes Framework (QOF) into UK general practice, with payment for meeting a number of both clinical and organisational quality standards.

Aim To investigate in detail the impact of the QOF on practice organisation and service delivery.

Methods Two linked qualitative case studies in England and Scotland, using interviews and observation to investigate in depth the impact of the QOF in four general medical practices.

Results and conclusion A number of significant changes to practice organisation and service delivery

were observed, including: changes to practice organisational structures; an increased role for information technology; a move towards a more biomedical form of medical care; and changes to roles and relationships, including the introduction of internal peer-review and surveillance. In spite of this, the practices maintained a narrative of 'no change', arguing that they had 'fitted QOF in' to their routines with little trouble.

Keywords: biomedical model; general practice; organisation; pay-for-performance; quality and outcomes framework.

How this fits in with quality in primary care

What do we know?

The Quality and Outcomes Framework, which focused pay-for-performance on achieving clinical and organisation quality standards, was anticipated as leading to greater activity for practices with rewards partly linked to this increase in workload.

What does this paper add?

This paper summarises changes resulting from introduction of the QOF on practice organisation, leading to an increased role for information technology, a greater emphasis on biomedical rather than patient-centred aspects of care and changes in internal roles and relationships. This contrasted with practices arguing that these developments had been incorporated with few changes in practice.

Introduction

Previous papers in this special issue have described the development and implementation of the QOF in UK general practice. Meeting the evolving quality standards that this embodies is not only an exercise in patient care by individuals (prescribing the right drugs, responding appropriately to test results outside the required range), but also requires collective activity within practices. Call and recall systems, accurate computerised records, clear allocation of responsibilities and frequent audits of achievement are all required to maximise performance against the targets, and success has been generally well rewarded at the practice level, with practice incomes increasing significantly, at least initially.1 Studies of achievement of OOF targets, and before/after comparisons of care can tell us something about the outcomes of this collective activity,² but they tell us little about the impact on practices as a whole or on the overall nature of the care that practices provide. This paper summarises the results of two linked qualitative studies of the impact of QOF on four general medical practices across the UK (in England and Scotland). Following a brief summary of the research, the main findings of the studies are presented under four headings, each accompanied by a brief analytical commentary. The concluding section discusses the perhaps surprising finding that practice staff largely saw the major

	Medium practice	Big practice	Family practice	Modern practice
List size	7900	12 000	4870	8000, increasing to 9000 during the study
Setting	English suburban, high numbers of families	English inner city, deprived population	Scottish middle- sized university town, high proportion of students and the elderly	Scottish medium- sized town, deprived population
Doctors	4 partners	7 partners, 2 salaried GPs	3 partners	6 partners, 2 salaried GPs
Nurses	3 nurse practitioners, 1 practice nurse, 1 healthcare assistant	2 nurse practitioners, 3 'chronic disease' nurses, 2 healthcare assistants	3 practice nurses, 1 healthcare assistant	3 practice nurses, 2 healthcare assistants
Self-identification	Public-health focus	Large, but holistic	Traditional 'family doctors'	Modern and business-like

Table 1 Practice characteristics

changes resulting from QOF as relatively insignificant in terms of the nature of general medical practice.

The research

The evidence presented here summarises the results of two linked ethnographic case studies of the new contract, studying two practices in England and two in Scotland. The methods are described in more detail elsewhere.³ In both studies, data collection included observation and interviews and took place over approximately five months in 2006. This period covered the introduction of the new QOF indicators for depression and kidney disease. A qualitative approach was adopted because we were interested in the fine detail of practice responses to QOF. Murphy et al⁴ suggest that qualitative methods are particularly useful 'for studying socially meaningful behaviour, holistically, in context and with due attention to the dynamic processual aspects of social events and interactions'. Furthermore, by observing practice activity, both formally in meetings and informally in reception areas etc, we were able to go beyond participants' accounts of what they did and observe directly the processes and interactions that determine overall practice response to change. The characteristics of the four practices are listed in Table 1.

The results of studies such as the two described here cannot be said to be 'representative' in the statistical sense, and are inevitably small in scale because of the time required to collect and analyse detailed observational data. However, it was striking how similar were the trajectories of change that we observed in a set of practices that had little in common either in the way that they were organised or in the ways in which they identified themselves. This suggests that, whilst caution must be employed, our findings are unlikely to apply only to a narrow subset of practices. A number of papers have been published reporting different aspects of these results, some of which report results from both studies,^{3,5,6} while some are based solely upon the English practices.^{7–10} This paper summarises evidence from both sets of papers.

The impact on practice organisation

General practices in the UK have, over recent decades, become ever more complex organisations, with increasing numbers of both clinical and other staff employed,¹¹ and facing increasing managerial chal-lenges.^{12,13} Research has demonstrated that it is not enough simply to think about practices as collections of individual GPs: whilst the views and attitudes of individual doctors may be interesting, the response of practices to change is an interactive outcome within the organisation as a whole.¹⁴ All the practices that we studied had changed their modes of operation in response to the QOF. Whilst the details were different in each practice, in general this involved an increase in the number of administrative staff, including those with responsibility for information technology (IT). In addition, three of the four practices recruited additional healthcare assistants, in one case promoting existing administrative staff to these positions. This particular practice had not recruited any additional qualified nurses, but the other three had done so. In all cases this represented an overall increase in practice expenses which tended to offset the financial gains resulting from the new contract. All of the practices had set up either a formal or informal internal 'QOF team' who were responsible for administering the QOF process, ensuring systems were in place to collect the necessary data, checking audits to ensure targets were being met and setting up call and recall systems to send for patients. In some practices these responsibilities were diffused, with individual staff members responsible for different clinical areas (e.g. nurses with diabetes experience responsible for diabetic indicators), whereas in others a single staff member assumed overall responsibility for the whole range of

QOF work. Internal hierarchies developed with, for example, Medium practice promoting three receptionists to form the 'IT team', who not only had higher status than their reception colleagues, but who were also involved at a very early stage in decision making about how to address new QOF targets. Managers' roles gained in importance, as they assumed responsibility for delivering the 500 points devoted to 'managerial' domains and for overseeing the achievement in the clinical domains. Many of the practices had set up new clinics for patients with chronic diseases, and in all the study sites it was clear that, whilst attempts were made to minimise duplication, patients with more than one chronic disease were subject to multiple recalls to attend the practice.

The role of IT

Attainment of QOF targets is assessed by the automatic extraction of data from practice computer systems on a certain date each year; data collection in general practice has therefore assumed a greater importance than ever before. The official discourse surrounding the computerisation of medical records is unremittingly positive, claiming that benefits include: convenience and confidence (for patients); integration of care; improving outcomes; better use of evidence; better audit; improving efficiency.¹⁵ Much of the medical informatics literature views the electronic record as a neutral recording device, whose benefits or disbenefits depend solely upon the efficiency with which it does the job for which it is designed.^{16–19} However, there is a more critical sociological literature that points out that electronic records shape not only the way in which medical care is conceived of and delivered, but also the nature of the host organisation and the work within that organisation.^{20,21} Thus, for example, who is allowed to enter data into a record is both shaped by and will shape the organisational hierarchy. Similarly, a record that only allows the recording of 'yes/no' factual data that can be coded into categories will tend to crowd out and devalue softer, more nuanced contextual information.²² Not only will a structured record shape the way a job is performed from day to day, but it becomes part of the definition of the nature of that job in the longer term.²³ In all of our practices, data recording via templates had become the norm. These templates act both to define the nature of the work required by acting as 'prompts', and to discourage staff from recording uncoded information that is not important for the QOF process.⁷ As a result, a nuanced clinical encounter may be reduced to a series of 'yes/ no' answers on a template. Furthermore, we found

evidence that for new, less experienced staff, the existing templates were used as training devices: 'doing a cardiovascular check' became 'filling in the cardiovascular disease template'. The data collection templates therefore not only structured and shaped clinician-patient encounters in the here and now, but their use as training devices ensured that the current definition of the nature of the job would be perpetuated into the future. Finally, we found that the increased use of IT altered practice structures and roles in more subtle ways. In Medium practice, for example, 'writing the templates' and 'organising the recall systems' became important roles that altered existing power relationships (Box 1). In Big practice, having responsibility for checking the IT system to look for patients not meeting QOF targets gave the nurses (and doctors) concerned the legitimacy to 'chase' their colleagues by, for example, sending notes to request that certain checks were made when patients attended for routine consultations. In Medium practice there was a newly constituted 'IT team'. When new clinical indicators were issued in April 2006, rather than being discussed initially by the doctors in order to discuss their clinical merits/demerits, the first meetings were held between the partner with QOF responsibilities and the IT team. Only once this group had produced an implementation plan was there any discussion with the wider team. In this way new indicators were configured as a technical problem requiring an IT solution, rather than as a clinical problem requiring a clinical response by the doctors.

Box 1

So the one deal is that nobody messes with the due diary dates, recall systems or any clinical review system without prior discussion. They mustn't suspend or change a due diary date, or do anything if they don't understand what they are fiddling with. (Doctor 1, Medium)

In summary, therefore, our studies demonstrated that QOF and its associated IT requirements acted to configure a patient whose complaints were categorised into a series of clinical codes, a clinical encounter that followed a predetermined pattern and a practice structure that privileged those with IT access and roles.

Impact on the clinical encounter and on the nature of medical care

The development of general practice as an academic specialty was in part founded upon opposition to the

dominance of hospital medicine in the 1950s and 1960s. The latter was said to be characterised by what is now generally called the 'biomedical model',^{24,25} in which the human body is seen as a host for disease, and therapeutic interventions are directed at the disease rather than the individual. In contrast, the Royal College of General Practitioners 1972 publication, The Future General Practitioner²⁶ emphasises the role of GPs as being concerned with 'the patient's total experience of illness', and has been credited²⁷ with coining the term 'patient-centred practice'. Patientcentred care, or 'holism' as it is often known, has remained a central concern of GPs,²⁸ though definitions of what is meant by holistic or patient-centred care are not always clear, and may not have necessarily been reflected in clinical practice.²⁹ Against this background, GPs in the UK have, along with their hospital counterparts, been encouraged to engage with the notion of evidence-based medicine (EBM). The original proponents of this approach emphasised the integration of population evidence from randomised controlled trials with the unique personal preferences and health state of the individual³⁰ in a way that is entirely compatible with a patient-centred approach. However, Harrison³¹ has argued that in the UK NHS this 'critical appraisal' model has been overtaken by 'scientific-bureaucratic medicine' - that is the translation of research evidence into 'clinical guidelines' for the more or less routine application to classes of patients, defined according to their disease category. The documentation surrounding the QOF emphasises its underlying evidence base,^{32,33} and it can be argued that it represents a biomedical model of medical care, implemented by paying doctors to conform.

Thus the very nature of the QOF suggests a biomedical approach to medical practice, and in our studies we found that changes had been made that would result in patients receiving a more biomedical, less patient-centred form of care.³ For example, in two of our practices non-attendance for required QOF checks was not accepted as a legitimate expression of dissent; patients who failed to attend in response to a number of letters would be visited at home (Box 2). Moreover, participants acknowledged that their consultations had become more 'biomedical', with an additional QOF-related agenda running alongside the patient's own agenda. Thus, for example, reminder systems were set up so that when patients attended for unrelated problems, the doctors/nurses would be reminded to weigh them, take their blood pressures or check their urine. Whilst in many cases this would be unproblematic, our participants acknowledged that it could generate awkwardness, particularly if the data required was not related to the presenting problem in a particular consultation. Finally, it was clear that care within our practices had become more dependent upon pharmacological approaches to treatment, as the QOF requires blood pressures, for example, to be controlled within a certain period of time after diagnosis. Non-pharmacological measures may take time to work, and we found an increased tendency to treat early with tablets (Box 3). In spite of this evidence of a move towards a more biomedical approach, all of our participants claimed that they still were able to practice 'holistic' medicine. Careful analysis of these claims to holism suggested that they rested upon the somewhat slippery and variable definitions of 'holism' that exist. Thus, we found claims to holism variously based upon: a metaphorical 'protected space' within the consultation; an ideal of complexity that claimed that doctors continued to treat 'complex' patients whilst their nursing colleagues dealt with routine QOFrelated work; and the ability of doctors to maintain an 'overview' of patient care, even if they were not personally involved.

Box 2

So we have got, we have got the true housebounds, but if there are other people who are ill with conditions who've for whatever reason won't, or don't come in eventually a trained nurse and an auxiliary will go out and do it ... so there's no escape. (Doctor 1, Medium)

Box 3

Some patients will come to you and they'll plead with you, 'Please don't give me any tablets, I'll bring my blood pressure down, I'll do everything. I'll bring it down', and again they're not horrendously high, they're like say 140/90 or whatever ... but we're saying to them 'well, look we've checked it three times now and it remains raised, you're clinically classed as hypertensive, we follow these guidelines and this is what we should be doing with you'. (Nurse practitioner, Medium)

In summary, QOF embodies a notion of medical care that is essentially biomedical in approach. In our study practices this more biomedical approach had been adopted and has led to changes in the way that patients were treated within the practices. However, the doctors in our study seemed unaware of this change, using the slippery and ill-defined nature of 'holism' to continue to make rhetorical claims to providing a holistic and patient-centred model of care.

Changing roles and 'restratification'

Prior to 1990, as long as he or she was conscientious and avoided complaints, what an individual doctor did in his or her own consulting room had no impact on the income of the practice as a whole. Health promotion clinics and immunisation targets made some impact in the early 1990s, and the advent of local Medical Audit Advisory Groups³⁴ introduced a generation of GPs to the notion of auditing performance. Achievement of QOF maximum scores, however, requires the actions of individuals to be scrutinised, and the use of computer monitoring systems makes consulting room behaviour visible to all, thereby introducing collective responsibility into general practice on a scale not seen before.

143

In all of our study practices we found subtle but important changes in roles and in boundaries between roles. Clinical staff fell into two groups: those responsible for ensuring that QOF targets were met, and those who were not. In one of our practices these two groups identified themselves as 'chasers' and 'chased', and in all practices mechanisms had been set up for monitoring achievement against the targets. Thus, for example, in Big practice responsibility for QOF targets was devolved down to individual clinical staff, including both doctors and nurses. Those responsible for a particular target would 'chase' their colleagues by sending electronic notes and reminders (Box 4). Whilst initially the practice identified themselves as quite open and democratic in their management processes, by the end of the study period an internal management group had been set up, and 'naming and shaming' of those seen to be 'not pulling their weight' with regard to QOF targets took place. In Medium and Family practices one of the partners took responsibility for all the QOF targets, sending reminders to their colleagues. There was a perception by those without formal QOF responsibilities that they might be 'told off' if they failed to comply. In Modern practice, 'naming and shaming' took place at a practice meeting, but interestingly it was largely the nurses who were subject to this process; the manager reported that he would approach the doctors individually about their QOF performance rather than naming them in public.

Box 4

Every day I come in I check (performance) ... I'm a chaser ... if you're a chaser you have to chase yourself though. 'Cos you've no credibility if you don't deliver.' (GP partner ID 16, Big). Thus we found that new distinctions had grown up within practices between those who carried responsibility for QOF targets and those who did not; these groups can conveniently be labelled 'chasers' and 'chased'. Freidson³⁵ drew attention to what has subsequently been called 'restratification' between groups of physicians, arguing that a new 'knowledge elite' had grown up who were responsible for setting the agenda to be followed by what could be called 'rank and file' physicians. The changes that we observed suggest that the QOF has generated a new form of restratification within UK general practice, with some clinicians (both doctors and nurses) involved in surveillance of their colleagues. Freidson suggested that restratification such as this would threaten the solidarity of the professional group as a whole. In our study, by contrast, we found that whilst some GPs expressed reservations about being 'chased' and about the substantive content of some of the targets there was little real dissent. Indeed, our study of the QOF, in combination with a later study of practice-based commissioning,8 suggests that there may be new norms developing in UK general practice, in which peer review and surveillance are regarded as legitimate and indeed desirable.

Summary: narratives of 'no change'

The two studies discussed here demonstrated a number of changes that have occurred as a result of the QOF: practice structures, roles and processes have changed; increased use of IT has had an impact on the nature of consultations; the QOF itself has enacted a more biomedical approach to patient care; and the contract has legitimised internal peer review and surveillance. In spite of these quite significant changes, all four practices that we studied offered us a narrative of 'no change'. Each practice had a clear, dominant 'story' about itself that 'explained' the approach taken to general practice work and organisation, the values underpinning this approach and their expectations of future developments.⁶ The existence of such 'organisational stories', which act as repositories of organisational memory, determinants of organisational identity and as resources for both the socialisation of new organisational members and the presentation of the organisation to the outside world, is well recognised in the management literature.³⁶ These stories differed significantly between our study practices, ranging from the self-consciously 'small and traditional' Family practice, who described themselves as a 'dying breed', to the business-like Modern practice, who referred to 'customers' rather than patients. During the study these four very different practices were all observed

making changes that brought them closer together in structure, organisation and in the type of care that was offered. In spite of this they all maintained a rhetorical stance that there had been 'no real change' in response to the QOF (Box 5). We were told that 'we were doing it already' or that the additional work had easily been 'fitted in' alongside their usual work. The narratives which underpinned their identities remained intact, in spite of an increasing discrepancy between the stories told and the reality on the ground. Our practices seemed to be aware neither of this discrepancy, nor of the magnitude or potential impact of the changes that were occurring. It would seem from these two studies that the QOF has been construed by UK general practices as a technical problem, which has been efficiently solved.

Box 5

All I think QOF did was make it a bit more organised and that. I don't think it was anything new. (GP4, Modern)

This finding has a number of implications. Firstly, from the point of view of the practices in our study, the observed disconnection between their internal identity narratives and the evolving reality on the ground suggests a potential for organisational dysfunction should external circumstances become more challenging. Effectively coping with continual change (as anyone working in the UK NHS must be prepared to do) requires some degree of organisational self-awareness if appropriate responses are to be made, and failing to notice and explicitly consider potentially significant changes opens general practices to a degree of risk. Secondly, this work suggests that, in spite of the continued strong rhetorical support for the notion of holistic care,²⁸ the nature of the care provided in UK general practice is subtly changing, with a move towards a more biomedical, less personalised or holistic approach. This may or may not matter, but discussion of this question is unlikely to occur unless there is acknowledgement that it is occurring. One approach to exploring this would be to consider the patient's perspective on QOF, something that we were unable to do. The framework does contain measures of patient satisfaction, but the surveys used are a rather blunt instrument with which to tease out the subtleties of patient perspectives on their care, and their reliability and validity have been questioned.³⁷ There is some evidence in the literature that patients with long-term conditions in particular value long-term relationships with familiar clinicians³⁸ and that a patient-centred approach that takes seriously the patient's own agenda leads to better outcomes.³⁹ However, this remains indirect evidence, and a more definitive answer to

this question will require careful qualitative study that gives patients time to tell stories about the care that they receive. Such studies are unlikely to be instituted unless there is an explicit acknowledgement of the changes that are occurring.

ACKNOWLEDGEMENTS

The English study was funded by the National Primary Care Research and Development Centre. The Scottish study was funded by the Economic and Social Research Council (ESRC) Public Services Programme and the East of Scotland Primary Care Research Network. We gratefully acknowledge the work of our coresearchers: Professor Ruth McDonald, Dr Suzanne Grant, Professor Bruce Guthrie and Dr Guro Huby. We are also indebted to the practices who took part, who welcomed us into their practices and gave us their valuable time.

REFERENCES

- 1 Timmins N. Do GPs deserve their recent pay rise? *BMJ* 2005;331:800.
- Doran T, Fullwood C, Gravelle *et al.* Pay-for-performance programs in family practices in the United Kingdom. *New England Journal of Medicine* 2006;355:375– 84.
- 3 Checkland K, Harrison S, McDonald R, Grant S, Campbell S and Guthrie B. Biomedicine, holism and general medical practice: responses to the 2004 General Practitioner contract. <u>Sociology of Health and Illness</u> 2008;30:788–803.
- 4 Murphy E, Dingwall R, Greatbactch D, Parker S and Watson P. Qualitative research methods in health technology assessment: a review of the literature. *Health Technology Assessment* 1998;2:1.
- 5 Grant S, Huby G, Watkins F *et al.* The impact of pay-forperformance on professional boundaries in UK general practice: an ethnographic study. *Sociology of Health and Illness* 2009;31:229–54.
- 6 Huby G, Guthrie B, Grant S *et al.* Whither British General Practice after the 2004 GMS contract? Stories and realities of change in four UK general practices. *Journal of Health Organization and Management* 2008; 22:63–79.
- 7 Checkland K, McDonald R and Harrison S. Ticking boxes and changing the social world: data collection and the new UK general practice contract. *Social Policy and Administration* 2007;41:693–710.
- 8 McDonald R, Checkland K, Harrison S and Coleman A. Rethinking collegiality: restratification in English general medical practice 2004–2008. <u>Social Science and</u> Medicine 2009;68:1199–205.
- 9 McDonald R, Harrison S and Checkland K. Identity, contract and enterprise in a primary care setting: an English general practice case study. *Organization* 2008; 15:355–70.

10 McDonald R, Harrison S, Checkland K, Campbell SM and Roland M. Impact of financial incentives on clinical autonomy and internal motivation in primary care: ethnographic study. *BMJ* 2007;334:1357–9.

145

- Profile of UK Practices August 2005. Information sheet no.
 London: Royal College of General Practitioners, 2005.
- 12 Laing A, Marnoch G, McKee L, Joshi R and Reid J. Administration to innovation: the evolving management challenge in primary care. *Journal of Management in Medicine* 1997;11:71–87.
- 13 Checkland K. Management in general practice: the challenge of the new General Medical Services contract. *British Journal of General Practice* 2004;54:734–9.
- 14 Checkland K. Understanding general practice: a conceptual framework from case studies in the UK National Health Service. *British Journal of General Practice* 2007; 57:56–63.
- 15 Information for Health: an information strategy for the modern NHS 1998–2005. London: The Stationery Office, 1998.
- 16 Elwyn G. Safety from numbers: identifying drug related morbidity using electronic records in primary care. *Quality and Safety in Health Care* 2004;13:170–1.
- Hippisley-Cox J, Pringle M, Cater R et al. The electronic patient record in primary care regression or progression? A cross sectional study. BMJ 2003;326:1439–43.
- 18 Laurence CO, Burgess T, Beilby J, Symon B and Wilkinson D. Electronic medical records may be inadequate for improving population health status through general practice: cervical smears as a case study. <u>Australian and New Zealand Journal of Public Health</u> 2004;28:317–20.
- 19 Williams PH and de Lusignan S. Does a higher 'quality points' score mean better care in stroke? An audit of general practice medical records. *Informatics in Primary Care* 2006;14:29–40.
- 20 Berg M. Practices of reading and writing: the constitutive role of the patient record in medical work. *Sociology of Health and Illness* 1996;18:499–524.
- 21 Berg M and Bowker G. The multiple bodies of the medical record: toward a sociology of an artifact. <u>The</u> *Sociological Quarterly* 1997;38(3):513–37.
- 22 Pinder R, Petchey R, Shaw S and Carter Y. What's in a care pathway? Towards a cultural cartography of the new NHS. *Sociology of Health and Illness* 2005;27:759–79.
- 23 Cowley S, Mitcheson J and Houston AM. Structuring health needs assessments: the medicalisation of health visiting. Sociology of Health and Illness 2004;26:503–26.
- 24 Jewson ND. The disappearance of the sick-man from medical cosmology 1770–1870. Sociology 1976;10:225–44.
- 25 Cantor D. The diseased body. In: Cooter R and Pickstone JE (eds) *Medicine in the 20th Century*. London: Harwood, 2000, pp. 347–66.
- 26 *The Future General Practitioner: learning and teaching.* The Royal College of General Practitioners, 1972.
- 27 Howie JGR, Heaney D and Maxwell M. Quality, core values and the general practice consultation: issues of definition, measurement and delivery. *Family Practice* 2004;21:458–68.

- 28 Hasegawa H, Reilly D, Mercer SW and Bikker AP. Holism in primary care: the views of Scotland's general practitioners. *Primary Health Care Research and Devel*opment 2005;6:320–9.
- 29 Mead N and Bower P. Patient-centred consultations and outcomes in primary care: a review of the literature. *Patient Education and Counseling* 2002;48:51–61.
- 30 Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB and Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ* 1996;312:71–2.
- 31 Harrison S. New Labour, modernisation and the medical labour process. *Journal of Social Policy* 2002;31:465–85.
- 32 Delivering Investment in General Practice: implementing the new GMS contract. NHS Confederation, 2003.
- 33 Briefing no 8: Practice management under the new GMS contract. <u>www.nhsconfed.org/docs/2practise</u> management. pdf, 2003
- 34 Lervy B, Wareham K and Cheung WY. Practice characteristics associated with audit activity: a medical audit advisory group survey. *British Journal of General Practice* 1994;44:311–14.
- 35 Freidson E. The reorganisation of the medical profession. *Medical Care Review* 1985;42:11–35.
- 36 Boyce ME. Organizational story and storytelling: a critical review. *Journal of Organizational Change Man*agement 1996;9:5–26.
- Hankins M, Fraser A, Hodson A, Hooley C and Smith H. Measuring patient satisfaction for the Quality and Outcomes Framework. *British Journal of General Practice* 2007;57:737–40.

- 38 Saultz JW and Albedaiwi W. Interpersonal continuity of care and patient satisfaction: a critical review. <u>Annals of</u> Family Medicine 2004;2:445–51.
- 39 Little P, Everitt H, Williamson I *et al.* Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. <u>BMJ</u> 2001;323:908–11.

PEER REVIEW

Commissioned; not externally peer reviewed.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Kath Checkland, Walport Clinical Lecturer in Primary Care, National Primary Care Research and Development Centre, 5th Floor, Williamson Building, University of Manchester, Oxford Road, Manchester M13 9PL, UK. Tel: +44 (0)161 275 7650; email: Katherine.H.Checkland@manchester.ac.uk

Received 22 December 2009 Accepted 7 March 2010