The new contract: renaissance or requiem for general practice?

BRITISH general practitioners (GPs) said they wanted a radical new contract. Well, they've got one.[1] Indeed, parts of it are so radical that there are few precedents to judge its impact on GPs or their patients. The contract has certainly arrived at a time when radical change is needed. GPs asked for their responsibilities to be clearly identified, with the choice of opting out of providing some services. They wanted limits to their workload and for resources to be allocated according to the needs of their populations. They wanted to be provided with the resources to provide high quality care, and to be rewarded for delivering it.

Most of these demands have been met. The allocation of 30% to 50% of income in the form of quality payments is a welcome change, ending the perverse incentives of the present contract in which income is more dependent on the quantity of care delivered than the quality of care. The negotiators had a tough choice. Should they reward just a few aspects of quality and risk sidelining other important aspects of care? Or should there be a more comprehensive package of incentives, with the attendant problems of data capture and recording? They have gone for a more comprehensive approach to rewarding quality, focusing particularly on chronic disease management. The gap between what GPs currently provide in this area and what they could provide is large[2] and these targets therefore have the potential to significantly improve health outcomes.[3]

Although the level of reporting to primary care trusts (PCTs) is designed to be 'high trust, low bureaucracy', GPs should not underestimate the changes in their practices that will be required to achieve the quality payments. Comprehensive computerisation will become essential, care may be more effectively delivered in clinics, and there may be a move towards specialisation within practices — changes which will be more difficult to achieve in some smaller practices. Many people will regard these changes as a necessary price to pay for the improvements in health which general practice has the potential to offer.

So the new contract proposals have the potential to save lives but also to sideline some of the core values of general practice. A comprehensive approach to patients' physical, psychological, and social needs may be more difficult to deliver and patients may find it harder to get continuity of care in a more specialised, clinic-based model of general practice. The old adage that GPs treat 'the patient rather than the disease' may no longer turn out to be true, and 'general' practitioners may start to feel more like 'partial' practitioners. Patient evaluations, which could refocus attention on co-ordination and continuity,[4] are mentioned as part of the reward package, but it is not yet clear how this will be put into practice.

Fragmentation is also a risk from some other parts of the contract. Since the inception of the NHS, GPs have had a near monopoly in providing primary care. The separation of services into three categories: essential, additional, and enhanced, provides GPs with an opportunity to limit the demands made on them. GPs may, for example, choose to opt out of providing 24-hour care, immunisations, contraceptive care, or chronic disease management. The categorisation of chronic disease care as a non-essential service in general practice will come as a surprise to many practitioners. If GPs choose to opt out, PCTs will then be obliged to find alternative providers. In our view, there is unlikely to be a shortage of individual entrepreneurs, private providers, and pharmaceutical companies ready and willing to bid for this work. This may lead to PCTs replacing practices as the unit of provision of primary care services. This risks further fragmentation, reducing continuity and co-ordination of care, and leading to a progressive erosion of the central position of GPs as providers of primary care. GPs have always prided themselves, not only on the quality of their work, but also their cost-effectiveness for the NHS. Contracting out specific functions to alternative providers gives politicians and managers an opportunity to challenge these claims.

Some other important recommendations of the new contract will support the development of high quality general practice. The contract will be with practices rather than directly with individual GPs, putting an end to the perverse penalisation of under-doctored areas, and encouraging flexible use of resources within the practices. The payment of a proportion of the quality payments 'up front' will allow practices to invest in their infrastructure and their quality improvement systems, and the use of incentives to maintain improvements will maximise the potential for sustained improvement. The opportunity to exclude certain categories of patients from the overall performance targets is welcome in principle, but risks gaming,[5] and again emphasises the level of detailed data collection that will become necessary within practices.

Pricing of the new contract will be critical. The lack of a ceiling for quality payments looks attractive and may just be achieved at a time of major injection of cash into the NHS. General practitioners who are supportive of the principles of the new contract will look carefully at the pricing, as will those with current personal medical services (PMS) contracts. It is yet not clear whether the new contract will offer inducements sufficient to tempt practices back from PMS contracts. These practices may continue to have greater flexibility in terms of responding to local needs. However, there is likely to be some convergence between general medical services and PMS contracts, especially in terms of the quality targets required.

Can we have our cake and eat it? Can we provide high quality care in a way that gives GPs and their staff rewarding and fulfilling professional lives? Can we provide high quality care for the many patients presenting with undifferentiated physical, psychological, and social problems, at the same time as improving disease outcomes? Have we convinced ourselves, never mind others, about the benefits of longitudinal relationships and integration to patient outcomes? In our view, the new contract offers the opportunity for a renaissance of general practice. If we can respond to the challenges of the new contract without losing our core values, then we will be providing primary care that will truly be the envy of the world. If, however, a combination of inappropriate pricing of the contract and fatigue among GPs leads to progressive dilution of general practice, then the contract may turn out to be a requiem. The future depends upon how we respond to these challenges.

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Chronic obstructive pulmonary disease and primary care

CHRONIC obstructive pulmonary disease (COPD) accounted for 26 000 deaths in England and Wales in 1999, representing 5.6% of all male and 3.9% of all female deaths.[1] This is 19 times the number of asthma deaths in the same year and approaches the 29 000 deaths from carcinoma of the lung. The annual consultation rates in general practice for COPD and allied conditions per 10 000 population between 1991 and 1992 were 417 at age 45 to 64 years, increasing to 1032 at age 75 to 84 years.[2] COPD is common, with reported prevalence rates ranging from 9.9% among a population of 60 to 75-year-olds in a semi-rural practice, to 26.4% among an urban population of people over 45 years of age.[3,4] It may also be underdiagnosed. Renwick *et al*, in a study that relied on self-reporting of the diagnosis by subjects, found that only half of the patients identified with airways obstruction had reported a diagnosis of asthma or chronic bronchitis.[4] Dickinson *et al* found that 38% of patients whom they diagnosed with COPD had no previous diagnosis of obstructive airways disease.[3] The potential benefit to patients of detecting undiagnosed COPD is in targeting strategies for smoking cessation, which is the only intervention that can arrest the accelerated decline in lung function.

Severe COPD (where forced expiratory volume in one second [FEV_1] is less than 40% of predicted) poses a significant problem in primary care. Typically, these patients are breathless on minimal exertion, and they are likely to have frequent exacerbations and hospital admissions.[5] One hospital-based study from the United States identified 50% mortality at two years after admission for an acute exacerbation of severe COPD.[6] Making individual prognostic predictions is difficult because population studies have shown wide variability in the survival of patients with similar lung function.[7] None of the current medications for COPD have been shown to modify the decline in lung function, although long-term oxygen improves survival in advanced disease.[8] Management of these patients focuses on symptom control, reduction and treatment of exacerbations, and optimising the quality of life.

Pulmonary rehabilitation, defined by The American Thoracic Society as a ‘multidisciplinary programme of care for patients with chronic respiratory impairment that is individually tailored’, includes exercise training, but may have an additional role in illness education and psychological support.[9] There is clear evidence that pulmonary rehabilitation improves patients’ exercise capacity, functional ability, and quality of life, even though lung function does not change.[10,11] In a randomised controlled trial comparing pulmonary rehabilitation with standard medical management in 200 patients with chronic lung disease (the majority with chronic obstructive pulmonary disease) the rehabilitation group showed greater improvements in walking ability and in general and disease-specific health status.[12] Pulmonary rehabilitation has been widely endorsed for moderate and severe COPD, but its benefits have been recognised at all stages of disease.[13]

The review by Chavannes *et al* in this month’s journal, reports an improvement in exercise tolerance with physical activity in mild to moderate COPD.[14] They conclude that recommending physical activity could become an extension to current therapy for mild and moderate COPD. In three of the five studies included in the review, subjects received pulmonary rehabilitation which involved more than exercise training.[15-17] Moderate disease predominated (British Thoracic Society guidelines[5]), with four of the studies reporting a mean FEV_1 in the range 47% to 61% predicted.[15-18] Pulmonary rehabilitation or a supervised exercise programme is different from a GP giving exercise advice.[19] Whether the benefits of such programmes can be reproduced by a GP giving exercise advice needs to be determined before the authors' conclusions can become recommended practice.

Also reported in this month's journal are two primary care-based pilot studies of pulmonary rehabilitation.[20,21] The first by Jones *et al* was set in a community health clinic; the second, by Ward et al in a community hospital. The rehabilitation consisted of an exercise programme and education. Ward *et al* used the same programme as that used in the local hospital. Both studies found improvements in patients' exercise tolerance and health status with rehabilitation. Primary care-based rehabilitation appears to be a feasible alternative to secondary care-based programmes and has the added advantage of convenience for some patients. These studies also demonstrate the multidisciplinary nature of a rehabilitation programme and prompt consideration of the benefits of other components of the programme, besides exercise training.

Where do pulmonary rehabilitation and exercise advice fit into the primary care management of COPD? Rehabilitation is indicated for symptomatic patients. Referral should be guided by patients' disability and not by their lung function. Typically, these patients will have moderate or severe disease. Symptomatic patients with mild disease have also been shown to benefit from rehabilitation.[13] With potentially large numbers of patients eligible for rehabilitation, demand may exceed the available resources. Recommending exercise may be an alternative approach, but evidence of its benefit outside a rehabilitation programme is needed. Clearly there will be advantages to some patients in having local community-based pulmonary rehabilitation. The new NHS Primary Care Trusts will have to decide whether the benefits will justify directing resources to them.

In spite of the benefits of pulmonary rehabilitation, patients with severe COPD remain a particularly difficult group to treat. The impact of COPD is far reaching, not just in terms of symptoms but also in its social and psychological effects. One study investigating the care received by patients with advanced COPD showed that 82% were housebound and 36% largely chairbound. Social isolation is inevitable for many of these patients. Furthermore, COPD patients' Hospital and Anxiety Depression Scale scores suggested that 90% had clinically significant anxiety or depression, of whom only 4% received further assessment and treatment. Seventy eight per cent of COPD patients said they did not receive enough information regarding their prognosis or future management.[22] Health care for these patients has been described as *ad hoc* and reactive, focusing on acute exacerbations.[23] Patients with advanced COPD do not have access to specialist support services in the same way as cancer patients, despite their poor prognosis and high levels of morbidity; it is clear that their needs are not being met by existing health service provision.

Addressing the unmet needs of COPD patients with end-stage disease presents general practice with another new challenge. As with so many initiatives in health service delivery, general practice is central to service provision in advanced COPD. GPs can identify patients with COPD through their computerised disease and prescribing registers. GPs are also the first port of call for COPD patients, whether for everyday complaints or in acute exacerbations. At the same time, GPs and primary care teams are overstretched and are faced with the dilemma of having unrivalled knowledge of patients but inadequate resources to respond to their needs. Is it realistic or practicable for GPs to take on the additional role of COPD care at the end of life? The burden is not enormous. Each GP is likely to have only three or four patients with advanced COPD. But the task is complex, requiring long-term surveillance of patients who are likely to become housebound. Respiratory nurse specialists may be the most appropriate people to co-ordinate care of COPD at the end of life. Inevitably, there will be additional costs from the extension of the rehabilitation described in this issue to the development of proactive end-of-life care. There is a need, therefore, to define the size of the problem, to explore models of care which bring together the skills of respiratory care, palliative care, and general practice, and to identify the manpower and infrastructure support required. But without new resources, patients with advanced COPD will remain disadvantaged, socially isolated, and largely silent.

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X-rays for back pain?

This editorial was written to accompany two papers in last month's BJGP*. An oversight on the part of the editor prevented its appearance then. Apologies to Paul Little and readers.*

TWO papers in last month's issue of the *BJGP* address one of the thorny problems in everyday clinical practice — back pain. Most of us at some time in our lives will suffer an episode of back pain and it causes more working days lost than any other condition, with the exception of respiratory infections.[1] A particularly difficult issue for clinicians is whether or not to X-ray. Kerry *et al*[2] show that routine X-rays for first presentation of back pain do not substantially improve pain or functioning but provide modest psychological improvement, presumably by providing reassurance that nothing serious is going on or about the minor nature of the X-ray changes observed.[3] Is this benefit worth it? Although chest X-rays provide a relatively small increase in the risk of fatal cancers (a one in a million lifetime risk), the radiation dose of a lumbar X-ray is considerably higher (150 times). Thus it is difficult to justify a modest improvement in psychological wellbeing for exposure to an unnecessary risk, when most X-rays are normal or show minor changes of uncertain significance that are also present in people without pain. X-rays also increase belief in the importance of X-rays[4] and thus unnecessarily 'medicalise' back pain.

However, perhaps the key issue for clinicians is not whether routine X-rays are useful, but who to X-ray. To rationalise its use, to protect patients, and to limit inappropriate use of services, the Royal College of Radiologists attempted to provide guidance for clinicians. In 1989, they issued consensus guidelines, which were subsequently modified but broadly endorsed by the CSAG and RCGP.[1,5] These combined guidelines suggest that unless there are 'red flags' (history of cancer or weight loss, fever, steroid use, persistent or progressive pain, age over 55 or under 20 years, or neurological signs) X-rays should be delayed for six weeks — although the guidelines differ in their advice regarding persistent pain.[6] Although trial evidence suggests that disseminating guidelines and attaching reminder messages to radiography reports reduces referral for X-ray,[7,8] what happens in routine practice when there are no such prompts? The paper by Hollingworth *et al*[9] confirms a very low yield from X-ray (approximately 2% of significant pathology) and suggests that there has been little uptake of the guidelines to rationalise lumbar spine X-ray use. This is perhaps not surprising given the existing evidence about guideline implementation, which suggests that guidelines by themselves are likely to do little.[10]

This also begs the question: are these consensus guidelines based on secure evidence? One of the very few prospective studies based in the United States documented 13 patients (0.66%) who had cancer as a cause of their back pain, among 1975 'walk-in' patients to a primary care outpatient clinic sited in a hospital.[11] An algorithm based on this data suggests performing an X-ray on patients with:

- a history of previous cancer; or,
- two red flags (an elevated erythrocyte sedimentation rate (ESR) of more than 20 mm per hour; failure to improve after six weeks with conservative therapy; unexplained weight loss; systemic signs worthy of investigation in their own right, such as lymphadenopathy or haematuria).

The algorithm identified all cases of cancer.[11] This algorithm would potentially limit X-rays to 22%, while remaining 100% sensitive. Given that this was based on only 13 cases and X-rays and ESRs were not performed in all patients, we clearly need more evidence from primary care about what best predicts serious pathology. Until such evidence is available it seems reasonable to follow such an algorithm, which is rather more conservative than some of the consensus guidelines. Some guidelines suggest that persistent pain alone is sufficient for X-ray, whereas the algorithm suggests that persistent pain with either one other red flag or a raised ESR should lead to an X-ray. While it is important to review patients with persistent pain and arrange an ESR, persistent pain alone is not likely to be sufficient to justify an X-ray and will result in many patients having an unnecessary X-ray.[11] This is supported by a recent trial which shows that routine X-rays for all patients who have not improved by six weeks is likely to do little.[6]

There is also another fundamental issue: the concept underlying guidelines is that the medical reasons are the real issues underlying the decision to X-ray. However, general practitioners (GPs) document both medical and psychosocial agendas for arranging X-rays, including patient reassurance and satisfaction.[12] While an X-ray is an understandable response by clinicians to uncertainty and the desire for reassurance from the patient, this is missing the point: the most frequent reasons for dissatisfaction among patients is failure to receive an adequate explanation of their back pain, or receiving an explanation which did not fit their own understanding.[13] Providing information can improve pain, functioning, and satisfaction,[13] reduce fears and worries about back pain,[13] and reduce reattendance.[14] GPs can also help pain and functioning by providing simple advice to mobilise and take regular exercise as soon as their back pain allows.[12] If advice and written information are provided at the same time, the advice and written information should probably be simple and in the same format.[14]

As with many areas, the evidence is messy and we clearly need more evidence, but what is the bottom line for a busy clinician seeing a patient with a new episode of back pain today? From present evidence for patients with a new presentation of back pain, clinicians should probably X-ray those with a previous history of cancer, those with a red flag not suggestive of cancer (e.g. past prolonged oral steroid use, fever), and those two red flags suggestive of cancer (persistent or progressive pain, age over 55 years, unexplained weight loss, systemic signs, high ESR). Patients with persistent pain should be reviewed and an ESR arranged, but persistent pain is not by itself a sufficient indication for X-ray. For the overwhelming majority of patients without serious pathology, an X-ray will do more harm than good: instead patients need exploration of their worries about back pain, reassurance, analgesia, simple information, and advice to mobilise and take regular exercise as soon as possible.

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