Quality Incentives: The Case Of U.K. General Practitioners

An ambitious U.K. quality improvement initiative offers the potential for enormous gains in the quality of primary health care.

by Peter C. Smith and Nick York

ABSTRACT: The United Kingdom is implementing major changes to the national contract for general practitioners (GPs). A central plank of the new arrangements is an ambitious scheme to reward high-quality care. Each general practice will be scored on 146 performance indicators according to the measured quality of care it delivers, and its accumulated score will determine the magnitude of the quality payment it receives. About 18 percent of practice earnings will be at risk. This paper describes the incentive scheme, discusses its potential benefits and risks, and draws out the implications for evaluation.

There is a growing conviction, crystallized in the Institute of Medicine's Quality Chasm report, that carefully designed incentives have a central role to play in securing quality improvement.1 Yet there have been remarkably few experiments with incentives designed explicitly to improve quality.2 Research has instead concentrated mainly on the implicit implications for quality of different payment mechanisms, such as fee-for-service, capitation, and salary.3

However, payers have recently begun to recognize the potential for securing quality improvements by directly rewarding measured quality. In the United States, the Leapfrog Group has spearheaded efforts to reward quality, and initiatives such as Rewarding Results and Doctor’s Office Quality offer the promise of improving our understanding of explicit quality incentives.4

This paper describes a major experiment in the United Kingdom with explicit quality incentives in primary care. We first outline the historical role of quality incentives in U.K. primary care. We then describe a new contract for general practitioners (GPs), introduced in April 2004, which marks one of the most ambitious attempts to incentivize quality to date. Finally, we discuss the opportunities and risks of the new contract and the implications for any evaluation.

General Practitioners As Independent Contractors

GPs are an important feature of U.K. health care. As independent contractors with the National Health Service (NHS), they have traditionally enjoyed consid...
erable autonomy. Every NHS patient must register with a GP, who acts as a gatekeeper to NHS secondary specialist care. In the 1990s policymakers introduced the notion of a “primary care–led” health system, in which GPs are expected to play a central role in the governance of the entire local health system, as well as in delivering primary care services.

- **Traditional GP contract.** GPs have traditionally been offered a wide range of direct financial incentives, via a national contract that offers a mix of remuneration methods, including fee-for-service (about 15 percent of GP income), capitation (40 percent), salary (30 percent), and capital and information technology (IT) (15 percent). The fee-for-service element includes incentive payments for reaching coverage targets for services such as vaccination and cervical cancer screening.

  The traditional GP contract sought to encourage vital public health interventions (vaccinations, immunizations, and screening), up to a payment threshold. The capitation payments were crude, and risk adjustment (for age and patients living in rural or disadvantaged areas) was rudimentary. Therefore, although refusal of enrollment is formally disallowed, the capitation system could in principle have discouraged GPs from seeking out high-risk patients. There has also been concern over the low quality of primary care provision in disadvantaged areas.

- **Alternative contract.** As an alternative to the national contract, about 30 percent of GPs have opted to work under locally negotiated arrangements known as Personal Medical Services (PMS) contracts, which are based mainly on salary but can vary according to local circumstances. There have also been additional incentive payments for practices outside the traditional GP contract—for example, for good prescribing and for improving access.

- **Impact of financial incentives.** GPs are thus used to working within an incentivized environment. Surprisingly little scientifically secure evidence exists on the quantitative impact of incentive mechanisms in U.K. primary care. However, the available evidence suggests that GPs do respond as predicted to material incentives.

  **Fundholding experiment: 1991–1998.** An important example was the fundholding experiment, under which practices were given annual budgets with which to purchase most routine (nonemergency) secondary care and pharmaceuticals for their patients. Fundholding ran from 1991 to 1998, by which time more than half of NHS patients were involved. In response to the budgetary regime, fundholders reduced inpatient procedures by about 5 percent relative to nonfundholders and also secured shorter waiting times for their patients.

  **Quality improvement scheme: 1998–2000.** In East Kent a primary care quality improvement scheme was tested from 1998 to 2000. Nearly 80 percent of local GPs enrolled in a program that required them to meet challenging chronic disease management targets across thirteen conditions (such as angina, heart failure, and epilepsy). An example of a quality standard for hypertension is that at least 85 percent of patients should have blood pressure below 160/90 unless there is a documented valid reason.
In return for enrollment and adherence to standards, each GP was offered a financial incentive of £3,000 per annum (about US$5,600 at early 2004 exchange rates), approximately 5 percent of earnings. This was repaid if the targets for all thirteen conditions were not met. In addition to quality standards and financial incentives, there was strong local medical leadership, information audit with feedback, and enhanced data collection.

The scheme was evaluated by interviews with primary care staff involved in the scheme and validated using audit data. The evaluation found material improvements in chronic disease management, which were ascribed to the multifaceted nature of the intervention. The financial incentive was necessary to encourage participation and focus attention on desired change. However, the physicians were also motivated by a sense of professional autonomy and ownership. Some participants were surprised to find that the newly available information showed that their care was not of high quality, and many wanted to address this. A major factor influencing the success of the scheme was that it focused on objectives that were important to both clinicians and managers.

There were some unintended effects. Some difficulties caused by increased GP referrals to secondary care were attributed to the scheme. For example, some specialist physicians and diagnostic services experienced increased workload without concomitant payment increases. There was also some concern that the focus on chronic disease targets might have led to the neglect of other clinical areas such as mental health or psychosocial problems. However, on balance, the evaluation concluded that the scheme led to major beneficial changes in the management of chronic diseases in the East Kent area.

The New GP Contract

The East Kent scheme influenced a major change to primary care incentives that was embodied in an entirely new GP contract, introduced in April 2004. The new contract incorporates a number of elements, including simpler remuneration rules, a fairer capitation scheme, and a major injection of expenditure into primary care (approximately £1.9 billion annually, an increase of 33 percent over three years). Central to the new contract is a system of quality incentives. About £1.3 billion, around 18 percent of GP income, will be distributed annually on the basis of quality measures. The new contract was developed in close negotiation with physicians and was approved by 79.4 percent in a ballot of GPs, with a response rate of 70 percent.

In its initial form, the new incentive scheme uses 146 indicators of quality across seven areas of practice. In each area a certain number of quality “points” are available, up to a maximum of 1,050. About half of these are for clinical quality. Other areas include practice organization (184 points) and patient experience (100 points). The clinical indicators are distributed across ten domains of care. The three most heavily weighted are coronary heart disease (121 points), hyper-
tension (105), and diabetes (99).

Exhibit 1 shows an example of the point scheme for hypertension. Five indicators are used, covering structure (clinical records), process (diagnosis and initial management), and outcome (ongoing management). For most indicators there is a lower limit at which points can begin to be earned and a maximum number of points. The points available for each indicator are shown in the right-hand column. For example, for indicator BP 2, points start to accumulate once the notes on 25 percent of patients with hypertension record smoking status at least once. A maximum of ten points are secured when smoking status is recorded for 90 percent of hypertension patients.

Assessment

The new GP contract is one of the most ambitious attempts yet to incorporate quality incentives into physician remuneration. It has some parallels with incentive mechanisms being introduced in other parts of the U.K. health system, most notably the “star ratings” regime, under which all English NHS organizations are given zero to three stars based on their performance across about forty indica-

**EXHIBIT 1**
The General Practitioner (GP) Contract: Hypertension Indicators, Sliding Scales, And Total Points At Risk (Maximum 105)

<table>
<thead>
<tr>
<th>Clinical records</th>
<th>Minimum percent score below which no points earned</th>
<th>Maximum percent score above which no further points earned</th>
<th>Total points at risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP 1. Practice can produce a register of patients with established hypertension</td>
<td>NA</td>
<td>NA</td>
<td>9</td>
</tr>
<tr>
<td>Diagnosis and initial management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP 2. Percentage of patients with hypertension whose notes record smoking status at least once</td>
<td>25</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>BP 3. Percentage of patients with hypertension who smoke, whose notes contain a record that smoking cessation advice has been offered at least once</td>
<td>25</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Ongoing management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP 4. Percentage of patients with hypertension for whom there is a record of the blood pressure in past 9 months</td>
<td>25</td>
<td>90</td>
<td>20</td>
</tr>
<tr>
<td>BP 5. Percentage of patients with hypertension whose last blood pressure reading (in past 9 months) was 150/90 or less</td>
<td>25</td>
<td>70/90</td>
<td>56</td>
</tr>
</tbody>
</table>

However, clinical quality plays a relatively small role in that scheme, and individual earnings are not at risk to nearly the same extent. The GP contract therefore largely represents a step into the unknown.

The contract embodies a number of important strengths, in line with the prescriptions of standard economic models. Most importantly, it seeks to reward cost-effective practice, in the form of the structure, processes, and outcome of health care. The scheme was developed in close collaboration with physicians who sought to apply evidence-based principles to the selection of performance indicators that are consistent with national clinical guidelines.

The structure of the scheme offers some important advances. A “balanced scorecard” seeks to reflect the relative importance of different primary care activities in terms of their impact on health. By basing remuneration on an aggregate score, GPs remain free to decide on their own priorities. Many of the distortions associated with more piecemeal schemes may therefore be avoided. The scheme will reward practices (rather than individual physicians), so it is likely to encourage teamwork and peer review. In contrast with many previous incentive schemes, the new contract could make a real difference in GPs’ incomes. Finally, there is a commitment to reviewing and updating the incentive scheme.

Potential risks. Notwithstanding these apparent strengths, there are some potential risks. First, because it is a complex scheme, GPs may not understand its full implications and may not respond as intended. Second, important areas of activity not covered by the scheme may be downgraded. For example, mental health is allotted a mere forty-one points, despite its importance in primary care. The contract documentation notes that “it was not possible to develop indicators that could be rewarded in this type of framework for many of the most important aspects of mental health care. Mental health care is however an example of a number of conditions where some markers of good clinical care have been included in the organisational indicators.” It will be important to evaluate how this affects patients. It will also be important to check whether the scheme adversely affects some of the “softer” quality attributes of primary care that are not directly rewarded, such as continuity and advocacy, or collaborative actions with other public services.

The new contract may discourage clinical practice in challenging environments. Formally, GPs are supposed to accept all types of patients onto their lists and may not select just healthy or compliant patients (known as cream skimming). However, in practice, GPs might find ways to discourage enrollment of patients who adversely affect performance measures. Perhaps even more importantly, the scheme might not do enough to encourage GPs to set up practice in disadvantaged areas. The initial implementation adjusts performance measures for local environmental difficulties by weighting payments in the clinical domain according to measures of disease prevalence. An important evaluation task will be to determine if these adjustments are operating effectively and fairly.

There is also a risk of gaming and misrepresentation. Some of the performance
measures appear to be particularly vulnerable in this respect. For example, in the patient experience domain, thirty points are allocated in part according to whether the average length of consultation with patients exceeds eight minutes. The potential for misrepresentation is large, given that the scheme relies mostly on self-reported data. Even if fraud is rare, a perception among GPs that there is widespread inaccuracy in reporting may undermine the scheme. A cost-effective audit regime is required, supported by a professional culture that does not tolerate misdemeanors. In the longer term, issues such as public release of performance data may need to be addressed.

Key tasks ahead. Although the design and implementation of the scheme are major achievements in themselves, progress will now need to be regularly monitored and reviewed. The key tasks are to identify unintended (and unwanted) consequences, to incorporate new clinical evidence as it emerges, and to refine the scheme’s architecture. This monitoring may impose a sizable managerial burden. Traditionally, the NHS has reported very low managerial costs, with the public and politicians reluctant to recognize that management activity may make an important contribution to clinical quality. Investment in information, consultation, and managerial processes is needed, though, if the full benefits of the scheme are to be secured.

Finally, perhaps the most uncertain element of any incentive scheme is whether it might undermine physicians’ professional ethic and morale. The medical profession arose in part from a need to guide the actions of physicians in circumstances where there is no direct guidance or remuneration. Will such a heavy reliance on the explicit use of incentives make GPs less willing to respond in the best interests of patients when not directly rewarded?

Concluding Remarks
An early evaluation of the scheme is clearly a high priority. Our discussion highlights many issues that need to be addressed in any evaluation, suggesting it will be methodologically challenging. For example, there are few baseline data. For many of the clinical areas covered by the scheme, the scheme will be the first attempt to collect data systematically across the whole NHS. Furthermore, there is no possibility of any piloting or randomization, so the evaluation will have to rely on observational data. Yet there are also clearly major opportunities to evaluate natural experiments—for example, when the weight on a particular indicator is changed—and despite these methodological challenges, the scope and power of the new contract may mean that it offers an almost unprecedented laboratory for research.

The new GP contract is an extraordinarily ambitious quality improvement initiative. Although it has risks, many of its design features accord well with the principles of incentive design advocated by economists. If the contract is implemented and evaluated with care, and necessary adjustments are made as experience is accumulated, the new GP contract offers the prospect of enormous gains in
the quality of primary health care in the United Kingdom and can inform policy in many other types of health systems.

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