The carrot, the stick and the general practitioner: how have changes in financial incentives affected health promotion activity in general practice?

SUSAN LANGHAM
STEPHEN GILLAM
MARGARET THOROGOOD

SUMMARY

Background. Financial incentives for increasing health promotion activity in primary care, introduced with the 1990 contract for general practitioners, were amended in 1993 and are now focused on cardiovascular disease. Payments for health promotion clinics were abolished and target payments were introduced.

Aim. The study aimed to evaluate the effect of the change, in June 1993, in financial incentives for health promotion activity in primary care on the distribution of health promotion payments in two family health services authorities.

Method. A retrospective study was undertaken in which data from two family health services authorities were used to determine the annual level of health promotion payments per 1000 practice population before and after the contractual amendment. Health promotion clinic payment data were analysed for 78 practices in Bedfordshire Family Health Services Authority and 85 practices in Kensington, Chelsea and Westminster Family Health Services Authority. Changes in health promotion payments were calculated and related to two measures of relative need: all cause standardized mortality ratios, for patients aged 74 years or less, of the electoral ward in which the practice is located; and the Jarman underprivileged area score. High relative need was defined as a standardized mortality ratio of over 100 or more than 25% of the practice population living in electoral wards with a Jarman score of over 30.

Results. Health promotion payments were more evenly distributed after the change in June 1993 than before between the two family health services authorities and between general practices. Single-handed practices were carrying out more clinics in 1992 than multi-practitioner practices and consequently were one of the greatest financial losers as a result of the change. In addition, practices located in electoral wards with high relative needs lost proportionally more than those in electoral wards with lower needs.

Conclusion. Changes in the general practitioner health promotion contract have created new financial winners and losers. It now appears that health promotion payments are more evenly distributed but that the distribution is unrelated to need or treatment given. More evidence on the effectiveness of health promotion interventions is required before policies aimed at promoting better health through primary care can be fully evaluated.

Keywords: health promotion; doctors' remuneration; general practitioner services; doctors’ attitudes.

Introduction

FINANCIAL incentives in general practice have been said to make general practitioners behave more like donkeys than doctors.1 The health promotion incentives introduced with the 1990 contract for general practitioners aimed to shift the emphasis from treatment to prevention, on the grounds that prevention offers greater long-term health gain.2 A fee was introduced for each health promotion clinic provided. The incentive was successful in increasing health promotion clinic activity. Comparing the time period October to December 1990 with October to December 1991, there was an increase of 24% in the number of health promotion clinics claimed for in a sample of family health services authorities in England.3 However, wide variations between practices became evident. Single-handed practices and practices located in deprived areas were less likely to be providing health promotion clinics than were multi-partner practices and those in less deprived areas.4

The general practitioner health promotion contract was amended in June 19935 and is now focused on cardiovascular disease. Payments for health promotion clinics were abolished, and general practitioners are now paid a fee per registered patient for providing a defined level of screening and for the recording of risk factors for a given percentage of the practice population; these are effectively target payments. There are three bands of fee, corresponding to levels of activity, that differ in the number of risk factors the general practice is required to record. More than 90% of general practitioners in the United Kingdom have opted for the highest band, band three, in which they are required to record information on several coronary heart disease risk factors and to provide protocols of care (unpublished data). In addition, general practitioners are paid a flat fee for providing special programmes for the management of asthma and diabetes. It should be noted that some of the features of the banding system introduced in June 1993 are currently under review.

It has been hypothesized that the change from sessional to target payments would reduce variation between general practices in payments received and that practices likely to gain under the 1993 contract would be those less able to carry out the former health promotion clinics, that is, single-handed practices and those in deprived areas.4 A retrospective study was undertaken to evaluate the effect of the general practice contractual amendment in 1993, which changed financial incentives for health promotion activity in primary care, on the levels of payments received in two family health services authority areas.

Method

General practices that were accountable to Bedfordshire Family Health Services Authority and Kensington, Chelsea and Westminster Family Health Services Authority were chosen for study. Bedfordshire is a predominantly rural area with pockets of deprivation. In contrast, Kensington, Chelsea and Westminster is situated in inner city London and encompasses large deprived areas.
Data were available from the family health services authorities on the health promotion clinics claimed for in a representative quarter in 1992 (April to June), together with the annual payments for 1993 (paid as a lump sum on 1 July 1993) to the same practices for the health promotion banding and chronic disease management programmes. Data on payments for 1992 were projected in order to derive annual payments.

The health promotion clinics claimed for in 1992 were divided into four groups: chronic disease management clinics; clinics considered to be relevant to coronary heart disease prevention, including coronary heart disease management, anti-smoking and well-person clinics; clinics indirectly related to coronary heart disease prevention, including stress management, diet and exercise clinics; and other health promotion clinics. Health promotion payments after June 1993 were divided into two groups: payments for asthma and diabetes programmes (chronic disease management programmes) and per capita payments under the banding arrangements. There are three bands of fee: in band one (lowest fee) general practices are only required to have a programme to reduce smoking among their patients; in band two general practices must also have programmes to minimize morbidity and mortality in patients with hypertension, coronary heart disease and stroke; and in band three (highest fee) general practices must also have a programme covering a full range of primary prevention measures for coronary heart disease and stroke. The chronic disease management programmes and the banding arrangements correspond approximately to the chronic disease management clinics and coronary heart disease prevention clinics, respectively, in the 1992 data.

Health promotion payments per 1000 practice population per year were calculated for 1992 and 1993. The change in remuneration brought about by the amendment to the general practitioner health promotion contract in June 1993 was calculated and considered in relation to various practice features: mean list size, number of practice partners and relative need of the electoral ward in which the practice is located.

Two measures of relative need were considered: all cause standardized mortality ratios, for patients aged 74 years or less, of the electoral ward in which the practice is located, aggregated for the years 1986–89 inclusive; and the Jarman underprivileged area score (based on data for 1992 and 1993), which is a measure of population deprivation factors likely to affect general practitioner workload. High relative need was defined as a standardized mortality ratio of over 100 or more than 25% of the practice population living in electoral wards with a Jarman score of over 30 (and therefore eligible to receive the highest rate of deprivation payments).

Sixteen of the 94 practices in Bedfordshire and 21 of the 106 practices in Kensington, Chelsea and Westminster were excluded from the analysis because the practices had been reorganized during the study period and consistent data were not available. Twenty two of the 78 practices studied in Bedfordshire were located in electoral wards with standardized mortality ratios of over 100 and just over one quarter of the 78 practices were single-handed practices. In Kensington, Chelsea and Westminster, 48 of the 85 practices studied were located in electoral wards with standardized mortality ratios of over 100 and nearly half of the 85 practices were single-handed practices.

Data were analysed using the EPI INFO statistical package. The Student's t-test was used to assess the significance of the results.

**Results**

Practices in Kensington, Chelsea and Westminster Family Health Services Authority carried out more health promotion clinics in 1992 than practices in Bedfordshire Family Health Services Authority, with a mean of 212 clinics per practice compared with a mean of 144 clinics per practice. Eleven per cent of the 85 practices in Kensington, Chelsea and Westminster and 15% of the 78 practices in Bedfordshire did not claim for any health promotion clinics in 1992. A greater proportion of practices in Kensington, Chelsea and Westminster than in Bedfordshire held clinics in 1992 classed as clinics indirectly related to coronary heart disease prevention (Table 1). Uptake of payments for chronic disease management programmes and band three payments in 1993 was lower in Kensington, Chelsea and Westminster (84% and 92% respectively) than in Bedfordshire (95% and 97% respectively).

Health promotion payments after the amendment in June 1993 were more evenly distributed between general practices and between the two authorities (Table 2). In 1992 there was a three-
fold difference in payments between practices in Bedfordshire and a twofold difference between practices in Kensington, Chelsea and Westminster. After the amendment, all practices studied in both authorities received similar payments. In 1992, single-handed practices carried out more health promotion clinics per partner than multi-partner practices, in both family health services authority areas.

Practices in Kensington, Chelsea and Westminster Family Health Services Authority lost a mean of £1475 per 1000 practice population, with 78% of practices receiving less income annually from health promotion clinics after June 1993; single-handed practices lost a mean of £2081 per 1000 practice population compared with a mean loss of £881 per 1000 practice population in multi-partner practices. In contrast, practices in Bedfordshire Family Health Services Authority gained a mean of £106 per 1000 practice population, with 71% of practices receiving more income annually from health promotion clinics after the amendment. Single-handed practices lost a mean of £420 per 1000 practice population compared with a mean gain of £301 in multi-partner practices.

Table 3 shows the characteristics of the practices that lost financially and those that gained financially following the change in June 1993 in financial incentives for health promotion activity in primary care. In both family health services authority areas, the practices that lost financially had more patients attracting high rate deprivation payments and had carried out significantly more chronic disease management and coronary heart disease prevention clinics in 1992 than practices that gained financially. In Kensington, Chelsea and Westminster, the financial losers had carried out significantly more indirect coronary heart disease prevention clinics in 1992 than had practices that gained financially. In Bedfordshire, compared with practices that gained financially, the financial losers had significantly smaller list sizes.

Table 4 relates the change in health promotion payments as a result of the amendment in June 1993 to measures of need in the population. In both family health services authority areas, practices in electoral wards with higher relative needs were financially disadvantaged by the change in arrangements for health promotion clinic payments compared with practices in electoral wards with lower relative needs.

Table 4. Differences in health promotion payments per 1000 practice population resulting from the change in June 1993 in financial incentives for health promotion activity in primary care, in relation to measures of population need.

<table>
<thead>
<tr>
<th>Measure of need</th>
<th>Bedfordshire FHSA (n = 78)</th>
<th>Kensington, Chelsea and Westminster FHSA (n = 85)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized mortality ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>-98</td>
<td>-1524</td>
</tr>
<tr>
<td>Low</td>
<td>+199</td>
<td>-1412</td>
</tr>
<tr>
<td>Jarman score&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>-179</td>
<td>-1797</td>
</tr>
<tr>
<td>Low</td>
<td>+174</td>
<td>-968</td>
</tr>
</tbody>
</table>

n = number of practices studied in FHSA. FHSA = family health services authority. *All cause standardized mortality ratio, for patients aged 74 years or less, of the electoral ward in which practice is located: high relative need, ratio of over 100. <sup>b</sup>Jarman score: high relative need, more than 25% of practice population living in electoral wards with score >30.

Discussion
This study has identified some effects of the amendment to the general practitioner contract in June 1993 regarding health promotion. Two unexpected findings emerged. First, in 1992 single-handed practices carried out more clinics per partner than multi-partner practices, contrary to research carried out just after the introduction of the 1990 contract for general practitioners. They had obviously been able to increase their clinical activity in the second and third year of the implementation of the 1990 contract for general practitioners. This may be because both family health services authorities studied had a policy of encouraging practices that were unlikely to carry out health promotion clinics without such encouragement. Secondly, single-handed practices and practices located in areas with high relative need were the greatest financial losers as a result of the change in financial incentives for health promotion activity.

In this study, health promotion payments have been used as a proxy for health promotion activity, although changes in pay-

Table 3. Characteristics of practices, in two family health services authorities (FHSAs), that lost and gained financially following the change in June 1993 in financial incentives for health promotion activity in primary care.

<table>
<thead>
<tr>
<th>Practice characteristic</th>
<th>Bedfordshire FHSA practices financially</th>
<th>Kensington, Chelsea and Westminster FHSA practices financially</th>
</tr>
</thead>
<tbody>
<tr>
<td>Losing (n = 23)</td>
<td>Gaining (n = 55)</td>
<td></td>
</tr>
<tr>
<td>Mean list size</td>
<td>4659</td>
<td>6795</td>
</tr>
<tr>
<td>Mean no. of patients per GP partner</td>
<td>2022</td>
<td>2099</td>
</tr>
<tr>
<td>Mean % of practice population attracting high rate deprivation payments</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Mean no. of clinics in 1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic disease management</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>CHD prevention</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Indirect CHD prevention</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

n = number of practices studied in FHSA that lost/gained financially. CI = confidence interval. CHD = coronary heart disease. Numbers too small to test significance. *P < 0.05, **P < 0.01, ***P < 0.001.
ments for health promotion may not correspond to changes in activity. The use of electoral ward standardized mortality ratios as an indicator of relative need is problematic, since it is related to the electoral ward in which the practice lies and not necessarily to the electoral ward in which the majority of the patients live.

It appears that there is now less variation in health promotion payments between general practices and between family health services authorities, but whether this indicates a more rational use of resources is unclear. Practices can no longer increase income by undertaking a large number of clinics. However, under the new arrangements, practices with higher relative need appear to have lost financially. Neither the banding payments nor the flat rate chronic disease management payment takes into account practice population need.

The current financial incentives do not encourage effective intervention. To qualify for payment, general practitioners must supply information on the prevalence of coronary heart disease risk factors in their practice population but they do not have to report on interventions carried out. Financial incentives are only linked to information about patients, not to health promotion activity nor, more importantly, to the outcome of that activity.

This study has shown that, in two family health services authority areas, the new arrangements for health promotion activity have resulted in a more even spread of financial resources. This has been achieved with a disproportionate financial loss to single-handed practices and to practices situated in areas of high relative need. What form of incentives for health promotion activity that might be appropriate cannot be determined until the wider debate on the cost-effectiveness of primary care based health promotion activities has been resolved. Financial incentives will fail to improve health if the incentive is linked to ineffective care.

References
1. Iliffe S, Munro J. General practitioners and incentives: carrots and sticks may make GPs behave more like donkeys than doctors [editorial]. BMJ 1993; 307: 1156-1157.

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Address for correspondence
Ms S Langham, Health Services Research Unit, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT.

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