# Measuring progress towards a primary care-led NHS

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#### SUMMARY

Background. The push towards a 'primary care-led' National Health Service (NHS) has far-reaching implications for the future structure of the NHS. The policy involves both a growing emphasis on the role of primary care practitioners in the commissioning of health services, and a change from hospital to primary and community settings for a range of services and procedures. Although the terminology has changed, this emphasis remains in the recent Scottish Health Service White Paper and its English counterpart.

**Aim.** To consider three questions in relation to this policy goal. First, does the evidence base support the changes? Secondly, what is the scale of the changes that have occurred? Thirdly, what are the barriers to the development of a primary care-led NHS?

**Method.** Programme budgets were compiled to assess changes over time in the balance of NHS resource allocation with respect to primary and secondary care. Total NHS revenue expenditure for the 15 Scottish health boards was grouped into four blocks or 'programmes': primary care, secondary care, community services, and a residual. The study period was 1991/2 to 1995/6. Expenditure data were supplied by the Scottish Office.

**Results.** Ambiguity of definitions and the absence of good data cause methodological difficulties in evaluating the scale and the appropriateness of the shift. The data that are available suggest that, at the aggregate level, there have been changes over time in the balance of resource allocation between care settings: relative investment into primary care has increased. It would appear that this investment is relatively small and from growth money rather than a 'shift' from secondary care. In addition, the impact of GP-led commissioning is variable but limited.

**Conclusion.** General practitioners' (GPs') attitudes to the policy suggest that progress towards a primary care-led NHS will continue to be patchy. The limited shift to date, alongside evidence of ambivalent attitudes to the shift on the part of GPs, suggest that this is a policy objective that may not be achieved.

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## Introduction

THE push towards a primary care-led National Health Service  $(NHS)^{1,2}$  has far-reaching implications for the future structure of the NHS. Its impact has been felt in two ways. First, in the role that primary care practitioners play in the commissioning process of health services has changed. Secondly, services and procedures are being shifted from hospital to primary and community care settings.<sup>3</sup> This has been encouraged by the rhetoric and the financial incentives for general practitioners  $(GPs)^2$  contained in policy through the 1990s. Although the terminology has changed, this emphasis remains in the recent Scottish Health Service White Paper, *Designed to Care*, and its English counterpart.<sup>5</sup> The Government's 'vision' for the NHS in Scotland is a service 'centred on primary care' in which 'as much as possible will be done for the patient in the familiar surroundings ... of their family doctor'.<sup>4</sup>

The rationale for such policies is essentially twofold: better patient care and lower costs. Together, these imply a more efficient (cost-effective) NHS. It is argued that patients can receive better quality of care if it is led by the primary sector, either by direct substitution of care or by managing the care process and the interface with secondary care. Patients may prefer this if it can achieve better communication, continuity of care, better access, and reduced waiting times. But perhaps the driving force is cost; costly secondary care can be substituted with less expensive primary care.

# Evidence

Even in an international context there is very little research evidence to inform or support any shifting of services from the hospital sector to primary care. Two recent reviews have assessed the evidence base for shifts to primary care.<sup>6,7</sup> Both reviews showed that there are few economic evaluations of shifts in the balance of care. The limited amount of good quality data reflects the methodological difficulties of evaluation in this area; difficulties compounded by the lack of clear definition of what constitutes a shift in the balance of care.<sup>6</sup> Many of the evaluations have been conducted in the field of community care as an alternative to long-stay care. The results of these studies tell us very little about the relative costs and benefits of the move toward a primary care-centred NHS. The studies that have been undertaken suggest that, in practice, general conclusions about the appropriateness of the shift cannot be drawn, and each shift should be considered on its own merits.

So what are the scale of changes that have occurred? Although primary care workload is apparently increasing, so is activity in the secondary care sector, in particular owing to increases in emergency admissions. <sup>8,9</sup> As a result, the current pattern and direction of shifts in the balance of care remains unclear. This paper attempts to address this issue: routine data is used to examine the scale of changes that have occurred between care settings; the impact of GP fundholding and a survey of GPs' attitudes are considered; and the barriers to implementation for a primary care-led NHS are discussed.

The scale of shifts between secondary and primary care budgets in Scotland

The population of Scotland is 5.1 million (1997). Its size and age/sex profile is similar to that of Yorkshire and Humberside in England. In 1994, 17.8% of the population were of pensionable age, infant mortality was 6.2 per 1000 live births, the rate of claimant unemployment was 9.3%, and approximately £795 per capita was spent on NHS health care.

## Method

The aims of this analysis were to use routinely available data to define a primary care 'programme' and a secondary care 'programme' in Scotland, and to examine and quantify changes in the relative size of the primary and secondary care programmes between 1991/2 and 1995/6.

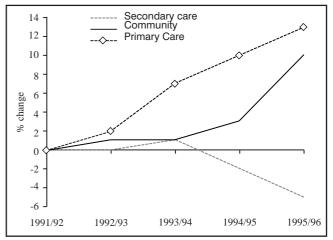
Programme budgets<sup>10</sup> were compiled to assess changes over time in the balance of NHS resource allocation with respect to primary and secondary care. Total NHS revenue expenditure for the 15 Scottish health boards was grouped into four blocks or 'programmes': primary care, secondary care, community services, and a residual.

The study period for this time series analysis was 1991/2–1995/6, the five years after the internal market reforms in the NHS. The principle source for expenditure data was Scottish Health Service Costs<sup>11</sup> and Scottish Office Annual Audited Accounts 1991/2–1995/6 supplied by the Scottish Office. Expenditure data are presented in nominal and real terms, the latter calculated in 1995/6 terms using the HCHS pay and prices index. Total numbers and skillmix of staff employed were also analysed by programme. <sup>12</sup> In addition, available measures of activity were examined.

# Results

# Programme budgets for Scotland as a whole

Trends in the total budgets for primary, secondary, and community care programmes are shown in Table 1 and Figure 1. The trends in staffing in the primary and secondary care programmes are shown in Table 2. At the start of the period, for every £100 spent in primary care, £277 was spent in secondary care. This



**Figure 1.** Percentage change in the share of total expenditure compared with the base year (1991/92).

ratio has fallen steadily, and by 1995/6 was £100 to £231.

Over the study period, the 15 Scottish Health Boards received a total of £727 million of 'growth' money (defined as change in funding from previous year), or £198 million in real terms. Secondary care received 45% (£325 million) of this, while primary care received 40% (£290 million). The balance of programme investment is disproportionate to their relative size, which has increased the percentage of spending on primary care. Over the five-year period, primary care increased its share of annual 'growth money' (29% to 46%), while the trend for secondary care was downward (61% to 16%).

#### Primary care

Over the study period, nominal primary care expenditure increased by 38% compared with base year (19% in real terms); a rate ahead of both the secondary programme and total expenditure (Table 1). Although the primary care share of total revenue expenditure only increased by three percentage points (from 22.9% to 26.0%), this represents a 13% increase of primary care's share since 1991/2 (Figure 1).

Within primary care, whole time equivalent (WTE) numbers

**Table 1.** Programme budgets (real terms = adjusted for health service inflation).

1991/2	1992/3	1993/4	1994/5	1995/6					
£ millions	£ millions	£ millions	£ millions	£ millions	1991/2 (%)	1992/3 (%)	1993/4 (%)	1994/5 (%)	1995/6 (%)
£764.3	£829.0	£916.8	£976.6	£1054.0	100	108.5 (101)	120.0 (109)	128.8 (113)	138.0 (119)
(£885.7)	(£898.8)	(£961.4)	(£999.0)						
£2113.6	£2249.3	£2370.0	£2411.3	£2438.7	100	106.4 (100)	112.1 (101)	114.1 (101)	115.4 (100)
(£2449.3)	(£2438.8)	(£2485.2)	(£2466.6)			, ,	, ,	, ,	, ,
£252.9	£272.4	£288.9	£303.1	£337.5	100	107.7 (101)	114.2 (103)	119.8 (106)	133.5 (115)
(£293.1)	(£295.4)	(£302.9)	(£310.1)			, ,	` ,	` ,	` ,
£1017.2	£1101.4	£1205.7	£1279.7	£1391.5	100	108.3 (101)	118.5 (107)	125.8 (111)	136.8 (118)
(£1178.8)	(£1194.2)	(£1264.3)	(£1309.0)			` ,	` ,	` ,	,
`£200.7	`£201.6	`£156.2´	`£200.6´	£228.3	100	100.4 (94)	77.8 (70)	100.0 (88)	113.8 (98)
(£232.6)	(£218.6)	(£163.8)	(£205.2)			` ,	` ,	` ,	` ,
£3331.4	£3552.3	£3731.9	£3891.6	£4058.5	100	106.6 (100)	112.0 (101)	116.8 (103)	121.8 (105)
(£3860.6)	(£3851.6)	(£3913.4)	(£3980.9)			` ,	` ,	` ,	,
(,	(,	( ,	(,						
22.9%	23.3%	24.6%	25.1%	26.0%	100%	102%	107%	110%	113
63.4%	63.3%	63.5%	62.0%	60.1%	100%	100%	101%	98%	95
7.6%	7.7%	7.7%	7.8%	8.3%	100%	101%	101%	103%	110
6.0%	5.7%	4.2%	5.2%	5.6%	100%	94%	70%	87%	93%
	£ millions  £764.3 (£885.7) £2113.6 (£2449.3) £252.9 (£293.1) £1017.2 (£1178.8) £200.7 (£232.6) £3331.4 (£3860.6)  22.9%  63.4%  7.6%	£ millions £ millions  £764.3 £829.0 (£885.7) (£898.8) £2113.6 £2249.3 (£2449.3) (£2438.8) £252.9 £272.4 (£293.1) (£295.4) £1017.2 £1101.4 (£1178.8) (£1194.2) £200.7 £201.6 (£232.6) (£218.6) £3331.4 £3552.3 (£3860.6) (£3851.6)  22.9% 23.3%  63.4% 63.3%  7.6% 7.7%	£ millions         £ millions         £ millions           £764.3         £829.0         £916.8           £885.7)         £898.8)         £961.4)           £2113.6         £2249.3         £2370.0           £2449.3)         £2438.8)         £2485.2)           £252.9         £272.4         £288.9           £0101.2         £1101.4         £1205.7           £1178.8)         £1194.2)         £1264.3)           £200.7         £201.6         £156.2           £232.6)         £218.6)         £163.8)           £3331.4         £3552.3         £3731.9           £3860.6)         £3851.6)         £3913.4)    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(£2466.6)         £252.9         £272.4         £288.9         £303.1         £337.5         100         107.7 (101)         114.2 (103)         119.8 (106)           (£293.1)         (£295.4)         (£302.9)         (£310.1)         £1391.5         100         107.7 (101)         114.2 (103)         119.8 (106)           (£293.1)         (£295.4)         (£302.9)         (£310.1)         £1391.5         100         108.3 (101)         118.5 (107)         125.8 (111)           (£1178.8)         (£1194.2)         (£1264.3)         (£1309.0)         £228.3         100         100.4 (94)         77.8 (70)         100.0 (88)           (£232.6)         (£218.6)         (

Table 2. Staff numbers ('NHS in Scotland' manpower summary).

	1991/2 WTE	1992/3 WTE	1993/4 WTE	1994/5 WTE	1995/6 WTE	1991/2 (%)	1992/3 (%)	1993/4 (%)	1994/5 (%)	1995/6 (%)
General practitioners Practice nurses All other practice staff Total primary care staff	3805 695 4643 9143	3848 736 4800 9384	3,861 772 5034.2 9668	3890 813 5173 9876	3866 875 5375 10116	100 100 100 100	101 106 103 103	102 111 108 106	102 117 111 108	102 126 116 111
All hospital medical and dental	5969	6133	6255	6478	6642	100	103	105	109	111
Nursing and midwifery <sup>a</sup>	52 648	52 829	52 635	52 521	52 416	100	100	100	100	100
Administrative and clerical <sup>b</sup>	16 061	16 839	17 387	17 754	17 598	100	105	108	111	110
Ancillary	15 022	13 974	13 286	12 323	11 858	100	93	88	82	79
Total secondary care staff	89 700	89 775	89 563	89 076	88 514	100	100	100	99	99

All figures rounded up to zero decimal places. aNurse learners excluded for all years, as transferred to higher education mid-period; bincludes obsolete management grades and management trainees.

of all staff types increased in total by 11% compared with the base year (Table 2). The total numbers of GPs increased by 2.2%. The total numbers of practice nurses (WTE) increased by 26%, and the total numbers of all other practice ancillary staff (WTE) increased by 11.4%.

National data on health outcomes and process activity were not routinely available for primary care.

### Secondary care

Secondary care expenditure has expanded more slowly than total revenue expenditure and has been almost stable in real terms. Hence, the secondary care share of total revenue expenditure has contracted by just over three percentage points, from 63.4% to 60.1% (Table 1). This represents a fall in secondary care's share of 5% compared with the base year (Figure 1).

Over the study period, total WTE staff numbers in the four areas shown in Table 2 have decreased by 1%. At the start of the study period there were close to 10 secondary care workers for every one in primary care. By 1994/5, the ratio had reduced to nine to one. Within secondary care, there have been clear changes in skillmix as well as in totals. The total numbers of medical and dental staff have increased steadily (up 11% on base year). Total nursing numbers have gone down slightly. Administrative and clerical staff numbers have increased markedly year-on-year (up 10% from base year).

Health outcome data are not routinely available for secondary care. However, over the study period, total acute inpatient discharges increased steadily year-on-year (up 8% in total). Total bed days have decreased (down 17% on base year). The total number of acute day case discharges and new outpatient attendances has risen rapidly in every year of the study period (by 76% and 31% in total, respectively).

Defining areas of growth and decline — analysis of sub-programmes

Within the primary care programme the proportion spent on GP pharmaceutical services has been increasing. This increase accounted for 54% of the total increase in primary care spending over the study period. Table 3 presents 11 categories drawn from the list of drugs that have shown the greatest change in either volume or cost since 1992/3.

Within secondary care, the acute inpatient sub-programme has expanded at the same rate as total inpatient costs and, therefore,

has maintained a constant 41% share of the total. The rate of expenditure on inpatient geriatric assessment has increased fastest (up 29% in real terms). Non-inpatient hospital expenditure has also increased rapidly, as might be expected with the rise of ambulatory care. Expenditure on the other sub-programmes has relatively declined. This decline has been most dramatic in maternity inpatient expenditure (down 3% in real terms), mental handicap inpatient expenditure (down 16% in real terms), and mental illness inpatient expenditure (down 9% in real terms).

Variation *between* individual health boards in the proportions spent on primary care narrowed during the study period. At the base year this ranged from 18.5% up to 29% of total expenditure. By 1995/6 this range was 19.5% to 27.5%. The direction of change in proportional expenditure over the study period differed among Health Boards, several decreased the proportion of total resources spent on primary care.

# Does GP fundholding lead to a primary care-led NHS?

Glennerster *et al*<sup>13</sup> suggested that the shift to primary care-led commissioning in the form of fundholding had been successful in improving choice and quality of service for patients. They suggested that motivation to seek service improvements and cost reductions generated by the fundholding scheme, coupled with the patient-level information on patient needs and preferences, enabled fundholders to exert pressure on providers to improve services for patients. Reductions in prescribing costs<sup>14</sup> and shifts in care settings resulted from the shift in purchasing decision-making power, illustrating the link between the two aspects of a primary care-led NHS defined earlier.

An early assessment of the impact of fundholding in Scotland also came to positive conclusions regarding the potential of the scheme to encourage primary care-led commissioning. Howie<sup>15</sup> looked at the initial impact of the Scottish shadow fundholding scheme in Grampian and Tayside regions. The practices concerned in the scheme were generally positive to change and innovation, became more aware of the financial implications of their decisions, were able to challenge standards in the hospital sector through the process of negotiating quality on behalf of patients, and, overall, came to see themselves more as part of a team of professionals and organizations involved in commissioning care, requiring them to work with rather than independently of other sectors.

Subsequent evaluations of the effectiveness of the scheme

**Table 3.** GP prescribing (real terms = adjusted for health service inflation).

			illions terms)		Percentages (real terms)				
BNF Group	1992/3	1993/4	1994/5	1995/6	1992/3	1993/4	1994/5	1995/6	
Ulcer-healing drugs	£48.4 (£52.5)	£53.6 (£56.2)	£61.5 (£62.9)	£68.0	100	111 (107)	127 (120)	141 (130)	
Corticosteroids	£15.5 (£16.8)	£19.2 (£20.2)	£22.8 (£23.3)	£25.6	100	124 (120)	147 (138)	165 (152)	
Antidepressant drugs	£12.3 (£13.3)	£14.3 (£14.9)	£17.1 (£17.5)	£21.6	100	116 (112)	139 (131)	175 (162)	
Bronchodilators	£16.2 (£17.6)	£17.6 (£18.4)	£18.8 (£19.3)	£20.5	100	108 (105)	116 (110)	126 (116)	
Lipid-lowering drugs	£3.1 (£3.4)	£3.7 (£3.9)	£4.4 (£4.5)	£6.8	100	118 (114)	142 (134)	219 (202)	
Drugs used in substance dependence	£0.4 (£0.4)	£0.7 (£0.7)	£1.0 (£1.1)	£1.4	100	161 (156)	255 (241)	346 (319)	
Drugs affecting bone metabolism	£0.6 (£0.6)	£1.0 (£1.0)	£1.3 (£1.4)	£1.9	100	171 (165)	237 (224)	330 (304)	
Drugs used in diabetes	£7.8 (£8.5)	£9.1 (£9.5)	£10.5 (£10.7)	£11.8	100	116 (112)	134 (127)	152 (140)	
Dressing and dressing packs	£1.8 (£2.0)	£1.6 (£1.7)	£2.6 (£2.7)	£3.1	100	89 (86)	143 (135)	171 (158)	
Drugs used in psychoses and related disorders	£1.6 (£1.8)	£2.0 (£2.1)	£2.5 (£2.5)	£2.9	100	122 (118)	153 (144)	181 (167)	
Drugs used for genitourinary disorders	£1.4 (£1.5)	£1.7 (£1.8)	£2.0 (£2.1)	£2.7	100	126 (122)	151 (142)	195 (180)	

have been less convinced of its impact. Robinson<sup>16</sup> argued that, although there certainly are examples of fundholders successfully exerting pressure on Trusts to implement organizational changes, such as improved waiting times, patient information, or access to services, the efficiency implications and the overall extent of the changes remain ambiguous. The evidence on changes in referral rates — shifting services from secondary to primary care, improved patient choice, and improved quality of care — is 'very limited, ambiguous, and inconclusive'.<sup>16</sup>

Coulter<sup>17</sup> and Howie et al<sup>18</sup> found conflicting evidence of the impact of fundholding on referral rates. Coulter found no difference between fundholding and non-fundholding practices. Howie et al, examining the referrals of a small number of practices in detail, found that outpatient, day case, and inpatient referral rates fell for a number of conditions in the year after the change to fundholding status. West<sup>19</sup> cites a number of studies that found that, in terms of choice of provider, fundholders 'were relatively conservative and did not shift large numbers of referrals between providers'. 19 There are examples of the use of savings made by fundholders for the development of practice-based and non-standard community services, again emphasizing the link between shifts in purchasing power and the shifts in care setting that they facilitate. However, these changes may be unequally distributed socioeconomically and geographically. Leese and Bosanquet<sup>20</sup> found that it is only GP practices in affluent areas and in areas of population growth that tend to be innovative. Several other studies have concluded that the potentially radical impact of fundholding has still to be realized. 21-23

Variations in practices' attitudes to the concept of a primary care-led NHS were explored in a recent study<sup>24</sup> examining the ways in which needs assessment is being used to improve health in Scotland. The study suggested that GPs had little or no appetite for the broader issues involved in GP-led commissioning, and that, but for a few champions of the new roles for GPs

embodied in the shift to primary care, most GPs neither felt comfortable with nor predisposed to the new roles being carved out for them. The results corroborate those found by the Audit Commission,<sup>23</sup> and support the hypothesis that practice characteristics are more important in determining the impact of fund-holding than the incentives created by holding funds and being given new responsibilities.

## Discussion

The results reported in this study suggest that, at the aggregate level, changes in the balance of resources between secondary and primary care have occurred. Although the balance has tipped in the direction that NHS strategy intended, the changes:

- have arisen from differential growth rates in expenditure in each programme,
- were relatively small and slow,
- had little impact on the secondary care share of total expenditure, and
- are supported by a flimsy evidence base.

Growth in primary care has been dominated by areas of expenditure, such as practice nurses and prescribing, that do not themselves constitute a shift in care settings, although they may be consistent with it.

Health board views on these empirical findings were discussed at a workshop,<sup>25</sup> which general managers, directors of public health and representatives from primary care from all Scottish health boards were invited to attend. Discussion focused on the barriers to implementation of a primary care-led NHS; four main issues were highlighted.

First, the lack of data is a barrier to progress. Showing changes in the broad programme budgets, while useful, cannot give a detailed picture of what is actually happening in terms of patient care. Intra-programme changes in the way services are delivered are likely to be occurring, with corresponding changes in the roles, responsibilities, and workload of primary care teams. It is not possible to identify from current data sources whether increased expenditure in primary care was a result of increased activity in secondary care leading to further implications for primary care; to decreased activity in secondary care with substitution by primary care (i.e. a shift); or to other factors such as pharmaceutical developments generating pressures on prescribing budgets.

Secondly, a particular concern is the extent to which increases in primary care workload are not being supported by shifts in resources into primary care. Again, data on this are limited.<sup>26</sup> Along with the remuneration system embodied in the GP contract, and the financial constraints on Trusts affecting their ability and willingness to provide resources to support the shift, this is likely to be a factor influencing the willingness of the primary care sector to support the overall policy goal of a shift to primary care.

Thirdly, changes in care settings have implications for the quality and accessibility of care to patients. However, the evidence base on patient preferences is even narrower than that for cost-effectiveness of different care settings. Patient preferences need to be weighed against the clinical and resource arguments surrounding changes in where and how care is delivered. This will require research into the costs and benefits of, and patient preferences regarding, specific shifts. It will also require mechanisms to gauge patients' needs and wishes for a shift in care setting, and to monitor quality of services for patients after any shift has occurred.

Fourthly, eroding the cost base of secondary care is likely to be both highly political and slow, especially given the current pressures on the hospital sector and the perverse incentives generated by some performance indicators such as the now defunct efficiency index.<sup>27</sup>

In conclusion, the evidence base for shifts in the balance of care is poor, and no general conclusions can be made regarding the appropriateness of shifts. In light of these issues, and in view of the continuing emphasis on the policy goal of a primary careled NHS, potential barriers to and evidence supporting the shift need to be considered. On each count, there are grounds to question whether this goal will be achieved.

## References

- NHS Management Executive. *Developing purchasing and GP fund-holding. Towards a primary care led NHS.* London: Department of Health, 1994.
- Health Departments. General practice in the National Health Service: the 1990 contract. London: HMSO, 1989.
- Coulter A. Shifting the balance from secondary to primary care. *BMJ* 1995; **311:** 1447-1448.
- Scottish NHS. Designed to care: Renewing the National Health Service in Scotland. Edinburgh: HMSO, 1997.
- Department of Health. The new NHS: Modern, dependable. London: HMSO, 1997.
- Scott A. Primary or secondary care? What can economics contribute to evaluation at the interface? *J Public Health Med* 1995; **18:** 19-26. Godber E, Robinson R, Steiner A. Economic evaluation and the shift-
- ing balance towards primary care: definitions, evidence and methodological issues. Health Economics 1997; 6: 275-294.
- Capewell S. The continuing rise in emergency admissions. BMJ 1996; **312**: 991-992
- Kendrick S. The pattern of increase in emergency hospital admis-
- sions in Scotland. *Health Bull* 1996; **54:** 169–184. 10. Craig N, Parkin D, Gerard K. Clearing the fog on the Tyne: programme budgeting in Newcastle and North Tyneside Health Authority. Health Policy 1995; 33: 107-125.
- National Health Service in Scotland, Information and Statistics Division. Scottish health service costs. Edinburgh: HMSO, 1991/92;

- 12. Information and Statistics Division. National Health Service in Scotland Manpower Summary Data. Edinburgh: NHS Scotland, 1997.
- Glennerster H, Matsoganis M, Owens P. Implementing GP fundholding: Wild card or winning hand? Buckingham: Open University Press, 1994
- 14. Whynes DK, Baines DL, Tolley KH. GP fundholding and the cost of prescribing: further results. *J Public Health Med* 1997; 19: 18-22.15. Howie JGR. Evaluation of the Scottish shadow fundholding scheme:
- Analysis of first results. Health Bull 1993; 51: 94-105
- 16. Robinson R. The impact of the NHS reforms 1991-1995: a review of research evidence. J Public Health Med 1996; 18: 337-342
- 17. Coulter A. Evaluating general practice fundholding in the United Kingdom. *Eur J Public Health* 1995; **5**: 223-239.
- 18. Howie HGR, Heaney DJ, Maxwell M. General practice fundholding shadow project: An evaluation. Edinburgh: Department of General Practice, Édinburgh University, 1995.
- 19. West PA. Understanding the National Health Service reforms: The
- creation of incentives? Buckingham: Open University Press, 1997.
   Leese B, Bosanquet N. Change in general practice and its effects on service provision in areas with different socio-economic characteristics. *BMJ* 1995; 311: 546-550.
- 21. Miller P. Are GP fundholders wasting money? Health Serv J 1997; March 6: 28-29.
- 22. Harrison AJ. Hospitals in England: Impact of the 1990 National Health Service reforms. Med Care 1997; 35(Suppl): OS50-OS61.
- 23. Audit Commission. What the doctor ordered: A study of GP fundholders in England and Wales. London: HMSO, 1996.
- 24. Murie J. Needs-based commissioning by GPs: A study to explore GPs' perception of the shift to primary care and its implications for needs-based commissioning. [Unpublished MPH dissertation.] Glasgow: Department of Public Health, University of Glasgow, 1997.
- 25. SNAP Workshop. Understanding the shifts between primary and secondary care in Scotland and implications for future policy. Glasgow: Greater Glasgow Health Board, January 1997
- 26. Scott A, Vale L. Increased general practice workload due to primary care led National Health Service: the need for evidence to support rhetoric. Brit J Gen Pract 1998; 48: 1085-1088.
- 27. Donaldson LJ, Kirkup W, Craig N, Parkin D. Lanterns in the jungle: Is the NHS driven by the wrong kind of efficiency? Public Health 1994; 108: 3-9.

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