

## High and low incomes in general practice

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### Abstract

**The Review Body on Doctors' and Dentists' Remuneration deals with average incomes and costs, and little evidence is available on local variability. In a study on general practice the distribution of high and low incomes was assessed. High income practices (defined as those with net incomes per partner of more than £35 000 a year) were more likely to be larger, to have younger partners, and to be located in affluent areas. Low income practices (with a net income of less than £20 000 per partner) were smaller, located in more urban areas, and more likely to have Asian partners. High income practices had higher costs per patient and more staff resources. Low income practices had fewer practice resources and faced great disincentives to investment. These practices were concentrated in less affluent areas, where the need for improved organisation of practices is greatest.**

**General practice is becoming increasingly divided between high income, high cost practices and those with low incomes and few resources.**

### Introduction

General practitioners are independent contractors within the NHS, and their income varies depending on the amount they receive in capitation fees, allowances, and item of service fees. A capitation fee is paid for every patient on a general practitioner's list, with older patients attracting a higher fee. The main allowances are the basic practice allowance (to cover the basic running costs of the practice), group practice allowance (to encourage doctors to work in partnerships of three or more), and supplementary practice allowance (for out of hours cover). Other allowances are paid depending on the circumstances of the practice. Specific items of service that attract a fee include vaccination and immunisation, family planning, cervical cytology, and maternity services.

The income of family doctors is determined yearly by the review body, which sets a target income for general practitioners for the next year.<sup>1</sup> The target income is achieved by adjusting the various fees and allowances so that an average figure can be calculated. A recent study of general practice in England showed that the average target income conceals wide variations depending on location of the practice and its strategy.<sup>2</sup> We present evidence on the local variations in income and give detailed results for practices at the extremes—those with high and low incomes.

For the purposes of the study we defined a low income practice as one in which the net income per doctor (before personal taxation) was £20 000 or less and a high income practice as one with an income per doctor of more than £35 000 (before personal taxation). Such variability of income may have important effects on practice behaviour and decisions. Low income practices may be more unstable and have lower

margins for investment. Many low income practices in an area might result in a lower response to incentives designed to encourage prevention and the provision of new services.<sup>3</sup> High income practices might show greater stability and willingness to invest.

### Methods

The evidence was drawn from a study of practices from different areas of England chosen as representative of the areas in which most people live.<sup>2</sup> The study areas and their characteristics were: north west suburban—an area including two sizable towns with some light industry and engineering and numerous small villages; London inner city—an urban area with a high proportion of its population from ethnic minorities and a long history of deprivation. Some of its wards were among the poorest in England; Thames valley—a fairly affluent area with many small towns but also including a new town and some areas of urban deprivation; east rural—an area comprising one large town, several smaller market towns, and some seaside resorts; north east industrial—an area including three large towns and some villages that depended on heavy manufacturing industry and had high unemployment; midlands urban—a mixed urban area on the edge of a large conurbation, containing a large amount of council housing but also some affluent villages, with a high proportion of its population from ethnic minorities. The London inner city, north east industrial, and midlands urban areas were less affluent than the other three areas.<sup>2</sup>

Information was collected by interviewing one partner in each practice, and the overall rate of response was 72%. Singlehanded practices were excluded from the study.<sup>2</sup> The study was carried out from October 1986 to May 1987. At that time the target net income for general practitioners was set at £25 080.<sup>1</sup> The doctors who were interviewed were asked to give the gross and net incomes of the practice from family practitioner committee sources for the past full accounting year, either as the actual figure or chosen from a series of ranges of income. They were also asked to give the size of the partnership to permit calculation of average net and gross incomes for each full time equivalent partner. Gross income was defined as the total income from the family practitioner committee in fees and allowances, excluding direct reimbursement of rent, rates, and ancillary staff salaries, and net income as the income available for distribution among the partners after practice expenses had been paid but before personal taxation.

The focus of the study was on decision making by practices. Practice strategy was defined by dividing practices into three groups depending on the decisions they had made in employing a practice nurse and participating in the cost rent scheme and in the vocational training scheme. These factors were chosen because they are generally considered to be signs of

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professional quality.<sup>4,5</sup> Practices fulfilling two or more of these criteria were designated "innovators," those fulfilling none "traditionalists," and the remainder "intermediates." In a previous report we showed that innovator practices were more likely to be located in rural or suburban areas, to have additional facilities, such as equipment, age-sex registers, special clinics, and appointment systems, and to employ practice managers.<sup>2</sup>

## Results

In the study 235 practices responded, not all giving financial information. Tables I and II show the considerable variation in practice income that we found among practices in different areas. In all tables those practices achieving middle incomes—that is, average net incomes of £20 000–£35 000—are included for completeness and comparison. Of 215 practices, 32 (15%) achieved high incomes and 46 (21%) achieved low incomes. Table II also shows the association between income and the strategy of the practice: high income practices were much more likely to be innovators. Table III relates the size of the partnership to income. The average number of partners was 3.7 in high income practices compared with 2.6 in low income practices.

Table IV shows the association of high and low

TABLE IV—Income and characteristics of general practitioners and characteristics of individual practices according to income of practice

	Income of practice			Total
	High	Middle	Low	
<i>Income of general practitioner</i>				
Mean net income (£000)	39.3	28.7	17.0	27.3
Mean gross income (£000)	66.0	42.6	28.3	43.8
<i>Characteristics of general practitioner</i>				
Average age (years)	43.1	43.3	45.3	43.7
Total No (%) of doctors	135 (17)	538 (67)	129 (16)	802 (100)
No (%) of men	117 (18)	445 (67)	98 (15)	660 (100)
No (%) of women	18 (13)	93 (65)	31 (22)	142 (100)
No (%) of Asians	5 (6)	46 (54)	34 (40)	85 (100)
No (%) members of BMA	105 (78)	378 (71)	94 (72)	577 (72)
No (%) members of RCGP	54 (40)	180 (34)	36 (28)	270 (34)
No (%) practices ≥ 1 trainer	20 (63)	47 (34)	5 (11)	72 (33)
<i>Practices using cost rent scheme</i>				
No (%) in scheme	18 (56)	57 (42)	10 (22)	85 (40)
No (%) not in scheme	14 (44)	80 (58)	36 (78)	130 (60)
<i>Equipment in practice</i>				
No (%) with computer	17 (53)	62 (45)	11 (24)	90 (42)
No (%) with electrocardiograph	26 (81)	100 (73)	23 (50)	149 (69)
<i>Employees in practice</i>				
No (%) with nurse	26 (81)	95 (69)	22 (47)	143 (67)
No (%) with practice manager	25 (78)	97 (71)	19 (40)	141 (66)

BMA=British Medical Association. RCGP=Royal College of General Practitioners.

income practices and the income and characteristics of the general practitioners working in them. The mean gross income followed a similar pattern to mean net income, being higher in higher income practices. On average doctors working in high income practices were younger (mean age 43.1 v 45.3 years) and more commonly men (18% v 13% women). Asian doctors were more likely to be in low income practices (40% v 6%), reflecting their concentration in more urban and less affluent areas. High income practices were more likely to be training practices (63% v 11%) and to have doctors who were members of the Royal College of General Practitioners (40% v 28%). More high income practices used the cost rent scheme (56% v 22%), had computers and electrocardiographs (53% and 81% v 24% and 50%, respectively), and employed nurses and practice managers (81% and 78% v 47% and 40%, respectively).

Table V shows the net and gross incomes of practices expressed as income per patient on the practice list. The net income per patient in high income practices was £17.00 compared with £9.56 in low income practices. Cost per patient was expressed as the difference between gross and net income per patient and reflects the practice cost per patient. Table VI sets out similar data on an area basis for all practices in that area and shows that the general practice services in urban and less affluent areas cost less per patient than those in the more affluent areas, where more of the high income practices were located. The figures for the east rural area were particularly high because of the large number of dispensing practices in that area.

## Discussion

Little evidence exists to support the idea of local variation in average income and costs for general practitioners. Our study, however, found some interesting differences. Affluent areas, such as the Thames valley and east rural areas, had a far higher proportion of high income practices (28% and 32%, respectively) than did the London inner city and midlands urban areas (4% and 7%, respectively). Urban areas and less affluent areas, especially the London inner city and midlands urban, had a far higher proportion of low income practices (32% and 36%, respectively). Our study showed an association,

TABLE I—Gross and net incomes and costs

Area	Mean gross income/partner (£000)	Mean net income/partner (£000)	Cost ratio/net: gross income	Coefficient of variation	
				Gross income	Net income
North west suburban	41.0	26.3	0.64	36.3	20.5
Thames valley	39.8	29.2	0.73	31.9	23.1
East rural*	72.0	33.7	0.47	42.5	23.1
London inner city	33.6	23.3	0.69	28.6	26.6
North east industrial	38.9	27.1	0.70	21.8	23.1
Midlands urban	37.0	23.9	0.65	32.7	29.2
Total	43.8	27.3	0.62		

\*Includes gross costs associated with dispensing.

TABLE II—Income of practice by area and strategy

	No (%) in each income bracket			Total (n=215)
	High (n=32)	Middle (n=137)	Low (n=46)	
<i>Area of practice</i>				
North west suburban	3 (8)	28 (72)	8 (21)	39
London inner city	1 (4)	16 (64)	8 (32)	25
Thames valley	8 (28)	15 (52)	6 (21)	29
East rural	12 (32)	24 (65)	1 (3)	37
North east industrial	5 (12)	29 (71)	7 (17)	41
Midlands urban	3 (7)	25 (57)	16 (36)	44
Total	32 (15)	137 (64)	46 (21)	215
<i>Strategy of practice</i>				
Innovator	22 (69)	52 (38)	11 (24)	85 (40)
Intermediate	7 (22)	55 (40)	14 (30)	76 (35)
Traditional	3 (9)	30 (22)	21 (46)	54 (25)

TABLE III—Size and income of partnership (full time equivalent)

No of partners	No (%) in each income bracket			Total (n=215)
	High (n=32)	Middle (n=137)	Low (n=46)	
1	1 (3)	3 (2)	4 (9)	8 (4)
2	2 (6)	35 (26)	25 (54)	62 (29)
3	15 (47)	43 (31)	10 (22)	68 (32)
4	6 (19)	23 (17)	3 (7)	32 (15)
5	3 (9)	20 (15)	2 (4)	25 (12)
6	4 (13)	7 (5)	2 (4)	13 (6)
7		3 (2)		3 (1)
8	1 (3)	3 (2)		4 (2)
Average No of partners	3.7	3.4	2.6	3.3

TABLE V—Income and cost per patient among practices with different incomes and strategies

	Net income as % of gross	Net income/patient (£)	Gross income/patient (£)	Cost/patient (£)
High income practices	60	17.00	28.55	11.55
Middle income practices	67	13.75	20.43	6.68
Low income practices	60	9.56	15.90	6.34
Innovator practices	57	14.16	24.68	10.52
Intermediate practices	65	12.18	18.82	6.64
Traditionalist practices	64	11.15	17.53	6.38
All practices	65	13.34	20.66	7.32
Review body <sup>1</sup>	68	12.34	18.05	5.71

TABLE VI—Location of practice and net and gross incomes and costs per patient on list

Area	Average list size	Income/general practitioner (£)		Income/patient (£)		Cost/patient (£)
		Net	Gross	Net	Gross	
East rural	1940	33 700	72 000	17.37	37.11	19.74
Thames Valley	2160	29 200	39 800	13.52	18.43	4.91
North west suburban	2009	26 300	41 000	13.09	20.41	7.32
North east industrial	2145	27 100	38 900	12.63	18.14	5.51
Midlands urban	2106	23 900	37 000	11.35	17.57	6.22
London inner city	2092	23 300	33 600	11.14	16.06	4.92

between the income of the practice and strategy. We previously reported that doctors in innovator practices were more likely to achieve a higher income than those in traditionalist practices and that traditionalists were more likely to be located in more urban, less affluent areas.<sup>2</sup>

Smaller practices were more likely to have lower average incomes than larger practices—for example, 54% of low income practices compared with only 16% of high income practices consisted of only two partners. The number of partners is important as larger practices can spread the cost of the practice over more partners. From the net income data the cost per patient in high income practices (£17.00) was considerably higher than that in low income practices (£9.56). For comparison, figures taken from the review body's report for 1986 for a target net income of £25 080 and an average list size of 2032, gave a cost per patient of £12.34, which is close to the average figure of £13.34 in this study.<sup>1</sup> The target gross income per patient from the review body's figures was £18.05. This figure was exceeded by some high income practices (£28.55), but low income practices had a gross income per patient of only £15.90. If more practices moved from the low income group, even into the middle income group, the cost of the general practitioner service would have to increase even though only 21% of practices were in the low income group (table II). Similarly, innovator practices as a whole were more costly than traditionalist practices.

We did not collect data on patients' follow up so the question arises whether the higher cost of innovator and high income practices, with their greater facilities for patients, actually provide a better service. These practices conform to the professionally approved model of care.<sup>45</sup> The National Audit Office emphasised recently that "good practice premises help to promote high standards of care and encourage the growth of team work in primary health care. Inadequate accommodation inhibits these developments and limits the range and standard of services provided" and "employing ancillary staff helps GPs to provide better and more efficient services for their patients."<sup>46</sup> On a similar theme an editorial in the *Lancet* stated that "no randomised trial is necessary to show that GPs working from their own front parlours or squalid lock up shops, in isolation, without office or nursing staff, and treating all the costs of a public service from their own pockets, make less effective use of their long and costly training than GPs working in groups, assisted by

secretaries and nurses, in purpose built premises, with most of the costs met directly by the state."<sup>47</sup>

We have shown that provision of such services and facilities will entail extra expenditure. The incomes of low cost practices would be still lower if it were not for the low costs of running these practices (table V). Running costs for each patient in the low income practices were only £6.34 compared with £11.55 in high income practices. These findings on income and costs are important for the future development of general practice. Practices with low incomes and few practice resources face great disincentives to investment. These practices are concentrated in less affluent areas, where the need for improved practice organisation is greatest. Our findings suggest that improvements in local services may well require local policies to improve the viability of these practices. General practice is becoming increasingly divided between high income, high cost practices and those with low incomes and few resources.

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## ONE HUNDRED YEARS AGO

The vexed question of punishment of refractory children in schools has not yet been settled; we still have frequent examples of the anomaly that while masters in board schools are expected to govern the boys and do their best to subdue unruly or immoral conduct, infuriated parents, too often with assistance from sentimental people, successfully drag the schoolmaster before the police magistrate to be punished for doing what he conceives to be his duty. As Lord Halsbury has said: "It would be well that school authorities should instruct their teachers to observe in the infliction of corporal punishment such a regularity, both in time and method, as to insure the greatest possible security against excess or temper in the person inflicting such punishment." In most schools, however, it is only the head teachers who can inflict punishment, and each such chastisement has to be entered in the "punishment book." The present state of uncertainty as to the power of a teacher, and conflicting magisterial decisions, tend greatly to weaken discipline in all schools, and lessen respect for the law, which ought to be supreme, that certain offences will surely meet with adequate retribution. Some teachers are not perfect, but all pupils are not amenable, and there are cases where the knowledge that there is no last resort to corporal punishment leads to immense mischief. It is strange that in the public press such sentimental tenderness should be expressed for the bodies of children educated by the State, while boys in the old public schools receive their thrashing without appealing to their parents to prosecute the head master. It is but seldom that any real harm has resulted from school chastisement judicially administered. (*British Medical Journal* 1889;i:148)