

# GP job satisfaction in view of contract reform: a national survey

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## ABSTRACT

### Background

Job satisfaction has been associated with intentions to quit and aspects of quality of care. In 2001, GP job satisfaction in England had fallen to its lowest point for over a decade.

### Aim

To assess GP job satisfaction and stressors immediately prior to implementation of the 2004 contract.

### Design of study

National survey of a random sample of GPs.

### Setting

England.

### Method

One thousand, nine hundred and fifty principal and salaried GPs surveyed in February 2004 were compared with 1828 principals surveyed in 1998 and 1841 principal and salaried GPs surveyed in 2001. Job satisfaction and stressor scores were adjusted for 2004 age-sex distributions. Determinants of overall satisfaction were examined through ordinary least squares regression.

### Results

The 2004 response rate was 53%. GPs were most dissatisfied with hours of work, recognition for good work and remuneration, and experienced most pressure from paperwork, increasing workloads and having insufficient time. The majority of doctors were satisfied with their job overall. Satisfaction was higher than in 2001 and approximately the same as in 1998. Overall stress in 2004 was lower than in 2001 but still higher than in 1998. After allowing for personal, practice and job characteristics, higher satisfaction was associated with lower job stress, involvement in decision making, increasing job interest and ability to meet conflicting demands.

### Conclusions

Despite recent initiatives to enhance workforce capacity and working lives for GPs, workload, time pressures and job control remain potential areas of concern. Addressing such issues may be key to maintaining morale as the new contract is implemented.

### Keywords

contracts; general practitioner; job satisfaction; workforce.

## INTRODUCTION

In April 2004, the majority of GPs in England changed to a radically new national contract in which up to 20% of their pay relates to the quality of care they provide.<sup>1</sup> The contract also aims to facilitate flexible working and thereby enhance doctors' participation in the workforce.<sup>2,3</sup> Previous contract revisions had a negative impact on GPs<sup>4</sup> and there is concern that the new contract may further reduce existing low levels of job satisfaction.<sup>5,6</sup>

Job satisfaction is known to be a major determinant of stated intentions to leave the workforce by GPs.<sup>5</sup> Low satisfaction may also have adverse effects on physicians' health and aspects of quality of care.<sup>7-10</sup> It is therefore important to investigate how the new contract affects GP satisfaction and to identify potential adverse factors that may be susceptible to intervention.

A study evaluating four different national cohorts of doctors defined according to their year of qualification indicated that the majority of NHS GPs had high levels of job satisfaction when assessed in 1998/1999.<sup>11</sup> However, a more recent national survey indicated that job satisfaction in GP principals in England fell considerably between 1998 and 2001.<sup>5</sup>

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## How this fits in

Job satisfaction is a major determinant of intentions to quit and has been associated with various aspects of quality of care provided by physicians. Previous national surveys of GPs in England have shown that job satisfaction fell after the implementation of the 1990 contract, had partially recovered by 1998, but then fallen again by 2001. This study indicates that the overall job satisfaction of GPs in 2004 had returned to 1998 levels. Nevertheless, workload, time pressures and job control remain areas of concern for GPs.

This study aimed to estimate levels of GP job satisfaction and stressors immediately prior to the introduction of the new contract in England and to compare them with those recorded in 1998 and 2001. It also explored the personal, practice and job characteristics influencing current overall job satisfaction.

### METHOD

#### *Design and participants*

A questionnaire was posted to a random sample of 1950 principals and salaried GPs in England drawn from a database maintained by the Department of Health.<sup>12</sup> The initial mailing was undertaken in February 2004, with non-responders sent two reminders at intervals of 3 weeks.

The data collected were compared with those from two national surveys of similar design and content conducted in 1998 ( $n = 1828$ ) and 2001 ( $n = 1841$ ). The details of these surveys — which yielded response rates of 49% and 67%, respectively — have been reported previously.<sup>5,13</sup> The 1998 sample included general practice principals only, whereas the 2001 sample included principals and salaried GPs.

#### *Survey instrument*

The job satisfaction measure was originally developed by Warr and colleagues<sup>14</sup> and subsequently shortened for use with GPs.<sup>15</sup> Doctors rated overall job satisfaction and satisfaction with nine job facets on a 7-point scale ranging from 'extremely dissatisfied' (scored 1) to 'extremely satisfied' (scored 7). Work pressure was assessed through 20 items representing job stressors that have been found to be associated with high pressure for GPs in previous surveys.<sup>13</sup> Each was rated from 'no pressure' (scored 1) to 'high pressure' (scored 5). The mean of the 20 individual items (Cronbach's  $\alpha$  for internal consistency = 0.91) was used as an indicator of overall job stress, with higher scores indicating higher stress. Up to 50% missing responses were allowed in the derivation of these scores.

Six statements on workday experiences were selected from the 2003 NHS Staff Survey.<sup>16</sup> Doctors

indicated the extent to which they agreed with each statement on a 5-point scale ranging from 'strongly disagree' to 'strongly agree'. These statements related to feedback on performance, involvement in decision making, increasing job interest over the last year, significance of job changes in the last year to improved patient care, ability to meet conflicting demands on time at work and lack of time to carry out work.

The survey instrument also included questions relating to the sociodemographic characteristics of the GPs, the practice in which they worked, and other characteristics of their job such as contract status (principal, salaried, etc), hours worked, hours on call and income.

#### *Statistical analysis*

Analyses were conducted with Stata 8.0. Differences in satisfaction and job stressor scores across survey years were examined with univariate analysis of variance (ANOVA), with statistical significance assessed at 0.01 to account for multiple testing. To account for differences in demographics across years, 1998 and 2001 scores were adjusted for 2004 distributions of age and sex. Where significant differences across years were found, post hoc pairwise multiple comparison (Bonferroni) tests were conducted, with individual pair differences determined at a less conservative  $\alpha$  level of 0.05.

Determinants of overall job satisfaction in 2004 were investigated through ordinary least squares (OLS) regression. GPs' personal, practice and job characteristics were included as independent variables. Age and number of hours worked were treated as categorical variables to reflect their potential non-linear relations to satisfaction.<sup>17,18</sup> Responses to the 6 workday experience items were recoded to form dummy variables, with agreement ('agree' or 'strongly agree') coded as 1 and no agreement ('neither agree nor disagree' 'disagree' or 'strongly disagree') coded as 0. A parsimonious model was produced by backward stepwise regression, dropping variables with  $P$ -values greater than 0.05. OLS results were compared with ordered logit regression to allow for the ordinal nature of the job satisfaction variable.

### RESULTS

Usable responses were obtained from 1035 GPs in 2004 (response rate 53%). Table 1 summarises the demographic characteristics of the survey samples in 1998, 2001 and 2004. The 1998 and 2001 samples have been shown to be representative of the wider population from which they were drawn.<sup>5,13</sup> The 2004 sample was similarly representative in terms of doctors' age, sex and contract status (Table 1).

### Overall job satisfaction and stress

Of the 1024 GPs who responded to the overall job satisfaction item, 62% gave a rating above the mid-point of 4, indicating that the majority of doctors were satisfied with their job. Univariate ANOVA showed significant differences in mean scores on this item across years ( $F = 60.71, P < 0.001$ ; Table 2). Post hoc pairwise comparisons indicated that overall satisfaction in 2004 was higher than in 2001 and approximately the same as in 1998. Mean overall stressor scores also differed across years ( $F = 31.69, P < 0.001$ ), with scores rising from 3.15 in 1998 to 3.52 in 2001 and then falling again to 3.38 in 2004. Thus, although the overall pressure experienced in 2004 was reduced from 2001, it was higher than in 1998.

### Job satisfaction and stressor facets

In 2004, GPs expressed greatest dissatisfaction with their hours of work, recognition for good work and remuneration (Table 2). They were most satisfied with their colleagues and fellow workers, the amount of variety in their job and the amount of responsibility given. Satisfaction ratings were statistically significantly different across years for all job facets but physical working conditions. Post hoc pairwise comparisons indicated that facet satisfaction generally fell between 1998 and 2001, and then increased by 2004 to 1998 or higher levels. However, satisfaction with freedom to choose own method of working, although improved from 2001, was lower in 2004 than in 1998.

The job stressors associated with most pressure at work in 2004 were paperwork, increasing workloads and having insufficient time to do justice to the job. Least pressure was felt from night visits,

**Table 1. Demographic and contract characteristics of 1998, 2001 and 2004 survey samples.**

	1998 <sup>a</sup>	2001 <sup>b</sup>	2004 <sup>c</sup>	England GP population <sup>d</sup>
<i>n</i>	1828	1841	1035	28 061
Mean age, years (SD)	44.4 (8.2)	44.7 (8.3)	46.4 (7.7)	47.3 (8.7)
Age range, years	25–72	28–78	28–70	26–71
Male (%)	67.3	66.5	64.1	65.6
White (%)	86.2	83.9	85.1	-
Holding salaried contract (%)	0	6.4	3.2	2.6

<sup>a</sup>No salaried GPs included. <sup>b</sup>Included principal, salaried and locum GPs but latter group excluded from results reported here. <sup>c</sup>Included principal and salaried GPs. <sup>d</sup>From the 2002 General and Personal Medical Services Statistics database<sup>12</sup> used to draw the 2004 survey sample. SD = standard deviation.

having 24-hour responsibility for patients' lives and interruption by emergency calls during surgery. All but one of the job stressors (interruptions by emergency calls during surgery) showed statistically significant differences across the three surveys. Post hoc tests indicated that, as expected, pressure was mostly higher in 2001 than in 1998, but that it was lower in 2004 compared with 2001 for only 10 of the 20 stressors. GPs in 2004 also reported significantly more pressure in relation to 'finding a locum' than did those in 1998 or 2001. Individual job stressor scores over the three surveys are given in Table 1 on the website.

### Determinants of overall job satisfaction

The results of the parsimonious OLS regression model of overall job satisfaction on doctors' personal, practice and job characteristics are shown in Table 3. The full model with 42 explanatory variables is on the website (Table 2). Higher job satisfaction was associated with being

**Table 2. Job satisfaction scores.**

Satisfaction item	<i>P</i> -value	Mean score (95% CI)		
		1998 <sup>a</sup>	2001 <sup>a</sup>	2004
Colleagues and fellow workers	0.003	5.32 (5.17 to 5.47)	5.36 (5.27 to 5.46)	5.60 (5.52 to 5.67) <sup>b,c</sup>
Amount of variety in job	<0.001	4.94 (4.79 to 5.09)	4.76 (4.66 to 4.86)	5.06 (4.98 to 5.14) <sup>c</sup>
Amount of responsibility given	<0.001	5.04 (4.88 to 5.20) <sup>c</sup>	4.57 (4.47 to 4.67)	5.05 (4.96 to 5.14) <sup>c</sup>
Physical working conditions	0.154	5.01 (4.86 to 5.16)	4.85 (4.75 to 4.95)	4.91 (4.81 to 5.01)
Opportunity to use abilities	<0.001	4.67 (4.52 to 4.82) <sup>c</sup>	4.32 (4.23 to 4.41)	4.85 (4.77 to 4.93) <sup>c</sup>
Freedom to choose own method of working	<0.001	4.90 (4.75 to 5.04) <sup>c,d</sup>	4.37 (4.28 to 4.46)	4.66 (4.58 to 4.75) <sup>c</sup>
Remuneration	<0.001	3.52 (3.38 to 3.66)	3.52 (3.43 to 3.62)	4.38 (4.29 to 4.48) <sup>b,c</sup>
Recognition for good work	<0.001	4.27 (4.13 to 4.41) <sup>c</sup>	3.59 (3.50 to 3.68)	4.28 (4.19 to 4.37) <sup>c</sup>
Hours of work	<0.001	3.72 (3.58 to 3.85) <sup>c</sup>	3.34 (3.25 to 3.43)	3.94 (3.84 to 4.04) <sup>b,c</sup>
Overall job satisfaction	<0.001	4.67 (4.52 to 4.82) <sup>c</sup>	3.95 (3.86 to 4.04)	4.62 (4.53 to 4.70) <sup>c</sup>

<sup>a</sup>1998 and 2001 satisfaction scores adjusted for 2004 distributions of age and sex. Post-hoc multiple comparison tests used to test pairwise differences following significant overall ANOVA. <sup>b</sup>Higher satisfaction than in 1998 ( $P < 0.05$ ). <sup>c</sup>Higher satisfaction than in 2001 ( $P < 0.05$ ). <sup>d</sup>Higher satisfaction than in 2004 ( $P < 0.05$ ).

**Table 3. Ordinary least squares regression coefficients of overall job satisfaction on doctors' personal, practice and job characteristics – parsimonious model derived from backward stepwise estimation.**

Characteristic	n (%) or mean (SD)	Regression coefficient (95% CI)	P-value
<b>GP characteristics</b>			
Male	519 (64.3%)	-0.37 (-0.55 to -0.20)	<0.001
Age 50–54 years <sup>a</sup>	142 (17.6%)	0.29 (0.06 to 0.52)	0.014
Age 55–59 years <sup>a</sup>	86 (10.7%)	0.52 (0.22 to 0.81)	0.001
Age ≥60 years <sup>a</sup>	31 (3.8%)	0.60 (0.16 to 1.04)	0.008
Two children <18 years <sup>b</sup>	264 (32.7%)	0.31 (0.10 to 0.52)	0.003
Three or more children <18 years <sup>b</sup>	176 (21.2%)	0.33 (0.09 to 0.57)	0.006
Fairly good general health <sup>c</sup>	193 (23.9%)	-0.44 (-0.64 to -0.25)	<0.001
Not good general health <sup>c</sup>	31 (3.8%)	-1.08 (-1.51 to -0.66)	<0.001
<b>Practice characteristics</b>			
Location rural <sup>d</sup>	54 (6.7%)	0.51 (0.19 to 0.84)	0.002
Location semi-rural <sup>d</sup>	221 (27.4%)	0.27 (0.09 to 0.46)	0.004
Location inner city <sup>d</sup>	89 (11.0%)	0.50 (0.24 to 0.76)	<0.001
PMS practice	356 (44.1%)	0.27 (0.10 to 0.43)	0.001
<b>Job characteristics</b>			
Individual practice income £50–70K <sup>e</sup>	222 (27.5%)	0.20 (0.02 to 0.39)	0.034
Individual practice income £85–100K <sup>e</sup>	134 (16.6%)	0.23 (0.00 to 0.46)	0.048
Number hours on call per week	12.1 (12.0)	-0.01 (-0.02 to -0.00)	0.006
Involved in decisions on changes that affect work <sup>f</sup>	356 (44.1%)	0.36 (0.19 to 0.53)	<0.001
Job has become more interesting over last year <sup>f</sup>	149 (18.5%)	0.54 (0.33 to 0.76)	<0.001
Cannot meet conflicting demands on time at work <sup>f</sup>	584 (72.4%)	-0.29 (-0.48 to -0.09)	0.004
Mean job stress	3.37 (0.65)	-0.62 (-0.76 to -0.47)	<0.001
Constant		6.50 (5.96 to 7.04)	<0.001

n = 807; R<sup>2</sup>=0.37; adjusted R<sup>2</sup>=0.35. <sup>a</sup>Compared with aged 45–49 years. <sup>b</sup>Compared with no children under 18 years; <sup>c</sup>Compared with good general health. <sup>d</sup>Compared with town/city location. <sup>e</sup>Compared with individual income from practice <£50K. <sup>f</sup>Compared with no agreement with workday experience statements (such as strongly disagree, disagree or neither). Variables removed from the model (P>0.05) were: age <35, 35–39, 40–44 years; non-white; cohabiting; one child under 18 years; suburban practice location; patient type (all categories); practice list size; salaried contract; individual practice income £70–85K, >£100K; hours worked per week (all categories); commute time; 3 workday items (changes to job in last year led to better patient care, trouble working out if doing well or poorly, do not have time to carry out all work).

female, older, having two or more children aged under 18 years, and being in good general health. Practice location (rural, semi-rural or inner city) and type (personal medical services) were also associated with higher overall satisfaction. The job characteristics promoting high satisfaction included an individual practice income of between £50 000 and £70 000 or between £85 000 and £100 000, working fewer hours on call, better workday experience (3 of 6 facets) and lower overall mean job stress. The non-linear relation between

satisfaction and age was confirmed, with the lowest satisfaction associated with the 45–54 year age group. The coefficients for the individual income dummy variables suggest that overall satisfaction also did not increase uniformly with increasing income.

Ordered logit regression produced substantively similar results (not reported), although an individual practice income of over £100 000 and the workday experience of changes to job leading to better patient care were additional statistically significant determinants of higher satisfaction.

## DISCUSSION

### Summary of main findings

The results suggest that overall job satisfaction was relatively high in the GP workforce on the eve of introduction of the new contract. Mean overall job satisfaction in 2004 recovered to 1998 levels following the low point reached in 2001. Nevertheless, specific factors relating to workload, time pressures and job control remain issues of concern to GPs. After allowing for personal, practice and basic job characteristics, doctors who had lower mean job stress and better workday experiences in terms of involvement in decisions, increasing job interest and conflicting demands on their time had higher overall job satisfaction.

### Strengths and limitations of the study

It is also not possible to determine which aspects of GPs' jobs (that is, clinical care or other activities) specifically contributed to the levels of job satisfaction and stress observed. The comparisons made across the three surveys were based on independent cross-sectional samples and so do not track change in individual GPs over time. However, each survey sample was randomly selected and all were shown to be representative of the populations from which they were drawn in terms of demographic characteristics. Thus, the results presented are likely to provide an accurate reflection of trends in satisfaction and stress in the GP population as a whole.

The generalisability of the study may be limited by the relatively low response rate of 53%. However, such a response is in line with previous national job satisfaction surveys with GPs; higher responses were obtained in 1990 and 2001 (61%<sup>19</sup> and 67%<sup>5</sup>, respectively), but responses in 1987 and 1998 were lower (48%<sup>15</sup> and 49%<sup>13</sup>, respectively). Response rates have tended to vary inversely with recorded levels of job satisfaction — the higher the response rate, the lower the level of job satisfaction.<sup>5,13</sup> Responders may therefore have been more dissatisfied with their jobs than non-

responders, leading to upward bias in the estimates of dissatisfaction and stress. However, as the direction of bias is likely to have been the same in the three surveys, the direction of trends in overall job satisfaction and stress is unlikely to be an artefact.

The study was conducted immediately prior to the implementation of the new contract. This timing might have affected GPs' responses in a number of different ways; for example, an expectation of increased income might have improved satisfaction, whereas an anticipation of increased workload could have had the opposite effect. Whatever the effect, it is valuable to establish GPs' satisfaction immediately before a major policy change in order to assess the impact of that change.

### **Comparison with existing literature**

This study suggests that GPs who were female, older and who had dependents were more satisfied overall than their male, middle-aged and childless colleagues. Higher satisfaction was also found in GPs working fewer hours on-call in rural, PMS practices. Such associations are unsurprising.<sup>5,13,20</sup> Less expected was the non-significance of salaried status, as this has previously been found to be associated with GPs' job preferences.<sup>3</sup> While the small number of salaried GPs contributed to the non-significant finding, the results of the full multivariate analysis (Table 2 on the website) suggest that, holding other factors constant, a salaried contract raised mean satisfaction by only 0.20. Other studies have failed to show significant differences in overall job satisfaction between salaried and standard contract GPs.<sup>20</sup>

Although factors relating to demography, location and basic working conditions have been highlighted as significant determinants of job satisfaction in previous surveys, they have been shown to explain only a small proportion of the variance in scores.<sup>5</sup> In contrast, the model presented here explained over 35% of the variance in overall job satisfaction scores. It identified a number of additional job attributes that were strong determinants of overall satisfaction, most notably overall pressure experienced from job stressors and the quality of workday experiences in terms of involvement in decision making, increased job interest and being able to meet conflicting demands on time at work.

The importance of job attributes in promoting job satisfaction has long been recognised.<sup>21</sup> Large-scale surveys conducted with representative samples of the wider British workforce highlighted a decline in overall job satisfaction between 1992 and 2001, which was attributed to intensification of work effort

and reduced task autonomy.<sup>18</sup> Paperwork and increasing workloads were the two highest rated stressors in the present study and have figured prominently in previous studies of stress, satisfaction and mental health in GPs.<sup>15,19,22-25</sup> In addition, GPs reported less satisfaction with freedom to choose their own method of working than was found in 1998. As it is the perception of a situation that impacts on stress and morale,<sup>26,27</sup> unfavourable views held by GPs on such attributes are a cause for concern.

### **Implications of the study**

The last decade has seen a number of changes to the NHS impacting the role of GPs. The period between 1998 and 2001, which saw a marked decline in GP job satisfaction, was associated with the end of fundholding, the implementation of clinical governance systems to enhance quality of care, and the introduction of primary care groups (PCGs), PMS and additional primary care access points such as walk-in centres and NHS Direct. Changes since 2001 have included the abolition of health authorities, the replacement of PCGs with primary care trusts (PCTs) and changes in the levels and allocation of funding across PCTs. Above all, the present survey was conducted immediately before the implementation of the new GMS contract, bringing with it greater emphasis on performance-related pay and quality incentives. And yet despite this, and perhaps contrary to expectations, overall job satisfaction has increased since 2001 back to levels seen in 1998.

The job attributes associated with job dissatisfaction and pressure in 2004 were related to workload, time pressures and job control. Such problems could well be intensified by the new contract, particularly if GPs continue to experience difficulties in finding locums. The reasons for this shortage of locums are unknown and warrant further investigation. Strategies to enhance workforce capacity include the recruitment of more GPs and transferring work from doctors to other healthcare workers. Similarly, increased job control might be achieved by increasing the potential of doctors to decide when and how they undertake their work. While the government has implemented programmes that tackle some of these problems,<sup>2,28</sup> our findings suggest that frontline GPs have yet to experience the full benefits. Addressing such issues may be key to maintaining morale as GPs move to implement the new contract.

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#### Ethical approval

The study was granted exempt status by the North West NHS Multi-centre Research Ethics Committee

#### Competing interests

The authors have stated that there are none

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