

# Patient satisfaction surveys as a market research tool for general practices

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## SUMMARY

**Background.** Recent policy developments, embracing the notions of consumer choice, quality of care, and increased general practitioner control over practice budgets have resulted in a new competitive environment in primary care. General practitioners must now be more aware of how their patients feel about the services they receive, and patient satisfaction surveys can be an effective tool for general practices.

**Aim.** A survey was undertaken to investigate the use of a patient satisfaction survey and whether aspects of patient satisfaction varied according to sociodemographic characteristics such as age, sex, social class, housing tenure and length of time in education.

**Method.** A sample of 2173 adults living in Medway District Health Authority were surveyed by postal questionnaire in September 1991 in order to elicit their views on general practice services.

**Results.** Levels of satisfaction varied with age, with younger people being consistently less satisfied with general practice services than older people. Women, those in social classes 1-3N, home owners and those who left school aged 17 years or older were more critical of primary care services than men, those in social classes 3M-5, tenants and those who left school before the age of 17 years.

**Conclusion.** Surveys and analyses of this kind, if conducted for a single practice, can form the basis of a marketing strategy aimed at optimizing list size, list composition, and service quality. Satisfaction surveys can be readily incorporated into medical audit and financial management.

**Keywords:** patient satisfaction; survey design; general practitioner services; market research.

## Introduction

GOVERNMENT policy over the past decade has increasingly emphasized the role played by consumers in ensuring the delivery of high quality primary health care. In 1984 the Griffiths report suggested that monitoring the health service at the local level should incorporate the opinions and perceptions of patients.<sup>1</sup> To do this, the report recommended that the National Health Service adopt the market research practices widely used in the private sector and 'respond directly to this information, act on it in formulating policy, and monitor performance against it'.<sup>1</sup>

Three years later, spiced with references to patient choice and the 'recognition of the benefits for service provision of greater competition',<sup>2</sup> *Promoting better health* proposed a series of measures which it described as 'leading the way to a family doctor service which responds effectively to the needs of the consumer'.<sup>2</sup> The public's comments were to be 'sought on local ser-

vices and their views on proposed changes fully taken into account' through public opinion surveys conducted by the then family practitioner committees.<sup>2</sup>

With the 1990 NHS and community care act, the introduction of the internal market and the priority now being given to primary care, the relationship between the consumer and the general practitioner has taken on an importance beyond the well-intentioned rhetoric of earlier policy statements. The progressive shift to general practitioner fundholding financed through weighted capitation gives general practitioners real incentives to investigate patients' views. As patients become more accustomed to exercising their choice of general practitioner, so the pressures on general practitioners will grow to understand their market better and to discover the reasons behind patient use and non-use of their services. Practice audit and total quality management may soon become part of the everyday language of general practice.<sup>3</sup>

Patient satisfaction surveys will be part of this market research. A well-established area in primary care research, patient satisfaction surveys will prove an important means of exploring consumer demand. Cartwright's studies<sup>4,5</sup> first established the genre which others have since refined, both in terms of the focus of inquiry and the measurement techniques employed.<sup>6,7</sup>

It was decided to investigate how far the satisfaction survey could be used as an instrument for defining patient groups for marketing purposes and to examine whether patient satisfaction with aspects of general practice care varied according to socio-demographic characteristics.

## Method

The survey questionnaire was designed and piloted at the Centre for Health Services Studies, University of Kent. Respondents were asked about their use of general practice services and access to them, aspects of general practitioner care, compliance with medication and knowledge.

Five point ordinal scales were used for answers to most questions, from 'very satisfied' to 'very dissatisfied' or from 'agree strongly' to 'disagree strongly'. Several asked patients about satisfaction generally and in the last consultation with the doctor.

The electoral register was taken as the sampling frame for the adult population (aged 17 years and over) in each of the 53 wards in Medway District Health Authority. Systematic random sampling drew one in 80 names to comprise a total sample of 3146 people. This was slightly over the target of 3000, considered to be sufficient for a range of multivariate analyses, the precise nature of which was unknown at the time of sampling. Each person was sent a questionnaire for self-completion in early September 1991. A reminder postcard was sent to non-respondents after approximately three weeks, followed by a letter and second questionnaire three weeks later.

All the questionnaires were examined before coding and the coding itself was rechecked for errors. The open-ended questions were written into a word-processing programme and reviewed, then coded as well. All data were input into the *SPSS* statistical package. Some of the initial frequencies, such as the time in minutes to get to the surgery, were grouped. Single years of age were also grouped. Information on employment was translated into social class using the registrar general's standard occupational classification. The initial frequencies were followed by a series of cross tabulations which were evaluated using the chi square

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test. Only data significant at the  $P < 0.05$  level are reported.

Reduced sample sizes were obtained where questions applied to only those respondents who gave certain answers to previous questions or who were, for example, of a particular social class. These reduced samples are noted and the proportion of non-respondents given. When questions have only two responses, however, those who did not answer are excluded in order to clarify interpretation.

## Results

### Representativeness of the sample

Of 3146 questionnaires sent, 2173 were eventually returned (69.1%). Of the 2173 who returned questionnaires, 20 had no doctor and 94 had not seen a doctor within the preceding five years. These people were excluded from much of the analysis, yielding 2153 or 2079 respondents for most questions. The sample had slightly fewer adults aged 17 to 44 years than the population of Medway (52% versus 57%) and slightly more adults between the ages of 45 and 74 years (42% versus 36%) (Medway District Health Authority data, 1991). The proportion of people aged 85 years and over closely matched that in Medway (1.4% versus 1.5%) and the proportion of women in the sample was slightly higher than in Medway (56% versus 51%).

### Satisfaction with access and general practitioner care

Reported overall satisfaction with access, with overall care received from the doctor and with out-of-hours consultations was high, yet those aged between 17 and 44 years were consistently less satisfied than those aged 45 years or more (Table 1). In addition, 7.1% of 1030 women compared with 4.8% of 798 men were dissatisfied with overall care received from the doctor ( $\chi^2 = 4.26$ , 1 df,  $P < 0.05$ ).

### Consulting the doctor

Over two thirds (69.0%) of 2153 respondents reported that they normally saw the doctor they thought of as their own while 26.0% said they saw any doctor available. Of the latter group, 52.6% could arrange to see their own doctor 'very easily' or

'fairly easily' if they wanted to. However, 20.5% could only do so 'not very easily' or 'with some difficulty', 15.1% were uncertain and 11.8% gave no response. On their most recent visit to the surgery 47.9% of 547 respondents who did not normally see the doctor they thought of as their own managed to see their own general practitioner while 52.1% saw someone else. None of the sociodemographic variables revealed significant differences on this question.

### Getting to the surgery

Fewer than half of the 2079 respondents (927, 44.6%), attended the surgery nearest to them, 36.9% said theirs was not the nearest, 15.8% said it was about the same distance as other surgeries and 2.7% did not know or did not answer. Those in higher social classes were more likely to report that there were other surgeries about the same distance from home: 18.9% of 513 respondents in social classes 1 and 2 compared with 11.5% of 304 respondents in social classes 4 and 5 described their surgery in this way ( $\chi^2 = 7.70$ , 1 df,  $P < 0.01$ ). Conversely, social class was not a significant variable among those who reported that their doctor's surgery was either the nearest or not the nearest. There were sharp divisions according to social class and housing tenure in the mode of transport to the surgery and the time taken to reach the surgery, yet reported ease of reaching the surgery was only significant for housing tenure (Table 2).

### Waiting times at the surgery

The majority of respondents reported normally waiting for between 10 and 30 minutes for their appointment (1382, 66.5%). The sample reported shorter waiting times on the last trip to the surgery: 65.5% of 1951 respondents waited less than 20 minutes, and 26.8% saw the doctor within 10 minutes. Approximately equal numbers waited 45 minutes or more on the last occasion and normally (6.9% of 1951 and 7.2% of 1965, respectively). In response to the question 'Is the waiting time too long?' 39.6% of 1018 respondents aged between 17 and 44 years answered yes compared with 23.6% of 939 respondents aged 45 years or more ( $\chi^2 = 57.13$ , 1 df,  $P < 0.001$ ).

### Contacting the doctor out of hours

Of 959 respondents to the question, 46.5% reported having tried to contact their doctor out of hours. These respondents were significantly more likely to be married ( $P < 0.001$ ), aged between 25 and 44 years ( $P < 0.001$ ), in social classes 1 and 2 ( $P < 0.05$ ) and to be women ( $P < 0.01$ ) than those not reporting having tried to contact their doctor out of hours.

Generally, 39.8% of 959 respondents reported being able to reach their own doctor or a partner out of hours, 29.8% were normally seen by another doctor, 8.8% received advice by telephone, 18.1% did not know or did not answer, and 3.4% indicated that something other than these outcomes happened. On the most recent attempt to contact the general practitioner out of hours 35.8% of 959 respondents reported seeing their own doctor or a partner, 37.7% were seen by someone else, 17.5% received telephone advice, 4.2% did not know or did not answer and 4.8% reported 'other'.

Only social class was significantly associated with levels of satisfaction with out-of-hours consultations: 71.2% of the 417 respondents in social classes 1-3N were satisfied versus 79.3% of the 363 respondents in social classes 3M-5 ( $\chi^2 = 6.82$ , 1 df,  $P < 0.01$ ).

### Relationship with the general practitioner

In answer to the question 'Do you like your general practitioner as a person?' 86.0% of 2079 respondents ticked either yes or yes

**Table 1.** Satisfaction with access to doctor, overall care received from doctor and out-of-hours consultations, by age.

	% of respondents aged (years)		% of all respondents <sup>a</sup>
	17-44	45+	
<b>Access to GP</b>	(n = 1022)	(n = 949)	(n = 2045)
Very satisfied/satisfied	75.6	87.2	81.1
Neither satisfied nor dissatisfied	15.5	9.3	12.7
Dissatisfied/very dissatisfied	8.9	3.5***	6.2
<b>Overall care from GP</b>	(n = 1028)	(n = 956)	(n = 2059)
Very satisfied/satisfied	78.7	88.0	83.3
Neither satisfied nor dissatisfied	13.4	8.9	11.2
Dissatisfied/very dissatisfied	7.9	3.1***	5.5
<b>Out-of-hours consultation</b>	(n = 504)	(n = 382)	(n = 917)
Very satisfied/satisfied	72.4	78.5	74.9
Neither satisfied nor dissatisfied	19.4	13.4	17.0
Dissatisfied/very dissatisfied	8.1	8.1	8.1

n = number of respondents in group. <sup>a</sup>Including respondents who did not give their age. Chi square for people aged 17-44 years versus 45+ years \*\*\* $P < 0.001$ .

**Table 2.** Details of getting to the surgery, by social class and housing tenure.

	% of respondents			
	In social classes 1-3N	In social classes 3M-5	Who are home owners	Who are tenants
<i>Mode of transport to surgery</i>	(n = 835)	(n = 742)	(n = 1361)	(n = 186)
Walking	30.9	40.0	32.4	54.3
Public transport	2.5	5.5	3.7	17.7
Car	66.6	54.4***	63.9	28.0***
<i>Time take to reach surgery (minutes)</i>	(n = 971)	(n = 847)	(n = 1577)	(n = 228)
<5	51.6	46.4	49.5	39.0
5-9	29.0	27.7	29.2	18.9
10-14	11.7	13.9	12.9	16.2
15+	7.6	11.9**	8.4	25.9***
<i>Ease of reaching surgery</i>	(n = 919)	(n = 805)	(n = 1493)	(n = 213)
Very/fairly easy	92.4	90.9	91.8	84.5
Neither easy nor difficult	5.2	6.5	5.8	9.9
Rather difficult/very difficult	2.4	2.6	2.5	5.6**

n = number of respondents in group. Chi square for those in social classes 1-3N versus 3M-5, or home owners versus tenants \*\*P<0.01, \*\*\*P<0.001.

very much, 10.7% did not like their doctor and 3.3% gave no answer. The number of respondents who reported liking their doctor 'very much' increased steadily with age: 19.8% of 212 people aged 17-24 years, 23.3% of 787 aged 25-44 years, 30.2% of 573 aged 45-64 years, 33.5% of 230 aged 65-74 years and 42.2% of 135 aged 75+ years. More tenants liked their doctors 'very much' than did home owners (39.3% of 211 versus 26.5% of 1463;  $\chi^2 = 14.98$ , 1 df,  $P < 0.001$ ).

Of the 994 respondents aged 45 years and over, 62.0% felt they could discuss personal problems with their doctors while 38.0% felt they could not. Of the 922 respondents aged less than 45 years 49.6% felt they could discuss personal problems with their doctor and 50.4% felt they could talk only about medical problems ( $\chi^2 = 29.99$ , 1 df,  $P < 0.001$ ). Tenants were more likely to report feeling able to discuss personal problems with their doctor than were home owners (62.9% of 213 versus 55.0% of 1444, respectively) while just over a third of tenants (37.1% of 1444) but 45.0% of 1444 owners felt able to discuss only medical problems ( $\chi^2 = 4.73$ , 1 df,  $P < 0.05$ ).

#### *Satisfaction with the doctor in the consultation*

Several questions were asked about specific aspects of the consultation, both generally and on the last occasion and the results, showing the overall sample frequencies and those of younger and older respondents, are shown in Table 3. Though satisfaction was high, more of those aged between 17 and 44 years were likely to be less satisfied than the older respondents.

#### *Prescriptions and compliance with medication*

Most respondents felt that their doctor was reasonable in prescribing (80.1% of 2079). Approximately equal numbers believed their doctors were too inclined to give prescriptions (7.3%), reluctant (4.6%), or were uncertain (5.6%). More of those aged 17-44 years felt their doctors were too inclined to prescribe than respondents aged 45 years or more (10.4% of 1011 versus 4.5% of 946,  $\chi^2 = 23.85$ , 1 df,  $P < 0.001$ ). Younger people were less willing to take medication and to finish the course, both generally and on the last occasion: 63.4% of the 1023 respondents aged 17-44 years reported that they generally always took prescribed medication compared with 79.7% of the 955 respondents aged 45 years or more. A total of 95.1% of the 756 17-44 year olds reported taking their prescribed medication on the last occasion compared with 99.0% of the 795 45+ year olds. Of 1022 respondents aged 17-44 years 56.8% reported that

they generally always completed a course of medication compared with 77.5% of the 944 respondents aged 45+ years; 87.9% of 756 17-44 year olds completed their course of medication last time compared with 95.6% of 795 45+ year olds.

#### *Knowledge and ability of patients*

Asked how strongly they agreed or disagreed with the statement 'Patients are able and knowledgeable enough to judge the technical/medical skills of their doctor', 38.4% of 2079 respondents agreed strongly or a little, 23.2% disagreed strongly or a little, and 35.7% neither agreed nor disagreed. The question was not answered by 2.7%. Those aged 45 years and over were more likely than the younger respondents to agree with the statement (42.4% of 934 versus 36.6% of 1016;  $\chi^2 = 6.81$ , 1 df,  $P < 0.01$ ) and less likely to disagree (19.9% of 934 versus 27.8% of 1016;  $\chi^2 = 16.41$ , 1 df,  $P < 0.001$ ). An interesting pattern emerged according to housing, social class and education variables. There was no statistical difference in the proportions who agreed with the statement. Of the remainder, homeowners, those in social classes 1-3N and those who left school aged 17 years or more were more likely to disagree with the statement while tenants, those in social classes 3M-5 and those who left school aged 16 years or less were more inclined to choose the neutral response (Table 4).

#### **Discussion**

Five point ordinal scales were used for respondents to grade answers as these are considered to better reflect respondents' true feelings than yes/no or agree/disagree and therefore increase reliability.<sup>8</sup> Previous surveys have tended to either ask patients about satisfaction generally or with the last consultation; this study asked about both.<sup>8</sup>

The results of this district-wide survey are in line with most local and national evidence. High levels of overall satisfaction with both access to and care received from the doctor have been reported by researchers using virtually the same instrument in another Kent district.<sup>9,10</sup> The royal commission on the NHS also confirmed high rates of satisfaction with access.<sup>11</sup>

Some low levels of satisfaction with specific aspects of the consultation were reported, for example 24% of respondents reported that the doctor gave them insufficient information in their last consultation. Levels of dissatisfaction with doctors' explanations matched those found by Cartwright<sup>4</sup> and Cartwright and Anderson;<sup>5</sup> dissatisfaction with the information received

**Table 3.** Satisfaction with the doctor in the consultation both generally and on the last occasion, by age.

	% of respondents reporting consultations generally aged (years)			% of respondents reporting last consultation aged (years)		
	17-44	45+	% of all respondents <sup>a</sup>	17-44	45+	% of all respondents <sup>a</sup>
<i>Is your GP understanding?</i>	(n = 1002)	(n = 944)	(n = 2021)	(n = 997)	(n = 925)	(n = 1991)
Very/fairly understanding	81.6	90.6	86.2	78.7	88.4	83.5
Neither understanding nor lacking in understanding	9.9	4.8	7.3	16.0	5.3	8.2
Not very/totally lacking understanding	8.5	4.7***	6.5	10.2	6.3***	8.3
<i>Is your GP good at explaining things?<sup>b</sup></i>	(n = 1018)	(n = 944)	(n = 2035)			
Very good/good	65.1	77.8	71.3	-	-	-
Neither good nor bad	27.0	18.3	23.0	-	-	-
Bad/very bad	7.9	3.9***	5.7	-	-	-
<i>Does your GP give you enough information?</i>	(n = 1000)	(n = 925)	(n = 2000)	(n = 1003)	(n = 922)	(n = 1998)
Far too much/slightly too much	0.6	0.6	0.6	1.4	0.3	0.9
About right	75.4	83.2	79.4	70.8	79.7	75.2
Slightly too little/far too little	24.0	16.1***	20.0	27.8	20.0***	23.9
<i>Does your GP spend enough time in the consultation?</i>	(n = 1018)	(n = 949)	(n = 2041)	(n = 1014)	(n = 946)	(n = 2033)
Yes	74.0	83.1	78.8	81.9	87.3	84.6
No	26.0	16.9***	21.2	18.1	12.7***	15.4
<i>Does your GP examine you thoroughly when necessary?</i>	(n = 1006)	(n = 943)	(n = 2023)	(n = 998)	(n = 931)	(n = 1999)
Yes	74.8	79.9	77.3	79.5	88.2	83.7
No	25.2	20.1**	22.7	20.5	11.8***	16.3

n = number of respondents in group. <sup>a</sup>Including respondents who did not give their age. <sup>b</sup>Respondents not asked whether GP was good at explaining things at the last consultation. Chi square for people aged 17-44 years versus 45+ years \*\*P<0.01, \*\*\*P<0.001.

from doctors was slightly lower than in the study by Williams and Calnan<sup>9</sup> but within the range found by Kinsey and colleagues.<sup>12</sup> Waiting times were slightly lower than those reported elsewhere<sup>5,12-15</sup> but dissatisfaction was slightly higher.<sup>5,12</sup>

Cartwright and Anderson reported that patients felt more knowledgeable about primary care in 1977 than they had 10 years earlier, and doctors agreed.<sup>5</sup> Over a third of respondents in this study (38%) felt patients were knowledgeable enough to judge their doctors and nearly as many (36%) were unsure about how knowledgeable patients were while 23% felt patients were not able to judge their doctors' skills. Analysis by sociodemographic variables revealed divisions between the negative and neutral responses and this may be because home owners, those who left school later and those in social classes 1-3N were more certain or more confident in their opinions or, although unprovable, because these groups were more likely to defer to their doctors' expertise.

Those aged between 17 and 44 years were less likely to like their doctors, were less satisfied with the doctor and were more willing to question the doctor's competence than older respondents, findings supported by previous surveys.<sup>4,5,9,16</sup> Of course, the data indicate that, overall, most people were satisfied, regardless of sociodemographic variables. However, these variables are important in distinguishing between relative levels of satisfaction and for identifying dissatisfied patients. Generally, analysts have not analysed sociodemographic variables or have found few differences<sup>16</sup> and have not concentrated on dissatisfaction.<sup>17</sup> These oversights undermine the utility of research on patient satisfaction which should be undertaken precisely to discern which patients are dissatisfied with which services. An early study considered the difference within a practice between patients referred to hospitals and patients not referred. While satisfaction with the general practitioner's communication ranged between 61% and 79% for different sorts of information, the percentage of patients

**Table 4.** Disagreement with or neutral responses to the statement 'Patients are able and knowledgeable enough to judge the technical/medical skills of their doctor', by tenure, social class and age when left school.

	% of respondents who					
	Are home owners (n = 897)	Are tenants (n = 126)	Are in social class		Left school aged (years)	
			1-3N (n = 545)	3M-5 (n = 490)	17+ (n = 337)	≤16 (n = 812)
Neither agree nor disagree with statement	59.1	71.4	49.7	70.2	50.1	64.3
Disagree with statement	40.9	28.6**	50.3	29.8***	49.9	35.7***

n = number of respondents in group. Chi square for home owners versus tenants, those in social classes 1-3N versus 3M-5, or those leaving school aged 17+ or ≤16 years\*\*P<0.01, \*\*\*P<0.001.

not referred to hospital who were satisfied was almost twice the percentage of patients who were referred who were satisfied.<sup>12</sup> The present study found the same proportion (38% of 45+ year olds) as in a previous study<sup>9</sup> who felt that they could not discuss personal problems with their doctor but the present study also found that half of those aged 17–44 years and 45% of home owners felt this way.

In the context of marketing services, it is these relative differences which will most affect practice strategies for improving and maintaining high levels of access, patient compliance and quality of consultations. For instance, waiting times have received political attention and have been shown to affect patient satisfaction.<sup>5,11,12,15</sup> Respondents to this survey reported shorter waiting times on the last consultation than generally, which may indicate a trend to better time management within practices, or the effects of patient recall. The 17–44 year olds were more likely to be dissatisfied with waiting times than the 45+ year olds. Younger people reported being more satisfied with the doctor in consultation on the last occasion than generally but were still significantly less satisfied than older respondents. This evidence argues in favour of disaggregated analysis regardless of whether the situation appears to be improving overall.

The standard satisfaction survey thus has the potential to help accomplish several goals which complement the present changes in general practice. First, it provides a community or at least a list-based element in medical audit. An obvious example is waiting times, but data on compliance and levels of satisfaction for different aspects of care are all important. One study found that a composite satisfaction score was positively correlated with patient compliance with advice from the general practitioner.<sup>12</sup> In the present study the 17–44 year olds were both less compliant with medication and less satisfied with overall care than the 45+ year olds. If satisfaction influences compliance, and better compliance means healthier (and less costly) patients in the long term, then perhaps the most effective way to improve compliance for younger patients is to increase their general satisfaction with the practice. Incorporating surveys into audit moves toward fulfilling the suggestion from the Griffiths report that such information be gathered and increases the chances that the information is used to improve services.<sup>1</sup>

Secondly, it is how the information is interpreted and used which underlies how surveys can be most valuable to individual practices. Surveys identify patient groups who are more or less satisfied and thus more or less vulnerable to being lured elsewhere. Consider transport and distance: differences were found in mode of travel and time taken to reach the surgery according to social class and housing tenure. A study comparing a practice in a depressed area with an affluent area practice found no differences in the amount of time taken to get to the surgery according to age but did find that patients attending the practice in the depressed area were more likely to walk while those attending the affluent area practice were likely to drive, with equal use of public transport by both sets of patients.<sup>14</sup> Clearly there is variation between areas and between practices. The finding that more respondents in social classes 1 or 2 were likely to report that there were other surgeries about the same distance from home than those in lower social classes may suggest that those in higher social classes have greater choice of surgery.

Identifying which patients are less satisfied with which aspects of the practice helps target list size and therefore general practitioner remuneration. According to the 1990 contract for general practitioners, attracting and keeping patients are deemed worthy of financial reward.<sup>18</sup> From a marketing standpoint, it is important that general practitioners are able to enhance those practice characteristics most likely to retain existing patients who have only a marginal commitment on the one hand and to interest

potential new patients on the other. Questions such as whether out-of-hours consultations should be expanded, curtailed or revamped,<sup>19</sup> whether more counselling should be provided, and whether information leaflets are effectively used or used at all are just some examples of the service which may be adjusted in order to make the practice more attractive.

Finally, it is further possible that data from patient surveys be combined with evidence on groups at risk, social deprivation, and disease patterns to add another dimension to epidemiological evidence about practices and communities. A paper has explored variations in out-of-hours consultations for one general practice by electoral ward-based deprivation scores.<sup>20</sup> In this context, surveys contribute as much to planning services as providing information on how to market them: the potential here is in need of exploration.

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