

**Givin' 'em a soapbox to stand on:
patients opinions on paying to see a GP**

PAULA K. LORGELLY

Address for Correspondence:

Dr Paula Lorgelly
The Health Foundation Lecturer in Health Economics
Health Economics Group,
School of Medicine, Health Policy and Practice
University of East Anglia
Norwich
NR4 7TJ
United Kingdom
Email: p.lorgelly@uea.ac.uk

Abstract

Issue being addressed: Patients' acceptance of or objection to paying out-of-pocket for GP visits within the NHS.

Methods: Qualitative data were gathered from open-ended questions in a questionnaire designed to elicit WTP for a GP consultation. The reasons underlying the valuations and any additional comments that respondents made were subjected to content analysis. Common themes were identified. These were then coded to allow for a quantitative assessment of their relationship to the elicited WTP values.

Results: Various reasons were given in support of valuations, such as a desire to discourage time wasters, similarity to what other professionals are paid and a desire to improve the health service. Many of those who gave zero valuations stated that they could not afford to pay for a GP visit. However, a number of the zero valuations were protest votes, arguing (often strongly) that they already contribute in the form of taxation. An analysis of differences in mean WTP valuations found significant differences across a number of the themes. For example, those who reasoned that the service was costly gave significantly higher values than those who did not. It is hoped that, subsequent analysis, in the form of a double hurdle regression model, will further inform which reasons are most significant in determining WTP valuations, and as such help develop CV methodology further and inform further research in this area.

Discussion: Out-of-pocket payment is, as expected, an emotive issue. While many appear to be comfortable with the notion, a number strongly object. There appears to be strong evidence that these opinions directly influence the WTP values which were elicited.

Key issues for discussion: To date only one other contingent valuation study has analysed the manner in which reasons and WTP values are constructed by respondents. Most studies document protest and ability to pay comments. Is there scope for further research into the reasons respondents give? Should we be undertaking more qualitative research alongside CV projects? What is the purpose of such qualitative research?

Status: Work in progress

1. Introduction

There are many criticisms of contingent valuation (CV) as a means of attaching monetary values to goods and services. Clark *et al.* (2000) provides a good discussion of these issues within environmental economics, prior to presenting the results of qualitative research investigating participants understanding of CV surveys and willingness to pay (WTP) questions. They found, using discussion groups, focus groups and face-to-face interviews, that respondents expressed difficulty with both the concept and the question, and challenged the legitimacy of the process in terms of what impact it would have on decision making and decision makers. Such findings have to some extent been mirrored within the specialty of health economics, but to date no research exists that has undertaken a thorough analysis of these issues.

The use of qualitative research and analysis in health economics is still in its infancy and, as Coast (1999) warns, although it can be insightful it should not be used naively. It has been used appropriately in the past to analyse different views of decision making and rationing (Coast *et al.*, 2002; Coast, 2001), to investigate participants understanding of stated preference decision modelling (Kenny *et al.*, 2003), and to analyse understanding of health state valuation exercises (Devlin *et al.*, 2004); however, it has still not been fully exploited by CV researchers.¹

What is presented here is an analysis of the responses of a questionnaire which elicited the public's opinions on paying to see their GP. Respondents were asked how much they would be willing to pay for a GP visit and then asked to provide some justification for their valuation. In essence it is not a contingent valuation exercise, more a assessment of the public's acceptance of user charges, but the approach is still valid and the criticisms discussed by Clark *et al.* still relevant; perhaps even more so because of the nature of the good. It was expected, a priori, that a number of respondents would either refuse to give a value, provide a zero protest vote, or give 'societal' rather than 'individual' valuations. Simple analysis of the WTP responses would be uninformative. It is more important to understand how and why they gave the valuations they did, thus allowing some insight into the public's acceptance of or objection to cost sharing.²

¹ There has been some research in this area that could loosely be categorised as qualitative, where the reasons and motives behind the elicited WTP values have been analysed. For example, Ryan and San Miguel (2000) use such reasons to test for consistency of responses, while Donaldson *et al.* (1997a,b) use them to validate different elicitation approaches. More recently Whynes *et al.* (2003) provided an analysis of these "ostensible reasons", not only to compare different elicitation methods but also to explore the relationship between the reasons and the values.

² Robinson (2002) suggests that policies on cost-sharing should be evaluated in terms of efficiency, equity and public acceptability; this analysis, therefore, attempts to assess the latter of these criteria, a previous analysis addressed the others (Lorgelly, 2003).

For this, a mixed methods approach is employed, where both qualitative and quantitative analyses are used. As Barbour (1999) explains this can be beneficial in that the use of both approaches can help compensate for the shortcomings of each other. This is undertaken by subjecting the qualitative comments to content analysis, then calculating the frequencies of each indexed reason. Mean WTP values are compared across reasons before attempts are undertaken to estimate the multivariate relationship between elicited values, reasons and other individual characteristics using a double hurdle model. Admittedly a rather quantitative end for a wealth of qualitative data, suggestions of other alternative avenues of analysis are welcome.

This approach is similar to that used by Whynes et al (2003). Following a long investigation into the validity of different methods for eliciting WTP valuations for colorectal cancer screening (see Frew *et al.*, 2004; 2003), Whynes *et al.* further test the technique by estimating the relationship between non-responses, zero valuations and positive WTP values and thirteen different explanations for these responses. Using a multi-stage estimation method with backward stepwise elimination, they found that a non-response was more likely if the question was deemed inapplicable (due to age or having private insurance) or too difficult to answer, while a zero response was more probable if a “protest” had been recorded in the reasons. In a log linear estimation of the positive values they found those expressing difficulties answering the question, perceiving some benefit to screening, or having family experience of cancer gave higher WTP values, and those recording a protest vote gave lower WTP values. Furthermore, they found that such reasons were informative in explaining the differences in WTP values between the two screening techniques.

The paper proceeds as follows, Section 2 describes the instrument and the methodology employed, Section 3 presents anecdotal quotes and the results of indexing the qualitative comments, before quantifying the relationship between these and the elicited WTP values. The paper concludes with some preliminary inferences, a discussion of the issues surrounding paying for health care and then presents some points for further discussion.

2. Data and Methods

The elicitation instrument was a ten page questionnaire designed for self-completion. A draft of the questionnaire was piloted on fifty members of the general public, presented for ethical approval, and modified accordingly. A regional collaborative research network of general practitioners (GPs) was approached and seven practices within the (former) Trent NHS Region agreed to distribute copies of the questionnaire to their patients. GPs were instructed to offer a questionnaire to any

patient during a normal consultation, subject to the following exclusion criteria: those patients who were aged under 18 and anyone with reading, writing or language difficulties. Completed questionnaires could be returned to the practice, or by post in a prepaid reply envelope.

The questionnaire asked standard demographic questions about gender, age, occupation, household income and education, as well as questions pertaining to health care consumption levels. Participants were asked how often they visited the GP and dentist, what their experience was of their current practice visit (waiting times, length of consultation, quality of care), how satisfied they were with this experience, whether they use other primary care providers, whether they are exempt from prescription charges and if they have private health insurance.

Willingness to pay values were elicited by asking “... *if you had to pay to see a GP what is the most that you would be willing to pay for each visit to a GP?*” A payment scale with values ranging from £0 to £50 was provided, and any valuation over £50 could be expressed by writing the appropriate amount in a space provided. Following this, respondents were asked to “... *explain the reasons for your answer*”, and given space in which to do so. In addition, at the back of the questionnaire respondents were invited to express their opinion further, “*If you have any other comments you would like to make, please write in the space below*”.

The respondents opinions made for fascinating reading, some verbatim quotes are given below. In order to be more informative as to why specific WTP values were given the open-ended replies were subjected to content analysis. Content analysis is an objective and systematic exploration of qualitative responses (Holsti, 1969); essentially it quantifies the textual data. The qualitative comments were indexed by an iterative process of reading, re-reading and reflection between myself and a research assistant. A sub-sample of completed questionnaires were read in isolation, and separately we each identified themes and categories. We then collectively agreed on a coding system and read and indexed the remaining questionnaires. Upon completion inconsistencies and potential new categories were discussed and agreed. Lengthy explanations were commonplace and often encompassed a number of themes, such that multiple indexing was justifiable.

Intended regression analysis encompassing both the quantitative and qualitative data will use a double hurdle approach to model the determinants of WTP (Blundell and Meghir, 1987). Double hurdle models have been previously shown to outperform a range of other nested models when dealing with skewed distributions and zero values (Jones, 1989; Yen and Jones, 1996; Garcia and Labeaga, 1996) and more recently Dalmau-Matarrodona (2001) found that the double hurdle model

was preferable to a Tobit model when estimating the determinants of WTP. Double hurdle models also have the added advantage that the determinants of participation (whether or not to offer a positive value) and consumption (how much to offer) are able to differ. In her contingent valuation of home care services in day case surgery Dalmau-Matarrodona modelled the determinants of consumption on a variety of demographic and economic variables relating to the characteristics of respondents, and the probability of participation on outcome variables, like self rated health and surgical complications.

Selection of explanatory variables is as usual a difficult choice, more so when estimating two different but similar equations. A stepwise regression (as in Whynes *et al.*) is one option but many would argue this is statistically invalid. Unlike Dalmau-Matarrodona I believe that what lies behind the decision to give a WTP value is probably not fundamentally different from the magnitude of the value given and as such I propose that similar explanatory variables are included in both the participation and consumption equations. What these actually are, however, is still a mystery. To date I have estimated a number of possible variations of a model, but have not been entirely comfortable with the results, believing the model is misspecified or suffering from problems of multicollinearity. A list of possible explanatory variables is given in Appendix 1, and a discussion of what factors to include in the participation and consumption equations is invited.

3. Results

3.1. Sample statistics

Two hundred questionnaires were distributed to each of the seven GPs, a total of 693 were completed and returned, giving a response rate of 49.5%. Table 1 provides a detailed breakdown of the demographics of the respondents, sample frequencies and descriptive statistics. The majority of the sample were female (66%), white British (97%), married or living together (70%), employed (41%) or retired (34%), and earning less than £20,000 per year (58%). The mean age of respondents was 51 years, and the average age at which they left full time education was 17 years. The sample, therefore, over-represents females, whites, married and retired individuals and as a consequence the mean age is higher than the England average (ONS, 2001). Furthermore, respondents had more GP consultations than the population average, the mean number of GP visits in the past year was 6.2 (range 0 to 30), while OHE (2002) reports that the average number per person per year in 2000 was 4; this and other sample demographics are probably a consequence of sampling at GP surgeries. With respect to their general health, the table shows that the majority of the respondents regard themselves as in good or excellent health, although a number have long-term illnesses. A large majority (67%) have an NHS dentist, and a number receive free dental treatment

and nearly half of respondents were exempt from paying prescription charges, this is representative of the national population. A larger proportion of the sample (17%) have private medical insurance compared with the general population, 11.5% (CEA, 2000).

Table 2 reports the respondents satisfaction ratings of various aspects of their GP visit. It shows that the majority of the sample are satisfied with the length of consultation and quality of care they received, although not overly so. There would appear to be more dissatisfaction with respect to how long they have to wait to see their GP (21% and 18% are unsatisfied or very unsatisfied with the amount of time they had to wait to get an appointment, or wait in the waiting room, respectively), furthermore a large majority are not satisfied with the overall state of the NHS.

All but 68 respondents (10%) provided an amount that they would be willing to pay to see a GP. These amounts ranged from zero to £100, and the majority (59%) were positive, non zero values (see Figure 1). The average WTP was £3.98.

3.2. *Qualitative responses*

A vast majority of the respondents (78%) provided explanations for their WTP values and seized the opportunity to give further comments. These responses were a mix of objection and support, including both logical and some bizarre reasoning. As expected extremist opinions (both in favour and against out-of-pocket payments) were most passionate, but in general there was a greater representation of objectors, and they were, by and large, more emotive.

A considerable proportion of respondents expressed objection to paying, stating that they already contributed to the health service in the form of taxes and national insurance contributions:

“Having paid National Insurance for the past 44 years – I think it is now pay-back time.”

“I consider I have paid enough during my working life through National Insurance.”

A number went further expressing feelings that they thought that their tax contributions and public funding in general were being misused and mismanaged:

“The tax I pay, should cover all costs and would if the government did not misappropriate it.”

“I have paid 45 years for NHS treatment if NHS management is good then that should be enough. It is unclear if charges are made to see GP who handles this money, is it ring fenced. My negative answers are based on the fact that I think the government would handle the money and they couldn't handle a good drink in a brewery.”

Other expressed objections included comments like:

“Health care should be free at the point of delivery.”

“Why should we have to pay?”

Although, interestingly, a small minority objected to paying because they did not want to pay for a bad service. This is an instance where “protest zeros” are also “true zeros”:

“Because the service provided is not worth any more. If I had to pay I would never visit again!”

Some also objected because they felt the health of others would suffer (thus gave a societal valuation):

“I believe charging to see a GP would harm the most vulnerable, i.e. young families and the elderly.”

“I myself am able to afford to pay to see my GP – but poor families and old people etc are not. If we start to pay say £5 to see our GP in ten years time it will be £50 a visit.”

“I know too many genuine people, on low incomes, who would not seek medical help at the risk of depriving children of food – in spite of our welfare state and the number of ‘free-loaders’, some are caught in the poverty trap and we cannot place honest folk at risk.”

While other respondents raised concern that they already pay for health care in the form of prescription charges, and thus objected to being “asked to pay twice”:

“I don’t think that I should have to pay to see the doctor, as I have to pay for prescriptions and I couldn’t afford both.”

“The system charges enough for other items, i.e. prescriptions.”

As expected, and evident in other contingent valuation studies, some respondents simply could not answer the question, and were unable (or found it difficult) to place a value on a GP visit:

“Difficult to put a figure, but in principle that should be enough on top of tax.”

“I have not answered 13 as I feel the money is irrelevant, if you have a need then you would pay the required amount as you do abroad.”

“I don’t know what I would be willing to pay.”

Also, as expected, ability (or inability) to pay was a commonly expressed reason:

“We are on family credit, £5 would be the maximum I could afford.”

“I am a pensioner on very little money, a little has to go a long way.”

While expressions of objection were intense, there was also vocal support from a number of respondents who thought charging would reduce the abuse of the free system:

“To stop malingers. People should also pay to visit A&E for other than life threatening conditions.”

“£2 may discourage time wasters, leaving more time for genuine patients, also it would put a little extra into patient care.”

Although some of these individuals had considered how this might impinge on other parts of the health care system, aware that charges could shift the burden to other areas of the health service:

“A small payment would deter a lot of minor ailments that people habitually turn up with, leaving more time for genuine cases to be afforded more time with the GP for a thorough examination and diagnosis. Despite the long waits in hospital A&E depts, I think more people would resort to using the A&E further stretching an overloaded system.”

“If you had to pay it would probably cut down the waiting times etc and stop people seeing the doctor for a sniffle when the chemist could help. On the other hand, people who are very ill and need to be seen regularly couldn't afford to pay and would get worse, which in the long run would be bad for them and the NHS as they would perhaps have to go to hospital.”

Also as expected some valuations were made with cost in mind:

“To alleviate the cost of the NHS.”

“I would be pushed to pay that amount but I know the NHS does not have enough resources for an efficient health care system.”

One respondent even went to the trouble of working out what they thought the cost of an appointment should be:

“£4.50 per hour just above minimum wage, multiplied by 2 to cover admin costs, divide by 6 and round off to £2 for 10 mins.”

Others reasoned that their valuations were made in the hope that paying would improve the service provided:

“If paying a fee improves/assists the quality of the NHS, I would be willing to pay.”

“I would pay that because you would get seen a lot quicker and you get to see the doctor a lot easier and you get to spend more time with him or her.”

While some respondents based their valuations on what similar occupations are paid, thus estimating the value based on a comparable good or service:

“Comparable to other professions per hour – 10 mins consultation is not long enough to command higher fee.”

“Tried to relate to other professional services but taking away the profit element. I would assume this fee relates to a consultation as opposed per ailment or by time.”

A number of respondents already had private insurance, thus were more accustomed to out-of-pocket payments for health care; they and others thought that perhaps a private system was the way forward:

“I would quite simply prefer to be total ‘private’ and pay whatever the appropriate rate might be – as I do with the dentist.”

“I am completely opposed to wholesale payment for health care as a matter of course the tax system should take care this. What I would like to see is some concession for those who can afford private health care and much better managed public health system draw much closer to a private scheme. This can work if the will is there.”

However, not all respondents provided lengthy reasons and comments, some where slightly less thoughtful about how they came about their valuations, simply providing a ‘nominal amount’:

“I consider that a nominal sum.”

“A token towards the cost of the health service.”

Or what they thought was a ‘reasonable fee’:

“I think I have made a fair assessment.”

“Above £5 seems a prohibitive amount but £4 would be acceptable.”

Some of the more extreme comments came from a small number who objected to being asked to pay for GP visits when ‘others’, namely asylum seekers, would receive (are receiving) free care:

“I think that we are becoming a dumping ground for Europe’s refugees. They are taking priority on NHS treatment and are a total drain on resources. I resent the NHS giving priority to these groups at the detriment of people who have paid their taxes all their lives.”

“If the government didn’t let too many immigrants in, our NHS wouldn’t be in this state. Keep Britain British.”

“Stop allowing asylum seekers and illegal immigrants, many with long term illness, which require costly treatment, i.e. AIDS, TB, Hepatitis, coming into the country. This has nothing to do with racism, it is logical thinking. Some day we might be lucky enough to have a government capable of imposing stricter controls, the money saved would provide new hospitals and more medical staff.”

3.3. Content analysis

The application of content analysis identified a number of themes, each of which is generally represented in the verbatim comments and phrases given above. Table 3 lists the categories and presents the proportions of respondents reasons that were indexed into each theme. This table summarises all the open ended responses provided by the entire sample; that is it includes those individuals who failed to give a valuation, as well as those who gave zero and positive values.

The top five reasons given for the valuations were, (a) that they already contributed via taxation, (b) that they could not afford to pay, or afford anymore, (c) they objected to paying, believing health care should be provided free, (d) they wanted to discourage time wasters and (e) they were concerned that the health of those who could not afford to pay would suffer. Thus as expected the large number of zero and low valuations are the result of protest zeros, budgetary constraints and individual's giving societal valuations. Although interestingly one in ten of respondents were not adverse to the idea of charging to discourage frivolous use of the system.

A comparison of mean WTP values, for those who gave specific explanations and those who did not, found that significant differences exist, see Table 4. As expected those who stated they already contributed in the form of National Insurance or tax, objected to being asked to pay, or made xenophobic comments gave significantly lower valuations than those who did not provide these as a reason. While respondents who wanted to discourage time wasters, were happy to pay a nominal amount, believed it was a costly service to provide, thought it was a reasonable fee, wanted to improve the quality of the service, or thought it was similar to what other professionals were paid gave significantly higher WTP values. This would suggest that there is some relationship between the reasons given and values elicited, however, a more robust multivariate approach is required to fully understand what lies behind individuals' WTP values. As discussed above, so far this has not been that successful, but it is hoped that comments and suggestions from HESG will be enlightening.

4. Discussion

As expected, out-of-pocket payments for GP care is an emotive issue. An analysis of the often lengthy comments found a mixture of both objection and support in the reasons provided for the valuations given. The reasons were varied, and in some instances similar to those expressed in other CV studies.

A significant proportion of respondents stated that they already contributed to the health service in the form of taxes, or as a matter of principle objected to paying for health care out of pocket. Moreover, these reasons were found to influence the amount they were willing to pay, both giving significantly lower mean WTP values. Whynes *et al.* and Donaldson *et al.* (1997a) found similar expressions of objection and label these as "protests". This raises the issue of what to do with such protests, especially since they appear to be influential in establishing mean valuations. There are some who believe protest zeros should be excluded from any subsequent analysis (Diamond and Hausman, 1994). However, others would argue that they represent a valid part of society and thus

their views and valuations are important. Exclusion may also come at a cost, if the respondents don't have the same characteristics as the rest of the sample then it could bias the result (Dalmau-Matarrondona, 2001). In this study, at least 20% of the respondents who claimed they already paid enough via taxation actually gave a positive value, therefore it is difficult to classify these as protestors; while a number of individuals explicitly protested giving zero values because they did not want to pay for what they considered to be a bad service, as such these "protest zeros" are "true zeros". Further analysis of the protesting individuals, in terms of the values they gave and their other characteristics is, therefore, warranted.

The predominance of reasons which are dissimilar to those reported by others is probably a result of valuing a service that already exists and is currently, and always has been, free. Reasons concerning equity is one example of this, likewise for those who wished to discourage misuse and abuse of the health service. It is this type of evidence, as the result of qualitative analysis, that provides further avenues to explore; subsequent research could investigate not only patient's opinions on paying to see a GP, but their opinions on being charged for missed appointments.

Ideally, the "reasons for the valuations" should have been recorded separately from the "further comments". This perhaps would be more insightful in terms of explaining the WTP values. As such only estimating the relationship between the reasons and the values, rather than all the comments and the values; thus leaving the further comments for greater qualitative analysis, especially as these are generally lengthy and (in some sense) unsolicited.

It is probably not surprising that I have encountered problems estimating the double hurdle model, it is no doubt a consequence of doing what Coast and others warn against, inappropriate use of qualitative methods. But even when excluding these qualitative variables from the regression, and simply estimating the relationship between WTP and the quantifiable individual characteristics nonsensical results are still generated. Whynes *et al.* were able to estimate such a relationship (including using qualitative reasons as explanatory variables) using a two part specification; and previously I have successfully estimated a two part specification using this data (producing sensible estimates and results). It is puzzling why the double hurdle approach is problematic, when it should be more robust.

To conclude, there appears to be some public acceptance of cost-sharing when considering the elicited WTP values; nearly 60% of the sample gave positive values. Although, when further considering the reasons for these valuations, objections and protests were commonly expressed, as

well as other concerns regarding equity and ability to pay. There does, however, appear to be some support for charging for missed appointments and deterring frequent (ab)users of the service, and acceptance that out-of-pocket payments could improve the service provided.

Suggested HESG discussion points

This work-in-progress has the potential to be two papers, one that presents the qualitative analysis and another that presents the quantitative analysis of the determinants of WTP, discussion of either or both of these issues would be appreciated.

- Should/can further qualitative analysis be undertaken? Are there other types of qualitative analysis that I can subject the data to? What would be the value of this?
- What is the best way to present the qualitative data? Verbatim comments or in some tabulated form?
- What factors influence the demand for primary care? i.e. what variables should be included as determinants of WTP (see Appendix 1)?
- Is a double hurdle model the most appropriate? Is there a more appropriate way to model the predominance of zero valuations?
- Should protest zeros be dealt with differently?
- Should I somehow model the non-responders, the 10% of the sample that did not give a valuation?

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Table 1: Population characteristics

	proportion or mean (standard deviation)
Gender	
Female	66.3
Male	33.7
Age	51 (17)
Ethnicity	
British	96.6
Irish	1.2
Other White	0.4
White and Black Caribbean	0.1
Indian	0.6
Other Asian	0.1
Caribbean	0.6
Chinese	0.1
Other	0.1
Marital status	
Single	10.9
Cohabiting	69.5
Separated	10.6
Widowed	9.0
Number of children	1.79 (0.89)
Economically Active	
Employed	41.3
Unemployed	5.8
Housewife/husband	5.8
Self-employed	8.6
Retired	34.2
Student	2.5
Other	1.9
Annual income	
< £10000	27.6
£10001-£20000	30.2
£20001-£30000	17.8
£30001-£40000	9.3
> £40,000	15.1
Age left full time education	17 (5.6)
General Health	
Excellent	9.8
Good	48.3
Fair	32.5
Poor	9.4
Long-term illnesses	
Circulatory problems	52.0
Cancer	11.8
Diabetes/kidney/liver problems	15.7
Stomach/bowel/bladder problems	23.7
MS/tremors/fits/epilepsy	10.0
Mental or nervous illness	22.2
Breathing problems	29.0
Have an NHS dentist	66.5
Receive free dental treatment	29.7
Exempt from prescriptions charges	47.5
Have private insurance	17.3

Table 2: Satisfaction ratings

	%
Satisfied with the amount of time you have to wait to get an appointment?	
Very satisfied	21.2
Satisfied	57.8
Unsatisfied	16.8
Very unsatisfied	4.3
Satisfied with the amount of time you have to wait in the waiting room?	
Very satisfied	14.8
Satisfied	66.8
Unsatisfied	15.7
Very unsatisfied	2.6
Satisfied with the length of consultation?	
Very satisfied	27.9
Satisfied	64.8
Unsatisfied	6.9
Very unsatisfied	0.4
Satisfied with the quality of care?	
Very satisfied	43.3
Satisfied	52.7
Unsatisfied	3.4
Very unsatisfied	0.6
Satisfied with the overall state of the NHS?	
Very satisfied	6.4
Satisfied	40.7
Unsatisfied	37.7
Very unsatisfied	15.2

Table 3: Reasons for valuations

	N	%
Already contribute NI/tax	189	34.9
Can't afford anymore	132	24.4
Discourage time wasters and missed appointments	60	11.1
A nominal amount	26	4.8
Costly service	21	3.9
A reasonable fee	35	6.5
To improve quality of the health service	34	6.3
Object to paying	65	12.0
Xenophobic	22	4.1
See a role for private insurance	17	3.1
Can not value health/answer the question	12	2.2
Object to paying for a bad service	8	1.5
Equity concerns – poor/elderly and ill would suffer	52	9.6
Shift burden to other areas of the health service	4	0.7
What similar occupations/professions are paid	11	2.0
I already contribute in the form of prescription charges	25	4.6
Other	46	8.5

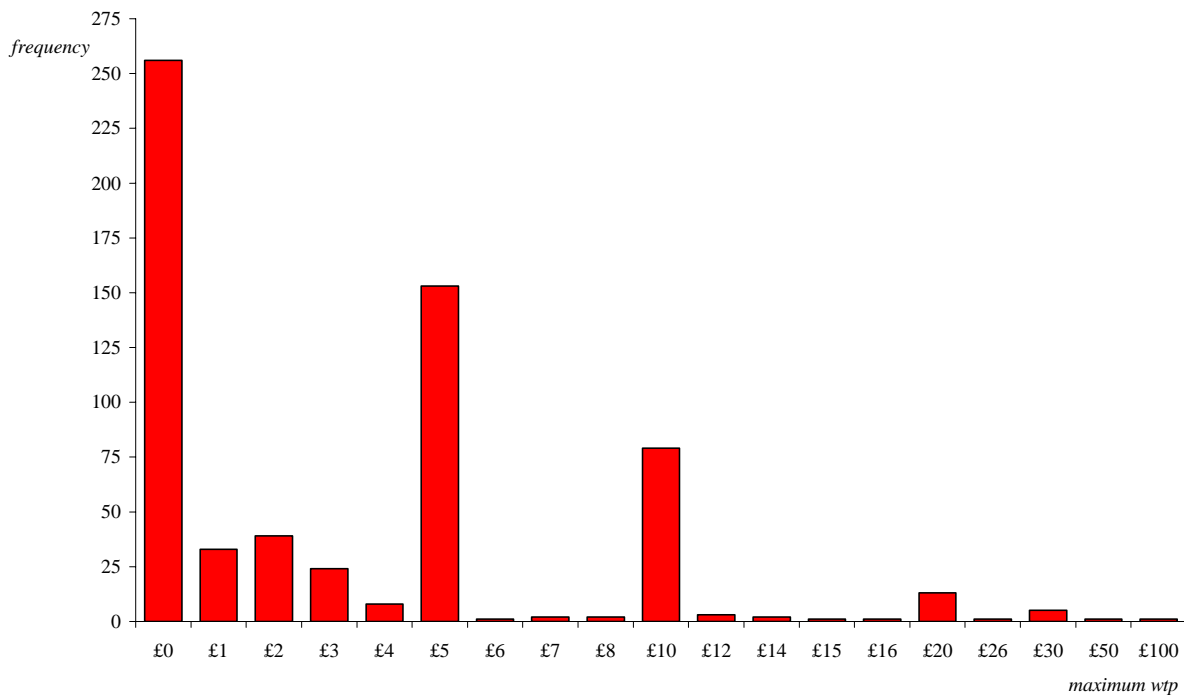
Note: sums to greater than 100% as possible for respondents to give more than one reason

Table 4: Relationship between valuations and reasons for valuation

	Mean WTP (£)		Mean Difference (p-value)
	Respondents	Non-respondents	
Already contribute NI/tax	1.02	5.20	<0.001
Can't afford anymore	3.15	3.97	0.312
Discourage time wasters and missed appointments	6.95	3.37	<0.001
A nominal amount	5.00	3.70	<0.001
Costly service	9.60	3.53	<0.001
A reasonable fee	8.09	3.47	<0.001
To improve quality of the health service	9.65	3.35	<0.001
Object to paying	1.84	4.02	<0.001
Xenophobic	0.95	3.88	0.003
See a role for private insurance	9.06	3.59	0.504
Can not value health/answer the question	5.00	3.76	0.298
Object to paying for a bad service	0.88	3.81	0.066
Equity concerns – poor/elderly and ill would suffer	2.94	3.85	0.837
Shift burden to other areas of the health service	3.75	3.77	0.478
What similar occupations/professions are paid	10.82	3.61	<0.001
I already contribute in the form of prescription charges	2.17	3.84	0.282
Other	5.91	3.56	0.074

Note: Mann-Whitney U test was employed due to the non-normal distribution of the willingness-to-pay values.

Figure 1: Distribution of willingness-to-pay values



Appendix 1: Possible explanatory variables

	Categories
Annual GP visits	continuous
Private insurance	yes = 1
Satisfied with time have to wait to get an appointment	yes = 1
Satisfied with time have to wait in waiting room	yes = 1
Satisfied with length of consultation	yes = 1
Satisfied with quality of care	yes = 1
Satisfied with overall state of the NHS	yes = 1
Income < £10,000	yes = 1
Income £10,000-£20,000	yes = 1
Income £20,000-£30,000	yes = 1
Income £30,000-£40,000	yes = 1
Gender	male = 1
Age	continuous
Married or cohabitating	yes = 1
Separated or divorced	yes = 1
Widowed	yes = 1
Number of children <16	continuous
Age left full-time education	continuous
Health status	good/excellent = 1
Ethnicity	white = 1
Receiving a benefit	yes = 1
Has a long term illness	yes = 1
R1 – tax contributions	yes = 1
R2 – Ability to pay	yes = 1
R3 – Discourage over/misuse	yes = 1
R4 – Nominal amount	yes = 1
R5 – Costly service	yes = 1
R6 – Reasonable fee	yes = 1
R7 – Improve quality	yes = 1
R8 – Objection	yes = 1
R9 – Xenophobic	yes = 1
R10 – Role for insurance	yes = 1
R11 – Can't value health	yes = 1
R12 – Bad service	yes = 1
R13 – Equity concerns	yes = 1
R14 – Shift burden	yes = 1
R15 – Similar professions	yes = 1
R16 – Prescription charges	yes = 1
R17 – Other	yes = 1

Note: that the mode of analysis requires some of the variables to be re-coded as binary dummies.