

# Fundholders' referral patterns and perceptions of service quality in hospital provision of elective general surgery

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## SUMMARY

**Background.** *The introduction of fundholding established an internal market in public sector health care, involving purchasers and providers contracting for the supply of health care.*

**Aim.** *This study set out to examine fundholders' hospital referral patterns, and to evaluate the quality of the service provided to patients undergoing elective general surgery, as perceived by fundholding general practitioners.*

**Method.** *A questionnaire was posted to the senior partners of all fundholding practices in the Trent Regional Health Authority area. This questionnaire requested assessments of the importance of 13 specified aspects of service quality and the quality of provision by general practitioners' most frequently-used hospitals. Five-point scales were employed in each case. Respondents were asked to provide additional details about their practice.*

**Results.** *A 67% response rate was achieved. Confidence in the consultant's ability, short waiting times and informative feedback from the providers emerged as the most important elements in referral decisions, while the cost of treatment and patient convenience received lower importance ratings. In terms of how well their providers were seen to perform, fundholders ranked confidence in the consultant and patient convenience highest, and style of hospital management lowest. The majority of referrals seemed to be local.*

**Conclusion.** *Judged in terms of fundholders' perceptions, sizeable variations in service quality between hospital providers of general surgery are evident.*

*Keywords: elective surgery; referral patterns; quality of health care; general practitioner-hospital relationship; general practitioner budget holder.*

## Introduction

FUNDHOLDING in general practice is a direct consequence of the 1990 National Health Service and community care act. This act established an internal market in public sector health care and defined autonomous purchasers and providers, who were to contract for the supply of care services. Among the purchasers were the newly-created general practitioner fundholders. According to the white paper which was the precursor to the act, fundholding in general practice was intended to overcome three prevailing obstacles to patient choice and service quality, namely: lack of incentive for hospitals to be responsive to the referral

demands of general practitioners; accounting and administrative problems resulting from inter-district referrals; and lack of incentives for general practitioners to offer their patients a choice of hospitals.<sup>1</sup> Fundholding commenced in April 1991, initially with practices of a list size of 11 000 and above being invited to apply for fundholding status. Successive waves of recruitment have occurred each year, with the list size limit being progressively reduced, and the process is continuing. Partnerships with fewer than the required number of patients have been permitted to join together with other partnerships in order to meet the list size requirement.<sup>2</sup>

The intention of fundholding was to confer enhanced market power upon the individual practice while, at the same time, requiring that the practice subject itself to the financial discipline of a pre-determined budget. As a consequence of the market for care services, each fundholder would be faced with a number of potential providers. In choosing with which of these to place its treatment contracts, the practice would be concerned to balance prospective costs against prospective benefits, both for the practice and for the patients; in short, to obtain value for money. In such an environment, the price and quality of the services offered by providers should therefore be a central concern of the general practitioner fundholders. Fundholders would naturally wish to obtain a high service quality on behalf of their patients, if only because of the possibility that their patients might choose to go to rival practices in the event of unsatisfactory provision. Purchasing from providers with disproportionately high treatment prices would impose direct budgetary problems for the general practitioner fundholders themselves. This having been said, value for money as perceived by patients and value for money as perceived by general practitioners might not be congruent, nor would the dimensions of quality necessarily be given equal weight by the two parties. Service quality is of concern to providers also — it is in their interests to ensure a high quality of service, in order to retain purchaser loyalty (and therefore income) into the future.

This paper reports on an evaluation of service quality, as perceived by general practitioner fundholders in the Trent Regional Health Authority area, in the hospital provision of elective general surgery. At the time of the study the region comprised four county-based family health services authorities — Derbyshire, Nottinghamshire, Leicestershire and Lincolnshire — and four family health services authorities as subdivisions of South Yorkshire — Sheffield, Rotherham, Doncaster and Barnsley. These areas were approximately contiguous with the respective district health authorities (two in each of Derbyshire and Nottinghamshire). Of the county-based family health services authorities, Derbyshire has one of the highest concentrations of general practitioner fundholders in England.<sup>3</sup>

## Method

A questionnaire was posted in the summer of 1993 to the senior partner of each fundholding practice in the region. According to names and addresses supplied by Trent Regional Health Authority, 151 general practitioner fundholders were operating in Trent in mid-1993, out of a total of approximately 850 practices.<sup>4</sup>

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A draft questionnaire was prepared and was discussed independently with two fundholders, the intention being to disaggregate service quality into a number of individual characteristics or attributes. Thirteen attributes of service quality were chosen for measurement. Some of the attributes impacted most directly upon the personal experiences of the individual patient, while the others were of more relevance to the fundholder's management of both the patient and the practice in general.

Respondents were invited to assess each attribute on a five-point ordinal scale with respect to: how important they considered that attribute to be as an element in their referral decisions (the scale ranged from not important at all (one) to extremely important (five)); and how well their secondary care providers performed in meeting their needs (the scale ranged from very poor (one) to excellent (five)).

The initial intention of the research had been to solicit opinion about a variety of referral types but, in the light of the two fundholders' observations on the draft questionnaire, it was decided to restrict the enquiry to assessing service quality in one specialty, elective general surgery. The reasons for this choice were, first, that this was likely to be the most frequent general practitioner purchase, and opinion would thus be better informed and, secondly, considerations of questionnaire length. This latter factor was especially relevant as it was clear that general practitioner fundholders typically referred their general surgery cases to more than one hospital. Accordingly, they were asked to assess the quality of performance with respect to each of the three hospitals to which they made most, second-most and third-most referrals. Hereafter, these are referred to as first-choice, second-choice and third-choice hospitals, respectively. In addition to the importance and performance ratings, respondents were also asked to provide a variety of details about their own practices.

All data were analysed using *SPSS*. As all variable distributions were non-normal, distribution-free tests were conducted, primarily analysis of variance.

## Results

### Profile of respondents

Questionnaires were received from 101 of the 151 general practitioner fundholders (67%). The lowest response rate was from fundholders in Barnsley, where 50% of the four fundholders returned the questionnaire, compared with 80% of the 20 in Lincolnshire and all six of those in Rotherham. By wave, 81% of 26 first wave fundholders, 67% of 30 second wave and 63% of 95 third wave fundholders returned the questionnaire. In addition, two practices returned their questionnaires uncompleted because of reported pressure of work.

As expected the earlier the practice became fundholding the larger the mean list size. Variations in list size within waves, however, were considerable. For the first wave, the mean list size of the 21 practices was 12 466 (standard deviation (SD) 5200, range 9000–33 067), falling to 10 971 (SD 3635, range 4400–19 500) and 9312 (SD 2385, range 3800–14 900) for the 20 second and 60 third wave practices, respectively. Sixty practices had between three and five partners with five having more than seven.

All the first and second wave fundholders employed full-time practice managers, as did 50 of the 60 third wave fundholders. Of the remaining 10, six employed part-time managers, three had partners as managers and only one employed no manager.

Fifteen respondents reported none of their patients typically being referred for private, as opposed to NHS, treatment. Of these, three were first wave, two were second wave and 10 were third wave. On the other hand, 13 reported a proportion higher than 10% and, of these, 10 were third wave.

Virtually all the fundholding practices surveyed (98 of the 101) already possessed facilities for conducting minor surgery; the remaining three (all third wave) expressed the intention to develop such facilities in the near future.

### Referral to hospitals

Of all the respondents, 13 returned performance data for a single hospital, implying they referred their cases to one hospital only. Nineteen returned data for two hospitals only and the remainder, 69, returned data for three. In total, 49 different hospitals were cited as providers, 11 of which lay outside Trent Regional Health authority. Of the 49, 31 were first choices for referrals, the remaining 18 appearing only as second or third choices. Despite such a large number of hospitals being used by the sample as a whole, the seven 'most popular' hospitals accounted for 48% of all citations. At the other end of the scale, 26 hospitals received three or fewer citations each, although in six cases these were all first choice. With respect to geographical location, the proportion of general practitioners making referrals to hospitals in the same district health authority/county as the practice is shown in Table 1. Fundholders tended to refer the majority of their patients to a local hospital, although the locality effect diminished for those hospitals used less regularly.

Aggregate importance ratings, by attribute are shown in Table 2, ranked by mean scores and presented in four groups, determined by Friedman two-way analysis of variance at 5%. The distributions of attribute scores were not significantly different within a group, but were different across groups, thus producing a statistically significant hierarchy of relative importances. Waiting time for first appointment, perception of consultant ability and aspects of information flow were the most important quality attributes, whereas post-treatment waiting times and cost were considered to be least important. The corresponding data for the perceived performance rating of the first-choice hospital is shown in Table 3. Again, these results have been divided into four groups on the same statistical criterion. Fundholders recorded the highest degree of satisfaction with respect to consultant abilities and patient convenience, and the lowest with respect to style of hospital management.

Analysis of the distributions of both importance and performance scores by wave of fundholder produced no significant differences in 25 out of the 26 cases (Kruskal Wallis one-way analysis of variance at 5%). The exception was speed of notification of death, for which the first-choice hospitals used by second-wave fundholders attained a higher performance rating than did those used by first- or third-wave fundholders ( $\chi^2 = 6.42$ ,  $P < 0.05$ ). A comparison of the performance distributions between the three choices elicited from the 69 fundholders using three

**Table 1.** Proportion of general practitioners making referrals to hospitals in the same district health authority as the practice.

FHSA	No. of respondents in FHSA area (% referring in same DHA)		
	1st choice hospital	2nd choice hospital	3rd choice hospital
Derbyshire	29 (86)	26 (65)	19 (26)
Nottinghamshire	12 (100)	10 (90)	7 (86)
Lincolnshire	16 (94)	10 (60)	8 (38)
Leicestershire	20 (95)	20 (95)	20 (95)
Sheffield	9 (100)	9 (100)	4 (50)
Doncaster	7 (100)	5 (0)	4 (25)
Barnsley	2 (50)	2 (50)	2 (0)
Rotherham	6 (100)	6 (33)	5 (0)

FHSA = family health services authority. DHA = district health authority.

**Table 2.** Aggregate importance ratings, by attribute, derived from all 101 respondents.

Dimension of quality	Mean	Median <sup>a</sup>
Length of wait for first consultant appointment	4.56	5
Confidence in consultant	4.53	5
Quality and speed of treatment information	4.51	5
Speed of notification of death	4.50	5
Speed of receipt of discharge letter	4.49	5
Length of wait between appointment and treatment	4.40	4
East of telephone access to consultant	4.22	4
Patient convenience	3.80	4
Quality of inpatient facilities	3.66	4
Hospital management style	3.62	4
Length of wait in outpatient clinic	3.48	3
Price of treatment	3.41	3
Length of wait for subsequent referral to outpatient clinic	3.35	3

<sup>a</sup>Values for mode are same as median values except length of wait between appointment and treatment and ease of telephone access to consultant, where mode = 5, and price of treatment, where mode = 4.

hospitals produced no significant differences between responses across choice (Kruskal Wallis one way analysis of variance at 5%), with the exceptions of those appearing in Table 4. These data imply that the hospitals which received the larger number of fundholders' cases were perceived as having consultants inspiring more confidence, easier telephone access and superior patient convenience. For the sample as a whole, pair-wise Spearman correlation coefficients between these three attributes were significant and in the range 0.204 to 0.332, that is, these three attributes displayed a small positive association.

For the sample as a whole, 11 practices were already members of multi-practice purchasing consortia. A further 22 expressed an interest in joining such consortia in the future, while 49 expressed no interest in the idea (the remainder offered no opinion).

**Table 3.** Perceived performance rating of first-choice hospital derived from all 101 respondents.

Dimension of quality	Mean	Median <sup>a</sup>
Confidence in consultant	4.20	4
Patient convenience	3.96	4
Ease of telephone access to consultant	3.67	4
Speed of notification of death	3.56	4
Quality and speed of treatment information	3.36	3
Length of wait for subsequent referral to outpatient clinic	3.30	3
Length of wait for first consultant appointment	3.27	3
Price of treatment	3.27	3
Speed of receipt of discharge letter	3.22	3
Length of wait in outpatient clinic	3.21	3
Length of wait between appointment and treatment	3.14	3
Quality of inpatient facilities	3.14	3
Hospital management style	2.89	3

<sup>a</sup>Values for mode are same as median values.

**Table 4.** Performance assessment, by hospital choice for 69 respondents using three hospitals.

Dimension of quality	Hospital choice	Mean	Median <sup>a</sup>
Ease of telephone access to consultant	1st	3.80	4
	2nd	3.38	3
	3rd	3.35	3
$\chi^2 = 8.43, P < 0.05$			
Patient convenience	1st	4.04	4
	2nd	2.91	3
	3rd	2.54	2
$\chi^2 = 62.4, P < 0.001$			
Confidence in consultant	1st	4.26	4
	2nd	4.07	4
	3rd	3.91	4
$\chi^2 = 6.13, P < 0.05$			

<sup>a</sup>Values for mode are same as median values except confidence in consultant, first choice of hospital where mode = 5.

No significant difference in opinions between waves or practice size was detected (Kruskal Wallis one way analysis of variance at 5%). However, those fundholders already members or interested in joining consortia did record a significantly lower performance rating with respect to the price charged by their first-choice hospital than did those not interested or with no opinion ( $\chi^2 = 7.90, P < 0.05$ ). Only this attribute of the 13 tested produced a significant difference.

## Discussion

The importance data provide substantive evidence relating to fundholder priorities in referrals for general surgery. Three types of attribute generally vied for premier position in respect of importance. These were, first, having confidence in the capabilities of the consultants responsible for the patients' treatments. This priority is readily comprehensible, given that clinical competence is a *sine qua non* of successful therapy. Secondly, great importance was attached to the speed with which treatment was effected. Finally, fundholders stressed the value of rapid and informative feedback from the hospital. In view of the budgetary and management discipline that fundholding was intended to instil, it is perhaps surprising to discover that fundholders assigned a relatively low importance to the cost of treatment and the management style of the hospital. This having been said, it is of interest that those who were especially dissatisfied with the price charged by their first-choice hospitals were also those most likely to express an interest in joining multi-practice purchasing consortia. This is interpretable as a rational response, given that membership of a consortium could be expected to enhance purchasers' bargaining power against that of the providers.

In terms of their attitudes towards individual patient welfare, fundholders clearly made some distinctions between the various items specifically related to patients' experiences of care. Thus they assessed waiting time for treatment as particularly important, yet considered the patient's waiting time in the outpatient clinic, quality of inpatient facilities and overall patient convenience to be of lower importance. The consistency of opinion about importance across the three waves suggests that fundholders' priorities do not change substantially over time or with experience. Perhaps more accurately, those who had recently become fundholders (third wave) did not appear to have different relative priorities from those with one or two years of actual fundholding experience.

Performance data reveal that confidence in the consultant was rated as being well beyond the level of more adequacy in all individual hospitals and in all groups of hospitals. Likewise, the first-choice hospital was generally rated as above average for patient convenience, although with some variability. Data with respect to waiting times and communication with the hospital suggest that performance here was, on average, deemed at least adequate. Management style was the dimension of service quality on which hospitals performed least satisfactorily. In spite of the explicit intention of the 1990 NHS act to reform hospital management, the survey data reveal that this is an area where scope for further improvement exists, at least in the eyes of general practitioner fundholders.

Finally, attention should be drawn to limitations of the study. First, responses were confined to elective general surgery and there is no way of knowing, in advance, whether fundholders would have assigned the same priorities within other specialties, whether they would refer to the same hospitals, or whether their performance ratings for these hospitals would have been different. Secondly, data collection was confined to fundholders, with the result that no control group (non-fundholder) data are available. Recently published research on non-fundholders in the North Western Regional Health Authority, however, permits a tentative comparison in this respect.<sup>5</sup> The non-fundholders also stressed quality of care provided as a principal motivation for referral, although waiting time for treatment was placed further down the priority ranking than was the case found here.<sup>5</sup> The non-fundholding general practitioners also gave prominence to patient convenience as a referral factor; this dimension appears to have been less important for the fundholders in the present study, in spite of the fact that the majority of referrals were local. Naturally, the price dimension examined in the present study was not relevant to the non-fundholding study. Whether such findings are indicative of important differences in priorities between fundholders and non-fundholders in general remains a subject for further research.

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