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Do patients' information requirements for choice in health care vary with their socio-demographic characteristics?

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Abstract

Objectives This study examines whether the information used to inform hospital choice, and the sources of that information, varies with patients' socio-demographic characteristics. It also examines whether information used by patients to inform choice is associated with attending their local hospital.

Methods A survey of 1033 patients who were offered a choice of hospital provider for elective treatment in England. Logistic regression was used to examine associations between patient characteristics and information used to inform choice of a hospital provider and sources of information used.

Results Factors most important to patients in choosing a hospital were quality of care, cleanliness, standard of facilities and reputation. While quality of care and related factors are important to the majority of patients, those with lower levels of education were more likely to report that location and appointment times were important. Those who thought quality important were more likely to attend their local hospital provider. The main sources of information used to inform choice of hospital were own experience, family and friends and the general practitioner (GP). Patients who sought advice from their GP or booking advisors were less likely to attend their local hospitals.

Conclusions Differences among patients as to what factors are important when choosing a hospital provider and what information and support they access suggest there needs to be a variety of information sources and support available to promote choice. Greater shared decision making through active involvement and support by GPs or booking advisors may be required if they are to make choices in line with their preferences.

Introduction

Policies advocating patient choice of provider as a mechanism to improve quality, efficiency and responsiveness of health systems have been introduced to many countries in the last decade.[1] Since 2006, patients in England referred by a general practitioner (GP) for elective

specialist care should have been offered a choice of hospital provider.[2] Initially, patients could choose from up to five providers, including from the independent sector, and since 2008, this choice extended to 'any qualified provider' registered with the Care Quality Commission.[3] Choice of provider has recently been enshrined as a patient right in the National Health Service (NHS) Constitution.[4,5] In an effort to increase the impact of patient choice in the NHS, the Government has promised an 'information revolution', which aims to provide more information on the quality of care to patients.[6] These developments are designed to create a system in which providers compete for patients on the basis of clinical quality.[7]

Previous research suggests that most patients do not use publicly reported performance data to inform their choice of health-care providers, relying instead on guidance from their GP, friends and family or relying on their own personal experiences.[8] Less is known about the extent to which information is actually used to inform choice, the sources of that information, and how these vary with patient characteristics. Early work on cardiac surgery patients in the United States suggests that more advantaged groups are more likely to use published performance information to inform their choices.[9] This feeds into concerns that policies to promote choice may disproportionately benefit affluent groups.[10,11] More recent work, however, has found that most patients do not use official information [12] that they value experience-based information at least as highly as publicly reported information[13] and prefer information on their specific type of surgery information over general information.[14] If patient choice is to be distributed equitably across the population and if different groups are to be equally able to choose to go to a 'high quality' hospital, then information tailored to different preferences is likely to be key. Previous work in the UK has shown that those aged over 65 years old and with no formal qualifications are less likely to use the internet[15] and that those with lower incomes and some ethnic minority groups may be more likely to have problems with health literacy.[16]

This study examines whether information used by patients to inform their choice of hospital, and the sources of information used by patients, varies with their socio-demographic characteristics. It also examines associations between the information patients use and whether they attend their local hospital provider. We currently know little about these issues in the English setting where health policy has sought to encourage greater patient choice of provider in recent years.

Methods

The data used for this study come from a larger postal survey of 2181 hospital outpatients. More detail on the design and methods for the survey can be found elsewhere.[17] The original study sent questionnaires to 5997 participants, and of these 2181 responded. In brief, the survey was administered by Picker Institute Europe between March and June 2009 to a random sample of patients referred to a first outpatient appointment in four local health economies during January 2009. The survey consisted of patients who were referred to specialties where choice of provider was available (patients excluded from the survey included those referred to psychiatric outpatient clinics, sexually transmitted infections clinics, two-week-wait cancer patients and rapid access chest pain clinics. Full details can be found elsewhere[17]). The overall response rate to the survey was 36%, similar to a Department of Health survey on related issues.[8] The local health economies were selected to provide variation in both the potential for patient choice of provider and its penetration. The providers included five NHS hospital trusts, six NHS foundation trusts (which have greater autonomy from central government) and two independent sector treatment centres [(ISTCs) privately run centres contracted to undertake elective surgery under the NHS] based in a mixture or urban and rural locations outside of London. Sample sizes were in proportion to the volume of referrals at each trust; however, ISTCs were oversampled to allow them to be

compared with NHS trusts. 2061 respondents answered the question 'Were you offered a choice of hospital?' and the analyses presented here are based on the 1033 who replied 'yes'. There were no significant differences between those offered a choice of hospital and those not in terms of age group, education or ethnicity. However, respondents living in small towns, those with urgent referrals, were less likely to be offered a choice of hospital.[18]

The outcome measures for this study were responses of 'essential' or 'very important' to the question 'How important were each of the factors below in influencing which hospital you chose?'; yes/no responses to the question 'Which, if any, of the following sources of information did you use to choose the hospital?'; and yes/no responses to the question 'Do you think of the hospital/treatment centre you are attending as your 'local' hospital?'

The predictor variables in this analysis were age group (16–35, 36–50, 51–65, 66–80, 81+ years), sex, ethnicity (white and mixed/non-white), number of GP visits in the last year (1, 2–5, 6–9, ≥10), area of residence (city/large town/suburbs, small town, village/rural area), self-rated health (EQ-VAS scale 1–100, divided into above and below the median of 75), education (no qualifications, qualifications below degree level, qualifications at or above degree level), employment status (in paid work, not in paid work) and past experience of local hospital (generally good, generally bad, mixed, no previous experience).

Logistic regression models were used for analysis of important factors in choice, important sources of information and attendance at a local provider. This involved separate models for each outcome (e.g. stating that reputation was an important factor, or stating that information from the GP was used to choose the hospital). All models were adjusted for all of the predictor variables mentioned above. The analyses presented here are weighted to allow for the oversampling of ISTCs although unweighted results provided similar results. All analyses were conducted using Stata 11.0.

Ethical approval for the study came from the UK National Research Ethics Service.

Results

A total of 606 (59%) of the responders were female, 110 (11%) were aged 16–35 years, 354 (34%) were over 65 years old and 939 (91%) were White (see Table 1). The sample included fewer young respondents, slightly more women, but a similar ethnicity breakdown to the national distribution of referrals in the NHS.[18]

Factors influencing choice of hospital by patient characteristics

The factors most important to patients when choosing a hospital were quality of care (93.3%), cleanliness (92.6%), standard of facilities (90.3%) and reputation (80.3%) (see Table 2).

There were no significant differences in factors influencing choice of hospital by age group. Women were more likely to report that personal experience (76.4 vs. 66.0%, $P = 0.01$) and family experience (56.3 vs. 44.3%, $P < 0.01$) were important than men. Non-white patients were more likely than white patients to report that timing of appointment was an important factor (79.7 vs. 62.2%, $P = 0.02$). Those with no formal qualifications were more likely than those with a degree or more to report that personal experience (82.0 vs. 60.3%, $P < 0.01$), location of hospital (74.3 vs. 65.3%, $P = 0.03$) and timing of appointment (69.3 vs. 53.2%, $P < 0.01$) were important when choosing a hospital.

The relationship between the importance of different factors and attendance at local hospital

Table 3 presents the percentage of patients attending what they considered to be their local hospital by the factors they considered important in choosing their hospital provider. It also shows the Adjusted Odds Ratios (AOR) from logistic regression comparing the odds of

Table 1 Characteristics of the sample

	Characteristic	Number	%
Age in years	16–35	110	11
	36–50	240	23
	51–65	329	32
	66–80	285	27
	81 and over	69	7
Gender	Male	427	41
	Female	606	59
Ethnicity	White	939	91
	Mixed and non-white	75	7
	Missing	19	2
Self-rated health*	Below average	446	43
	Above average	472	46
	Missing	115	11
General practitioner visits in last years	1 or less	55	5
	2–5	536	52
	6–10	307	30
	More than 10	124	12
	Missing	11	1
Employment status	In paid work	593	57
	Not in paid work	358	35
	Missing	82	8
Level of education	No formal qualifications	318	31
	Below degree level	403	39
	Degree level and higher	150	15
	Missing or other	162	16
Urban vs. rural area	City/large town/suburbs	484	47
	Small town	310	30
	Village/rural area	195	19
	Missing	44	4
Past experience of local hospital	Generally good	712	69
	Generally bad	26	2
	Mixed	224	22
	No previous experience	61	6
	Missing	10	1
	Total	1033	100

*Median self-rated health EQ-VAS was 75.

attending the local hospital between those who did and did not use these sources of information.

Respondents who stated that personal experience was important were nearly three times more likely to attend the local hospital than those who did not select this factor as important (AOR 2.95, 95% CI 1.88; 4.64). Respondents who stated that cleanliness (AOR 2.54, 95% CI 1.34; 4.82), location (AOR 3.68, 95% CI 2.44; 5.57) and quality of care (AOR 2.67, 95% CI 1.32; 5.41) were important were more likely to attend a local provider than those who did not select these factors as important (Table 3). The only factor to be associated with being less likely to attend the local provider was waiting time for an appointment (AOR 0.61, 95% CI 0.37; 1.00).

Demographic breakdown of sources of information used to choose the hospital attended

The sources of information most commonly used by patients when choosing a hospital were their own experience (40.9%), their GP (36.0%) and family and friends (17.5%) (see Table 4). The NHS Choices website and telephone line booking advisors were used by only 4.3% and 9.1% of respondents, respectively.

Patients aged over 80 years old were less likely to use family and friends than those aged 16–35 (11.6 vs. 26.4%, $P < 0.01$). Women were more likely than men to report that they had used their own experience (43.6 vs. 37.0%, $P < 0.01$) and were less likely to have used staff at a referral centre (4.9 vs. 2.1%, $P < 0.01$). Non-white patients were more likely than white patients to report that they had used a telephone line booking advisor (18.7 vs. 8.4%, $P < 0.01$). Those who had been to the GP more than 10 times in the last year were more likely than those who had been to the GP only once in the last year to report that they used a leaflet (10.5 vs. 1.8%, $P = 0.03$) and the hospital's own website (5.6 vs. 1.8%, $P < 0.01$).

The effect of sources of information on health-care quality on likelihood of attending local provider

Patients who reported using their GP (AOR 0.64, 95% CI 0.44; 0.93), their family and friends (AOR 0.36, 95% CI 0.23; 0.57), staff at a referral centre (AOR 0.29, 95% CI 0.10; 0.88) and a telephone line booking advisor (AOR

Table 2 Important factors when choosing a hospital

	Reputation	Personal Experience	Cleanliness	Location of hospital	Timing of appointment	Waiting time	Family Experience	Quality of food	Quality of care	Standard of facilities
Overall	80.3	72.0	92.6	68.1	63.3	77.4	51.2	39.3	93.3	90.3
Age										
16–35	77.9	72.4	90.7	69.4	63.5	76.4	57.1	27.6	95.2	88.6
36–50	77.5	69.4	90.3	69.6	65.6	76.7	53.8	31.7	90.0	87.3
51–65	78.7	64.9	90.8	64.0	63.1	79.0	47.3	37.0	91.5	88.1
66–80	84.4	80.3	96.8	69.3	60.8	77.1	51.2	51.8	97.4	95.6
81+	87.0	84.3	96.5	75.9	65.4	74.5	47.8	61.2	94.3	96.1
Male	80.3	66.0	91.2	64.9	61.2	74.3	44.3	39.5	90.7	88.8
Female	80.3	76.4*	93.6	70.3	64.8	79.6	56.3*	39.0	95.2	91.5
White	80.1	72.4	92.8	67.7	62.2	77.3	51.3	38.5	93.4	90.6
Non-white	82.5	71.2	89.2	69.7	79.7*	78.5	50.0	47.6	93.7	90.3
Below average self-rated health	80.1	73.5	93.4	67.7	63.8	79.6	48.1	41.7	95.0	90.3
Above average self-rated health	79.1	70.4	91.1	68.3	61.1	75.1*	52.1	34.7	92.1	89.9
GP visits: once	74.5	57.8	89.6	63.5	70.8	80.0	59.6	26.1	85.7	82.2
GP visits: 2–5 times	78.3	71.5	92.0	67.2	60.4	75.3	51.6	36.2	92.2	89.0
GP visits: 6–10 times	84.6	71.8	93.1	69.1	64.8	80.8	48.2	46.2	95.8	92.1
GP visits: more than 10	79.8	77.6	94.6	71.9	68.4	76.8	52.4	39.3	94.7	94.6
In paid work	82.8	74.1	93.5	68.7	61.0	76.6	50.0	46.6	95.4	93.0
Not in paid work	76.1	67.8	90.0	67.3	66.5	78.9*	53.8	26.8	89.0	86.0
No formal qualifications	86.3	82.0	95.3	74.3	69.3	77.2	54.2	57.6	95.4	92.3
Below degree level	79.7	69.1*	94.4	63.7*	62.6*	78.9	49.7	33.5*	93.9	90.4
Degree level and higher	69.0*	60.3*	83.6*	65.3*	53.2*	78.2	45.9	18.9*	86.9	87.6
City/large town/suburbs	80.1	73.4	92.5	70.7	65.6	77.9	49.6	39.2	94.2	90.4
Small town	82.4	71.2	92.2	67.4	62.4	77.3	54.3	37.9	92.9	91.7
Village/rural area	76.6	67.5	93.0	61.0	57.8	76.5	50.0	39.7	90.7	87.8
n	744	753	768	770	746	753	710	685	737	731

*Indicates statistical significant difference at the 5% level. These derived from a logistic regression model also adjusting for age group, sex, ethnicity (white, mixed/non-white), number of GP visits in the past year (one or less, two to five, six to ten, more than ten), EQ-VAS self-rated health, education (no qualifications, less than/more than degree), urban/rural (city/large town/suburbs, small town, village/rural area) and employment status (in paid work, not in paid work).

Table 3 Logistic regression model of attending local hospital by important factors when choosing a hospital

Importance of various factors in hospital choice (*n*)	% attending local hospital	AOR *	*P* value	95% Confidence Interval
Reputation (652)				
No	61.1	—	—	—
Yes	71.2	1.71	0.03	1.07; 2.76
Personal experience (656)				
No	53.2	—	—	—
Yes	78.2	2.95	<0.01	1.88; 4.64
Cleanliness (671)				
No	55.2	—	—	—
Yes	71.4	2.54	<0.01	1.34; 4.82
Location of hospital (675)				
No	47.4	—	—	—
Yes	83.1	3.68	<0.01	2.44; 5.57
Time of appointment (649)				
No	68.3	—	—	—
Yes	71.7	0.76	0.20	0.50; 1.15
Waiting time for appointment (659)				
No	75.2	—	—	—
Yes	67.4	0.61	0.05	0.37; 1.00
Family experience (626)				
No	68.5	—	—	—
Yes	70.5	1.21	0.35	0.81; 1.81
Quality of food (593)				
No	65.5	—	—	—
Yes	75.6	1.42	0.15	0.88; 2.29
Quality of care (638)				
No	52.6	—	—	—
Yes	71.0	2.67	<0.01	1.32; 5.41
Standard of facilities (638)				
No	58.0	—	—	—
Yes	71.2	2.30	0.01	1.21; 4.41
Waiting time in waiting room (648)				
No	65.1	—	—	—
Yes	72.3	1.09	0.70	0.71; 1.68

*AOR, adjusted odds ratio. These results adjusted for age group, sex, ethnicity (white, mixed/non-white), number of GP visits in the past year (one or less, two to five, six to ten, more than ten), EQ-VAS self-rated health, education (no qualifications, less than/more than degree), urban/rural (city/large town/suburbs, small town, village/rural area), employment status (in paid work, not in paid work) and past experience of hospital (generally good, generally bad, mixed, no previous experience). Only those respondents offered a choice included in these analyses ($N = 1033 - 50.1\%$ of responders).

0.51, 95% CI 0.28; 0.93) were all less likely to attend their local provider (see Table 5). Patients who reported using their own experience (AOR of 2.04, 95% CI 1.35; 3.07) were more than twice as likely to attend their local hospital as those who did not report basing their choice on personal experience. Those who used none of these sources of information (AOR 2.49, 95% CI 1.10; 5.64) were also more than twice as likely to attend their local provider as those who reported using at least one of the sources of information mentioned.

Discussion

What's important to different patients and are they more likely to switch?

The factors most important to patients in choosing a hospital were quality of care, cleanliness, standard of facilities and reputation. Patients stating that these factors were important were significantly more likely to attend their local hospital. Those who stated that waiting time for an appointment was important were less likely to attend a local provider.

Table 4 Percentage of patients stating they used different sources of information to choose the hospital they attended

	Used GP	Used Leaflet	Used NHS Choices	Used Hospital Website	Used other website	Used family and friends	Used own experience	Used someone else at GP	Used staff at referral centre	Used telephone booking line advisor	Used none of these
Overall	36.0	6.1	4.3	2.7	0.8	17.5	40.9	0.9	3.3	9.1	6.5
Age											
16–35	40.0	6.4	5.5	4.5	2.7	26.4	37.3	3.6	2.7	9.1	7.3
36–50	35.8	4.2	5.8	4.6	0.4	18.8	42.9	0.8*	5.4	9.6	7.9
51–65	34.7	7.0	4.3	1.5	1.2	14.0*	41.0	0.0	3.3	11.2	6.1
66–80	35.4	7.0	3.5	2.1	0.0	18.6	39.6	0.4	2.1	7.7	4.9
80+	39.1	4.3	0.0	1.4	0.0	11.6*	43.5	2.9	1.4	2.9	8.7
Men	37.2	7.5	5.2	3.0	0.9	16.2	37.0	1.2	4.9	9.8	6.3
Women	35.1	5.1	3.6	2.5	0.7	18.5	43.6*	0.7	2.1*	8.6	6.6
White	35.0	6.0	4.2	2.8	0.6	17.4	41.5	0.7	3.0	8.4	6.8
Non-White	45.3	8.0	5.3	1.3	2.7	20.0	34.7	2.7	8.0	18.7*	1.3
Below average self-rated health	36.3	4.7	3.6	1.6	0.9	17.7	42.2	0.9	2.9	8.1	5.8
Above average self-rated health	35.2	7.0	5.5	3.6*	0.8	16.9	41.5	0.4	3.4	10.8	6.6
GP visits in last year: 1	41.8	1.8	3.6	1.8	1.8	30.9	32.7	1.8	0.0	3.6	7.3
GP visits in last year: 2–5	33.0	5.2	4.5	2.4	0.6	18.3	40.7	0.7*	3.9*	9.7	7.6
GP visits in last year: 6–9	38.4	6.8*	4.2	2.3	0.7	12.4*	41.0	1.0*	1.6*	10.4	5.9
GP visits in last year: 10+	41.9	10.5*	4.0	5.6*	1.6	19.4	45.2	0.8	4.8*	6.5	2.4
In paid work	36.1	6.7	3.4	2.4	0.8	17.5	39.8	0.5	2.5	6.9	5.6
Not in paid work	35.5	5.6	5.9	3.9	0.8*	17.6	42.7	1.1	4.1*	11.7	8.7
No formal qualifications	38.4	8.8	2.5	2.2	0.3	13.5	34.6	0.6	3.5	7.9	5.7
Below degree level	33.3	5.5*	5.5	3.2	1.0	16.1	44.9*	1.0	3.0	10.9	6.0
Degree level and higher	43.3	4.0	5.3	3.3	1.3	22.7	44.0	0.0	3.3	7.3	9.3
City/large town/suburbs	35.3	8.5	4.3	2.7	1.4	16.5	44.4	1.4	3.5	7.4	5.8
Small town	36.1	5.5	3.9	2.6	0.3*	14.2	36.8	0.3	2.6	12.6*	7.1
Village/rural area	38.5	2.6*	5.1	3.1	0.0	22.1	39.5	0.0	2.6	8.2	7.2
n	719	719	669	669	395	719	719	281	719	719	672

*Indicates statistical significant difference at the 5% level. These derived from a logistic regression model also adjusting for age group, sex, ethnicity (white, mixed/non-white), number of GP visits in the past year (one or less, two to five, six to ten, more than ten), EQ-VAS self-rated health, education (no qualifications, less than/more than degree), urban/rural (city/large town/suburbs, small town, village/rural area) and employment status (in paid work, not in paid work).

Table 5 Logistic regression model of attending local hospital by sources of information used in choosing hospital

Sources of information used to choose hospital (*n*)	% attending local hospital	AOR*	*P*-value	95% Confidence Interval
GP (736)				
No	71.7	—	—	—
Yes	68.0	0.64	0.021	0.44; 0.93
Leaflet (736)				
No	70.1	—	—	—
Yes	64.5	0.63	0.23	0.30; 1.34
NHS Choices (736)				
No	70.1	—	—	—
Yes	60.4	0.61	0.26	0.26; 1.45
Hospital Website (736)				
No	71.2	—	—	—
Yes	42.8	0.40	0.06	0.15; 1.06
Other website (736)				
No	70.3	—	—	—
Yes	71.4	1.40	0.69	0.27; 7.25
Family and friends (736)				
No	74.8	—	—	—
Yes	50.0	0.36	<0.01	0.23; 0.57
Own experience (736)				
No	64.5	—	—	—
Yes	78.7	2.04	<0.01	1.35; 3.07
Someone else at GP (736)				
No	70.2	—	—	—
Yes	87.5	0.56	0.70	0.03; 10.73
Patient organisation (736)				
No	70.4	—	—	—
Yes	66.7	1.56	0.67	0.20; 11.97
Staff at a referral centre (736)				
No	71.3	—	—	—
Yes	39.2	0.29	0.03	0.10; 0.88
Telephone booking line advisor (736)				
No	71.2	—	—	—
Yes	58.6	0.51	0.03	0.28; 0.93
None of these sources (736)				
At least one	70.0	—	—	—
Used none	82.3	2.49	0.03	1.10; 5.64

*AOR, adjusted odds ratio. These results adjusted for age group, sex, ethnicity (white, mixed/non-white), number of GP visits in the past year (one or less, two to five, six to ten, more than ten), EQ-VAS self-rated health, education (no qualifications, less than/more than degree), urban/rural (city/large town/suburbs, small town, village/rural area), employment status (in paid work, not in paid work) and past experience of hospital (generally good, generally bad, mixed, no previous experience). Only those respondents offered a choice included in these analyses ($N = 1033 - 50.1\%$ of responders).

Overall, most patients consider quality of care to be an important factor when choosing a hospital. Other important factors such as cleanliness and the standard of facilities may be used by patients as markers of quality, and in the absence of objective information about the quality of care, it seems patients view a hospital's reputation (i.e. what they have heard) as important. Some of the concepts presented here such as 'quality of care' are rather vague and do not give detail on what specific aspects of quality are most important to patients. Attempts to use this information to improve care would need careful consideration of how to measure these concepts and what data are most important and interpretable to patients. Patients may well be interested in 'softer' aspects of care than those traditionally

focused on by many health professionals and researchers. For example, work in the Netherlands found that patients considered patient experience–based information, such as physician communication at least as important as other measures such as waiting times for surgery.[13] Previous work has highlighted the importance of staff kindness in Germany[19] and a 'friendly atmosphere' in the Netherlands.[20] There is an increasing focus on these 'softer' measures such as patient experience in England, with the NHS Choices website (a government initiated website launched in 2007), which was designed to provide patients with more information on the choices available to them and quality at different providers, including a provision for patients to post ratings and free text comments on the quality of care they received.

Our results indicate that some issues are more important to those with lower levels of education such as timing of appointments and location. Other work on surgical patients in the Netherlands has found that waiting time and quality of care information were valued to a similar degree among patients with different levels of educational attainment referred for surgery.[20] These contrasting findings may be because our study looked at a range of patients (not just those referred for surgery) or could be due to health system or cultural differences between the two countries. We can only hypothesize as to the reasons for our findings, but perhaps because a greater proportion of those with less education are in jobs where getting time off for hospital appointments is difficult and unpaid, or they may not have their own transport and be more reliant on public transport. Health policy in England needs to recognize that patients may consider a range of factors when choosing a hospital and that these may vary by patient. Information to support patients therefore needs to be tailored to reflect their own values and preferences.

Patient choice policy in England is intended to create more competition between hospitals on the basis of quality and drive service improvements.[21] Yet, our analysis suggests that those who think quality is an important factor when choosing were actually more likely to be loyal to the local provider. It was only those who thought that waiting times were important who were more likely to go to a non-local provider, suggesting that perhaps the tangible possibility of being treated sooner is more likely to lead to active switching than the harder to observe concept of quality of care. Evaluation of choice policy in the Netherlands, where there has been more active encouragement of patients to choose between different hospitals, found that patients were willing to travel further for aspects they cared about strongly (such as physician expertise) than aspects they considered less important (such as the percentage of operations with a positive outcome).[13] This work, alongside the work presented here, emphasizes the myriad factors that inform patient choice and cautions against a one-size-fits-all approach.

How are different patients using information and are they more likely to switch?

This study confirms findings from previous research from the UK and the Netherlands that patients rarely use official publicly reported information (even among patients who have actively compared hospitals) on quality to inform their choice of health-care provider, relying instead on their own experience, that of family and friends and their General Practitioner.[12,17] There is also evidence to suggest that GPs do not use official information on quality of care to guide their decisions,[22] further calling into question any reliance on such official information being widely used to try to drive improvements. Despite NHS Choices (which does contain such official information) being promoted as the main source of information for patients to access information about the comparative quality of hospital care when making a choice, less than five per cent of patients reported using the site. This, however, may have changed since this study was conducted. The majority of patients in this study continue to rely on their own personal experi-

ence, the experience and views of friends and family and the advice of their GP.

Use of information sources was broadly similar across age and sex categories, although women were more likely to use their own experience than men. This is in contrast to a study of surgical patients which found few differences between the sexes[22] but may be that women who may be more likely to have contact with health services are also more likely to use their own personal experience when choosing a hospital, as they may have more direct experience to draw on. In terms of percentage differences, some factors such as reputation and cleanliness show an apparent gradient with age, but these are not found to be statistically significant, which may be due to small numbers of respondents in each age group.

Those not in work are more likely to use referral centres, and non-White patients are more likely to use telephone line booking advisors; however, the percentage of patients reporting use of these services was very low (<10%). These findings confirm previous research that patients have different information needs[16,23] and point to a need for differing levels of support. In early pilots of patient choice, patient choice advisors (who were tasked with assisting patients in making these choices) were found to be highly valued by patients who used them.[24,25] These choice advisors, however, have not been in general use since the policy rolled out nationally.

We also found that those who reported their choice was informed by their GP were less likely to attend their local hospital, as were those who reported seeking information from family and friends, telephone line booking advisors or staff at a referral centre. These findings echo those from the shared decision-making literature that patients may not have stable preferences about what is important to them in choosing a hospital, but that being guided through their choice with someone (such as their GP, or a booking advisor) may allow them to match their choice to their preferences.[26] This may in turn lead them to choose a non-local provider for treatment. It also suggests that those who are more active in seeking information and advice from others are also more willing to consider travelling further to access hospital care.

Limitations

This study presents new analyses about how information is used by patients when making choices in health care and differences by patient characteristics. There are, however, a number of limitations to this study which need to be borne in mind when interpreting the results. First, data collection was limited to only four areas of England and therefore does not necessarily represent patient views and experiences across the whole of England. However, the sites were specifically chosen to include a diversity of rural and urban areas outside London and to reflect the penetration of patient choice. Second, the response rate of 36% to this survey is relatively low, although it is similar to that achieved in the official Department of Health surveys on patient choice.[8] It is expected that the low response rate may have introduced some bias. However, the characteristics of responders and non-responders to the survey were broadly similar.[17] Patients with low literacy levels or whose first language is not English are likely to be under represented in this sample. Unfortunately, the sample was too small to investigate whether certain population groups using different sources of information were more or less likely to attend their local hospital. It is also possible that some of the findings on attendance at a local provider may not have been statistically significant as the numbers of patients who reported using information or thinking different factors important were small. Third, patients in this study were asked to tick all factors which were important to them and did not have to make trade-offs or consider the relative importance of different factors. This may account for the high levels of importance given to many factors. Although this problem can be overcome by methods such as discrete choice- or adaptive choice–based conjoint

experiments,[12] this has not been performed here as the structure of the data did not allow for this. Fourth, as the design of this study was retrospective, asking patients what information they used previously, consideration should be given to the possibility of recall bias. Other studies have sought to overcome this by supplementing questions to patients about what information they have used in the past to inform choice of provider with what information to intend to inform future choices.[20] Finally, the study used self-reported measures to determine whether a patient attended their local hospital. We were not able to verify whether patients actually attended their nearest hospital. However, it is reasonable to expect that most patients are aware of the hospital that is closest to where they live.

Conclusion

Taken together, these findings suggest that simply publishing performance information is unlikely to be enough to motivate patients to actively choose non-local providers on the basis of quality. They suggest that more active involvement and support by GPs or booking advisors may be required if the ambition of patients choosing on the basis of quality is to be realized. Differences among patients as to what factors are important when choosing and what information and support they will access suggest there need to be a range of information sources and support available. Some patients may benefit from advice and support in order to help them make a choice that it is in line with what is important to them. However, the lack of widespread differences found across patient groups alleviates previous concerns that certain groups would be 'left behind' by their inability to access information to inform choices.

Despite substantial upheaval and structural change in the English, NHS policy makers have expressed enthusiasm for increasing choice of provider as a quality improvement tool. Simultaneously, there is a growing call to focus on the concepts of shared decision making, highlighted here by the importance patients assign to their GP in helping determine their choice of hospital provider.[27]

There is now an opportunity to actively engage patients in choices about their care and treatment, helping them to understand what is important, the choices they face and how to interpret information.

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Supporting Information

Additional Supporting Information may be found in the online version of this article:

Data S1. Patient choice questionnaire.

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