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Comparing importance and performance from a patient perspective in English general practice: a cross-sectional survey

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Abstract

Background. Patient experience and satisfaction are important indicators of quality in health care. Little is known about where to prioritize efforts to improve patient satisfaction.

Objectives. To investigate patient satisfaction with primary care, as part of the Quality and Costs of Primary Care in Europe study in England, identifying areas where improvements could be made from patients' perspectives.

Methods. We conducted a questionnaire survey of general practice patients in three English regions. Patient Values questionnaires assessed what patients thought was important, and Patient Experience questionnaires rated performance of primary care. Fifteen attributes of care were compared using Importance Performance Analysis, a method that simultaneously represents data on importance and performance of a service, enabling identification of its strengths and weaknesses.

Results. Patients rated both 'relational' and 'functional' aspects of care as important. Satisfaction with general practice could be improved by concentrating on specific aspects of access (ensuring that patients know how to access out-of-hours services and find it easy to get an appointment), and one aspect of empowerment (after their visit, patients feel able to cope better with their health problem/illness). However, for other attributes (e.g. proximity of the practice to a patient's house or, a short waiting time when contacting the practice), investing additional resources is not likely to increase patient satisfaction.

Conclusion. Attributes needing most improvement concerned access to primary care and patient empowerment. More research is needed to identify how to improve access without generating unnecessary additional demand or compromising continuity of care.

Key words. Family practice, patient-centered care, patient satisfaction, primary care, quality improvement.

Introduction

Key aspects of quality in health care include safety, clinical and patient perceived effectiveness and patient experience [1]. A positive experience of care, while important in itself, is also associated with other aspects of quality [2]. Measuring patient experience can be used to identify shortcomings, improve health care quality, give patients a voice and promote choice [2]. Similar claims have been made about patient satisfaction [3], and consequently increasing attention is being paid to both experience and satisfaction as quality indicators. In this article, we investigate patient satisfaction with primary care in England.

Patient 'experience' and 'satisfaction' are often used interchangeably [4], but Coulter *et al*. [5] differentiate these: satisfaction measures ask patients to rate aspects of their care using categories such as 'good' or 'poor', something which is likely to be influenced by their expectations, whereas experience measures ask patients 'whether or not certain processes or events occurred during a particular visit, a specific episode of care, or over a specified period' [5]. 'Experience' relates to people's memory of what happened, and in what manner, while 'satisfaction' relates more to patients' opinions/feelings about what happened. Patient experience measures, therefore, aim to 'elicit reports on what actually occurred, rather than the patient's evaluation of what occurred' [5].

Inevitably, these concepts overlap since 'experience measures' require people to reflect on past events, and are, therefore, based upon (selective) recall. Using these definitions, a focus on experience is arguably preferable to satisfaction as it reduces the problem of 'overly positive responses' sometimes encountered in patient satisfaction surveys [4].

However, 'satisfaction' can also be considered to reflect patients' experiences in relation to their expectations. Delnoij [6] states that exploring both patients' expectations and experiences is helpful, defining 'satisfaction' as 'a multidimensional concept, based on a relationship between experiences and expectations' [6], an approach we adopt in this study.

Patient experience and expectations of care can be considered in terms of 'relational' and 'functional' aspects. Relational aspects refer to doctors empowering patients through recognizing, respecting and including their preferences, and enabling independent living. They also encompass doctors being polite, honest and respectful throughout the doctor–patient interaction. Functional aspects refer to the effectiveness of communication across the health care system, accessibility and continuity of care [2].

The term 'expectations' has been used in many ways [3,7]: to denote what patients anticipate will happen based on prior experience (e.g. the consultation time will be short because doctors have limited time) and also to refer to what patients value most (i.e. they may anticipate a short consultation time, but desire a longer one) [8]. We used this latter definition as our focus was to identify what was most important to patients [7].

We aimed to examine the extent of agreement between patient experience and importance measures to identify where improvements could be focused to increase patient satisfaction. Through this we contributed to existing knowledge by increasing our understanding of patient satisfaction, as one indicator of the quality of primary care.

Methods

We measured patient satisfaction by comparing patients' ratings of the importance of different aspects of care with patients' rating of the performance of these aspects of care based on their experience. Self-administered patient questionnaires were completed as part of the Quality and Costs of Primary Care in Europe (QUALICOPC) study [9]. QUALICOPC investigated quality, equity and costs in primary care across Europe, using instruments developed from previous research (see Schäfer *et al*. [9] for details) [10].

Practices were recruited from the East Midlands, South Yorkshire and East of England regions through the National Institute for Health Research Primary Care Research Network. These regions were selected as a convenience sample, but provided a good mix of urban and rural locations. Practices received questionnaires,

information sheets and consent forms, and needed to recruit ten adult patients to complete nine patient experience (performance) questionnaires plus one patient values (importance) questionnaire. The ratio of importance and performance questionnaires was based on the findings from previous research showing that while there is little variation within a country on what patients find important, experiences may vary considerably [7].

We used these data to perform an Importance Performance Analysis (IPA) [11]. IPA enables identification of the strengths and weaknesses of a system such as primary care by comparing the importance that patients attribute to different aspects of service provision with the service's performance [11], hence identifying priorities for resource allocation.

We selected 15 attributes to include in the IPA that enabled direct comparison of patients' priorities with their experiences. In our questionnaires, importance was measured on four-point Likert items, as questionnaire design was based on a validated instrument called Consumer Quality Index GP care. Using a four-point scale ensures that respondents cannot have a tendency to select the middle option. Performance was measured as binary (yes/no) answers or (in some cases) included a 'don't know' option. Therefore, we consistently rescaled responses to values of 1 or 0 depending on whether the users evaluated the service positively or negatively, respectively. 'Don't know' answers were recoded following the QUALICOPC handbook 29 July 2014. Analyses are presented as shown in Figure 1. A mean score was calculated for each element to represent the extent to which participants viewed an element as a priority (vertical axis), and the extent to which the element had been fulfilled by the GP practice (horizontal axis). This was improved with diagonal models that draw a line representing those points in the IPA space where importance is equal to performance [12]. Consequently, attributes above the diagonal become the 'concentrate here' quadrant [Fig. 1] and the space under the diagonal is divided into three quadrants as in the traditional approach. This approach offers a simple and clear picture of which attributes practices should focus on to maximize patients' satisfaction.

We investigated our sample's representativeness at practice level using data from the National General Practice Profiles (http://fingertips.phe.org.uk/profile/general-practice/data) comparing practices in our sample with practices in the regions participating in QUALICOPC, and with practices in England, and at patient level comparing the characteristics of the patients participating in the study with wider GP consultation data [13] in Stata 12.

Results

Our sample

A total of 1473 practices were asked to participate in the study and 174 practices participated (12% response rate); returning 1296 of 1566 (82.8%) performance and 155 of 174 (89.1%) importance questionnaires. Table 1 shows a summary of respondent characteristics.

Generalizability

Participating practices were representative of those in the regions in terms of all measures except for Quality and Outcomes Framework [14] points and time taken for patients to see/speak to a nurse/GP. There were additional differences between participating practices and those across England (see online Supplementary Table 1).

We compared the proportion of participating males and females aged 20–64 and 65 years and older with the latest wider data from
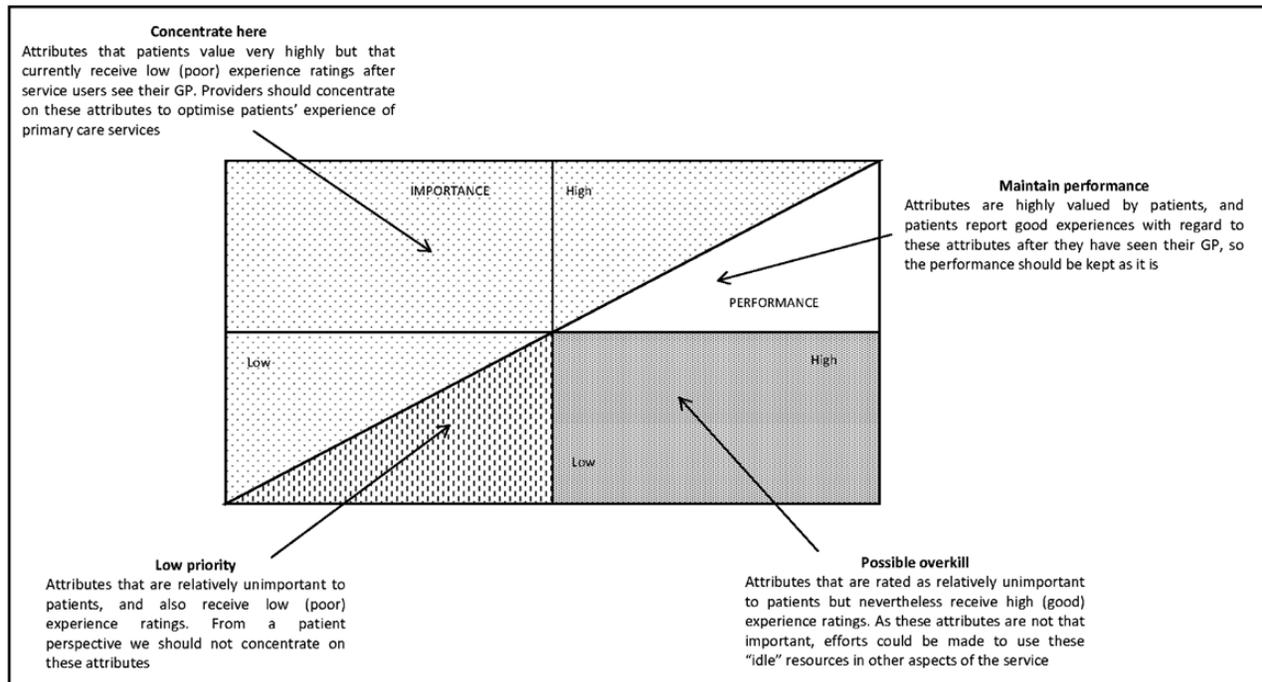
Figure 1. Combination of IPA and diagonal model

Table 1. Respondent characteristics

Characteristic		Patients completing a Patient Experience Questionnaire (N = 1296)	Patients completing a Patient Values Questionnaire (N = 155)
		N (%)	N (%)
Sex	Male	470 (36)[a]	62 (40)
	Female	806 (62)	93 (60)
Age	18–64 years	820 (63)	98 (63)
	65 years and older	444 (34)	57 (37)
Employment status[b]	Working or studying	618 (48)	80 (52)
	Unemployed	43 (3)	6 (4)
	Unable to work due to illness or disability	93 (7)	4 (3)
	Retired	485 (37)	63 (41)
	Mainly homemaker	78 (6)	8 (5)
Level of education	No qualifications	246 (19)	37 (24)
	Secondary school	394 (30)	29 (19)
	Further secondary education[c]	600 (46)	89 (57)

[a]For this table, figures have been rounded up to the nearest whole number and in some cases, do not add up to 100% due to missing data.

[b]Note that here some respondents have ticked more than one option.

[c]This refers to students aged 16 years and older—in England, it includes Advanced Subsidiary level, Advanced level and National Vocational Qualification level 3+ or equivalent, degree or equivalent and post-graduate qualifications.

the Health and Social Care Information Centre on GP patient consultations ([15]) and found that our patients were representative of this wider population (see online Supplementary Table 2).

Main findings

Patients viewed many of the attributes as very important (Fig. 2 and Table 2): ease of getting an appointment (0.99), the doctor knows important information about the patient's background (0.98), has the patient's medical records at hand (0.97), listens carefully to patients (0.97), takes sufficient time/does not make the patient feel under pressure (0.96), involves patients in making decisions about treatment (0.96) and is polite (0.95); after the visit the patient feels she/he can cope better with his/her health problem/illness (0.95); the

patient knows how to get evening, night and weekend services (0.92) and reception staff are polite and helpful (0.91).

As indicated by the shading on Figure 2, three of the four highest ranked items (15, 7 and 1) were 'functional' aspects of care, relating to accessibility and informational continuity. However, of the remaining six most highly ranked items, all but one (item 13) were 'relational' aspects concerned with patient empowerment, and the nature of communication between patients and health care staff.

Figure 2 also shows that the items rated as the least important were: doctor knows about the patient's living situation (0.47), asks patients about other possible problems besides the one she/he came for (0.66); short waiting time when contacting the practice (0.80); extensive opening hours (0.80), and proximity of practice to patient's

Table 2. Comparison of mean scores for all items[a]

Questionnaire item	Performance (experience)	Importance (value)
1. Doctor has the patient's medical records at hand	0.97	0.97
2. Doctor is polite	0.98	0.95
3. Doctor listens carefully to patients	0.97	0.97
4. Doctor takes sufficient time/does not make the patient feel under pressure	0.95	0.96
5. Doctor involves patients in making decisions about treatment	0.87	0.96
6. Doctor asks patients about other possible problems besides the one she/he came for	0.61	0.66
7. Doctor knows important information about the patient's background	0.98	0.98
8. Doctor knows about the patient's living situation	0.71	0.47
9. After the visit the patient feels she/he can cope better with his/her health problem/illness	0.80	0.95
10. Extensive opening hours	0.85	0.80
11. Proximity of practice to patient's house	0.97	0.83
12. Short waiting time when contacting the practice	0.88	0.80
13. The patient knows how to get evening, night and weekend services	0.71	0.92
14. Staff at the reception are polite and helpful	0.98	0.91
15. Ease to get an appointment	0.82	0.99
Mean	0.87	0.87
Minimum	0.61	0.47
Maximum	0.98	0.99

[a]Items 4, 5, 6, 9, 13 and 15 were those where the importance rating was higher than the performance rating.
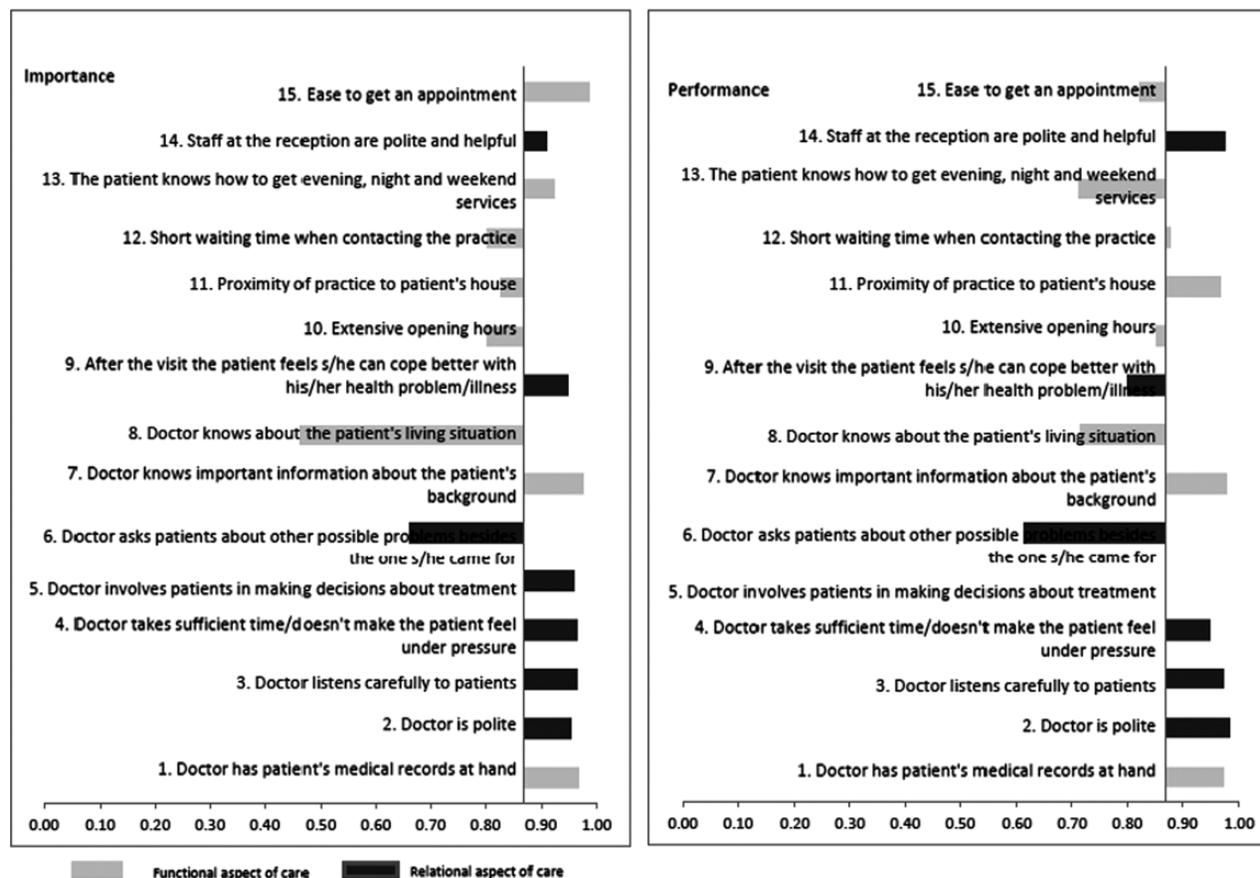
Figure 2. Patient importance and performance data

house (0.83). The last three items relate to accessibility and all but one (item 6) relate to functional aspects of care.

Having investigated what patients considered important, we examined their corresponding experience (performance) ratings (Fig. 2), which again, were high for most priorities. The items receiving the highest performance ratings were a mix of 'relational' and 'functional' aspects of care: doctor is polite (0.98), knows important information about the patient's background (0.98); staff at reception are polite and helpful (0.98); doctor listens carefully to patients (0.97), has patient's medical records at hand (0.97); proximity of practice to patient's house (0.97); doctor takes sufficient time/does not make the patient feel under pressure (0.95), and short waiting time when contacting the practice (0.88).

There was no clear pattern in terms of 'functional' versus 'relational' aspects of care in those items receiving the lowest performance ratings. These were: doctor asks patients about other possible problems besides the one she/he came for (0.61); the patient knows how to get evening, night and weekend services (0.71); doctor knows about the patient's living situation (0.71); after the visit the patient feels she/he can cope better with his/her health problem/illness (0.80); ease of getting an appointment (0.82); extensive opening hours (0.85) and doctor involves patients in making decisions about treatment (0.87).

Using IPA to compare importance and performance (Fig. 3), we found that there were six items where performance could be improved to increase satisfaction: the patient knows how to get evening, night and weekend services (13); ease to get an appointment (15); after the visit the patient feels that she/he can cope better with his/her health problem/illness (9); doctor involves patients in making decisions about treatment (5), asks patients about other possible problems besides the one she/he came for (6) and takes sufficient time/does not make the patient to feel under pressure (4).

For two 'functional' aspects of care, performance ratings exceeded importance, implying that provision exceeded the extent to which patients valued these aspects. They related to accessibility: proximity of practice to patient's house (11) and short waiting time when contacting the practice (12).

Patients gave poor performance ratings to, doctor knows about the patient's living situation' (8) and extensive opening hours (10), but these attributes were not perceived by patients to be very important.

Finally, five attributes were considered to be very important and also received high-performance ratings ('maintain performance' section): doctor has the patient's medical records at hand (1), knows

important information about the patient's background (7), listens carefully to patients (3), is polite (2) and reception staff are polite and helpful (14).

Discussion
Summary
Our study revealed patients' priorities and the extent to which these were met by general practices. Overall respondents reported very good experiences of general practice. Two items, doctor asks patients about other problems besides the one she/he came for (6) and doctor knows about the patient's living situation (8), received relatively low importance ratings. The IPA suggested that concentrating additional resources on item 8 was unlikely to improve patient satisfaction. In contrast, although both importance and performance ratings were relatively low for item 6, there was room for improvement here as patients' performance rating was lower than the importance they placed on this item.

Focusing on patients knowing how to get evening, night and weekend services (13), the ease of getting an appointment (15) and ensuring that patients feel that they can cope better with their health problem/illness after seeing the GP (9) was most likely to improve patient satisfaction. The first two of these are functional items relating to accessibility, and the last item is a relational item about empowerment. 'Access' was the area where importance most exceeded performance, but performance exceeded importance for some aspects of access such as extensive opening hours (10), practice proximity (11) and short waiting time when contacting the practice (12), suggesting that focusing on these areas was less likely to increase patient satisfaction. There was also some potential to improve patient satisfaction through an extended doctor–patient dialogue (taking sufficient
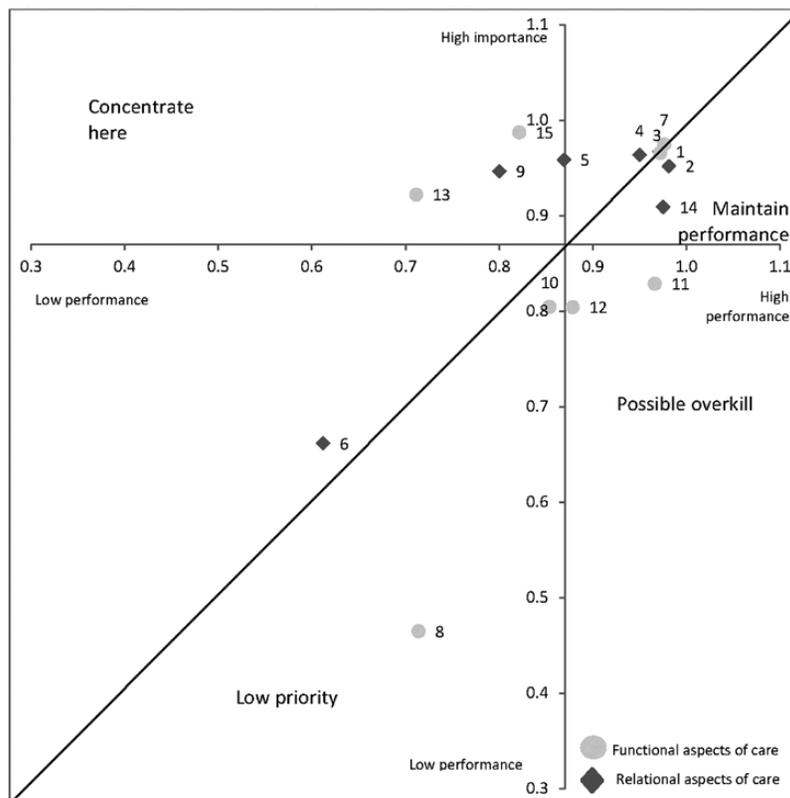

Figure 3. IPA representation for the English QUALICOPC population

time with a patient and asking about other possible problems besides the one that they come in for), and a focus on empowerment (trying to ensure that patients feel better able to cope with their health problem/illness after the consultation) and shared decision making (involving patients in treatment decisions). Thus, our findings suggested that concentrating on particular aspects of access and patient empowerment were most likely to improve patient satisfaction.

Strengths and limitations

Traditionally IPA is conducted using paired data (i.e. both performance and importance questions are answered by the same person). In our analysis, we collected data on performance and importance from different patients within the same practice. Patients completing performance and importance questionnaires were similar in terms of mean age (55 versus 56 years), health status (62% versus 65% reported good health) and gender (62% versus 60% were female) for performance and importance, respectively. Moreover, as the number of 'importance' questionnaires analysed was smaller than the number of 'performance' questionnaires, we added confidence intervals to the importance data to indicate the certainty of our estimates which did not substantively affect the findings (see online Supplementary Figure 1).

Practices were broadly representative of those in participating regions but differed from those across the rest of England in ways which could influence patients' performance and/or importance ratings. For example, practices in our sample had a higher proportion of patients with caring responsibilities (i.e. answering 'yes' to 'do you look after, or give any help or support to family members, friends, neighbours or others because of either long-term physical or mental ill health/disability, or problems related to old age?') compared to those in the rest of England. Such patients may visit GPs more frequently than other patients and may also have different expectations of care (16). Overall, patients completing the questionnaires appeared to be representative when compared to wider GP consultation data in terms of the proportion of males and females aged 20–64 and 65 years and older. This article is focused on England, and further research is needed to investigate whether findings translate to other countries. However, the QUALICOPC study also took place in 33 other countries using translations of the same questionnaires (which were based on questionnaires that had previously been used in international studies). Consequently, it would be straightforward to conduct IPA on data from the other participating countries for comparison.

Although recall bias was minimized by patients completing the questionnaire shortly after their consultation, performance ratings may not have directly reflected what occurred during a consultation. Moreover, they may not reflect the views of those who do not attend primary care. Additionally, satisfaction may be influenced by previous experiences of primary care.

Our analysis was based on a limited number of variables and other factors, potentially important to patients, were not included. Future research could investigate other variables that may potentially be important to include in such analyses, for example to measure the co-ordination of care, or the extent of shared decision making.

Future research could also explore in more detail the reasons why patients view some items as more important than others. For example, item 6 (doctor asks patients about other possible problems besides the one he/she came for), item 7 (doctor knows important information about the patient's background) and item 8 (doctor knows about the patient's living situation) are similar in that they all relate to a GP having wider knowledge of a patient than simply the reason for their current consultation. However, while item 7 is viewed as very important, items 6 and 8 receive relatively low importance ratings. Finally, future research could also investigate importance and performance from the perspective of the GP.

Comparison with the existing literature

Direct comparison with the previous literature is problematic due to variation between studies in the attributes investigated and methods used (17). From a policy perspective, the UK government has already identified 'access improvement' as a priority, and access was highlighted as an area in which we could improve patient satisfaction in our study (18). However, our findings suggest that simply extending opening hours may not be the best approach as patients participating in this study valued ease of getting an appointment, and knowing how to get evening, night and weekend services more highly than extensive opening hours. This suggests that rather than increasing opening hours, ideally we would invest additional resources to facilitate access to GPs and focus on raising awareness of how to access services out-of-hours.

Many previous research studies have suggested that 'relational' factors matter most to patients and are more closely associated with high patient satisfaction levels than 'functional' factors. In our study we found that three of the four most important aspects for patients (ease of getting an appointment (15), doctor knows important information about the patient's background (7) and doctor has the patient's medical records at hand (1), Table 2) were 'functional' factors, while most of the least important attributes were also 'functional' factors.

Patient satisfaction could also potentially be improved through an extended doctor–patient dialogue (although currently there are practical constraints around this) and a focus on empowerment and shared decision making.

Conclusions

We identified patients' priorities for general practice and the extent to which these were being met. Findings suggest that patient satisfaction could best be improved by focusing on particular aspects of access and patient empowerment. For access, areas where satisfaction could be improved included patients knowing how to access out-of-hours services and ease of making an appointment. For empowerment, we should focus on ensuring that after the visit patients feel able to cope better with their health problem/illness.

Previous research discusses variation in patients' expectations and experiences by age, gender, ethnic and socio-economic case-mix, so improvements should be tailored to different populations (16,19). Future research should further investigate the extent to which performance and importance ratings vary by patient characteristics and identify best-practice models that enhance access and empowerment without generating additional supply-induced demand or compromising continuity of care (18).

Supplementary material

Supplementary material is available at *Family Practice* online.

Declaration

Acknowledgements

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