Quality in Primary Care 2010;18:373–8

Research paper

Influences on patient satisfaction survey results: is there a need for a rethink?

James T Gray MB ChB MRCGP MRCSEd FIMC.RCSEd DCH
Medical Director

Nicola Richmond MPH
Public Health Analyst

Andrew Ebbage BA(Hons)
Primary Care Commissioning Officer

NHS Derbyshire County, Chesterfield, UK

ABSTRACT

Background Patient experience is a key principle of the NHS and is increasingly linked to payment of providers.

Aim To establish if any correlation exists between patient satisfaction scores (as measured in the MORI survey) and practice list size or deprivation score.

Method This was a retrospective correlation review using data for general practices in Derbyshire County Primary Care Trust extracted from existing publicly available sources. Correlation between satisfaction score and both deprivation index and practice list size was examined.

Results Data from all 96 practices were reviewed. Overall satisfaction showed a statistically significant negative correlation with deprivation (r=–0.28, P=0.006). Neither question pertaining to QOF payment showed a correlation with deprivation, however, there was a statistically significant negative correlation with list size (Q5a r=–0.52, P<0.01. Q7 r=–0.43, P<0.01). Questions regarding satisfaction with the doctor showed weak but statistically significant negative correlations with deprivation, (r varying from –0.21 to –0.39, P<0.05). Satisfaction with nurses showed positive correlations with deprivation, with satisfaction increasing in line with deprivation (r varying from 0.24 to 0.36, P<0.05). Regarding list size, for nurse care the reverse was seen, with increased list size being linked to decreased satisfaction (r varying from –0.21 to –0.45, P<0.05).

Conclusion Although variables showed weak correlations, there were correlations between list size and deprivation in the results of the patient experience questionnaire. Linking this to payment has implications for primary care contracting.

Keywords: contracts, delivery of health care, personal satisfaction, primary health care, social class

How this fits in with quality in primary care

What do we know?

All healthcare contracts in the UK contain some element of patient experience. The General Practice Survey undertaken by MORI has been shown to minimise response bias but there is a lack of review against other variables. If variation in response occurs with other factors then there is a potential for contractors to be financially disadvantaged and further work would be required to ensure contracting mechanisms can account for these variations.

What does this paper add?

This paper shows that other external factors have the potential to affect patient satisfaction scores, which are considered an important aspect of quality of care. The results suggest that further work is required to try and mitigate against these influences, especially as they are now linked to primary care income and likely to become more important in the future.

Introduction

Patient experience is a key principle of the National Health Service (NHS) and most recently has been emphasised in the NHS Constitution,[1] but importantly payment is now increasingly linked to patient feedback, a theme further strengthened in the new White Paper for Health.[2]

The drive to measure patients' experience is not a new phenomenon, with the Department of Health in 1998 understanding that patients' views were an important way of improving services.[3] Work at the time looked at validation of satisfaction questionnaires; however, the results were not used as a measure upon which to directly base payments.[4] Since then we have seen increased focus on payment linked to patient satisfaction, with initiatives such as Patient Reported Outcome Measures (PROMs)[5] being introduced for surgical procedures and contractual payments to acute hospital trusts linked to Commissioning for Quality and Innovation (CQUIN) metrics,[6] all of which will require a patient experience element.

In primary care, the Quality and Outcomes Framework (QOF) within the general practice contract already contains an element of patient experience, particularly around access to services, and is currently linked to 57.5 points out of a possible 1000, comprising almost 6% of the payment for performance linked to QOF.[7]

The General Practitioner (GP) Patient Survey[8] (most recently undertaken by MORI) has been criticised as specifically leaning toward areas of political imperative such as access, and concerns that responses are biased by differences in the populations that practices serve. Opinions differ as to how this variation manifests: some suggest more affluent patients demand more and will therefore score practices lower, others claim the reverse.

Linking satisfaction and choice considerations, it should be noted that the NHS Choices website[9] now allows patients to post comments about their GP providers and to rate them. Whilst there is no suggestion that ad hoc online comments have the same standing as a validated satisfaction questionnaire, they can provide insights into issues that would not otherwise be picked up and it is important to note that any variation in patient experience linked to socioeconomic factors could disadvantage providers in the affected areas.

The aim of this study was to identify whether any relationships exist between practice population variables and patient experience scores as indicated by the MORI questionnaire. This was undertaken as a service evaluation as results may have important commissioning implications for the primary care trust (PCT); therefore the main focus was on overall satisfaction responses and those currently linked to payment of the patient experience points under the QOF (Box 1: Q5a – QOF PE6 and Q7 – QOF PE7). It is worth noting that in the year 2008 to 2009 the QOF points total in NHS Derbyshire County ranged from 817.02 to 1000 points.

Method

The results from the MORI Primary Care patient survey 2008 to 2009 for the questions listed in Box 1 were obtained for the 96 practices that serve NHS Derbyshire County.[10] The collated number of responses indicating total or partial agreement was used as the overall measure, i.e. the number of 'satisfied' and 'fairly satisfied' responses were combined. The results for each question were then correlated with the practice weighted Index of Multiple Deprivation 2007 score[11] and the practice list size at 1 July 2008 was recorded.

All variables approximated to a normal distribution and showed a linear relationship; therefore the Pearson's correlation coefficient (r) statistic was used to determine the strength of relationships. The degree of variation was determined by calculating the value of R^2 and the t-test was used to establish the significance of the correlation coefficient (r).

Results

Satisfaction versus deprivation

The answer to Q25, overall satisfaction, showed a statistically significant negative correlation with deprivation, with practices in more deprived areas reporting lower satisfaction with the care they received (see Figure 1). However, the strength of correlation was very weak (r=–0.28, P=0.006).

Neither of the questions used for payment under QOF areas PE6 and PE7 showed a correlation with deprivation. Questions 20a to 20g, regarding satisfaction with the doctor, all showed weak but statistically significant negative correlations with deprivation: scores lessened as deprivation increased (r varying from –0.21 to –0.39, P<0.05). Conversely, questions regarding satisfaction with nurses showed positive correlation with deprivation, with satisfaction increasing in line with deprivation, although all were weak associations (r varying from 0.24 to 0.36, P<0.05).

Box 1 Patient satisfaction

Question numbers relate to the survey for April to September 2009

QOF PE6 was Question 5a
QOF PE7 was Question 7

Q4 How helpful do you find the receptionists at your surgery/health centre?
Q5a In the past six months how easy have you found it getting through on the phone?
Q7 Think about the last time you needed to see a doctor fairly quickly. Were you able to see a doctor on the same day or in the next two weekdays the surgery or health centre was open?
Q14 How do you feel about how long you normally have to wait?
Q17 How satisfied are you with the hours that your GP surgery or health centre is open?
Q20a Last time you saw a doctor at your GP surgery or health centre how good was the doctor at giving you enough time?
Q20b Last time you saw a doctor at your GP surgery or health centre how good was the doctor at asking about your symptoms?
Q20c Last time you saw a doctor at your GP surgery or health centre how good was the doctor at listening to you?
Q20d Last time you saw a doctor at your GP surgery or health centre how good was the doctor at explaining tests and treatments?
Q20e Last time you saw a doctor at your GP surgery or health centre how good was the doctor at involving you in decisions about your care?
Q20f Last time you saw a doctor at your GP surgery or health centre how good was the doctor at treating you with care and concern?
Q20g Last time you saw a doctor at your GP surgery or health centre how good was the doctor at taking your problem seriously?

Q24a to g – same as above but for nurses.

Q25 In general, how satisfied are you with the care you get at your GP surgery or health centre?

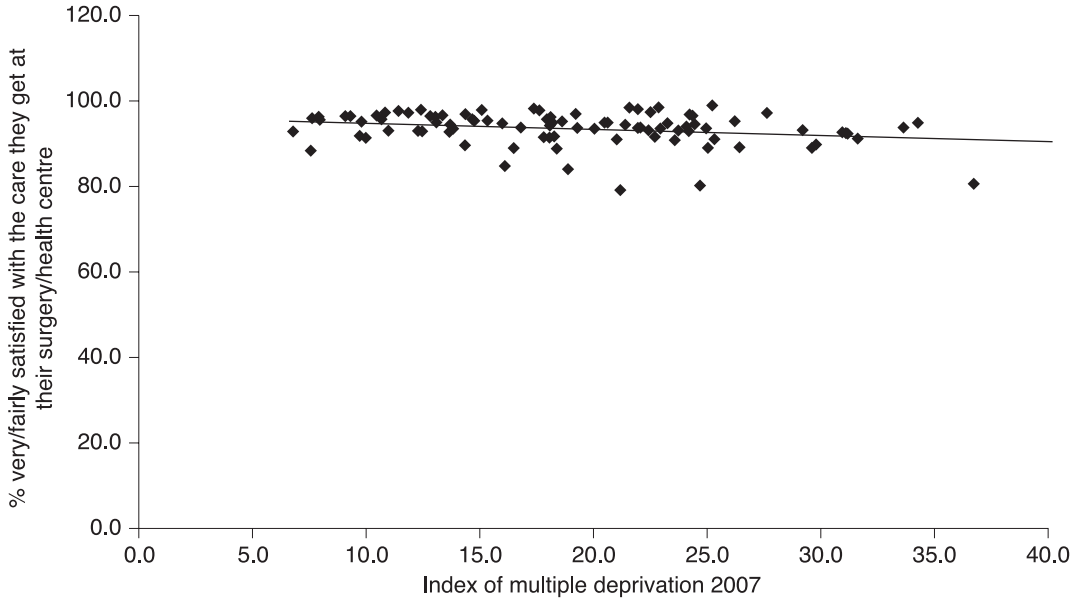

Figure 1 Index of Multiple Deprivation 2007, correlated with % very/fairly satisfied with the care they get at their surgery/health centre

Satisfaction versus list size

There was no correlation or statistically significant difference in overall satisfaction (Q25) with increasing practice list size.

For the questions used for payment under QOF areas PE6 and PE7, there was a statistically significant negative correlation with list size, with satisfaction decreasing in line with practice size for both questions (Q5a r=–0.52, P<0.01; Q7 r=–0.43, P<0.01). There was no correlation seen for questions 20a to g.

A negative correlation was also found between views of how helpful receptionists were and list size, with larger practices scoring lower (r=–0.40 P<0.01).

There was no correlation between satisfaction with the doctor and list size, however, for satisfaction with nurse care, an inverse relationship with deprivation was seen. Increased list size was associated with decreased satisfaction across these questions (r varying from –0.21 to –0.45, P<0.05).

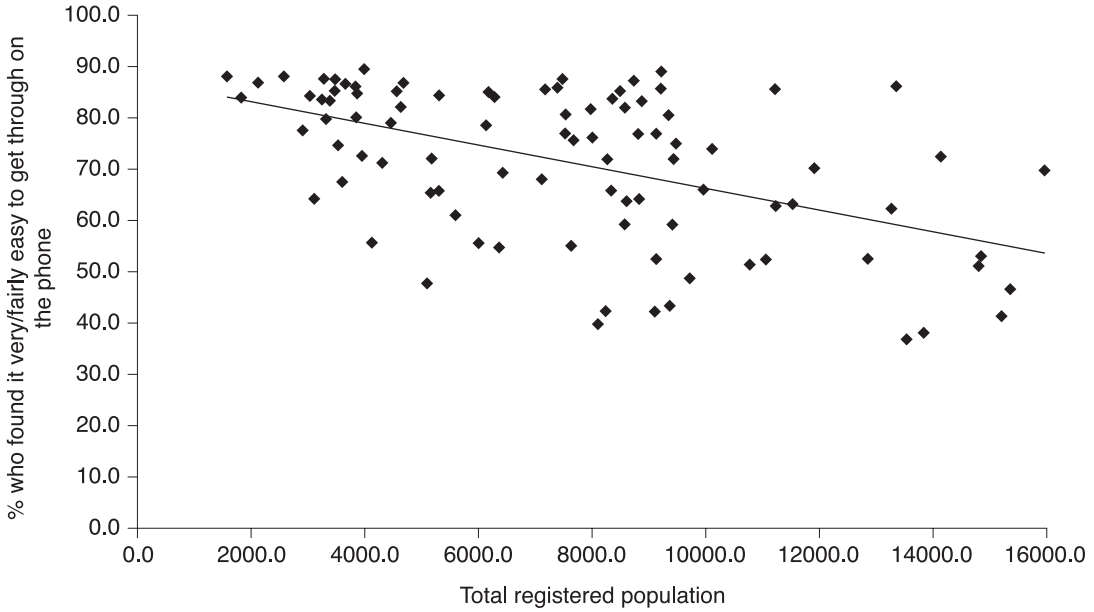

Figure 2 Total registered population correlated with percentage who found it easy to get through on the phone (PE6)

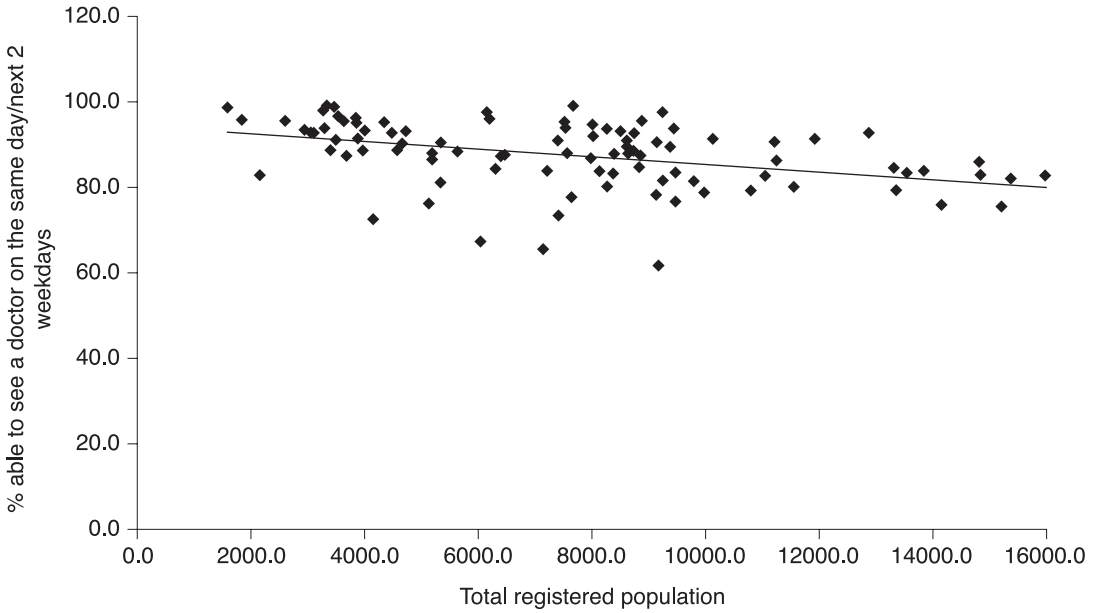

Figure 3 Total registered population, correlated with percentage able to see a doctor on the same day/next two weekdays (PE7)

When assessed against one another no correlation was found between list size and deprivation (r=0.07, P>0.05).

Discussion

The results suggest that both deprivation and practice list size relate to patient satisfaction with services, the latter being more strongly correlated, although in most cases the association is weak. Of particular interest were the questions currently linked to payments under the QOF in the GP contract, which showed no correlation with deprivation but did show a negative correlation with list size. This has potential implications for funding of larger practices, despite the distribution of results showing a wide variation for practices of similar size.

NHS Derbyshire County is one of the largest PCTs in England and has 96 practices covering some of the most deprived and some of the most affluent areas in the country, making it suitable for undertaking this piece of work. Limitations of the study include the fact that the Ipsos MORI survey uses quintiles rather than a linear scale, meaning that to determine the measures of satisfaction scores there is a requirement to total the upper quintiles to determine payment thresholds under QOF, and it is these that have been used in this study.

Prior to the MORI questionnaire practices had to simply undertake a patient survey, which was done using either the Improving Practices Questionnaire (IPQ) or the General Practice Assessment Questionnaire (GPAQ). As previous authors have commented, neither had much published data to support their validity.[12] Previous work on the MORI questionnaire has established that there is little evidence to support the concern expressed by some GPs that there is a response bias in the survey leading to unfairness in payments.[13] Nevertheless, concerns remain that there may be specific external influences, outside the control of the individual practice or practitioner, which may lead to bias in the results. Work in 2007 looking at four questionnaires used to assess patient satisfaction in out-of-hours services found limitations which led to concerns about the reliability and validity of some questions.[14]

Literature looking at this area is relatively limited. A link between deprivation and lower scores in the QOF has previously been established,[15] whilst other authors have shown that longer consultation times in deprived areas may improve patient perception of quality in a GP consultation.[16] These papers suggest that targeted interventions in deprived areas can produce patient perception of improved quality of care. If we are to take the satisfaction score results on face value then our study also supports this view.

It is difficult to determine the reasons for lower satisfaction scores in the larger practices, however, this may have more to do with lower levels of continuity of care (where patients are more likely to see different clinicians on different visits), known to be important to patients and directly related to satisfaction, rather than a true reflection of difficulty in accessing care.[17]

The finding of increased satisfaction with nursing care as deprivation increases is difficult to explain. Previous work has demonstrated generally high satisfaction with nurse-led care as compared to GP care; however, it is noted that this may be linked to longer consultation times with nursing care.[18] It has also been seen that the blurring of boundaries between medical and nursing primary care has had an effect on satisfaction and it may be that in larger practices more nurses are employed, often with wider portfolios – including providing more medical care – for a range of acute and long-term conditions, with a resulting conflict between patient expectation of seeing a doctor and the different care provided. Other authors have suggested that nurses have more time for patients and are more compassionate; nevertheless, patients still want the continuity of care provided by the GP. It would be interesting to know whether using patient leaflets to clarify the differing roles of GPs and nurses would affect satisfaction.[19] A recent study has noted the lack of research in this area and the need to try to understand in more detail and better represent patients' views.[20]

Conclusions

This study suggests that there are potential biases in the results of the GP patient survey and that there would be a benefit in further research to see whether these results truly reflect decreased quality of care. With an increasing reliance on patient experience metrics more detailed research needs to be undertaken to look at the potential biases that may need to be considered to ensure fairness in contractual payments.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the support of NHS Derbyshire County in producing this report.

REFERENCES

1 Department of Health. *The NHS Constitution for England.* 2010. www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_113645.pdf (accessed 9 March 2010).

2 Department of Health. *Equity and Excellence: liberating the NHS*. London: The Stationery Office, 2010.
3 Department of Health. *Our Healthier Nation: a contract for health*. London: HMSO, 1998.
4 Grogan S, Conner M and Norman P. Validation of a questionnaire measuring patient satisfaction with general practitioner services. *Quality and Safety in Health Care* 2000;9:210–15.
5 NHS Information Centre. *Patient Recorded Outcome Measures*. www.ic.nhs.uk/proms (accessed 20 March 2010).
6 Department of Health. *Using the Commissioning for Quality and Innovation (CQUIN) Payment Framework*. London: Central Office of Information, 2008.
7 NHS Confederation. *The General Practice General Medical Services Contract*. London: Department of Health, 2003.
8 *The GP Patient Survey Website*. www.gp-patient.co.uk (accessed 9 March 2010).
9 *NHS Choices Website*. www.nhs.uk/Pages/HomePage.aspx (accessed 9 March 2010).
10 *The GP Patient Survey Results*. results.gp-patient.co.uk/report/main.aspx (accessed 9 March 2010).
11 Dixon P. *Practice Weighted Index of Multiple Deprivation 2007*. Association of Public Health Observatories, 2008.
12 M Hankins, A Fraser, A Hodson *et al*. Measuring patient satisfaction for the Quality and Outcomes Framework. *British Journal of General Practice* 2007;57:737–40.
13 Roland M, Elliott M, Lyzratzopoulos G *et al*. Reliability of patient responses in pay for performance schemes: analysis of national General Practitioner Patient Survey data in England. *BMJ* 2009;339:b3851.
14 Garratt A, Danielsen K and Hunskaar S. Patient satisfaction questionnaires for primary care out-of-hours services: a systematic review. *British Journal of General Practice* 2007;57:741–7.
15 Ashworth M, Seed P, Armstrong D *et al*. The relationship between social deprivation and the quality of primary care: a national survey using indicators from the UK Quality and Outcomes Framework. *British Journal of General Practice* 2007;57:441–8.
16 Mercer S, Fitzpatrick B, Gourlay G *et al*. More time for complex consultations in a high-deprivation practice is associated with increased practice enablement. *British Journal of General Practice* 2007;57:960–6.
17 Fan VS, Burman M, McDonell MB and Fihn SD. Continuity of care and other determinants of patient satisfaction with primary care. *Journal of General Internal Medicine* 2005;20:226–33.
18 Seale C, Anderson E and Kinnersley P. Comparison of GP and nurse practitioner consultations: an observational study. *British Journal of General Practice* 2006;56:137–8.
19 Redsell S, Stokes T, Jackson C *et al*. Patients' accounts of the differences in nurses' and general practitioners' roles in primary care. *Journal of Advanced Nursing* 2007;57:172–80.
20 Rashid C. Benefits and limitations of nurses taking on aspects of the clinical role of doctors in primary care: integrative literature review. *Journal of Advanced Nursing* 2010;66:1658–70.

FUNDING

No funding was received for this study.

ETHICAL APPROVAL

No ethics approval was required for this service review of publicly available data.

PEER REVIEW

Not commissioned; externally peer reviewed.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr James T Gray, Medical Director, NHS Derbyshire County, Chesterfield S41 7PF, UK. Tel: +44 (0)1246 514320 (PA); email: james.gray@derbyshirecountypct.nhs.uk

Received 14 May 2010
Accepted 22 August 2010