

The English Patient Experience: Does Healthcare Quality Matter?

*Mel Hudson Smith (Melanie.hudson-smith@plymouth.ac.uk)
University of Plymouth Business School*

*Dave Smith
University of Exeter Business School*

*Andy Phippen
University of Plymouth Business School*

Abstract

Understanding the interaction between performance measurement, quality of care and patient satisfaction is important in managing healthcare. The family doctor is typically the first point of contact for patients and the gatekeeper for most treatments. Doctor's surgeries are extensively measured but little researched, however. A measurement framework which aims to improve quality of care has been adopted by most English surgeries, with patient satisfaction measured independently. This paper aims to determine whether achievement in the measurement system can predict patient satisfaction. Although literature suggests that quality care positively impacts on patient satisfaction, the results of this study do not support this.

Keywords: Performance Measurement; Customer Satisfaction; Healthcare Operations.

Introduction

It is fundamental to many areas of Operations Management practice that improved quality leads to improved customer satisfaction and that measuring the right things leads to improved quality. Achieving this requires a balanced set of performance measures, which utilise pro-active, process based measures and non-financial outcome measures, in addition to traditional financial measures (Kaplan and Norton, 1992; Neely, 1999). The development of non-financial performance measurement (PM) throughout the 1990s coincided with an increased focus on the need for operational outputs to deliver value to customers, both through the development of the service operations field (Johnston, 1999) and the maturing of the quality movement through initiatives such as TQM and Six Sigma. From the service operations perspective, there are some obvious benefits for promoting the measurement of customer satisfaction, in terms of providing external feedback on operational performance (Kaplan and Norton, 1992). However, the ongoing difficulty in measuring customer satisfaction in an objective, quantitative manner means that the quality of such measurement is often of poor (Kim and Kim, 2009). In the quality movement, the development and use of PM, for example in the Six Sigma methodology, has helped improve customer focus (Chenhall, 1997) and highlights the role of process based measurement in achieving quality outcomes (Banuelas et al, 2006).

A significant area of research in service operations focuses on the healthcare sector (Johnston, 2005). However, measuring performance in this sector is recognised as being fraught with difficulties (Gomes et al, 2010). Some of the continuing challenges for PM relate to the measurement of service quality and customer satisfaction, particularly in complex public sector environments where the need for information transparency makes the use of outcome measures more appropriate than process measures (DeGroff et al, 2010), along with the move towards more holistic performance management, rather than simply measurement (Gomes et al, 2011).

Within healthcare, the General Practitioner (GP) or family doctor is typically the first point of contact for patients and in England is also the key gatekeeper for NHS and many private treatments. As such the performance of the GP has the potential for a high impact on overall patient care. In terms of Service Operations, however, this is a relatively un-researched area. With the potential development of the proposed GP Consortia, this role will only increase in significance (Department of Health, 2010). In this context, a study of PM, with a focus on customer satisfaction in GP surgeries appears both timely and relevant. Therefore, the aim of this paper is to determine whether achieving high scores in the standardised PM system adopted by the majority of English GP surgeries is a predictor of patient satisfaction.

Background Literature

Existing work in the complex areas of customer satisfaction, service quality and PM have addressed the interaction between these three areas in different ways.

In PM the need for balanced systems encompasses not just the areas measured (Kaplan and Norton, 1992), but also the requirement to appraise *how* a job is carried out, rather than simply looking at the outcomes (Melynk et al, 2010). This emphasises the importance of process measures, which are typically described as being lead indicators – i.e. they monitor the processes which lead to the outcomes, and are therefore associated with process improvement (Muchiri et al 2010). However, a criticism of this approach is that process measures cannot identify what improvements should occur – only that the existing approach is not yielding the desired results (Meyer, 2004). Further criticism stems from the fact that complexity can blur the link between process measures and their outcomes (De Groff et al, 2010).

According to Melynk et al, (2010), measures should explicitly be linked to the way the organisation delivers value to their customers, whilst Gomes et al (2011) consider that PM related to customers is an increasingly important area. It is this customer focus which links PM to the quality movement and to customer satisfaction. Both TQM and 6 Sigma methodologies are associated with the use of non-financial performance measures and both are focused on customer satisfaction as their prime purpose (Schroeder et al, 2008). Indeed, customer satisfaction has always been a fundamental driver of quality improvements (Deming, 1986). However, although TQM has been found to be correlated with improved customer satisfaction (Mehra & Ranganathan, 2008), studies have shown that this may be more to do with the ‘soft’ changes within the organisation, such as internal unity of purpose and the removal of departmental barriers, than more objective, easily quantifiable and measurable improvements (Terziovski, 2006).

On a more positive note, process improvements that reduce apparent variation in service processes increase customer satisfaction, as do general improvements in service quality (Frei et al, 1999). Indeed, there is some evidence that service quality is a predictor of customer satisfaction (Miguel-Davilla et al, 2010). It has been argued that in services, a process orientation should have a significant and direct impact on

customer satisfaction (Nilsson et al, 2001). In reality however, there is often a lag between the improvement in the process and the corresponding improvement in customer satisfaction (Mitra & Golder, 2006).

Customer satisfaction is a lag indicator and is complicated by its subjective nature. Service quality, which is closely linked with improving customer satisfaction (Tam, 2004), can be defined as the gap between expectations and perceptions (e.g. Parasuraman et al, 1985). However, both expectations and perceptions are personal constructs, clouded by emotion and prior experience, making satisfaction one of the most challenging measures of performance. The incentive to find some way to overcome these problems lies in the fact that satisfied customers are more likely to be loyal and spend more (Kim & Kim, 2009).

In healthcare, patients are increasingly referred to as consumers or customers (Sitzia & Wood, 1997) and patient satisfaction is similarly desirable, but difficult, to measure. Patient satisfaction has been defined as the gap between patients' expectations and actual perceptions (Chow et al, 2009). Studies have shown that symptom outcomes affect patient satisfaction (Jackson et al, 2001) and that the technical quality of care is a predictor of patient satisfaction in specific areas such as mental health (Edlund et al, 2003). Similarly, a study of diabetes patients showed that GPs who followed clinical guidelines had better overall patient satisfaction scores (Gross et al, 2003).

Despite this evidence, which appears to link the process and technical quality of care with satisfaction, it has been argued that patient satisfaction is not a direct influence in healthcare as it is not a good proxy measure for quality (Cronin et al, 2000). The problem is that although quality healthcare focuses on providing good technical and emotional care (John, 1991), patients overemphasise the emotional care because they do not feel qualified to fully evaluate the technical quality of care (Panchapakesan et al, 2010). This is supported by the fact that it may be confidence, rather than quality, which correlates with satisfaction (Weiss, 1998). One study found that in hospitals, where the technical quality of care was assumed to be high, satisfaction was based primarily on behaviour and communication, whereas with GPs, the empathy and emotional care is taken for granted, but often it is the technical quality which is viewed with suspicion (Vuori, 1991).

Unmet expectations are at the root of poor patient satisfaction (Jackson et al, 2000). However, if a patient feels that they have received high quality care, they are more likely to be satisfied and this is important because satisfied patients are more likely to comply with any medication and treatment, which should lead to better health outcomes (Chow et al, 2009). The important factors for patient satisfaction are understood to be: interpersonal manner; technical quality of care; accessibility and convenience; efficacy and outcomes of care; continuity of care; physical environment and availability of care (Ware et al, 1983; Fitzpatrick, 1990). However, these are complicated by factors related to demographics; various studies have shown that old people are more likely to be satisfied than young people and that the more knowledge the patient has, the less satisfied they are (Rundle-Thiele & Russell-Bennett, 2010;). Satisfaction, it seems, is strongest when the patient receives the expected help and when the doctor treats them well (Rahmqvist & Varma, 2010).

This literature review has highlighted the role of both PM and internal quality improvements in improving customer satisfaction. It has also established clear links between customer and patient satisfaction. Whilst it has highlighted the issue of patient satisfaction being a poor proxy measure for quality of care, there is evidence to suggest that quality of care should positively impact on patient satisfaction.

Approach

This study utilises two sets of publicly available data on GPs: a balanced set of performance measures and a separate survey covering customer satisfaction. The first is the Quality and Outcomes Framework (QOF) 2009/10 (www.ic.nhs.uk, 2011) and the second the results of the GP Patient Survey 2009/10 (www.gppatient.co.uk, 2011).

The Quality and Outcomes Framework

Since 2004, the Government has attempted to reward and stimulate improvements in the quality of care provided by NHS funded GPs through the QOF. This is a standardised PM system comprised of a set of payment-by-performance indicators through which GP practices earn points for achieving both process and outcome targets, being paid by the number of points accrued. It is estimated that for most practices, the QOF payments equate to around 15% of the Practice annual turnover (Leech, 2009). Perhaps unsurprisingly, the vast majority of GPs in England now participate in the QOF despite its voluntary status (www.nhsemployers.org 2011).

The indicators included in the QOF monitor both processes and outcomes and include 134 aspects of GP performance across 4 domains: Clinical; Organisation; Patient Experience and Additional Services. There are 1000 points available in total, as follows:

- Clinical domain; 697 points;
- Organisation domain, 167.5 points;
- Patient Experience domain, 91.5 points and
- Additional Services domain, 44 points.

The QOF indicators are described as being “useful in patient care” (NHS Employers, 2009) and the stated aim of the QOF is to “reward the provision of quality care” (www.nhsemployers.org, 2011). The QOF guidance includes an explicit recognition that indicators should only be developed where (amongst other things) there is good evidence for the health benefits likely to result from improved care (Leech, 2009). Furthermore, the points available for each indicator are determined according to the potential improved outcome for the patient (Leech, 2009). Therefore, it is reasonable to assume that high achievement should correlate to high quality patient care and improved patient outcomes, which should lead to increased patient satisfaction. In this study, the results used are for the year 2009/10.

The GP Patient Survey

In order to examine the interaction between achievement in the QOF and whether patients actually feel satisfied with the service they receive from their GPs, this research used the results of the GP Patient Survey (GPPS). The purpose of the GPPS is to assess patient experiences of local NHS services. The Survey comprises 11 areas of measurement, and includes a specific question for overall satisfaction with care received at the surgery. It is administered quarterly to a random sample of around 1.4 million adults registered with GP practices in England. The survey is run by Ipsos Mori on behalf of the Department of Health and this study used the Practice level results for 2009/10 (the same time period as the QOF results).

Hypotheses

The aim of this study was to examine the following hypotheses:

- H₁ There will be a positive relationship between the scores achieved in the QOF and the GPPS measure of satisfaction with care received at the surgery.

H₂ The QOF scores will be a predictor of satisfaction with care received at the surgery.

Data Analysis

The study compared practice level results between the QOF and the GPPS. The domain level scores and the total QOF scores for each practice were loaded into SPSS, along with the practice level scores from the GPPS showing the percentage of patients who were satisfied with the level of care received from the surgery. A total of 8167 GP surgery results were examined; representing every surgery in England which had both QOF and GPPS results for the 2009/10 period.

The QOF data is numerical, with the GPPS data being ranked. However, for analysis purposes, both sets of data are treated as numerical data (Blumberg et al, 2008). Correlations were therefore calculated using Pearson's Correlation Coefficient (Saunders et al, 2009). Table 1 shows the results of this basic correlation analysis.

Table 1: Pearson Correlations between QOF domains and Selected GPPS Responses

QOF	GPPS	Satisfied with Care Received at Surgery
		<i>N</i> = 8167
Clinical Domain		R = 0.193
Organisation Domain		R = 0.134
Patient Experience Domain		R = 0.490
Additional Services Domain		R = 0.183
Total QOF Score		R = 0.356
<i>All correlations significant to 0.01 level / Missing values excluded pairwise</i>		

Table 2: Model summaries for QOF domain predictors of patient satisfaction

Model	R	R ²	Adjusted R ²	Std Error of Estimate
Clinical Domain	0.193	0.037	0.037	0.062037
Organisation Domain	0.134	0.018	0.018	0.062656
Patient Experience Domain	0.490	0.240	0.240	0.055123
Additional Services Domain	0.183	0.033	0.033	0.062156
Total QOF Score	0.356	0.127	0.127	0.059074

Table 3: SPSS regression output for QOF domain predictors of patient satisfaction

Model	Unstandardised Coefficients		Standardised Coefficients Beta	t	Sig
	B	Std Error			
(Constant)	0.693	0.012		57.730	0.000
Clinical Domain	0.000	0.000	0.193	17.763	0.000
(Constant)	0.798	0.009		90.388	0.000
Organisation Domain	0.001	0.000	0.134	12.193	0.000
(Constant)	0.797	0.002		359.352	0.000
Patient Experience Domain	0.002	0.000	0.490	50.756	0.000
(Constant)	0.767	0.008		92.750	0.000
Additional Services Domain	0.003	0.000	0.183	16.822	0.000
(Constant)	0.508	0.012		43.981	0.000
Total QOF Score	0.000	0.000	0.356	34.460	0.000

Although the majority of correlations were relatively weak, linear regression was carried out to determine whether it is possible to predict the outcome of this measure of patient satisfaction from either the QOF domain scores or the total QOF scores.

The regression analysis was conducted in SPSS, with ANOVA calculations confirming in each case that the results were not due to sampling error. A summary of the models developed in SPSS are given in Table 2, while Table 3 shows the regression coefficients for each model.

Findings

The results of the analysis show that there are some relatively weak correlations between the QOF scores and patients' satisfaction with care received at the surgery, as monitored by the GP Patient Survey. However, these correlations have not been adequately explained by the regression analysis. Therefore, we can tentatively accept the first hypothesis, which looked for a positive relationship between the QOF scores and the GPPS question, but reject the second hypothesis which aimed to identify the QOF scores as predictors of patient satisfaction with the care received at the surgery.

In trying to understand these results, it is easy to speculate that perhaps measures in the organisation domain, which are focused on internal efficiency and effectiveness, might not have an obvious significant impact on customer satisfaction. Similarly, as the additional services (such as contraceptive advice or child welfare monitoring) only affect specific areas of the population, it could be suggested that it would be difficult to predict general customer satisfaction from scores in this area. However, it is more difficult to explain away the results from the clinical and patient experience domains, which demand a more detailed examination.

Clinical Domain

The analysis of the clinical domain shows a weak correlation (0.193) between the two variables, with only 3.7% of the variance in the patient satisfaction scores explained by the clinical domain scores ($R^2 = 0.037$). The regression showed no predictive capability from this variable ($B=0.000$). This result is surprising because previous research which looked at technical quality of care suggested that better quality care was associated with better patient satisfaction scores (Edlund et al, 2003). In addition TQM advocates that improving technical quality should drive customer satisfaction (Mehra and Ranganathan, 2008).

The clinical domain has almost two thirds of the QOF points attached to it, which suggests that following clinical guidelines in diagnosis and ongoing care is considered the most important way of improving quality of care overall, by the NHS. However, these results suggest that patients do not really take this into account when determining the level of satisfaction with their care.

It could be argued that, for the reasons touched on in the literature (i.e. that patients find it hard to evaluate the technical quality of care, or that patient satisfaction should not be the main objective of quality health care) that the lack of a clear predictive link between clinical quality and patient satisfaction is not an issue. However, if the clinical domain of the QOF is aimed at driving improved clinical outcomes, then patient satisfaction is a critical element, as patients who are satisfied with their care are more likely to comply with medication and treatment which will positively impact on the eventual outcome (Chow et al, 2009).

According to the principles of TQM / 6 Sigma, the clinical domain indicators should, in order to drive customer satisfaction, be developed with a focus on the 'voice of the customer'. As an example, Quality Function Deployment, a tool commonly advocated

by both methodologies, was developed specifically to link customer requirements directly into the product design process (Schroeder et al, 2008). However it appears that the QOF clinical indicators are developed primarily from the evidence of practitioner studies, which focus on the identification of best practice from a clinical point of view, with little or no direct input from patients. Strengthening the patient input into the development of clinical indicators could be a key way of improving patient outcomes for the future.

Patient Experience Domain

The strongest correlations (0.49) were identified in the patient experience domain, which perhaps explains a significant amount of the correlation between the overall QOF score and the GPPS question. Overall, 24% of the variance in customer satisfaction can be explained by the patient experience scores from the QOF ($R^2= 0.24$). However, despite this, the predictive capability of the patient experience scores on patient satisfaction was negligible ($B= 0.002$).

The patient experience indicators aim to ensure that patients have easy access to, and enough time to discuss their situation effectively with, their GP. The limited evidence available in the literature suggests that if these measures can be seen as proxies for patient familiarity with their GP and face-to-face contact time, then together these may improve patient outcomes (Schers et al, 2005) and patient satisfaction (Shipman et al (2000)). It is, therefore, very surprising that these results show no predictive capability for this domain. Perhaps the explanation lies in the fact that improvements may raise expectations, which, perversely, may actually reduce patient satisfaction as perceptions of the service do not match the higher expected care (Chow et al, 2009).

Conclusion and Recommendations

The argument for measuring and improving customer satisfaction for commercial firms is that it can increase customer loyalty and drive increased revenues (Heskett et al 1994). Although this may be true for the GPs who benefit financially from patient contact, an increase in patient satisfaction may be less useful for the NHS, for which every patient contact has a cost and where overachievement cannot be financially rewarded (Tan and Rae, 2009). This highlights a significant challenge for patient satisfaction measurement for GPs – the conflicting requirements to ration the use of NHS resources (which will only be exacerbated by the development of the new GP Consortia) and the need to ensure that patients feel that they are being given the time and resources they need to most effectively manage their health.

The Government has pledged to cut measurement bureaucracy for GPs and move towards an outcome only measurement system, where GPs are not constrained by detailed process measures (Department of Health, 2010). The danger in such an approach is that, without some degree of process measurement, which can be used to reduce the variance in quality of care, patient outcomes might suffer. A stronger argument for the retention of the process measures within the QOF could be made if they had a significant impact on patient satisfaction. The results of this study suggest that this is not currently the case. Although this was very much an exploratory study, with far more work to be done in detailed analysis, it offers a clear recommendation to include patients in the development of future QOF indicators, in addition to ensuring that GPs become better at managing patients' expectations of care in the GP Surgery environment.

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Data supplied by



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