Asma Keshtgar
Len D'Cruz

Serving the Customer– Do Patient Feedback and Questionnaires Improve Quality?

Abstract: This review article aims to analyse whether patient feedback and questionnaires improve quality of care. It is recognized that patients cannot assess the medical competence of the clinician, yet patient experience provides an insight into the process of care through the patients' eyes. Patient experience measures are more reliable for use to assess quality than patient satisfaction surveys. It is inappropriate to use patient satisfaction surveys as a basis for remuneration of dentists within the NHS. Patient Reported Outcome Measures (PROMs) have been a successful measure of patient experience in medicine and their introduction to dentistry needs to be considered.

CPD/Clinical Relevance: This article will enable clinicians to understand the importance of patient experience measures as a more reliable way of improving the quality of clinical care than patient satisfaction surveys.

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Patients are different from traditional 'customers'. They seek 'services' with great trust in their 'service provider' and the 'goods' purchased are often the return to good health.[1] Between 1980 and 1996, there was a five-fold increase in the number of publications relating to 'patient satisfaction' in the medical literature. This increase may be linked to the development of the consumer movement that started in the 1960s and 1970s. Nonetheless, this could reflect the 'emerging competitiveness of managed care', resulting in patient satisfaction surveys being used to differentiate between providers.[2]

Asma Keshtgar, BDS, MJDF, Dentist, London and **Len D'Cruz**, BDS, LDS RCS, MFGDP LLM, DipFOd, PGC Med Ed, General Dental Practitioner, Woodford Green, Essex, UK. (a_keshtgar@hotmail.com)

The Department of Health defines quality as covering the three key domains of clinical effectiveness, patient experience and safety.[3] This is similar to the American Dental Association mission of the Dental Quality Alliance to improve oral health, patient care, and safety through a consensus-building process.[4] It is important to note that patient perceptions are central in definitions of quality.

The Steele Review re-emphasized the importance of embedding quality into dental services. Furthermore, the 2009 NHS Constitution consists of pledges that the NHS makes to patients; quality plays a major role in the development of the NHS.[5,6]

In April 2014, medical practitioners in the UK entered the world's largest Pay for Performance programme (P4P); the Quality Outcome Framework. This provides a financial incentive to improve the quality of primary care.[7] Comparatively, 'Quality' and 'Outcomes' are currently measured in the dental pilot programme using the Dental Quality and Outcomes Framework (DQOF). This comprises 10% of the contract value of the NHS pilot contracts and consists of three domains that include patient safety, clinical outcomes and patient experience.[8] This prompts the question: Does patient feedback improve quality?

The questions included in the DQOF questionnaire (Table 1)[3] relate to patient satisfaction from the treatment, dental team and treatment outcome. The responses from these questions demonstrate patient satisfaction or dissatisfaction with the service.

The questions currently included on the NHS choices website[9] for patients to rate and recommend dental practices covers domains such as shared decision-making, information transfer and treatment outcome (Table 2). However, these questions are limited in their depth of information acquisition and do not include all members of the dental team with whom the patient has engaged.

All dental practices providing treatment commissioned by NHS England are required to have implemented the NHS Friends and Family Test (FFT) from April 1st 2015. The initial FFT question is 'We would like you to think about your recent experiences of our service. How likely are you to recommend our dental practice to friends and family if they needed similar care or treatment?' The responses are: 'Extremely likely'; 'Likely'; 'Neither likely nor unlikely'; 'Unlikely'; 'Extremely unlikely'; or 'Don't know'.[10]

Although patients cannot assess quality in terms of the medical competence of the dentist or physician, patient experience provides 'unique information regarding the process of care as seen through the patients' eyes that cannot be replaced by other performance indicators'.[11] Some research indicates that patients' perceptions of quality can be somewhat precise; cardiac patients who reported higher satisfaction from their treatment had lower 30-day readmission rates.[12] Nonetheless, the majority of studies have failed to demonstrate a clear link between *patient satisfaction* and quality.

Conversely, the positive correlation between *patient experience* and quality has been well demonstrated in the literature. A systematic review of 55 studies in the *British Medical Journal* stated 'patient experience is positively associated with clinical effectiveness and patient safety, and supports the case for the inclusion of patient experience as one of the central pillars of quality in healthcare'.[13]

Moreover, assessing patient experience rather than satisfaction may be a more reliable feedback tool as this allows a better discrimination of performance between practices. A study conducted by Salisbury *et al* reported that there was a 4.6% variation of satisfaction rating between practices when patients were asked to rate their overall satisfaction, whereas there was a 20% variance in responses between practices when asked to report on their experience.[14] The comments made on patient surveys are invaluable and can often provide a deeper insight into the cause of high or low ratings.[15]

The current Dental Quality Outcomes Framework (DQOF)[3] mainly uses patient satisfaction indicators as a marker of 'patient experience'. This is not appropriate as it is recognized that patient satisfaction is an unreliable indicator of quality.[11] It is crucial that any future restatement of the DQOF measures aspects of patient-centred care.[16]

The relationship between satisfaction and expectations varies between consumers in the UK and USA. In the USA, consumers with expectations of high-quality care rated higher levels of satisfaction, whereas this positive relationship between satisfaction and expectations has not been found in the UK.[17] Physicians may strive to fulfil patient expectations and undertake tests or treatments which they do not think are clinically required. A nationally representative sample found that cases of higher patient satisfaction were linked with more prescription drug expenditures, higher overall healthcare and increased mortality.[18]

A highly relevant patient outcome tool currently used nationally in England in the field of medicine is Patient Reported Outcome Measures (PROMs), which have been in use since 2009. This Department of Health led programme provides information demonstrating the effectiveness of the delivery of care by the patients reporting the outcome of their treatment. PROMs are currently in use for elective surgical procedures, including hip replacements, groin hernia operations, knee replacements, varicose vein operations and breast surgery.

PROMs consist of the completion of two questionnaires by the patient; one before and one after the treatment. The four aspects of the data set include:

1. Patient identifiable information: this is not made available for wider analysis but is used to link the data.
2. Self-reported health status using condition-specific measures.
3. Self-reported health status using generic measures.
4. Further questions relating to patients' health and existence of other medical conditions.

The changes between the pre-operative and the post-operative PROMs data is analysed to establish the surgery outcome as perceived by patients; in terms of its 'impact on their self-reported symptoms and functional status'.[19]

The information obtained from PROMs is of greater value than that of patient satisfaction questionnaires as a patient could have a satisfactory experience of a service (score highly on a satisfaction questionnaire) but experience a poor clinical outcome. The advantage of the PROMs is that both outcome and patient perception are being measured concurrently.[20] The white paper 'Equity and Excellence: Liberating the NHS' by the Department of Health outlines a move to 'include much wider use of effective tools like PROMs, patient experience data, and

	Patient experience indicator questions	Maximum score
1	Patients reporting that they are able to speak and eat comfortably	30
2	Patients satisfied with the cleanliness of the dental practice	30
3	Patients satisfied with the helpfulness of practice staff	30
4	Patients reporting that they felt sufficiently involved in decisions about their care	50
5	Patients who would recommend the dental practice to a friend	100
6	Patients reporting satisfaction with NHS dentistry received	50
7	Patients satisfied with the time to get an appointment	10

Table 1. The patient experience indicator questions currently included in the dental pilot DQOF.[3]

real-time feedback; it will extend PROMs across the NHS wherever practicable.'[21]

PROMs are also currently being used in Breast Conserving Therapy for breast cancer patients and a few examples of questions[22] that are asked include:

1) How satisfied or dissatisfied were you with the information you received from the surgeon about:
a) Healing time?
b) Possible complications?
c) How much pain to expect during recovery?
2) Did you feel the surgeon:
a) Was professional?
b) Gave you confidence?
c) Involved you in the decision-making process?
d) Was reassuring?
e) Answered all your questions?
f) Made you feel comfortable?
g) Was thorough?

Question 2, about the radiation oncologist, was addressed as a separate question. Several questions were asked about the treatment itself and outcomes.

The final question asks about members of the medical team other than the surgeon. Did you feel they:
a) Were professional?
b) Treated you with respect?
c) Were knowledgeable?

The options of answers are:
- Definitely disagree;
- Somewhat disagree;
- Somewhat agree;
- Definitely agree.

These options prevent the patient giving a neutral response to any of the questions.

A major advantage of the PROMs questions is that they collect results reflecting the whole of the team responsible for the patient care and enquire about the treatment itself, outcome, information given and attitude of the care providers. The PROMs questions are validated; ie prior to the use of a PROMs questionnaire for collection of data regarding a treatment, a sample group are asked to fill out the questionnaire and the responses are assessed.

Looking at the questions included in the PROMs questionnaire in medicine, one can see that the questions are also relevant in the field of dentistry. PROMs questionnaires explore both depth

Domain	NHS choices questions
Recommend to friends and family	How likely are you to recommend this dentist to friends or family if they needed similar care or treatment?
Appointments	How satisfied are you with the time you have to wait for an appointment?
Dignity and respect	How satisfied are you that you are you treated with dignity and respect by staff?
Involvement in decisions	How satisfied are you that the dental surgery involves you in decisions about your treatment?
Information on treatment cost	How satisfied are you with the information given by the surgery on the cost of your NHS treatment?
Outcome of treatment	How satisfied are you with the outcome of your treatment?

Table 2. Questions on the NHS choices website for dental practices.[9]

Issue number	Issue	Finding	Solution
1	Are the measures focused on a specific event or general evaluations?	Measures focused on a specific event reliably correlate with accepted outcome measures. Use of general evaluations produce poor results.	Patient experience measures should be based on a specific event.
2	Which interactions are being focused on?	In a hospital setting nursing care and communication were more predictive in overall patient experience scores than interactions with physicians.	Focus on the patient-provider interactions.
3	How long after the experience are the feedback forms collected?	Recall inaccuracies and bias can result if there is a lag between the interaction and the feedback collected.	Ensure patient feedback is collected in a timely manner.
4	Are the outcome measures risk-adjusted?	Risk-adjustment of outcome measures helps eliminate confounders.	Outcome measures should be risk-adjusted.
5	How is patient satisfaction defined?	There is no common method of defining 'patient satisfaction'.	A common measure of patients' overall assessment of care would allow cross-study comparisons.

Table 3. The five key issues to consider for the cause of inconsistent results regarding patient-experience measures and health outcomes.[25]

and breadth of patient experience and the introduction of such a robust system in dentistry may allow for more useful quality patient experience data. Furthermore, by using the same PROMs questionnaire across dental practices, inter-practice comparison of quality of service can occur.

It is crucial to acknowledge non-response bias; 'there is no safe level of response rates below 100%'.[23] Response rates for data collection are greater using a face-to-face approach (mean response rate, 76.9%) compared to collecting data by mail (67%).[24] This should be taken into account when seeking patient feedback.

It is unrealistic to expect a 100% response rate; however, the design of the data collection is within our control. It is our responsibility to ensure that the data collected is of greatest value. Work by Manary *et al* highlights the 'key issues to consider for the cause of inconsistent results regarding patient-experience measures and health outcomes'.[25] In order to improve reliability, the patient experience measures should be based on a specific event, focus on the patient-provider interactions and be collected in a timely manner. Nonetheless, in dentistry, because of the focus on regular preventive care, the emphasis on 'specific event' feedback may not be as appropriate as in medicine, although its applicability in interventions such as implants, the removal of third molars and endodontic procedures is clear. For example, a patient can give clear feedback with regards to an outcome of a specific surgical procedure in the field of medicine, whereas this may not be appropriate in preventive dentistry. The outcome measures should be risk-adjusted to help eliminate confounders. Finally, more sound research should be undertaken to develop a common measure of the patients' overall assessment of care so that cross-study comparisons can be undertaken. This is shown in Table 3.

The Denplan questionnaire[26] consists of 12 rated questions and two open questions. These questions are general and not based on a specific event; this may be appropriate for a questionnaire in the dental setting. There is a large focus on the patient-provider interactions, including both communication and interaction with the dental team as a whole and not just the dentist.

The open questions ask about 'one thing which could be improved about your dental practice' and 'what do you like best about your practice?' These two questions enable the patient to provide feedback allowing the dental practice both to acknowledge and tackle areas that require improvement and to build on positive aspects.

The Denplan questionnaire encompasses feedback on the patients' experience in terms of 'attitude, trust, and competence of the dental team'; these are key qualities in an effective patient-provider relationship.

Concluding remarks

Patient experience measures are more reliable for use to assess quality than patient satisfaction surveys. It is recognized that patients cannot assess the medical competence of the clinician yet patient experience provides an insight into the process of care as seen through the patients' eyes.

It is imperative to ensure that the data collection is well designed to optimize its use in the quality improvement spiral. Reliability of collected data can be increased; by focusing the patient experience measures on a specific event, on the patient-provider interactions and ensuring that patient feedback is collected soon after the event. The outcome measures should be risk-adjusted to help eradicate confounders and a common measure of the patients' overall assessment of care should be decided upon so that cross-study comparisons can be undertaken.

Furthermore, non-response bias should be considered in the findings and it should be noted that face-to-face approaches yield a greater response rate than data collection by mail.

The DQOF questions relate to patient satisfaction. Research reliably shows that patient experience measures are more effective in assessing quality of care compared to patient satisfaction surveys.

Finally, Patient Reported Outcome Measures (PROMs) have been a successful measure of patient experience in the field of medicine; however, the value of PROMs and feedback from specific events is yet to be explored in the field of dentistry. This consists of completion of two questionnaires by the patient; one before and one after the treatment. The changes between the pre-operative and the post-operative PROMs data is analysed to establish the surgery outcome as perceived by patients, in terms of their functional status. The use of PROMs will be extended across the NHS. The results from PROMs are prospective and demonstrate patients' perception of the outcome of treatment as opposed to satisfaction. Using PROMs questionnaires in dentistry may allow for more accurate patient responses regarding quality of services. Whilst it is crucial to acknowledge that questionnaires have limited value, they do enable patient experience to be reflected upon and changes implemented to improve quality. Therefore, patient satisfaction surveys can serve to inform practices of quality development so that practices can recruit and retain patients.

The most important element of improving quality of care through the use of patient experience measures is to look at the data collected and feedback given and act on these accordingly. The comments made on patient surveys can often provide a deeper insight into the cause of high or low ratings. Reflecting on data collected and implementation of change (when the score is neutral or low) can allow for a patient-centred care approach and creates an upward spiral in quality of care.

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Book Review

Understanding Dental Caries; From Pathogenesis to Prevention and Therapy. Michel Goldberg (ed). Switzerland: Springer International Publishing AG, 2016 (249pp, 140.39 Euros h/b) ISBN 978-3-319-30550-9.

This new cariology text seeks to explain the biological background of dental caries and the formation of carious lesions to provide the practitioner and student reader with the basis to understand different therapeutic and preventive measures. To this end the Editor, Michel Goldberg, has enlisted the help of 20 international cariologists. The book has 19 chapters, 249 pages and is fully referenced. A first examination yields three unpleasant surprises: there is no index; of 126 figures, only 5 contain clinical pictures and the Editor's Preface is peppered with grammatical errors.

The text is divided into 5 parts covering carious enamel, carious dentine, cervical erosions, fluoride and finally invasive and non-invasive therapy. The major part of the text covers histology in great detail but sadly with minimal reference to the clinical relevance. The enamel histological section includes an excellent chapter on the biofilm, and a diagnostic chapter that only covers light-induced detection methods, none of which detects cavities. Clinical-visual diagnosis and radiography are not covered.

Fluoride, brushing, toothpastes and saliva are briefly, but well discussed. An excellent chapter on resin infiltration really brings the biology to the clinical problems. The best 20 pages for me concern 'Minimally Invasive Therapy: Keeping Teeth Functional for Life'. A final chapter covers individual caries risk assessment and then discusses preventive strategies, repeating much of what is already in the preceding chapters. Dietary counselling is given half a page but there is nothing on sugars or behaviour modification.

This book is expensive and is not a stand-alone text for students. However, cariology teachers and researchers will find much of interest. Hopefully, libraries will stock copies so that teachers can refer students to specific chapters.

Edwina Kidd
Emerita Professor of Cariology
Dental Update Board Member