INCORPORATING OUTPATIENT PERCEPTIONS INTO DEFINITIONS OF QUALITY

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Abstract

This paper argues that in the NHS quality measures have generally been defined by reference to processes and outcomes and the views of patients themselves have not been systematically incorporated into measures of quality. Patient satisfaction surveys may be thought to redress this imbalance but these are often poorly conducted and methodologically flawed. One well-known methodology developed to measure satisfaction by measuring the gap between expectations and performance in service industries (SERVQUAL) will be introduced and its applicability to healthcare discussed. An argument will be advanced that quality measurement is still producer-led and should incorporate the views of patients more directly into the quality measurement process. It is suggested that calibration or baseline surveys of patients be conducted which then identify the issues that may be subject to more sustained quantitative analysis. Quality monitoring should be conducted in such a way that particular sub-groups can be subject to routine analysis. Models of quality measurement need to incorporate the perspectives of many 'key players' in which the views of patients are complemented by relevant professional, clinical and managerial groups. The extent to which there is a disjunction between quality as objectively measured (e.g. by waiting times) and as experienced by patients will receive attention. Suggestions will be made that routine monitoring should provide data which can feed back directly into clinic management to improve levels of service.
**Introduction**

There is now a burgeoning literature in the field of quality assurance and a political climate within which the imperatives to demonstrate 'quality' in the services experienced by patients has probably never been higher. In ‘The Patient’s Charter’ several standards were published with which it was expected that the relevant parts of the NHS should comply as soon as practicable. This paper grows out of a series of investigations into the ways in which the 'quality' of outpatient clinics was both measured and then improved, in order to comply with the ‘The Patient’s Charter’ standards (Hart 199b).

**Definitions of quality are 'producer-led'**

The available literature on quality in healthcare has conventionally drawn a distinction between the dimensions of inputs, processes, outputs and outcomes (Harrison and Pollitt 1994). In the context of outpatient clinics, we could discern the quality of inputs (fully-trained nurses, required number of consultants), of processes (well-conducted diagnostic procedures, good communication processes during treatment), of outputs (minimised waiting times) and finally of outcomes (health gain). However, the issue of who is concerned primarily with quality is said to be divided on tribal lines as key professionals struggle to maintain 'their' definitions of quality.

What is common to each of these approaches to the measurement of quality is that the voice of the ultimate consumer is not heard. For example, the 'League Table' approach in which hospitals are ranked according to their adherence to government-set guidelines contains only 'objective' measures of quality such as five measures of waiting times or the speed of attention in casualty and outpatient departments. It is evident that these government inspired initiatives have concentrated very much upon the easily measurable rather than the significant. In the case of outpatients, the assumption is that a reduction of waiting times leads to an overall improvement in the service - an approach which has some limited validity given that
long waiting times in clinics has long been documented as a source of dissatisfaction. However, Hart (1995b) shows that the relationships between reduction of waiting times and the overall improvement in quality are problematic - a reduction in waiting times could well be bought at the price of a diminution in the quality of individual attention as consultants process patients more quickly in order to secure compliance with a measure of quality.

It is of no surprise that measures of quality are producer-led as the key professionals and their employing organisations are in possession of not only the data but also the means of processing the data to derive quality measures. But it is not inevitable that this is the only approach to a measurement problem. An analogous argument might be the measure of unemployment in the UK which is tightly defined as those registered for unemployment benefit and seeking work - an approach which generates a conservative estimate of the unemployed when compared with the American approach in which unemployment is measured, at arms length, by a sample survey method.

**Asking the patients**

Healthcare providers are urged to obtain patient feedback wherever possible in order to monitor and thus to improve service quality. Both the Griffiths Report (1983) as well as the White paper *Working for Patients* (1989) advocated the use of surveys to ensure that patient needs were being adequately addressed. The rise of a more consumerist orientation in which patients become redefined as consumers has only accelerated this trend (Avis, Bond and Arthur, 1995). As well as academics who had often surveyed patients but had their own agenda, managers of health services now have available to them much more practical advice concerning the practical ways in which consumer feedback could be conducted. For example, the Kings Fund established the Consumer Feedback Resource in June 1989, and a series of booklets were published
which offered managers more practical advice concerning the administration and use of survey material (McIver 1991a, 1991b, 1992, 1993a, 1993b, 1994)

Nonetheless, there remains a degree of cynicism concerning the reliability of many of the findings of surveys, particularly if they rely heavily upon forced-choice questions. Carr-Hill's (1992) study of the measurement of patient satisfaction draws attention to the fact that satisfaction levels may well be an artifact of the ways in which questions are asked, that patients are not typically asked to comment upon aspects of clinical practice and that the sampling methods leave a lot to be desired. The problem of non-response rates is very often not addressed in a systematic way. Carr-Hill's review indicated that even sponsors do not express dissatisfaction with low response rates and the literature is replete with examples of surveys in which response rates often leave a lot to be desired. The point is not just one of technical or methodological purity - response rates of less than 50% or even 70% inevitably raise questions concerning the socio-demographic characteristics of the non-responders who, if included, might well have changed the significant findings in the study. Even the computation of reported non-response rates is open to question as refusals are often excluded from the denominator before the response rate is calculated. There do not appear to be many examples of good practice in this area in which the characteristics of the 'non-responders' are sought (perhaps with follow-up surveys) or ways in which the characteristics of the sample population are mapped onto the target population. Despite the fact that most patient satisfaction surveys are samples, confidence limits for the proportion of responses falling into particular categories are rarely, if ever, calculated or reported.

However, the most serious source of concern regarding consumer satisfaction surveys is that they are essentially producer rather than consumer led. Put baldly, the providers of the services have framed the questions to which the consumers 'tick' the answers. As Carr-Hill trenchantly observes
.. the questionnaire method only obtains answers to a series of pre-set questions, not the patient's considered (or spontaneous) views on the issues that concern them, whether as current users or as members of the public. Once the fieldwork is over, there is a considerable temptation to forget what are confidently described as respondents' views are only their replies to questions devised by the researcher and not necessarily the patients' own views and priorities. Thus it is common place to observe that health service policy has been steered by providers' perceptions and definitions of good practice (Emphasis added)

(Carr-Hill, 1992, p.245)

This is not to deny the fact that well-conducted and methodologically sound surveys are conducted. But busy health service managers with many other pressing concerns may not have the necessary statistical expertise required to estimate population from sample statistics or to compute confidence intervals. The fact that pushing up a response rate from 50% to 70% may well double the resources that have to be devoted to a survey may make a higher response rate an unnecessary luxury, particularly if low response rates do not attract any particular opprobrium.

The issue of waiting times in outpatient clinics is an interesting example of some of the issues involved here. Most surveys of outpatients have collected data on waiting times, subject as they are to Department of Health guidelines. However, the evidence concerning how waiting times are experienced is ambiguous. Whilst often identified as a source of discontent, Cartwright and Windsor's (1992) study indicated that only 2% found a wait of up to half an hour unreasonable. In some clinics such as renal dialysis clinics, waiting time may be seen as 'mutual support time' and not, therefore, defined as irksome. The way in which the time spent has meaning to the patients who have to experience the wait is an under-researched area. Clinic managers and local managers in attempting to follow government guidelines have needed to respond to a single figure (i.e. proportion of patients seen within 30 minutes). This single figure is seen to 'stand for' the overall quality of a clinic to the extent that other and potentially more sensitive indicators of
quality are either ignored or minimised. Waiting times are considered irksome but they are easily tolerated when the reasons for any delays are clearly communicated and there is an expectation of 'quality time' when seen by a consultant. The 'waiting time' statistic probably gives more weight to governmental and managerial imperatives than it truly deserves.

The SERVQUAL methodology

One approach to the measurement of service quality derives from the assumption that the level of satisfaction obtained from the delivery of any service can be measured by the gap between consumers' expectations of a service and their perceptions of a service as actually experienced. This theory of expectancy disconfirmation has been most heavily developed and debated in the marketing literature but in principle it can be applied to any service industry including healthcare. The SERVQUAL model first developed by Parasuraman, Zeithaml and Berry (1985,1988) has subsequently stimulated a number of empirical studies, mainly in the United States and Canada. More recently, the model has been applied to services offered to Scottish local authorities (Dalrymple et.al. 1995) as well as to a sample of outpatients attending hospitals in the East Midlands of England (Hart 1996). The methodology underlying the model has also been utilised to develop inpatient questionnaires in a hospital in the East of England (Tomes and Ng 1995). The sweep of the results obtained thus far appear to indicate that when compared with a large sample of consumers of American private sector services (Hart 1996), the consumers of British public services exhibit higher levels of satisfaction (measured empirically as the gap between expectations and perceptions).

The SERVQUAL methodology allows for scores to be obtained on five dimensions of quality (tangibles, reliability, responsiveness, assurance and empathy) and for respondents to allocate weighting scores to each dimension. Thus in industries such as healthcare, empathy will probably receive a higher weighting than in say, insurance. The strengths of
SERVQUAL lie in the fact that a large number of studies have been conducted using the methodology and it is therefore possible to make comparisons between different types of service industries, over time and also between similar sub-units of an organisation (e.g. outpatient clinics).

However, the SERVQUAL model has attracted debate on both a conceptual and an empirical level. One line of argument is that quality is defined as a balance of positive or negative affects rather than the cognitive processes implied by the expectancy disconfirmation theory (Westbrook 1987). Other theorists such as Oliver,1993 and Thompson & Suñol,1995, have attempted to produce composite models which can accommodate both methods of conceptualising the components of satisfaction. On an empirical level, it has been suggested that simple models of performance may yield more reliable results than those suggested by the SERVQUAL methodology (Cronin and Taylor,1992). Even the term expectation is capable of a degree of theoretical refinement. For example, Thompson and Suñol suggest that the term may connote any or all of the following - ideal expectations (aspirations), predicted expectations (anticipated), normative expectations (what should happen) and unformed expectations.

As Thompson and Suñol observe, the concept of expectations may need particular delineation in its application to healthcare. In contrast to a decision to purchase a particular service or product, an episode of healthcare may extend over a much longer time-scale. Expectations do not come 'free-floating' but are probably a function of the last experienced episode of healthcare such as a clinic attendance. More conceptually, the health services may be seen as fulfilling a need rather than satisfying a desire by purchasing a service. The aim of the health services should be sufficiently effective to reduce further demand rather than sustaining demand to compete in the market place. When compared with the purchases of private services, healthcare consumers may be seen both as 'producers' as well as 'consumers' of their own health status. Another perspective is the argument that people may have no, or only weakly developed, prior expectations in the initial stages of episodes of healthcare. Expectations of subsequent stages evolve in a dynamic way and may be a resultant
of factors such as emotional states, the prognosis of the underlying health condition and the nature of the individual's social and personal networks. Some studies suggest that patients may express satisfaction even when their expectations have not been met (Linder-Pelz, 1982).

**Generating the elements of a quality survey instrument**

Whatever view is taken of the applicability of SERVQUAL, it may be instructive to learn how the initial SERVQUAL scales were constructed. In order to supply the elements of their initial questionnaires, Zeithaml, Parasuraman and Berry (1990) utilised twelve focus groups constructed in such a way as to ensure geographical, age and sex balances. The themes emerging from such an analysis then suggested the dimensions of service quality that needed to be explored in the later, quantitative stages of the analysis. Focus groups are being used more extensively in community research (Heyman 1995, Milner and Watson 1995) and the data that they reveal are rich in ecological validity. Whilst the findings of such studies are interesting and revealing, the problems of representativeness and generalisability of the findings are ever-present. However, there need not be any disjunction between qualitative and quantitative styles of research. Following the classic formulation of scientific methodology, it may be said that focus groups fulfill the principle of induction in generating issues and hypotheses whilst that of any derived questionnaire fulfills the principles of deduction. Research efforts have often been conducted in the role of one research tradition or the other and it is perhaps a source of regret that the two traditions (often exemplified as either qualitative or quantitative research) are not used in conjunction with other in practical research programmes.

In the context of patient satisfaction surveys, it is important that patients should not be seen merely as data providers. The results of any patient satisfaction survey should be not only freely available but advertised as such in order that patients may see themselves as more active participants in the monitoring process. The
technology now exists to present the results of survey results in a user-friendly fashion that can be displayed on notice-boards or made available through other media.

**Calibrating a patient satisfaction survey**

Outpatient questionnaires form the third largest category of survey after inpatients and maternity (Carr-Hill, McIver and Dixon, 1989). Many surveys have followed the guidelines established in the Raphael survey which was itself based upon a study of nine hospitals between 1974-76. Areas examined included—Getting to the Clinic, Waiting Areas, Amenities, Examination by Doctor, General Opinion, Additional Comments (Raphael 1979). The survey was easy to complete with simple forced choice questions but with space available for additional comments.

However, it is now recognised that the Raphael questionnaire, whilst bringing a degree of standardisation and providing simplicity of operation, appears to have reflected the interests of service providers rather than users. The fact that Amenities and Waiting Areas is examined by eight questions whilst the provision of information is only covered by only two questions reinforces this view. No information is given in the original survey how the agenda of important issues and concerns to patients came to be formed.

This strongly suggests that outpatient surveys need an initial 'calibrating' investigation to ascertain those aspects of service provision which are of most current concern to patients and carers. Such an investigation may well need to take place every two years or so to ensure that current needs are being expressed as services evolve. Such calibrating surveys would probably involve the use of focus groups, critical incident and other qualitative techniques in the data gathering stage. The data thus gathered, probably tape-recorded, can then be subject to content analysis and examined for themes which will form the substance of the subsequent quantitative study or monitoring survey. In view of the intensiveness of such an operation, there
may well be opportunities for hospitals to collaborate with local academic institutions to assist in the data collection and analysis. Of course, a danger is that a 'hard' producer-led survey is not subsequently replaced by a 'softer' one in which the concerns of producers are allowed to influence the agenda of the focus groups themselves. It has to be recognised as well that the subsequent monitoring surveys themselves will address several issues. As well as providing statistical information on certain parameters such as DNA's (Did Not Attend's) and waiting times within clinics, they should also suggest areas of provision capable of improvement as well as aspects of clinic operation which may ultimately impact upon therapy.

**Determining the needs of particular groups of patients**

Most outpatient monitoring surveys will be organised by clinic and this has manifest advantages in that data can be analysed by consultant or by speciality. Collecting data by clinic also ensures that management and clinicians can apply first hand knowledge to service improvement. An unanticipated consequence of this method of data collection, however, is that the experiences and needs of particular categories in the population may remain 'buried' in the data and therefore not so susceptible to analysis. In particular, it may be difficult to ascertain the profiles of black or minority groups, the elderly or those with mental or learning difficulties.

If a calibrating survey is conducted, then the specific needs of such groups might be flagged up as requiring particular analysis. It should then be possible to record extra data (e.g. on ethnicity) in the routine monitoring survey such that databases could extract subsets of the data for more intensive investigation.

One source of concern is the low sample size that may result from such a procedure. Whilst not being cavalier about small sample sizes, it is unnecessary to be too pessimistic either. Most patient satisfaction surveys are intended to produce a 'headline' figure (e.g. percentage of patients seen within 30 minutes) but
unless they are derived from complete enumerations of a statistical population, which is unlikely, the figures produced are 'point spot' estimates which are subject to normal sampling errors. A convention could be established that, in any reporting sample results, any mean or proportion should be accompanied by its appropriate confidence interval (for example, 95% probability that the mean or proportion of the whole population lies within particular limits). Managers of services could then interpret the headline figures that they obtain with more sensitivity as small fluctuations from month to month may be explicable in terms of sampling rates rather than indications of fluctuations in 'real' quality. By extending this argument, then even quite small sample sizes (provided that n>50) can generate usable results if confidence intervals are computed and quoted alongside the relevant mean or proportion.

If a particular sub-group indicates results that show marked divergences from the sample statistics, then this would be the cue to undertake a more specialised investigation. It could be that the needs of ethnic minorities, the economically inactive, the 'transport poor' and so on could be specifically investigated as the need arose. To some extent, this is already part of the culture as it is recognised that DNA's (Did Not Attend's) often need specific investigation and questionnaires have been designed and applied to tackle this particular problem (McIver 1991a). But it is probably true to say that most investigations of this nature are of an ad hoc nature and the suggestion made here is that the monitoring instruments should be designed in such a way as to facilitate these types of analysis on a regular basis.

**Measuring and modelling quality in dynamic ways**

Whilst reference has already been made to the producer-led thrust in many satisfaction surveys, it cannot be assumed that producers are a homogeneous group sharing an identical world view. In the case of outpatient clinics, we need to distinguish the roles played by consultants, nurses, clinic management staff, medical records staff and quality assurance staff amongst
others. From this point of view, an outpatients department may be seen as an arena within which many different professional groups have their own particular area of expertise but who are nonetheless required to collaborate to produce the required service for patients.

It would therefore appear idiosyncratic if the interests of one core group, the patients, were to be accorded a status which was to be denied to other groups who also 'key players’ in the organisation of outpatient care. Whilst the views of patients may well have been neglected or under-represented in the past, they cannot be regarded as paramount. One line of argument maintains that patients are not necessarily in a position to assess the technical quality of the care to which they are subject (Harrison and Pollitt 1994). On the other hand, there is evidence in qualitative studies that a more informed and critical attitude may result from repeated contact with services (West 1976, Fitzpatrick and Hopkins 1983). What is evident is that approaches to the measurement of the quality of healthcare must be located in the matrix of direct providers, managers and consumers. Comprehensive approaches to quality measurement must go well beyond the simple measurement statistic (waiting times) experienced by one of the parties to the transaction (patients). Rather a judicious blend of the qualitative and the quantitative approaches to measurement should ensure that none of the key parties to the 'transactions’ of episodes of outpatient care are systemically excluded.

Measurement of patient satisfaction and clinic quality move beyond the purely technical questions of deriving adequate measures. The 'producer-led' model of quality measurement does imply that a service is provided upon which patients are occasionally allowed to comment. However the fact that so many surveys indicate levels of satisfaction in the 75-90% range may be more of a comment upon the lack of discrimination in survey instruments (Carr-Hill 1992) and a reluctance on the part of patients to express negative opinions (Locker and Dunt 1978). It is not to be forgotten either, that patient satisfaction does not by itself indicate effective care, although it is a necessary condition for it (Richards and Lambert 1987).
Questions of measurement and philosophies of clinic organisation are not therefore independent of each other. It is possible to posit a more dynamic approach to clinic organisation which goes beyond the 'producer-led' approach but which incorporates the views of patients and of stakeholder professional and managerial groups (Hart 1995a). In such a case, monitoring instruments will reflect the fact that the organisation of care is a multiple transaction in which the views of patients as well as other key groups are involved in a policy of continual improvement.

'Perceptions of Quality' versus 'Measured Quality'

Although the voice of the patient is now receiving more recognition, the rise of consumerism may pose inherent dangers for health providers. Although the consumer may be more empowered and professional groups now more subject to a process of accountability, it is necessary to remind ourselves that patients are not in an exactly analogous position to that of the general consumer in the market place for goods and services. Patients may have little genuine choice in the selection of care treatments and the assumption that they actually desire such choice is open to question.

The fact that League Tables and Charter standards are now part of the panoply of quality measurement may subvert the fundamental goals of service providers. The necessity to attain such standards may direct attention towards the more overt and 'measurable' parts of the system which are under constant scrutiny, thus diverting resources away from less tangible but arguably more important aspects of the treatment process. It is a classic problem in the operation of bureaucracies that 'displacement of goals' occurs in which the concentration of effort towards measured output directs attention from fundamental organisational goals, as Blau (1963) demonstrated in a classic study.
It is therefore possible that 'observed quality' and 'perceived quality' could move in different directions. Patient perception that quality of service may be diminishing could be due to a revolution of rising expectations in which 'real' improvements in clinic quality (particularly if unseen) are not sufficiently appreciated. Conversely, a perception that quality is increasing could be a function of the 'hotel services' aspects of patient care (waiting areas, availability of refreshments and so on) rather than a reflection on the technical aspects of clinic efficiency. This particular dilemma is hard to resolve and points to the fact that perceptions of clinic quality, whilst important, need to be considered alongside and not to replace more conventional measures of quality assurance. A two-stage model of quality assurance alerts service providers to the fact that whilst patient perceptions of satisfaction may be regarded as a necessary condition for the assessment of clinic quality, it does not by itself ensure a quality output.

Patient satisfaction is an elusive concept and as Redfern and Norman (1990) point out, quality health care has to be seen as more than the consequence of patient satisfaction. As we have seen, satisfaction may be conceptualised in a number of ways and perceptions may themselves be a resultant of many different facets of biographical and prior experience. As Avis (1992) observes, the measurement procedures may give more weight to in-clinic processes rather than eventual outcomes as these are intrinsically more difficult to measure. If outcomes are favourable (as typically in childbirth) then transient incidents of dissatisfaction may be forgotten whilst the reverse is equally true.

**Conclusions**

This paper has argued that producer-led definitions of quality, even when they apparently incorporate the voice of the consumer, need to evolve. One possible method is to explicitly address the question of the gap between expectations and perceptions of service quality - the SERVQUAL model - although its applicability to the measurement of healthcare may be suspect. It is
suggested that the managers and providers of healthcare undertake specific calibrating surveys to ascertain those aspects of service provision which may then be measured by the more conventional quantitative techniques. Subsequent quantitative surveys should allow for the analysis of particular categories of outpatients (such as ethnic minorities) in which the effect of small sample sizes can be estimated by the publication of the appropriate confidence interval. Finally, arguments are advanced that the role of the patient-as-consumer whilst important are not paramount. Quality measures need to give the appropriate weight to all key managerial and provider groups. Patient perceptions of clinic quality need to supplement and not to replace the methods of quality which have been in use for the last two decades. As Pollitt (1988) argued:

The aim is not merely to please the recipients of public services (difficult and worthy though that may be) but to empower them.
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