

# PATIENT SATISFACTION IN HEALTHCARE DELIVERY – A REVIEW OF CURRENT APPROACHES AND METHODS

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## Abstract

Patient satisfaction is a topic that is important both to medical (health) care providers, the patients (consumers) themselves and other third-party stakeholders in the medical care industry. For health care providers ensuring that consumers are satisfied is a continuous effort. It is therefore critical to them that the true state of consumer satisfaction is known. To achieve this, the health care providers embark on research to feel the pulses of the consumers and discover ways of serving them better. However, deciding the right instrument and methodology to effectively measure the satisfaction level of consumers is a major challenge for health care providers/researchers. This paper attempts to explain what constitutes satisfaction in the perspective of the consumers and the method(s) that can be adopted by healthcare providers/researchers to unveil factors that are responsible for consumer satisfaction.

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**Keywords:** Medical care, patients, consumer satisfaction

## Introduction

There is increasing pressure on medical care organizations to improve on the quality and focus of their service delivery to meet increasing consumer demands (Drain, 2001). Medical care organizations therefore embark on research projects to discover new and better ways of keeping abreast with changing consumer demands and how best to adequately satisfy these demands. In fact there are several reasons why a medical care organization may conduct consumer satisfaction research (Lin & Kelly, 1995). It could be as a result of self-desire and a key strategy to improve on its processes (Gill & White, 2009). This can either be motivated by a quest to improve on the processes thereby reducing cost or a quest to improve customer satisfaction and thereby retaining old customers while attracting new ones (Nelson et al. 1992; Powers & Bendall-Lyon, 2003). For any of the above reasons the organization has the underlying objective of remaining

relevant and competitive. The need to carry out the research could also be as a result of pressure from regulators, third-party payers and consumers demand for improved services (Friesner, Neufelder, Raisor & Bozman, 2008). Whatever the case may be the research project provides avenue for the organization to get relevant feedback to improve on its processes and services and also show consumers that their opinions are critical to the development of more consumer focused services (Askew et al. 1996). Understanding factors that inhibit or promote consumer satisfaction will aid management not only to identify its strengths and limitations but also on how to adequately channel its efforts in improving service delivery. An improved and customer centric service delivery will end up bringing the desired customer satisfaction. So in essence consumer satisfaction research projects aim to basically measure consumers' perception on the quality and value of services they receive (Nelson & Steele, 2006). The organization conducting the research can use the knowledge gained from the research to improve its services by changing the way the services are offered, modifying the content and quality of the services to properly suit the customers' desires. Organizations can use it to evaluate the level of performance delivered by other organizations that may have been contracted to render particular services.

The rest of this paper will be organized as follows: The next section will focus on first clarifying the research question. In understanding the problem and clarifying the research question the research should seek to fully incorporate the perspective of the consumers; this point is explained in section three. Section four considers the appropriate research method to adopt to better deliver a sound consumer satisfaction research in medical care. The paper recognizes that to deliver a thorough research the research questions should be carefully crafted to obtain the desired response from the respondents. For example the research questions should not merely aim to ask respondents questions on areas of dissatisfaction (Capella & Turner, 2004). Furthermore, in section five the paper looks at sampling limitations and issues bothering reliability and validity of measurement instruments before coming to a conclusion in section six.

### **Understanding the problem**

What exactly is consumer satisfaction? How does a consumer measure the satisfaction he derives from a particular service? And what is the most suitable research method to adopt in measuring consumer satisfaction especially in medical care services? For any research to yield the desired results it must be able to answer the above questions. The challenge therefore, is how the researcher can find out answers to the first two questions when the supposed respondents themselves don't even know the

answers. The researcher is therefore, posed with the problem of constructing and crafting its research methodology in such a way as to probe answers to these seemingly 'difficult' questions. The researcher should not assume that the effectiveness and efficiency of a service is directly proportional to the level of satisfaction consumers will derive from the service. It is not impossible for consumers to be satisfied with services that are effectively and efficiently delivered and it is also possible for them to be satisfied with services which by other measures are deemed to be poorly delivered. The bottom-line therefore is that yardsticks for measuring service delivery effectiveness and efficiency must be in synch with the tools for measuring consumer satisfaction (Koch & Rumrill, 2008). Furthermore, the research questions should not be such that makes the respondents give answers that they think is socially desirable. The questions should rather be organized in such a way that leads the respondents to give their true opinion (Capella & Turner, 2004).

Perhaps to appreciate what satisfaction could mean to medical care consumers one could refer to some theories on consumer health care satisfaction. These theories can be summarized as follows (Hawthorne, 2006; Gill & White, 2009):

1. Satisfaction is derivable when there is alignment between patients' perspective on what constitutes satisfaction in health care and the providers view (Fox & Storms, 1981);
2. Linder-Pelz (1982) argued that satisfaction is a function of the patients previous expectation, personal belief and values towards health care delivery;
3. Donabedian (1980) theory stipulates that interpersonal aspect of care plays very important role in determining the satisfaction patients derive from health care. For a patient to be satisfied with health care delivery he should have a positive judgment towards every aspect of the quality of care delivered especially as it concerns interpersonal side of health care;
4. Fitzpatrick & Hopkins (1983) argue that patients' satisfaction in health care services is influenced by their individual social environment. Patients measure the satisfaction they derive from health care services against the perceived comfort or discomfort they feel with respect to the services;
5. Ware et al (1983) suggest that patient health care satisfaction is a function of their personal preferences and expectation as far as health care is concerned.

In measuring consumer satisfaction the measurement instruments must be multi-dimensional and not uni-dimensional. The components of a given service must be broken down in such a way that consumers can

express their satisfaction in the various components. The instruments should be designed to measure the various components and should not for example merely measure overall satisfaction (Koch & Merz, 1995). Koch & Rumrill (2008) noted that many researches today agree that consumer satisfaction has many dimensions. In as much as they have unanimously agreed on the multi-dimensional nature of consumer satisfaction measurement no defined and generally agreed measurement criteria has been reached. Various authors including Kosciulek (2003), Schwab et al (1999) and Capella & Turner (2004) have all identified various dimensions of consumer satisfaction without reaching a consensus. It is therefore important that the research breaks down the medical care services into various components before going ahead to ask the consumers what their satisfaction levels are for the various areas. Asking generalized questions on consumer satisfaction with medical care services may be too ambiguous and may not attract the desired answers as consumers may be confused. The researcher must therefore, have a proper understanding of the various areas that make up a particular medical service. A medical service for instance may start from when the consumer books an appointment to see a doctor or a nurse. The researcher may need to find out the acceptable and available means of communication between the consumers and the organization. The means of communication between consumers and medical care centers may vary slightly or significantly from one medical care centre to another. Communication can be by email, telephone, post or any other available and acceptable means of communication between consumers and the medical care centre.

How effectively and efficiently the receptionist at the medical care centre responds to the appointment request is vital to the overall service rendered to the consumer. Is the receptionist warm and friendly? Does the consumer get suitable appointment times? On the day of the appointment, does the consumer get a parking space for his car without hassles or does he have problems locating a parking space? When he eventually parks his car or gets out of a taxi or bus as the case may be how is he received at the front desk? How is the waiting area, is it comfortable? How long does he have to wait between the actual time of his appointment and when he gets attended to? The above questions bother around the booking of an appointment to see a medical care staff to getting to the centre and eventually seeing the desired staff. The research will also have to find the quality of service the consumer eventually receives. Is the health care staff qualified enough and does he possess the requisite experience? Did he understand in detail the patient's problems? After the patient leaves the centre what is the level and nature of the after service? The above questions are a few of the questions the researcher may seek answers to.

Donabedian (1980, 1988) suggested a framework of three key components in evaluating consumer satisfaction in a survey. The first is the perceived value a patient derives from going to a medical care centre for treatment. The second is whether the right tools were used for the treatment, in which case the consumer will be concerned about the qualification of the practitioners and the quality of the tools used. Lastly the consumer is concerned about the service delivery processes within the organization. The consumer is interested in such basic issues as timeliness of the service and the conduct of the practitioners towards them. In essence to achieve a truly robust consumer satisfaction survey in medical care the consumers' interest and perspective must be a key component of the research.

### **Conducting a consumer centric medical care research**

Often medical care consumer satisfaction survey like most other consumer satisfaction researches is conducted mainly with the aim of satisfying the owners of the medical organization. These researches focus on the objective views of the medical care organizations and take little cognizance of the subjective views of the consumers (Powell, Holloway, Lee & Sitzia, 2004). A research that takes only into consideration the satisfaction dimensions of the organization will not yield the right and complete results. To yield the desired complete results the research should incorporate satisfaction dimensions of the consumers (Campbell, 1999). If consumers notice that the research does not take their interest into consideration the chances that the research will face low response is very high. The research may therefore end up facing validity and reliability challenges (Meehan, Bergen & Stedman, 2002).

The importance of the research objective being directly relevant to consumers cannot be over-emphasized. The participants should understand in as clear terms as possible the benefits they stand to derive from the research. To ensure that the research meets the consumers' desires and expectations it is often advisable to get former medical care workers to be the interviewers in case of an individual in-depth interview or group interview. The reason for this is that the interviewer have deeper understanding of the expectations of the respondents and because of his experience he is also better placed to conduct and direct the interview process in a way that extract the desired responses from respondents. To ensure that the responses from the respondents are not skewed the wordings of the research questions should not be positively worded only. There should be a balance; the questions should be both positively and negatively worded.

Another way to get the buy in of the consumers is to involve them in the developmental stages of the consumer satisfaction research process. Their input can be sort in the construction of the data collection instruments,

and wording of research questions. By so doing the researcher will ensure that the research objectives properly reflects what consumers consider important. Furthermore, the researcher can also seek the input of selected consumers in the interpretation of the research findings. Capella & Turner (2004) used this strategy in their research in order to build a deep consumer focused research. They interviewed both current and former consumers of vocational rehabilitation services. The inputs obtained from these consumers were used to conduct a 36-item vocational rehabilitation consumer satisfaction survey.

### **Choosing the right research method**

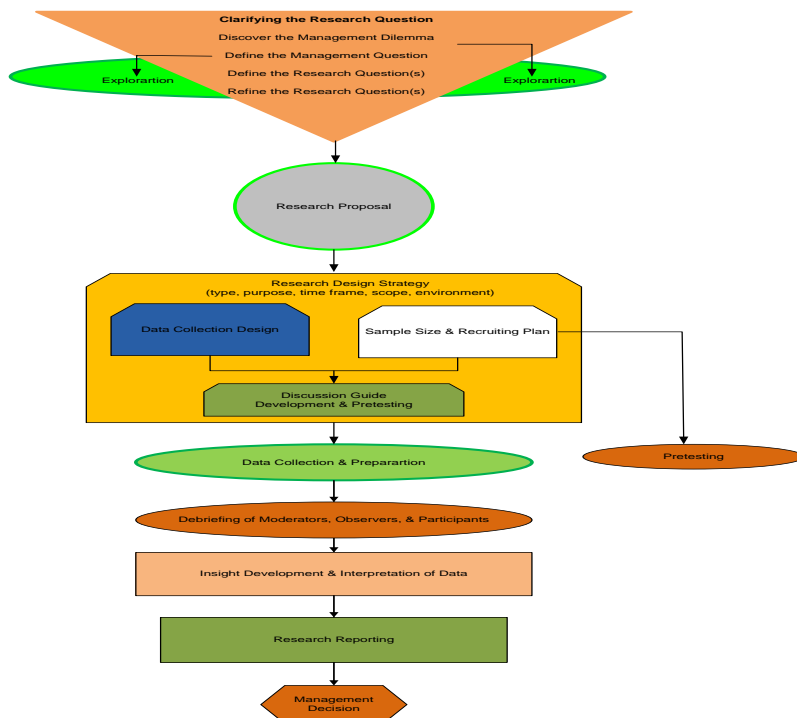
Challenges plaguing the determination of consumer satisfaction through research include ascertaining how to best fashion the research strategy and approach. Various instruments have been developed over the years for the measurement of consumer satisfaction in the medical care sector with no defined consensus among the instruments. Hulka et al (1970) developed the “satisfaction with Physician and Primary Care Scale; Ware & Synder (1975) came up with “Patient Satisfaction Questionnaire”; in the late 70s Larsen et al. (1979) constructed the “Client Satisfaction Questionnaire”. Later on in the early 80s Larsen et al (1984) made some improvement in their earlier work and called it “Patient Satisfaction Scale”. Since then various instruments have been developed by various researchers all making different assumptions based on their definition of what constitutes consumer satisfaction (Gilbert et al., 2004).

Crowe et al. (2002) and Urden (2002) noted that consumer satisfaction is largely subjective and based on individual’s perception. If that is the case the measurement of consumer satisfaction in medical care will be better achieved using qualitative means. For instance Crowe et al. (2002) noted that interviews (telephone and face-to-face) generate higher responses than mail survey. The difference in response was found to be as high as 30 percent. They however, suggested that the huge difference in response between interviews and mail surveys can be reduced by following up mail non-respondents with telephone calls. This however, will increase the cost of the project. In the overall qualitative approaches may be more resource intensive but deliver more in-depth information that ordinarily will not be captured via quantitative methods (Crowe et al, 2002).

Quantitative approach will only permit consumers to give answers to fixed questions or simply choose from a list of answers as provided in the questionnaire. This may be strongly limiting, as the respondents will be compelled to stay within the confines of the provided questions. By using qualitative approach the researcher is better positioned to understand the body languages of the respondents including their attitude, behavior, value

system, culture, life style, concerns, aspirations and emotions. For a sensitive area such as health care it is not enough to merely obtain straight answers but to understand the reasons behind those answers (Ereaut, 2007). Different consumers of medical services may have varying responses to a given question. Disabled consumers should not be treated the same way as none physically challenged persons when it comes to for instance parking space provision. People have varying medical histories and conditions and may therefore require very different or even specialized medical attention. Both the obvious and subtle differences between the different consumers can only be properly discovered through in-depth interviews and group interviews such as focused groups.

Qualitative approach has stronger potential to uncover more in-depth facts than a fixed form questionnaire. Qualitative research basically helps the researchers to fully understand consumers’ perspective, establishing the issues that are most critical to the consumers. To embark on a qualitative approach the researcher has to first understand the question the research is aiming to answer see figure 1 below. Also see the section above on understanding the problem. It is after the purpose for the research is clarified that the researcher can put together the research proposal and eventually the research design strategy, data collection and preparation, debriefing of moderators, observers and participants, and all the way to research reporting.



Source: Cooper and Schindler, 2008

Interviews are the primary means of gathering data in a qualitative research method. The nature of the interview is usually determined by the number of participants in an interview session, the total number and duration of the interviews conducted during the entire research process and the structure of the research. Interviews can be done with individuals or with a group of participants. The interviewers in both individual and group interviews are usually trained and skilled in conducting such interviews. This is particularly important if a good result is to be obtained from the interview process. The interview process may be unstructured, that is no strict set of questions or fixed procedures. It can be semi-structured with few fixed questions with the rest of the interview allowed to follow no particular order. Finally the interview process can be properly structured with fixed questions and guidelines that the interview must follow (Cooper & Schindler, 2008 pp171). Depending on the nature of the research project the researcher can either go with individual in-depth interviews or group interviews or a combination of both. The research can also adopt observation as a data gathering technique. It can for example observe the mood of consumers before and after they receive a medical care service. Furthermore, it is also possible for the researcher to extend the combination of research methods to quantitative research. To carry out individual in-depth interview the researcher can use various communication tools including over the phone or face-to-face. This should be done after identifying the right sample size and respondents with adequate enough knowledge to represent the entire population. The right sample size is one that allows for the right inference to be derived from the population. With the right sample size the chances of having sampling error is minimized. This is because the sampling error is inversely proportional to the square root of the sample size (Marshall, 1996). But if the sample size is too large the researcher may not be able to get the desired detailed information, which is the reason in carrying out a qualitative research in the first place. On the other hand if the sample size is too small the researcher may not be able to obtain rich-enough information to make the desired inference as the data may not be adequate to achieve informational redundancy or theoretical satisfaction (Sandelowski, 1995). It is therefore, critical that the right sample size is selected. A practically appropriate sample selection approach in qualitative research is the purposeful sampling approach, which is the selection of a sample that has good knowledge of the subject (Patton, 2005). This should be used as against probability sampling as is the case for quantitative sampling. One of the most frequently used purposeful sampling approaches is maximum variation sampling. This technique tends to include a wide range of extremes in its sample selection strategy. The reasoning is when participants with very diverse views and backgrounds are selected for a qualitative study; their aggregate responses



can be assumed to be close to the views of majority of the population (List, 2004).

Aside from in-depth interview the researcher may prefer focused group interviews. If focused group interview is adopted, there may be need to establish many focused groups each representing the possible various interests groups in the community. This is important as the various focus groups may see things differently and may proffer different solutions to similar issues. For instance what may be of utmost importance to maturing singles within a community as far as medical care is concern may be different from what is considered important by senior citizens within the same community (Cogswell et al, 1985). Also, in setting up the various focus groups it is good for the interviews to be conducted within existing groups that have some level of organization like regulated meeting times. Because the members of the groups already know one another it is easier for them to communicate freely and express themselves more openly largely because they share common views and opinions on issues. Allowing the group interviews to be conducted within the groups' usual meeting grounds gives them a better sense of comfort, giving the opportunity to be more expressive. It may also be advantageous to have heterogeneous groups. This can bring different flavors and richness to the discussions as the different members share different views on issues.

Even with the shortcomings of using a purely quantitative method in consumer satisfaction research in medical care this paper is suggesting not a total departure but a combination of qualitative and quantitative methods where applicable. Webb et al (1966), Smith (1975), Denzin (1978) and Jick (1979) suggest that qualitative and quantitative methods should be seen as complimentary rather than rivals. On that note this paper will suggest that future research in consumer satisfaction in medical care should adopt both research methods as far as they complement each other. Appendix 1 below shows a sample questionnaire that can be used to complement questions already asked during an interview (Friesner, Neufelder, Raisor, & Bozman, 2008). Some of the questions in the questionnaire can equally be used during the interview process to get more in-depth view from the participants.

### **Sampling limitations and validity & reliability of measurement instruments**

There is the strong likelihood that some targeted respondents may not exactly respond to consumer satisfaction surveys in the case of questionnaires or not be knowledgeable enough to provide the correct responses in case of an interview. In such a situation the response will be inadequate and may not represent a generalizable view as the people who responded may be significantly characteristically different from those who

did not responded to the survey. For example senior citizens, people with very little education and even healthier patients may not respond at all due to inability to read and write or purely due to lack of interest or respond wrongly due to ignorance. Powell et al (2004) noted that having a sample size that is not representative of the larger population is dangerous as the service provider may be misled by the outcome of the research. The service provider may be lured to modify its services in response to the research findings without knowing that the research gave the wrong results. If the response is too low it may end up giving the wrong results and if the sample size is not properly selected it may also give the wrong results. The sample size must be such that is generalizable and the responses must not be low as it will negate the effect made in getting the right sample size. To further aid respondents in giving their opinion the survey questions should not be positively worded as this may cause the respondents to answer questions affirmatively.

Quite a number of satisfaction measurement instruments have been adopted and used in the medical services sector. Sitza (1999) in his study and review of 195 studies on health service user satisfaction found that 64 percent of the researches did not provide any evidence on the reliability and validity of the measurement instruments used for the various studies. Powell et al. (2004) support the view that little attention is given to the validity and reliability of measurement instruments by many researchers. They went on to argue that data that can be used to measure validity and reliability are rarely collected and even when they are collected the validity and reliability of the instruments are often found to be significantly below any reasonable expectations. Where the validity and reliability of patient satisfaction data cannot be ascertained it creates huge doubt on the credibility of the findings of the research.

Developing a suitable model for the measurement of consumer satisfaction is quite tricky (Heidegger et al, 2006; Hawthorne, 2006). This is largely because of the challenge in defining what truly 'satisfaction' is and determining the appropriate measurement instrument to use. Therefore, comparing the different consumer satisfaction scale scores is quite a difficult task as there is clear lack of standardization in the instruments used and the scoring scales adopted by the various researchers in this space (Nguyen et al., 1983). Many of the researches conducted on consumer satisfaction in the medical care space in the past has been largely quantitative. Gonzales et al. (2005) noted that for the last couple of decades most consumer researches in this field have been mainly done through the use of questionnaires and it is only recently that they tried to ensure the validity of the research instruments used. Hawthorne (2006) noted that none of the research instruments examined and reviewed showed reasonable validity and reliability. As

mentioned above most of the previous researches are quantitative and do not take into consideration the qualitative views of patients. These researches therefore, lack merit as they fail to take into perspective the all important opinions of the consumers.

## **Conclusion**

Qualitative research method is an effective and efficient approach to adopt in medical care research. This is due to the suitability of qualitative study as a tool for understanding complex phenomena of which little is known (Strauss & Corbin, 1990). In a field like medical care readers will better understand the results of qualitative findings basically because information is presented to them in the form in which they normally experience it. The findings are presented in a manner that describes medical care issues in both the researcher and reader's perspective (Lincoln & Guba, 1985 p.120). In other words the detailed format in which qualitative findings come make them likely to be "epistemologically in harmony with the reader's experience" (Stake, 1978, p.5) and hence more understandable and meaningful to the reader. In as much as qualitative research method is desirable and preferable for medical care research it should be combined with quantitative research where and when necessary. Quantitative research method should be used to complement qualitative research method where appropriate as far as measuring consumer satisfaction in medical care is concern.

No matter what the research should be designed in a manner that is customer centric. The questions and research methodology should be such that seeks to get out the desired information from respondents. The sample size selected should not be too large and should not be too small either. It should be the right size and of the right quality. The quality of the respondents should be such that properly represent to as much extent as possible the overall view of the larger population. It is important to note that the consumers' interest should be the key factor in any consumer satisfaction research. This is particularly so as if there are no consumers there will be no health care service providers and hence there will be no need for a research in the first place. Furthermore, the research must ensure that there are little or no sampling biases. The data used should be valid and reliable to the extent that the research findings are not compromised. To ensure this the research instruments used for the research must possess reasonable validity and reliability.

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**Appendix**

In our quest to build a world class medical centre that is completely customer focused we would appreciate your input by completing the questionnaire below and returning it. Thank you for your comments and your time.

Before proceeding with the questionnaire kindly indicate your

Age: .....

Gender: .....

Please rate between a scale of 1 – 10. Where a rating of 1 signifies Poor and a rating of 10 signifies excellent

S/N	Question	Rating
1	The facility (cleanliness, appearance, parking).	
2	The convenience of the parking.	
3	The convenience of the registration process.	
4	How well the staff anticipated your needs.	
5	The skill and expertise of the staff.	
6	The explanation of your medical condition and treatment by the doctor or nurse practitioner.	
7	The explanation of the tests, procedures and treatment provided by the clinical staff.	
8	The courtesy and concern for you from the physician who treated you.	
9	The staff's concern for your confidentiality and privacy.	
10	The opportunity to be involved in the decision making about your care.	
11	The explanation of discharge or follow up care instructions and written materials.	
12	The overall quality of care you received today	
13	The opening hours	
14	The educational material you received including ease of reading, content and understandability	

Source: Adapted from Friesner, D., Neufelder, D., Raisor, J. and Bozman, C.S. (2008).