Creating Patient Experience
An Exploratory Study

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Abstract

The Healthcare sector is poised for rapid growth. Factors like growing population, increasing affordability, increased patient awareness, and lower treatment costs as opposed to the developed countries are the key factors to look out for, which would drive the future growth of healthcare in India. On the other hand, medical tourism, telemedicine, health IT etc. are encouraging out-of-the-box thinking by the healthcare players for better operation. Patients are becoming more aware of their health needs, demanding quick response, expecting less waiting time, and better quality care. They do not just want a plain healthcare service; they desire a better healthcare experience.

The purpose of this paper is to discuss key drivers of patient experience (delight) and evaluate patient perceived service quality in Indian hospitals. For patients, perceived service quality has become the prominent aspect to choose between hospitals. The key focus of this paper is to study the relationship between patient satisfaction and patient delight. The research used a two-staged research design. First stage incorporates exploratory research and the second stage consists of a descriptive research through an online survey to collect information on recent hospital encounters of respondents and their expectations for similar future visits. By understanding the relationships among different metrics and the impact of these dimensions on patient experience, we were able to build predictive models. Structured Equation Modelling (SEM) technique was used to test and validate models. The study also indicated that obvious components like service quality remain the top priority while choosing a healthcare provider followed by service performance, service design, personal satisfaction, innovations, and customization in a rank order. The results of this study have certain limitations, as they are based on Indian hospitals. The contribution of this research paper will be the creation of an experiential model based on the importance of certain unexplored factors important for patient satisfaction and patient delight in healthcare. This work provides practitioners and policy makers a new approach to address issues related to the patient care.

Keywords: Patient experience, patient satisfaction, patient safety, healthcare service, experience creation.

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1. INTRODUCTION

In today's world when the competition is very intense, "delighting" customer has become the most essential driver for long-term success of any business. Merely "satisfying" customers is just not enough. Service practitioners realize that in order to retain customers they must go beyond the usual satisfaction level to make customers feel delighted. Excellent design, marketing, and delivery are as crucial for good experience as they are for goods and services. Experience is an emerging concept in product and service and it takes place when quality and concepts are put forth through customization and relationship management. It is essentially reducing the gap between customers' expectations and their subsequent service encounter. According to Pine and Gilmore (1998) for creating experiences companies intentionally use services as the stage, and goods as props, to engage individual customers in a way that creates a memorable event. Today, experience design has become as much important as the product and process design.

Kotler and Armstrong (2004) defined service as "any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything." Factors like intangibility, inseparability, variability, heterogeneity, being labor intensive, participation of the customer in the service delivery process are peculiar to services as compared to a product. Healthcare service is not an exception. The healthcare service industry is dynamic and requires a holistic approach to address health concerns. It has gone through a transition in health care service delivery process and recently higher service expectations of patients, ever-advancing technology, and greater access to health information through the internet and the digital media have become great influences. In such competitive healthcare market with growing patient consumerism, in order to satisfy and exceed patients' expectations, it is important for healthcare providers to understand how patients and their patient's families perceive healthcare service quality. It is also important to explore the factors that impact perceptions. Before a hospital can charge admission, it must design an experience that patients judge to be worth the price. Therefore, it is critical for providers to understand what builds an experience for the patients and families.

Hospital data are mostly used to provide information on health outcomes and the level of satisfaction of patients during the service encounter. The missing link is in - "what do patients desire?" What would they want from the hospitals, in order to have a delightful healthcare experience?

Research related to patient experience has not been paid enough attention whilst there have been numerous studies on patient satisfaction. There is an extant literature on patient satisfaction while very less has been done in the field of patient experience. There is no commonly accepted model for patient experience. It needs to be understood that what may satisfy a patient may not necessarily provide a true delightful experience. Therefore, there is a greater need of a "Patient experience creation model" in Indian hospitals. A new framework has to be developed which encompasses all relevant dimensions of the customer experience, suitably modified in healthcare contexts. In this paper an attempt has been made to address issues related to identification of patient experience creating dimensions and the extent of their influence of patient delightful and build an experiential model.

In the next section, past research related to experience economy and its relation to healthcare has been analyzed. Objectives of research have been presented in the third section. Fourth section establishes a rationale for the study. Methodology including data source, sampling frame and empirical model is presented in the fifth section. The sixth section concludes the paper and presents the further research scope.

2. LITERATURE REVIEW

The construct of experiential designing of services appeared in literature for the first time in early 1990s. In the last few years there has been increasing interest from both academia and practitioners in the field of customer experience. Pine II and Gilmore's article "Welcome to the experience economy" is regarded as the forerunner in this area of research. The article was published in 1998 in the Harvard Business Review. The study explored the small
world of experience creation introduced by Pine and Gilmore. An in-depth analysis of the scientific influence of this article was performed, based on the citations article received from 1998 to 2012. The results confirmed the influence of the ‘customer experience’ concept on the healthcare industry. Pine and Gilmore’s articles have been used in different number of areas ranging from business to non-business fields such as sports, leisure and hospitality.

Customer experience as a research idea has already been covered by many practitioner-oriented journals or management books (Berry, Carbone and Haeckel 2002; Meyer and Schwager 2007; Shaw and Ivens 2002). However, these publications focused more on the managerial actions and out comes than the theories underlying the antecedents and consequences of customer experience. Historically, the literature in marketing, retailing and service management doesn’t exclude customer experience as a separate construct. Researchers have indeed focused on measuring the customer satisfaction and service quality (e.g., Parasuraman, Zeithaml, and Berry 1988; Verhoef, Langerak, and Donkers 2007). However, some work focused on the customer experience has also been put forth. In 1982, Holbrook and Hirschmann theorized that consumption has experiential aspects (see also Babin et al. 1994). Schmitt (1999) presents how companies created experiential marketing by making customers feel, think, act and relate to a company and its brands.

Pine and Gilmore suggested two dimensions to assist thinking about the customer experience. The level of customer participation (from passive to active) is the first dimension. The degree of connection (or depth of the relationship) between the customer and the performance is the second dimension. It ranges from absorption to immersion. The memorability of the “staged” events, as in the Pine and Gilmore’s works, is no longer of primary importance: what contributes to the value creation is not so much selling memorable experiences, but enabling customers to live all the moments of the relationship with a company in a way which is even beyond customer’s expectations. More recently, a comprehensive contribution has been made in the direction of “Co Creating experience” It passes through experiences that are co-created by consumers and companies (Prahalad and Ramaswamy, 2003). According to Prahalad and Ramaswamy (2003), customers create their own unique experience together with the company. In this perspective, companies not sell (or stage, according to Pine and Gilmore’s perspective) experiences, but rather provide contexts, that are conducive of experiences and which can be properly employed by consumers to co-create their own unique experiences. Schmitt (1999) argued that right environmental settings need to be provided by the marketer for any desired experience to emerge.

Based on recent understanding and modern view customer experience could be defined as a process which involves various stages of interactions between two these sides, customer and the company. Such experience involves customer’s involvement at different levels, such as rational, sensorial, emotional, physical and spiritual (Gentile, Spiller, and Noci 2007). Second and related definition presents this experience as a subjective response by customers to any type of contact, direct or indirect, with the company. Direct contact takes place during the purchase process, product or service. This is generally initiated by the customer. In contrast, indirect contact most often takes place through unplanned encounters with company representatives (Meyer and Schwager 2007; Pullman and Gross (2004) defined experience design as an approach to create an emotional connection with customers through various planned events. Such events could be tangible and intangible in nature.

On the basis of the literature reviewed,Identiﬁcation metrics, for customer experience and patient experience, are being prepared and presented in the following Table-1 and Table-2. Since the indicators were suggested by multiple researchers, the following tables group authors according to their work in service experience and patient experience respectively.

Table 1: Reviewed literature on customer experience

<table>
<thead>
<tr>
<th>Theme and the year of publication</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer perceived value (2001)</td>
<td>Jillian C. Sweeney et al</td>
</tr>
</tbody>
</table>
involving this topic has been limited, especially on health care service experience.

3. RATIONALE FOR THE STUDY

While performance measurement metrics are well adopted in patient satisfaction, constructs/models for patient experience creation are still at a nascent stage. Reasons for lesser attention to patient experience creation are not well documented. Further, most of the hospitals and healthcare research consider patient satisfaction as the central point.

Empirical research in the Indian context has to be carried out to come up with a model or framework which if followed will lead to an exceptional and delightful patient experience. Structural Equation Model (SEM) would be used to validate the PEC model proposed in this paper. Working on a "Patient experience creation" model based on the above factors may give valuable insights to hospital managers and administrators. It may also help in optimization of healthcare service delivery thus creating a customer delight or experience.

4. HYPOTHESES

Opportunities to enhance patient experience exist everywhere in hospitals. Hospital focus needs to be on creating the ‘value for the patient’ rather than the ‘volume’. The key is to identify and consider patients as their customers, and to design the patient’s end-to-end experience accordingly. Changes are being introduced slowly, particularly in urban areas. Few corporate hospitals have started thinking in terms of creating a delightful experience for their customers. Change is imperative, but with a huge gap between demand and supply for quality health care, implementing patient-centric care and achieving customer delight will be easy. Healthcare in India is still stuck between two ends, a physician/hospital centric model in the best case and profit-centric in worst case in such scenario, delivery models involving participatory medicine and consumer experience need to be given required momentum. Though service practitioners believe that in order to retain customers they must go beyond satisfaction to delight, unfortunately there is no commonly accepted scale to measure customer delight in the area of the health care service sector.
Scales such as Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), Service Quality scale (SERVQUAL), Service performance scale (SERVPERF) and Patient personal experience (PPE- 15) exist but are incomplete in one way or the other. Therefore, this study is an effort to identify the building blocks of patient experience creation and arrange them in order of importance, to design a patient experience creation (PEC) model which can be applied to any hospital and improve/design the Healthcare Experience”. This may also help us to move up the ladder of economic offerings (Pine & Gilmore).

Commodity ➔ Product ➔ Service ➔ Experience

Based on literature review and in-depth interview following research hypotheses were formulated:

**Hypothesis 1:** Customization of Healthcare services leads to creation of healthcare experience

**Hypothesis 2:** Service quality leads to creation of a healthcare experience

**Hypothesis 3:** Service Performance leads to creation of a healthcare experience

**Hypothesis 4:** Service Design leads to creation of a healthcare experience

**Hypothesis 5:** Personal Satisfaction leads to creation of a healthcare experience

**Hypothesis 6:** Cost effectiveness leads to creation of a healthcare experience

**Hypothesis 7:** Innovative services leads to creation of a healthcare experience

**Hypothesis 8:** Experiential designing of healthcare service improves the quality of care and acceptance of hospitalization as a primary method of healthcare.

Seven distinct dimensions of a perceived healthcare service creation leading to an optimum healthcare experience were identified and hypotheses were built. Our model assumed that patient experience consists of these seven constructs. The 7 major dimensions (constructs) were Customized Service (co creation), Service Quality, Service performance, Service Design (service scope), Personal Satisfaction, Cost Effectiveness and Innovations in service and their impact on satisfaction, buying behaviour, repeat purchase and future recommendation about the service they availed was also measured.

5. **OBJECTIVES**

The primary objective of this research is to explore factors which create a healthcare service experience and assess the extent of its influence on patient future expectations. The specific objectives of the study are as follows:

a. To assess patient’s preferences in healthcare services
b. To find out the factors which create a desired patient healthcare experience
c. To know the impact of these factors on future intentions outcomes
d. To assess the above factors in order of the importance so that healthcare service can be designed as an experiential event

6. **METHODOLOGY**

In this section research design and data collection technique has been described. The hypothesis model is also discussed in this section.

6.1 **Research Design and data collection**

A two stage research design was used. In the first stage an exploratory study was conducted through in-depth interviews and focus group discussions with members across all stakeholders. It helped in defining the problem and formulation of hypotheses. After work upon the responses and inputs of experts in interviews and focused group discussion, a set of constructs were identified which create patient experience and model linking them was hypothesized. A structure questionnaire was designed which was pilot tested in Delhi. After testing the content, sequence, difficulty level of the questionnaire, changes were made. An online survey data collection was carried out. Sampling Unit consisted of any individual who has an opinion regarding his/her choice of healthcare service provider and is willing to respond to the online. Thus the sampling technique was convenience sampling for a mix of online respondents.

6.2 **Model for creating patient experience**

The proposed model presented in Figure-1 is derived...
from in-depth interviews with experts and study of literature. The model proposed in this paper was validated through Structural Equation Model. The purpose of this model was to assess the role and importance of these constructs increasing patient experience.

![Diagram of hypothesized model of patient experience](image)

Figure 1: Hypothesized model of patient experience

7. ANALYSIS

7.1 Definition of Constructs

Our model assumed that patient experience comprises of these seven constructs: Customized Service (Co creation), Service Quality, Service performance, Service Design (service scope), Personal Satisfaction, Cost Effectiveness and Innovations in service and their impact on satisfaction, buying behaviour, repeat purchase and future recommendation about the service they availed.

Table 3: Definition of Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Co Creation</td>
<td>Firms and active customers share, combine and renew each other’s resources and capabilities to create value through new forms of interaction, service and learning mechanisms</td>
</tr>
<tr>
<td>SQ Service Quality</td>
<td>The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge</td>
</tr>
<tr>
<td>SP Service Performance</td>
<td>The degree to which health care provider uses resources to get the best value</td>
</tr>
</tbody>
</table>

SD Service Design: Creating platforms that support value creation processes, helping users and organizations to make sense of how to use the system and build their own value.

PS Personal Satisfaction: is the consistent meeting of patient expectations and has four key elements: delivering the promise of quality healthcare, providing a personal touch, doing a more than adequate job and resolving problems well.

EI Expenses Incurred: Expenditure incurred in getting the healthcare service.

IS Innovations in Service: Innovation can be viewed as the application of better solutions for meeting new requirements accomplished through more effective products, processes, services, technologies, or ideas.

PEC Patient Experience Creation: Experience happens when quality concepts are put forth through customization and relationship management. It is essentially reducing the gap between customers’ expectations and their subsequent service encounter

Indicator / observed variables for these constructs were identified on the basis of exploratory research and past results. Maximum likelihood estimation method of structural equation modeling (SEM) using AMOS 18.0 was used to test the model.

Data were entered into SPSS (Statistical Package for Social Sciences) 18.0 and proposed relationships among identified constructs of patient experience creation have been validated using parameter estimation statistics and goodness-of-fit statistics of Structural Equation Modeling (using IBM SPSS AMOS 18.0). Structural Equation Modeling (SEM) technique is used to make a structural model of the constructs of “Patient Experience”. CFA has been carried out to confirm the components Patient Experience and conduct the reliability and validity of the PEC instrument. On the basis of results obtained, a model to link underlying factors of creating a delightful patient experience has been proposed.

7.2 Measurement Model

We propose the model which tests the validity
and reliability of the constructs. Constructs enable us to understand the process going on behind any phenomena, therefore to understand these better and to test the measurement model, constructs were put under few conditions. First, factor loading of one observed variable per construct was fixed to a value of unity. Second, constructs were freely allowed to correlate with each other. Additionally, measured variables had freedom to load on only one construct (unidimensionality) however, correlation among the error terms with each other was not allowed. Minimum 3 indicator variables under each construct were used in the measurement model and covariance between each construct was drawn. The measurement model is described in Figure 2 below.

The CMIN/DF value of 1.849 reported by the measurement model indicates that the model fits the sample data fairly well. The RMR value of 0.053, which is slightly above 0.05. GFI value of 0.925 and CFI value of 0.959 obtained for our model indicate good fit. RMSEA value of less than 0.05 indicate good fit and value as high as 0.08 represent reasonable fit. Error of approximation in the population (Brown and Cudeck, 1993). Closeness of fit (PCLOSE) tests the hypothesis that RMSEA is "good" in the population (specifically, that it is < 0.05). Jöreskog and Sörbom (1996) have suggested that the value for this test should be > 0.50. RMSEA value equal to 0.073 with PCLOSE value of 0.59 (> 0.5) for our model indicate the good fit.

7.3 Structural Model

Responses received from the questionnaire survey were used to test the hypothesized model. Results of the model such as standard error...
critical ratios, and regression weights have been estimated and have been presented in figure 3.

The values of Standard errors are in good order since they are in the range 0.101 to 0.327. Critical ratio values are significant at 0.001 levels. Next, using Goodness-of- fit statistics, we aim to find the extent to which our hypothesized model adequately describes the sample data. Results for the same are as follows:

Table 5: Goodness-of- fit of statistical model

<table>
<thead>
<tr>
<th>Model</th>
<th>CMIN/DF</th>
<th>RMR</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>PCLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>2.792</td>
<td>.031</td>
<td>0.931</td>
<td>.903</td>
<td>0.106</td>
<td>0.774</td>
</tr>
<tr>
<td>Recommended</td>
<td>3:1</td>
<td>&lt;.05</td>
<td>&gt;.901</td>
<td>&gt;.90</td>
<td>&lt;.07</td>
<td>&gt;.50</td>
</tr>
</tbody>
</table>

CMIN/DF for the structural model is 2.792, which is between 2-5, indicates a satisfactory fit. RMR for the model is .031, which is less than .05 again indicates a good fit. CFI equals 0.903 and GFI equals 0.931 both are greater than 0.9, represent that sample data fit the model well. RMSE A value for the model is 0.106 which is slight higher than 0.07PCLOSE of 0.774 (>0.50) represents the excellent model fit. These results affirm the data fit.

7.4 Reliability and validity

Reliability of the model is measured through composite reliability. The scale exceeded the recommended cut off value 0.7. Therefore, the scales have been concluded to be reliable. In terms of Average variance extracted (AVE), all values are greater than 0.50 which empirically supports the convergent validity of the scales. AVE values are greater than the corresponding SIC values (Squared Inter-construct Correlation estimates). Therefore, it can be concluded that the indicators share more attributes with the construct they are associated with than they do with other constructs. Therefore, CFA model shows discriminant validity. Furthermore, all correlations were significant and positive, ensuring the nomological validity of scale.
7.5 Hypothesis testing

Various parameters have been estimated for the model. This allows us to test different hypotheses. Results for the same have been presented in the following table:

<table>
<thead>
<tr>
<th>SevQual</th>
<th>SevPerf</th>
<th>SevQual</th>
<th>ServDesign</th>
<th>SevQual</th>
<th>CoCreation</th>
<th>Innovation</th>
<th>PtExperienCo-Creation</th>
<th>SevQual</th>
</tr>
</thead>
<tbody>
<tr>
<td>.901</td>
<td>.102</td>
<td>.185</td>
<td>.437</td>
<td>.762</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.877</td>
<td>-.098</td>
<td>-.148</td>
<td>.376</td>
<td>.443</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.327</td>
<td>.221</td>
<td>.200</td>
<td>.160</td>
<td>.101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.2681</td>
<td>-.444</td>
<td>-.737</td>
<td>2.353</td>
<td>4.364</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.007</td>
<td>.653</td>
<td>.461</td>
<td>.019</td>
<td>***</td>
<td></td>
<td></td>
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</table>

S.E. stands for Standard Error; C.R. stands for Critical Ratio.

- H1 stated that Customization/co creation of Healthcare services leads to the creation of a healthcare experience. With std_β value as 0.185 and P ≤ 0.001, the effect of Customization has been found to be statistically significant which supports this hypothesis. Therefore H1 is accepted.

- H2 stated that Service quality leads to the creation of a healthcare experience. With std_β value as 0.762 and P ≤ 0.001, the effect of coordination level has been found to be statistically significant which supports this hypothesis. Therefore H2is accepted.

- H3 stated that Service Performance leads to the creation of a healthcare experience. With std_β value as 0.901 and P ≤ 0.001, the effect of Service performance has been found to be statistically significant which supports this hypothesis. Therefore H3is accepted.

- H4 stated that Service Design leads to the creation of a healthcare experience. With std_β value as 0.102 and P ≤ 0.001, the effect of Service design has been found to be statistically significant which supports this hypothesis. Therefore H4is accepted.

- H5 and H6 stated that Personal Satisfaction and Cost effectiveness leads to the creation of a healthcare experience. These effects were not found statistically significant by the measurement model, thus H5 and H6 were rejected.

- H7 stated that Innovative services lead to the creation of a healthcare experience. With std_β value as 0.437 and P ≤ 0.001, the effect of Service design has been found to be statistically significant which supports this hypothesis. Therefore H7is accepted.

8. CONCLUSION

"Experience Creation" is not a new phenomenon. Researchers have shown that this aspect of service encounter is extremely important and should be one of the prime areas of concern for administrative and service providers while designing a service. The proposed model validated the hypothetical model formulated on the basis of existing theory. The model established an empirical relationship between Patient experience creation and various indicator variables such as Service Quality, Innovation, Cost effectiveness patient centeredness etc. These predictive models may help hospitals understand how to deliver a better patient experience through customer experience management practices. The findings will assist hospitals who might be focusing on the wrong areas to improve patient loyalty or are failing at design an apt patient experience.

The study explored factors which create a healthcare service experience and assess the extent of its influence on future patient intentions and design a conceptual model of “Patient Experience Creation”. Results obtained from structural equation modelling approach support all causal relationships to be statistically significant except the one relationship between
perceived experiential value and guest loyalty. This study provides a good insight of the patient’s repurchase decision-making intention. In general, the level satisfaction (characterized by Service Quality, Co-Creation, Service Design etc.) among the sample of online respondents was found to be low. Majority of the respondents in the study had a wide range of expectations for their future Healthcare Service encounter when asked how it can be converted to a desirable experience.

9. IMPLICATIONS FOR THE FUTURE RESEARCH

The patients, in the present study, however had not had an optimum healthcare experience suggesting the need for organizational interventions for service reforms to initiate the process of a “delightful patient experience.” It is further suggested that, future studies need to have both inclusion and exclusion criteria in terms of age, years of experience and mental and emotional health profile of the sample. It is important to mention here that the future researchers would need to be careful in selecting the sample with respect to age, i.e., respondents in higher age bracket or higher income range may be having more expectations from their healthcare services and in the circumstances of not getting what they had expected may create an undesired experience. In order to further generalize the findings and results of the present study, it would have been more desirable to have a larger sample with age wise and income wise distribution. The future studies need to have both inclusion and exclusion criteria in terms of age, Income Profile, type of healthcare service provider and mental and emotional health profile of the sample. The PEC instrument designed during this study needs to be refined with the factors of less importance excluded so that the complexity of this instrument can be reduced and the variables can be measured in a better way. A scoring system for each indicator variable could be another area for future research.

10. REFERENCES


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