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INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

SERVICE QUALITY MODELS IN HEALTHCARE - A REVIEW (1990-2010)

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ABSTRACT

It is estimated that "doing things wrong" typically accounts for between 30 and 40 per cent of a service organization's operating costs. There is significant misunderstanding of the various aspects of service quality. While the literature concerning service quality dimensions in the healthcare industry is replete with studies from the developed world, researchers from developing countries have been exploring the applicability of the related models and frameworks in their specific context (Padma et.al, 2009). The primary aim of this study is to enhance understanding of "service quality in healthcare" and to identify (HCSQM) Health Care Service Quality Models that managers in the service industry can employ to improve quality. The researcher identified the gap and presented suggestions to future research.

KEYWORDS

Behavioral intention, Customer satisfaction, Healthcare services, Quality measurement, Quality models.

INTRODUCTION

Healthcare is described as the "world's largest service" (Kenagy et al., 1999). Factors like opening up markets, increase in use of IT, increased customer knowledge and awareness, etc, becomes a must to deliver the services better than its competitor at agreed price (Seth and Deshmuhk, 2005). In the current business scenario, service quality needs a fresh understanding. Several researchers explored the subjects with varying perspectives and using different methodologies.

The criteria for choosing published material for review include the models derived based on the dimensions which gives significant impact on healthcare. This review includes the service quality and its outcome such as patient satisfaction, behavioral intention and loyalty. It examines 14 different hospital service quality models reported in the literature during the period 1990-2010. This research contains hospital service quality models empirically tested and conceptually proved research and presented in chronological order.

The models disclosed that the healthcare service quality outcome and measurement are dependent on various dimensions and geographical settings. This review is not an abstract, an opinion from sequential development along with continuous updating of models. The research differs in definition, models, measurement, data collection procedure and data analysis etc. The review becomes the base to researchers and practitioners to modify the existing quality concepts and bring out the new one, either conceptually or empirically. The models are covering brief discussion about healthcare service quality dimensions, sample selection, demographic variables, service quality outcomes, data analysis, scale development etc. This research does not measure hospital service quality. It gives an insight to hospital service quality models.

OBJECTIVES

The main objective of this review is to critically appraise various service quality models in healthcare, particularly in hospitals in the light of the changing business scenario. The other objectives are identification of factors influencing service quality and to find the gap in the existing models.

HCSQM-1: AUTHOR: REIDENBACH, SANDIFER-SMALLWOOD, 1990

Patient confidence, business competence, treatment quality, support service, physical appearance, waiting time, empathy

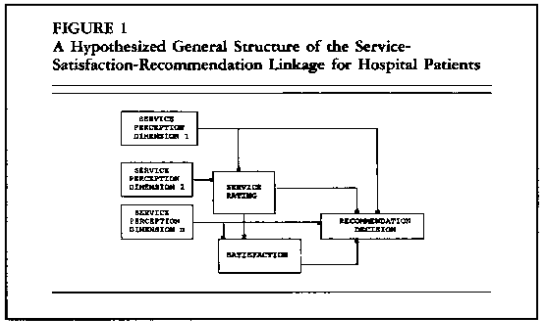


FIGURE 1
A Hypothesized General Structure of the Service-Satisfaction-Recommendation Linkage for Hospital Patients

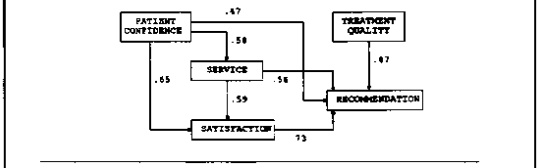


FIGURE 2
A Hypothesized Model of the Service-Satisfaction-Recommendation Linkage for Outpatients

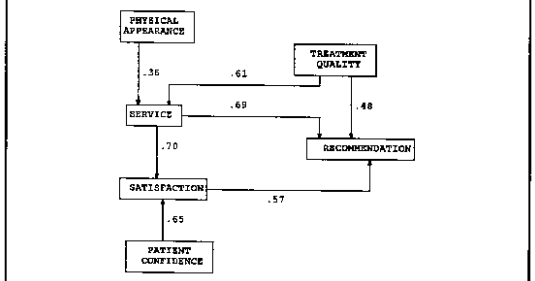


FIGURE 3
A Hypothesized Model of the Service-Satisfaction-Recommendation Linkage for Emergency Room Patients

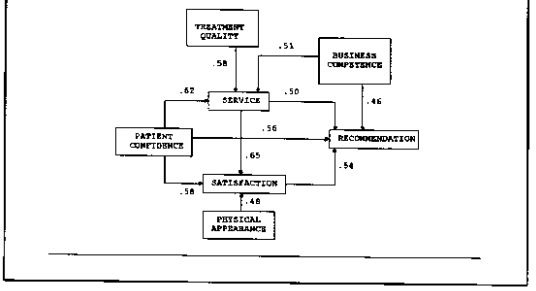


FIGURE 4
A Hypothesized Model of the Service-Satisfaction-Recommendation Linkage for Inpatients

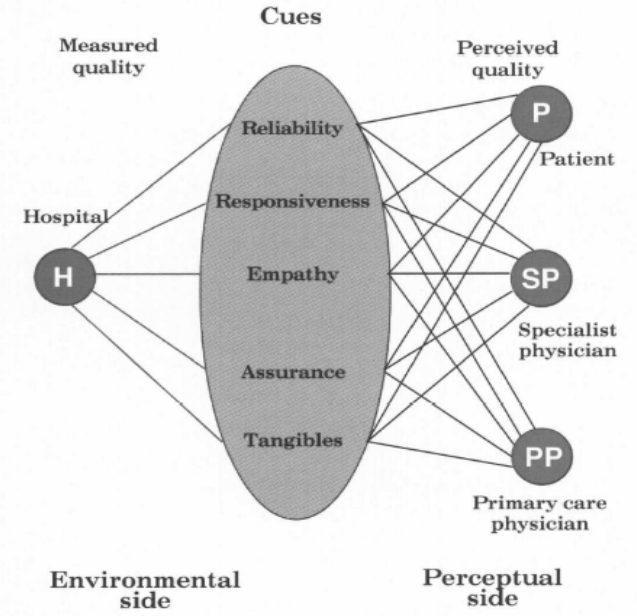
To understand the relationship among patient's perceptions of inpatients, outpatients, and emergency room services and their overall perceptions of service quality with their care and willingness to recommend the hospitals services to others, the authors provide work for three models using modified SERVQUAL instrument includes seven dimensions. 300 patients surveyed through telephone using stratified sample. The authors employed 5 point Likert scale anchored by "Very good" to "Very bad" to rate the service quality of the hospital. They conducted factor analysis and identified "Patient Confidence", first identified by the authors, which has significant impact on patient satisfaction. Treatment quality is found to be another significant variable towards outpatient and emergency room patient to recommend the hospital. Added to that, perceiving physical appearance makes an impact on emergency room patient. They found that overall service quality perceptions of patients, their satisfaction and their willingness to recommend to others were strongly correlated to each other in different hospital settings, namely, in-patients, out-patients and emergency care patients.

HCSQM-2: AUTHOR : LICATA, MOWEN, GOUTAM 1995

Competence, reliability, understanding, credibility, access, listening skills, facilities, personal association, responsiveness, patient preference, specialist affiliation, geographic convenience

EXHIBIT 1

The Marketing Lens Model (MLM)

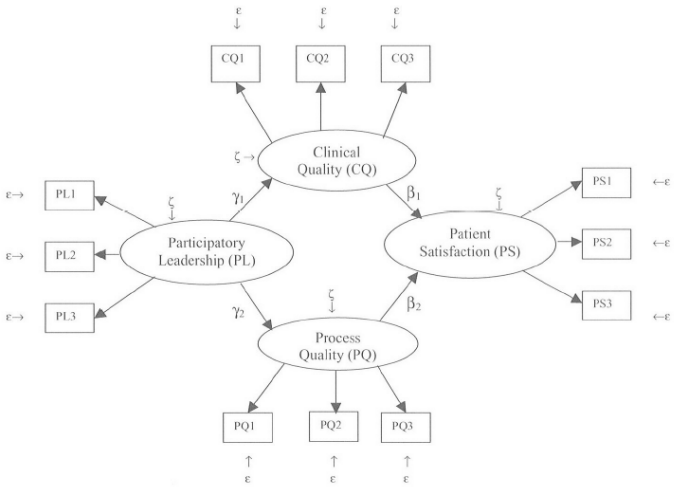


Every one involved in the medical channel has their own views and perceptions. In relation with this, a Marketing Lens Model was first proposed by the authors to diagnose quality perceptions in a complex exchange channel. To be successful in a complex medical channel all the parties who are involved should view the key stimuli through similar lenses. To identify the key stimuli the authors designed a questionnaire in three versions, each one for primary care physician, specialists and patients. In their versions they employed two dimensions as medical competence and hospital characteristics along with 15 attributes ("1 for below average to 5 for exceptional") to rate the quality of the hospital. Samples were taken from 991 bed metropolitan private hospital with 670 affiliated physicians. Their findings articulated the views as Primary care physicians and specialists assess overall hospital quality in terms of medical competence but patients consider both medical competence and hospital characteristics. Customer satisfaction assessments from customers and from internal sources (.eg. quality managers) are highly correlated. Using factor analysis they identified that patients and physicians were using similar lenses (patterns of cues) in assessing the quality of the hospital.

HCSQM-3: AUTHOR : MARLEY, COLLIER, GOLDSTEIN, 2004

Participatory leadership, clinical quality, process quality, patient satisfaction

Figure 1: Hypothesized causal model of the determinants of hospital patient satisfaction.



The authors bring out a casual model of the determinants of hospital patient satisfaction. In their model they focused on clinical and technical medical care that emphasizes on "what" performance patient receives and "how" the services are delivered. For the investigation purpose they have taken three constructs as leadership, clinical quality and process quality on patient satisfaction. The hypothesized model evaluated using structural equation modeling with a sample size of 202. The data collected from U.S hospital from a member of hospital management like director / vice president of quality / quality manager. Every item was measured using a 7 point Likert scale. Their results suggest that hospital leadership has a significant impact on process quality than clinical quality. But clinical quality in health care is top priority for doctors, hospital leaders, and patients. Both clinical and process qualities are important, clinical quality is the order qualifier and process quality is the order winner. They found that the "personal" care relating to communication, empathy and caring by hospital personnel were the determinants of patient satisfaction. Moreover the ability of patients to evaluate process quality than clinical quality has its own impact on patient

satisfaction. They opined that the patient is not necessarily the best evaluator of clinical quality, as they may not have the opportunity, expertise or equipment to evaluate clinical quality. Moreover the ability of patients to evaluate process quality than clinical quality has its own impact on patient satisfaction, at the same time the leaders influence on process quality and clinical quality and in turn create patient satisfaction.

HCSQM-4: AUTHOR : KARA, LONIAL, TARIM, ZAIM, 2005

RATERC (P&E)

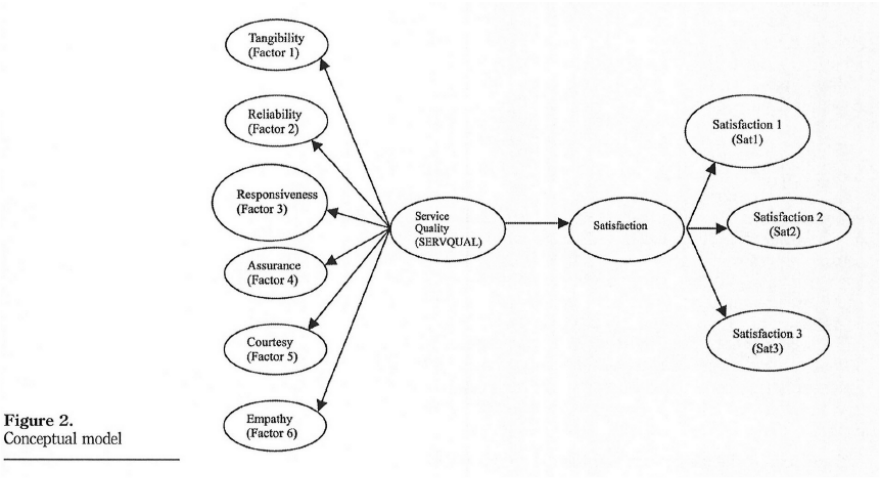


Figure 2. Conceptual model

The researchers empirically examine the tangible and intangible determinants of service quality and the relationship with customer satisfaction using a structural equation model. To test the model they used AMOS and found that all intangible factors are associated with service quality are more important than the tangible. The samples were 139 and updated SERVQUAL (Carman) instrument (RATERC) was administered to collect the data from inpatients. Courtesy and Assurance were found the top scores to become an important service quality factors. There fore they concluded that attitude, behavior of the employees and trust on nurses, billing, and employees, to the patients and their families are very important intangible factors that can affect service quality. Reliability and Tangibility are the least scorers. Satisfaction context was shown in three dimensions as repurchase intention, overall service quality and overall satisfaction and all of them are statistically significant and highly related with satisfaction.

HCSQM-5: AUTHOR: ZINELDIN, 2006

5Q – quality of object, quality of process, quality of infrastructure, quality of interaction, quality of atmosphere

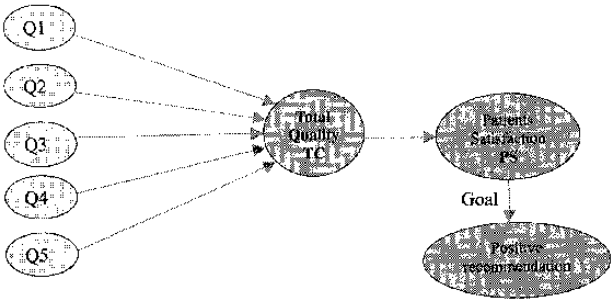


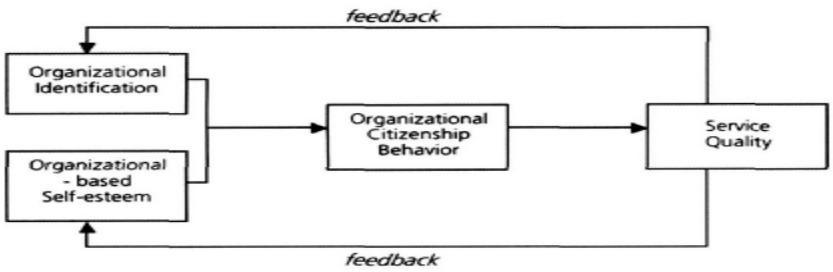
Figure 2. Zineldin's 5Qs: a multidimensional model of health care attributes and patients satisfaction

The author derived a comprehensive model using five quality dimensions namely quality of object, quality of processes, quality of infrastructure, quality of interaction, quality of atmosphere in which 48 attributes were identified. He examined the major factors affecting patient's perception of cumulative satisfaction in Egypt and Jordon. Using the instrument 224 usable questionnaires were used (inpatients) to collect data. Samples were collected from one public hospital, one semi-public hospital and new and modern private hospital. The constructs were measures through multiple item scales and a five point Likert scale was used ("very good to very bad"). The analysis shows that Patients satisfaction with different service quality dimensions has direct impact with their willingness to recommend the hospital. The author shed light on the shortcoming of the quality issues such as quality of infrastructure and quality of atmosphere influence patient satisfaction in public hospitals and semi-public hospitals. At the same time, in private hospitals quality of infrastructure, quality of process and quality of interaction plays major role in patient satisfaction.

HCSQM-6: AUTHOR: BELLOU, THAN OPOULOS, 2006

Organisational identification, organizational-based self-esteem (OBSE)

EXHIBIT 1. OCB ANTECEDENTS AND IMPACT ON SERVICE QUALITY

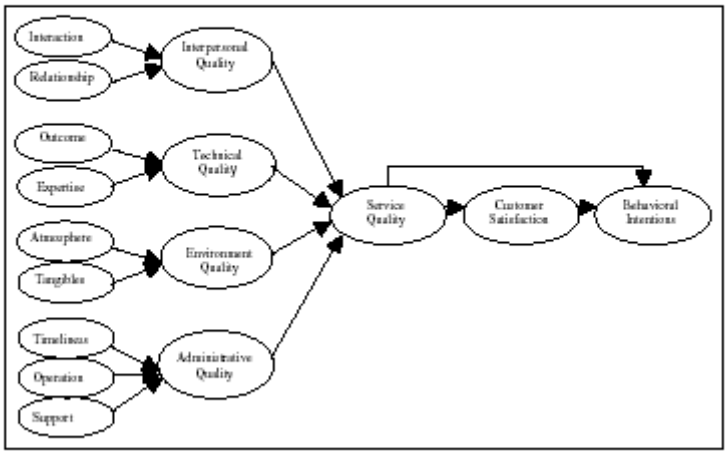


The model highlight the importance of organizational citizenship behavior (willingness to contribute to the hospital) to enhance the service quality in hospital. They carried out the study in Greek public hospitals in a sample of 233 doctors and nurses from two pathology clinics, as they interact with patients and provide direct health care. The variables used in their research are organizational identification and organizational-based self-esteem (OBSE). In their analysis they found doctors were affected by OBSE alone, whereas nurses are affected by both OBSE and organizational identification. Excellence in customer service is the hallmark of success in service industries. Employees who exhibit higher organizational citizenship behavior for coworkers or their hospital will be more active in the fulfillment of patients needs which will consequently be reflected in patients evaluation of service quality. Perceptions of quality have a strong influence on patient's inclination to avail themselves of health services. To enhance OBSE, managers could grant direct recognition and reward of both effort and results, which will increase OCB towards the hospital.

HCSQM-7: AUTHOR : DAGGER, SWEENEY, JOHNSON, 2007

PERCEIVED SERVICE QUALITY – service satisfaction, behavioral intention, interpersonal quality, technical quality, environment quality, administration quality, interaction, relationship, outcome, expertise, atmosphere, tangibles, timeliness, operation, support

FIGURE 1
Full Conceptual Model

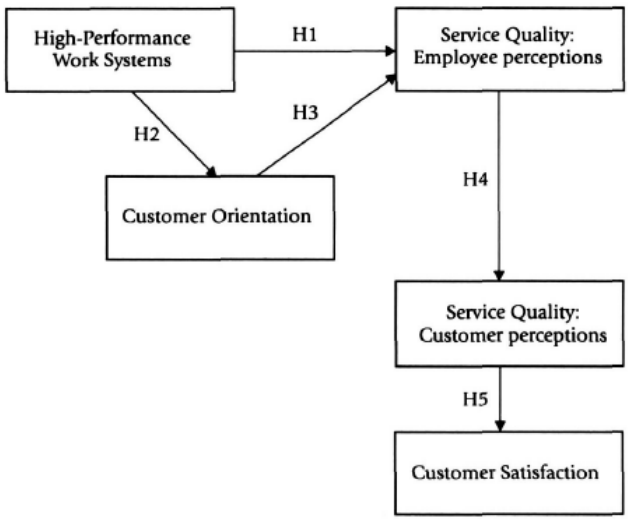


The authors developed a multidimensional hierarchical scale for measuring health service quality and empirically validated the scale's ability to predict important service outcomes, such as, service satisfaction and behavioral intentions. They identified service quality perception drivers as four primary dimensions and nine sub dimensions. The primary dimensions were interpersonal quality, technical quality, environmental quality and administrative quality. The sub dimensions were interaction, relationship, outcome, expertise, atmosphere, tangibles, timeliness, operation and support. The authors collected data from qualitative study and three different field studies of health care patients in two different health care contexts namely oncology clinics and general medical practice. In qualitative study, using purposive sample was considered appropriate, total of 28 participants, 7 focus groups were involved in the age between 18 – 72 as medical insurance holder and proven diagnosis of cancer. To develop the scale, samples were selected from private outpatient oncology and general practitioners clinics using exploratory and confirmatory samples techniques. The model provides evidence that service quality has a considerable impact on service satisfaction and behavioral intentions. Their results indicate that service quality perceptions mediated the relationship between the primary dimensions and behavioral intentions. Each service quality and service satisfaction had a significant impact on behavioral intentions. But service qualities have greater total effect on behavioral intentions than satisfaction.

HCSQM-8: AUTHOR: SCOTTI, HARMON, BEHSON & MESSINA, 2007

High performance work systems, employee perceptions of service quality, customer orientation, customer perceptions service quality, customer satisfaction.

Conceptual Model



The authors investigate the chain of events through which high-performance work systems (HPWS) and customer orientation influence employee and customer perceptions of service quality and patient satisfaction. They presented a conceptual model for linking work environment to customer satisfaction. They employed 113 samples in Veterans Health Administration ambulatory care patients. Stratified, random-sampling design adopted for the survey sample selection. To construct the instrument for, independent variable, HPWS a ten-item (goal alignment, communication, involvement, empowerment, teamwork, training, trust, creativity, performance enablers, and performance-based rewards) scale derived from the VA employee survey. Customer orientation was measured by three-items from the VA employee survey. Employee-perceived service quality was measured with two-item scale derived from the employee satisfaction survey. Customer-perceived service quality was measured by two-item scale from the customer satisfaction survey. Finally customer satisfaction was measured by a single-item from the VHA customer survey. They found a significant relationship between employee perception and customer perceptions of service quality as well as customer perceptions of service quality is a strong driver of their satisfaction. They added that enhancing service quality and customer satisfaction, rather than inflating costs, contributed to cost efficiency. Their finding expressed that HPWS is linked to employee perception which in turn linked to customer perception and ultimately have a link to customer satisfaction.

HCSQM-9: AUTHOR : PRIPORUS, LASPA, KAMENIDOU, 2008

Tangibles, reliability, assurance, interpersonal communication, responsiveness, total satisfaction

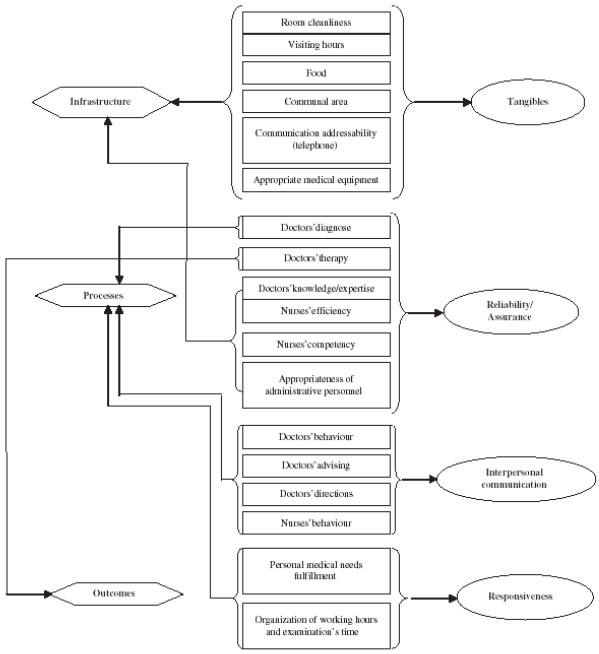


Figure 1: Satisfaction items

The authors investigated the quality of Greek hospitals and patients characteristics on patient perception. 225 patients were taken as sample from 7 nonprofit hospitals; using the structured questionnaire the data were collected form urban and rural areas to see the disproportional volume of patient served in the hospitals. Questions were scored using Likert scale ("1= very disappointed to 5= very satisfied"). According to the results that educational status, type of medical insurance and the emergent admission significantly affect perceptions of satisfaction. Compare to females and older people, males and young people rate satisfaction a little higher. Added to that regarding responsiveness they identified that personal medical needs gained high priority among other variables. Apart from that there is no clear indication of differentiation between rural and urban patient's perceptions.

HCSQM-10: AUTHOR: STEINKE, 2008

Service training (ST), managerial practices (MP), physical design (PD), job design (JD), job satisfaction (JS) and employee empowerment

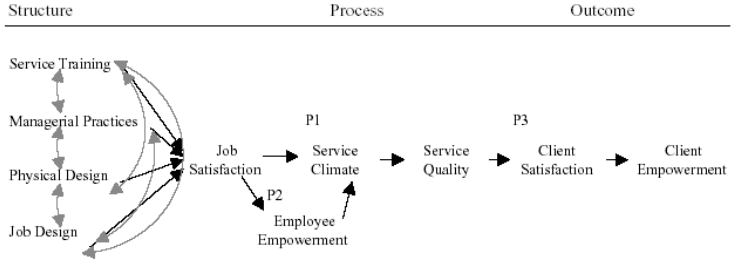


Figure 1.
The service outcome chain (the research model)

The author empirically investigates the mediating role of service climate (SC) on service quality (SQ) and client satisfaction (CS) using a modified version of service profit chain. In this study the variables are service training (ST), managerial practices (MP), physical design (PD), job design (JD), job satisfaction (JS) and employee empowerment. The researcher used 180 employees (registered nurses) from emergency departments in Canada were taken as sample to opine about internal and external service quality. Structural equation modeling (SEM) was implemented using LISREL showed that service climate have positive impact on outcomes in healthcare. SQ, CS and CE were fully mediated by SC, rather JS and empowerment were partially mediated the relationship between managerial practice, physical design, job design and service climate. Added to that Frontline providers (nurses) contribute to service quality this consecutively gives an impact on attitudes, cognitions, and intentions (perceptions) of clients.

HCSQM-11: AUTHOR: PADMA, RAJENDIRAN, PRAKASH, 2009

Infrastructure, personal quality, process of clinical care, administrative procedure, safety measures, corporate image, social responsibility, trustworthiness of the hospital

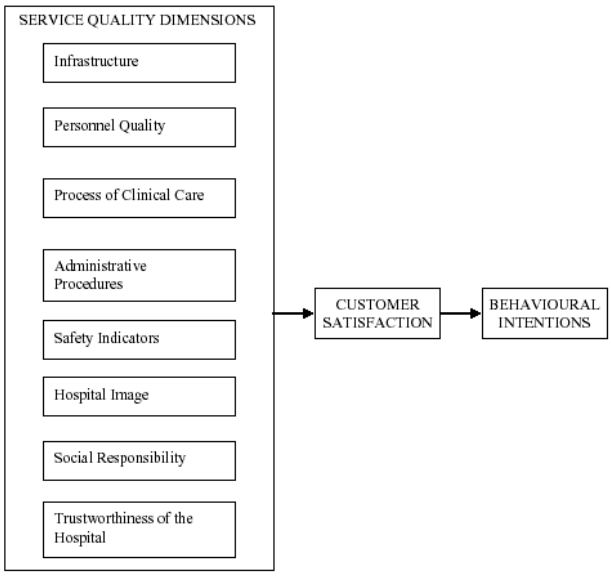


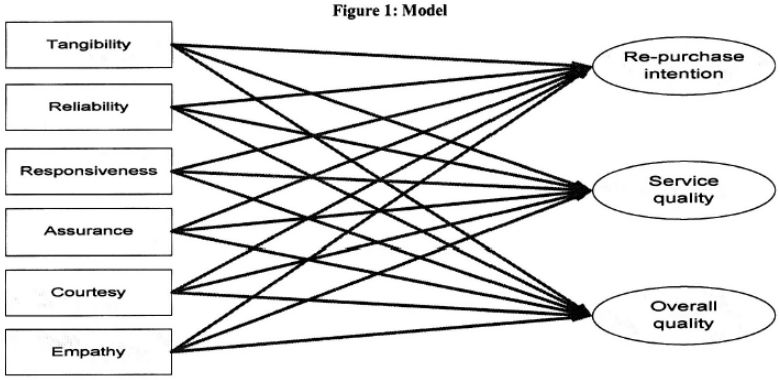
Figure 1. A conceptual framework for healthcare service quality

The researchers proposed a conceptual framework to measure service quality from the perspective of patients and attendants in the hospital. They derived two instruments for measuring the dimensions of hospital service quality, one for patients and another one for attendants. Here they defined "Quality" as satisfying customer needs. To satisfy customers the hospitals can use one of the quality management techniques such as 'house of quality' using customer perceptions as 'voice of customer'. The satisfaction can be spread out through word of mouth to their families and friends, which will leads to loyalty. The loyal customers are willing to pay more for enhanced services. To prove the above concept a path analysis of Quality →Customer satisfaction → Behavioral Intentions be done. For the organization purpose the researchers developed an instrument to collect data about their customers' perceptions to benchmark their services with their competitor's services. In the instrument they suggested 7point likert scale to measure the patient's perception of services provided by the hospital, where "1" indicates "very low" level of service and "7" indicates "very high" level of service. After an extensive literature, they derived the dimensions as infrastructure, personnel quality, process of clinical care, administrative procedures, Safety measures corporate image, social responsibility, trustworthiness of the hospital in their instrument, which will help hospital administrators to understand their patients and their attendants perception about service quality.

HCSQM-12: AUTHOR: ZAIM, BAYYURT, ZAIM, 2010

RATERC

Figure 1: Model



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The researchers examined the relationship between service quality and customer satisfaction in the hospital environment. In their study they measured customer satisfaction through three criteria such as future purchase intention, evaluation of overall service quality and how the customer see the overall service quality in the hospital by using the Carmen instrument to collect data. The instrument has six criteria's used as: tangibility, reliability, responsiveness, assurance, and empathy. The questionnaires were distributed to 400 patients in 12 hospitals out of which 265 were usable. They measured service quality using seven point likert scale, anchored at the numeral 1 indicated verbal statement "Strongly Disagree" and at the numeral 7 indicates the verbal statement "Strongly Agree", by differentiating perceived service and expected service. For the analysis the researchers used factor analysis and ordinal logistic regression technique to investigate the relationships among the variables. From the analysis they confirm tangibility, reliability, courtesy and empathy are responsible for customer satisfaction while the other two criteria's responsiveness and assurance are not responsible for customer satisfaction. Their suggestion includes, increasing the service quality in hospitals, physicians can concentrate on treatment leaving the administration in the hands of managers who have managerial skill and talent.

HCSQM-13: AUTHOR: SHABBIR, KAUFMANN, SHEHZAD, 2010

Service quality, Trust, Word of Mouth

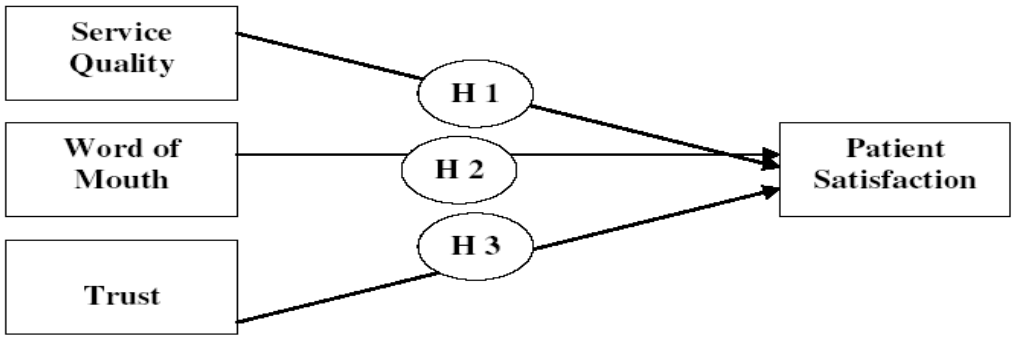


Figure 1. Theoretical framework.

The researchers derived a conceptual model of patient satisfaction and investigate attributes as service quality, trust and word of mouth on patient satisfaction. 186 samples were collected from public and private hospitals in Pakistan city. To construct the instrument 16 items service quality variables were taken from SERVQUAL (1985, 1988), for trust 5 items from Anderson & Dedrick (1990), 4 items for word of mouth, 5 items for patient satisfaction from Kavanaugh et.al.,(2006), using 5 point Likert scale (strongly disagree – strongly agree) numbered 1-5. In Pakistani hospitals patient's satisfaction was determined by the income level than any other demographics such as education level and age. Their results expressed that service quality is associated with the higher level of patient satisfaction, which is followed by trust. In service quality, discipline, had the greatest impact on customer satisfaction. They also studied that patient's perceived public hospital as superior in quality. They added that positive word of mouth does not influence the patient satisfaction, whereas service quality and trust are of greater importance. Significant contribution is given by the authors to identify the impact of word of mouth on satisfaction.

HCSQM-14: AUTHOR: CLARK, SAVITZ, 2010

Clinical excellence, service excellence, physician engagement, operational effectiveness, employee engagement, and community stewardship

EXHIBIT 1: Mission Critical Support for Performance Excellence

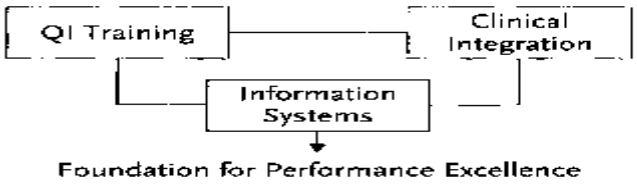
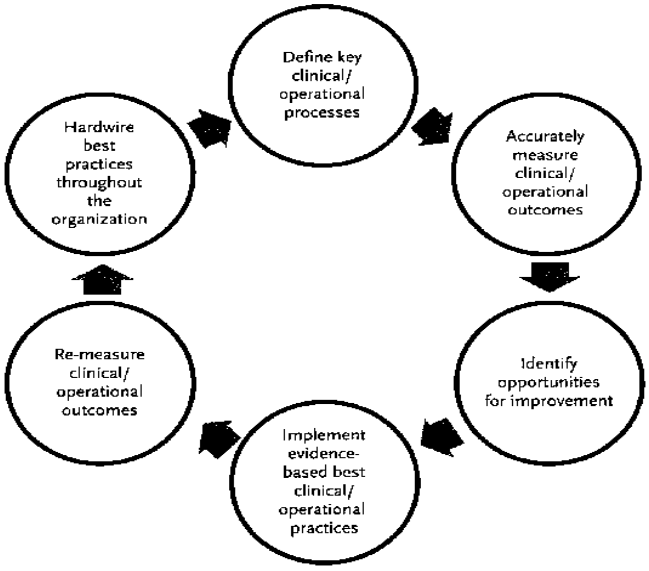


EXHIBIT 4: Applying Clinical Process Improvement to Operational Processes



DAVID D. CLARK, FACHE; LUCY A. SAVITZ; AND SCOTT B. PINGREE • 25

One of the key challenges in the service sector is low cost and high quality. This study provides a conceptual model to illustrate cost savings and the relative impact of hospital group versus payer benefit. Opportunities exist in many hospitals and health systems to consistently provide an extraordinary patient care experience while reducing operating costs. Extraordinary care is defined in six dimensions as clinical excellence, service excellence, physician engagement,

operational effectiveness, employee engagement, and community stewardship. Reliable clinical data, an activity based costing system, transparency, and accountability reporting are fundamental building blocks in the performance improvement process. For example, Medicare is raising the bar on quality and outcomes, essentially requiring more from providers while paying less. Finally they concluded that continuous organizational improvement processes need steady and consistent commitment to measure clinical and operational goals.

DISCUSSION

The growth of literature in the field of service quality seems to have developed sequentially, providing a continuous updation and learning from the finding / observations of predecessors and outcomes.

INSTRUMENT USED IN THE MODELS

There are researchers use SERVQUAL (Rohini and Mahadevappa, 2006; Shabbir et.al 2010) or modified SERVQUAL (Reidenbach and Smallwood, 1990, Kara et.al 2005, Zaim et.al 2010) instrument in healthcare setting. Carman, 1990 suggested that researchers should work with the original ten dimensions, rather than adopt the revised five-factor Parasuraman et.al (1998) model.

Majority of researchers goes beyond SERVQUAL, as they believe SERVQUAL is not a generic model for all industries (Ramsaran-Fowder, 2008). Haywood-Farmer and Stuart (1998) suggested that SERVQUAL was inappropriate for measuring professional service quality since it excluded "core service", "service customization" and "knowledge of the professional" dimensions. Apart from that, two administrators of the instrument cause boredom and confusion (Carman 1990, Buttle 1996). There is little evidence that customers assess service quality in terms of P-E gaps. Added to that SERVQUAL focuses on the process of service delivery, not the outcomes of the service encounter (Mangold and Babakus 1991, Buttle 1996)

These studies show that SERVQUAL does not cover all healthcare services dimensions that are important to patients. As health service is different from other service it has its own special dimensions. Because the whole focus of healthcare industry is patient's well-being (both physical and mental). Patients are usually in a physical or psychological discomfort when they consume health services (Padma et.al, 2009).

To overcome these limitations several authors developed their own framework to conceptualize and measure service quality in hospital services. In Indian context, there is a dearth of an independent model of service quality as almost all the existing studies applied SERVQUAL framework, except that of Duggirala et al, 2008; Padma et.al, 2009. They developed an instrument for measuring service quality from the patients' along with attendants and providers' perspectives.

SATISFACTION AND OUTCOME

Beyond these critiques service quality is one of a number of apparently interrelated constructs whose precise alignment has yet to be explored in terms of relationship between service quality, customer satisfaction, behavioral intention, purchase behavior, market share, word-of-mouth and customer retention (Buttle, 1996). Few researchers tried the above concepts in their healthcare service quality models (Reidenbach, Smallwood, 1990; Kara et.al, 2005; Zineldin, 2006; Dagger et.al, 2007; Padma et.al, 2009; Zaim et.al, 2010; Shabbir et.al, 2010).

Although the quality of products may some times be adequately measured by attributes, objective performance indicators, or adherence to manufacturing specifications, but the quality of service is adequately measured only by customer perceptions. This implies that customer satisfaction should receive considerable attention in service research. In line with, many researchers developed a model of perceived service quality and patient satisfaction. Cronin and Taylor (1992, p.65) observed that service quality is an antecedent of customer satisfaction, and has a significant impact on purchase intention. Dagger et.al, 2007; Steinke, 2008 further examined and proved the relationship of service quality as antecedents and mediator in their model. It is observed that dimensions such as intangibles (like human touch) have greater impact on service quality than tangibles (Kara, 2005).

ANTECEDENTS OF SERVICE QUALITY

Cronin and Taylor (1992, p.65) pointed out that consumers don't always buy best quality service they might instead purchase on the basis of their assessment of value of service. He found that customers evaluate service quality by reference to multiple encounters. In this study, researchers developed models incorporating patients perception of service quality with attendants (Padma et.al, 2009), physicians, experts (Licata et.al, 1995), CEO's **(**Marley et.al, 2004**)**, nurses (Steinke, 2008). This gives different perspective of service quality assessment in healthcare settings.

OBSERVATION OF MODEL

From this review, it is clear that there does not seem to be well-accepted conceptual model and measurement of health service quality. Another issue form the review is identification of different types of customers such as internal and external like patients, physician specialist, professional like doctors and nurses, other employees, and attendants. Professional like doctors, nurses and other employees are internal customers who should be dedicated when they provide service. Unless internal customers are satisfied, it may be difficult to visualize good quality service for the external customers.

At the same time the role and commitment of top management in delivering quality service to its customer also important in growing competitive pressure and globalization of services (Seth and Deshmuhk, 2005).

On the basis of the above review a gap is identified in this study which includes different perspective of precedents of service quality and outcomes of service quality.

REPRESENTATIVE ARTICLES

Model No	*Year*	*Author Name*	*Model Category/ Instrument*	*Approach*	*Impact variable*	*Research Issue*
HCSQM-1	1990	Reidenbach, Sandifer-smallwood	Modified SERVQUAL	Empirical-inpatient s, outpatients & emergency room services	"Patient Confident"	Understand the relationship among patients perceptions & willingness to recommend others
HCSQM-2	1995	Licata, Mowen, Gowtam	Marketing Lens Model	Empirical- physician, specialists & patients	Medical competence & Hospital characteristics	Identify the key stimuli in medical channel in similar lens
HCSQM-3	2004	Marley, Collier, Goldstein	Casual Model	Empirical hospital management like director / vice president of quality / quality manager	Leadership, Clinical & process quality	Focus on clinical & technical medical care
HCSQM-4	2005	Kara, Lonial, Tarim, Zaim	Modified SERVQUAL (RATERC)	Empirical- inpatients	Attitude & Behavior	Tangible & intangible determinants of service quality
HCSQM-5	2006	Zineldin	5Qs Model	Empirical- inpatients	Infrastructure, Atmosphere, Interaction	Factors affecting patients perception on satisfaction
HCSQM-6	2006	Bellou, Than Opoulos	OCB Model	Empirical – Doctors & Nurses	Organizational identification & OBSE	OCB impact on service quality
HCSQM-7	2007	Dagger, Sweeney, Johnson	Conceptual Model using multidimensional hierarchical scale	Empirical - Qualitative	Interpersonal, Environmental, Technical, Administrative quality	service quality impact on satisfaction & behavioral intentions
HCSQM-8	2007	Scotti, Harmon, Behson & Messina	Conceptual model	Empirical- patients	HPWS	Chain of events from employee perception to customer satisfaction
HCSQM-9	2008	Priporus, Laspa, Kamenidou	Satisfaction Model	Empirical- patients	Educational status & medical insurance type	Assess quality and patients characteristics on patient perception
HCSQM-10	2008	Steinke	Modified Service Profit chain model	Empirical - Nurses	Service quality, customer satisfaction & customer engagement	Focus on predictors of service climate on service quality
HCSQM-11	2009	Padma.P, Rajendiran.C, Prakash Sai.L	Conceptual framework	Conceptual – patients & attendants		Measure service quality
HCSQM-12	2010	Zaim, Bayyurt, Zaim	Modified SERVQUAL – Carmen instrument - RATERC	Empirical- patients	Tangibility, reliability courtesy & empathy	Examined relationship between service quality & satisfaction
HCSQM-13	2010	Shabbir, Kaufmann, Shehzad	Modified SERVQUAL	Empirical- patients	Service quality, trust, word of mouth	Service element on satisfaction
HCSQM-14	2010	Clark, Savitz	Performance excellence model	Conceptual	6 dimensions	Cost impact on quality

CONCLUSION

Nowadays, the trend in healthcare is to treat the patient as a client, which affects many issues (Priporus, Laspa, Kamenidou, 2008). This study shows how perceptions and evaluation of healthcare service quality change over time. In summary, as found in this literature review of models, hospital service quality is a multidimensional phenomenon. It clearly indicates that the variation in dimensions is all about the behavior of patients before and after consumption of service. The customer's expectations towards a particular service are also changing with respect to factors like time, increase in the number of encounters with a particular service, competitive environment, etc. These demands for a continuous effort to learn, modify the existing concepts of service quality (Seth and Deshmuhk, 2005).

Few studies have examined the impact of human factor such as employee's perception of service quality on patient satisfaction. Few other studies investigate the impact of patient's perception of service quality on satisfaction. Rarely there are authors studied the management perception of service quality which impact on satisfaction and the reflection of retention of customers in terms of profitability. No published studies that have empirically verified the entire chain of effects from organizational practices to service quality to customer satisfaction and behavioral intention in a healthcare setting.

It is noted that the models have a focus on only one link (i.e provider perception or employees including professional and expert's perception or patients and attendants perception). Here the gap in these models indicates the perception of human factor in three dimensions to measure the outcome of service quality. On the other side the researchers have continuously pointed out the positive correlation of internal service quality with business performance and service quality delivered to the customer (including distribution, marketing and other support functions) (Seth and Deshmuhk, 2005). The study suggest that the forthcoming research model of service quality in hospital should have three perceptions like managements, employees, patients and attendants perception and put together can measure the outcome of service quality. As identified a gap in the literature, the future researchers can work on this gap to fill it up.

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