Patient experience quality: 
towards the development of a grounded conceptual model

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ABSTRACT
Faced with the requirement of improving the patient experience and with the imperative to understand experience requirements from the patient’s perspective, health services need research that makes an impact on their knowledge and practices of experience management. This exploratory research introduces a grounded model of patient experience quality in UK hospitals. Through a content analysis of stories written by cancer patients, we identify the determinants of experience quality and establish what determinants lead to positive and negative experiences. Preliminary results obtained from 11 stories are presented in this paper. The model will help managers to understand the determinants of positive and negative experiences and provide researchers with a foundation for the development of a measurement scale for patient experience quality.

Keywords: Health Management, Experience Quality, Patient Stories

Both General Practitioners (GPs) and hospitals, the two main providers of patient care associated with the UK National Health Service (NHS), have been repeatedly challenged to improve the quality of the service they provide to patients, as evidenced by the extensive literature addressing service quality and patient satisfaction published in the past 25 years. Recently, as the customer experience management paradigm has been adopted in many private business sectors (Pine and Gilmore 1999), the concept of patient experience quality has also come to the fore in health services. It is believed that offering a high quality experience to patients is essential to ensure the long-term sustainability of the UK public healthcare system. As a result, issues pertaining to the measurement and improvement of the patient experience have come under intense scrutiny from policymakers, health professionals, and independent associations. For instance, Dr Foster Hospital Guide uses patient experience as one of the two measures of hospital quality to identify excellent health institutions (Intelligence 2011); the “Patient Experience: Quality Standard and Beyond” conference takes place in September 2012 in London; the Department of Health of Northern-Ireland has published a comprehensive report entitled “Improving the Patient and Client Experience”; and several websites now encourage patients to provide written feedback about their experience with health services. This evidence suggests that understanding and managing the patient experience is increasingly important for all the stakeholders of the UK healthcare system.

1 http://www.healthcareconferencesuk.co.uk/patient-experience
2 http://www.dhsspsni.gov.uk/improving_the_patient_and_client_experience.pdf
3 www.patientopinion.org.uk and NHS Choices at www.nhs.uk
In addition, a second trend in healthcare concerns the new role of patients in participating in the design and improvement of the service provision system. Until recently the dimensions of service quality were entirely determined by the NHS “based solely on available resources without taking into consideration patients’ needs” (Gruber and Frugone 2011). Patients are given limited attention when designing the mechanisms of health service provision in most countries (Guven-Uslu 2005). However, Sargeant (2009) states that recent years have seen the emergence of consumer-driven policy changes. Raleigh et al. (2012) observe that patient-centric approaches to defining and evaluating quality have become a reality. For instance, the NHS Institute for Innovation and Improvement has been pivotal in the implementation of ‘the Experience Based Design (EBD) approach’ in the UK. EBD is a user focused design process which involves patients in the design and improvement of the healthcare experience by understanding the care journey as well as the emotional journey patients go through (Improvement 2009). This approach is a move from “redesigning the system around the patient, to co-designing services with the patient (Bate and Robert 2007). This trend closely follows the new models of co-production and value co-creation proposed in the literature and observed across a variety of business sectors (Vargo and Lusch 2008). It is clear that an organisation’s capability to design the service system for experience relies, at least partly, on its ability to understand the experience requirements and behaviours of the customer (Ponsignon and Maull 2012b).

The importance of offering a quality experience to patients and of considering experience quality from the patient perspective create new challenges for health practitioners and offers research opportunities to academics. Thus, this exploratory research aims to introduce a conceptual model of patient experience quality. The model will help managers and policy-makers to understand the determinants of positive and negative experiences and provide researchers with a foundation for the development of a measurement scale for patient experience quality. This research intends to fill four important theoretical and methodological gaps. First, the numerous service quality models that have been tested in a healthcare context represent valuable contributions. However, a framework focused on patient experience quality, which is seen as a broader and more holistic construct than service quality (Lemke, Clark and Wilson 2011; Payne, Storbacka and Frow 2008), is missing. Second, a customer experience quality model has been recently proposed in the literature (Lemke et al. 2011).
Since theory development is at an early stage in this nascent area, this model is highly generic and context-agnostic. As it has been suggested that experience quality and experience management are contextual (Zomerdijk and Voss 2010; Stuart and Tax 2004), validation and extension of this model in the healthcare context will advance theory. Third, this study is the first to provide a patient-centric conceptualisation of experience quality. Previous research has shown that customers construe experience quality (Lemke et al. 2011). It is necessary to explore the patient’s cognitive and emotional response to their experience to gain an in-depth insight into the determinants of experience quality. Fourth, no academic study has used written stories to provide an understanding of experience quality issues. Most studies have relied on surveys and on the Critical Incidence Technique (CIT) where an interviewer generally asks respondents to recall and describe their service experience. In this research, we analyse independently-created data, i.e. stories written by patients about their experience with hospital services shortly after they have experienced it. This approach avoids two major drawbacks of CIT, “recaller bias” and “interviewer bias” (Gremler 2004). Therefore, an empirically-derived model of patient experience quality can make a relevant and meaningful contribution to the existing literature as well as a direct impact on the knowledge and practice of experience management in health services.

The remainder of the paper is organised into four sections. Section two reviews the existing literature on service quality and experience quality in healthcare as well as in the wider service sector. Important gaps are identified and two research questions are proposed. Section three describes the methodology adopted in this research to develop an empirically-grounded model of patient experience quality. Section four outlines our preliminary results of the research and describes the next steps.

**LITERATURE REVIEW**

Service quality research has addressed all economic sectors. Service quality is traditionally defined as the customer’s evaluation of service encounters. The evaluation results from a comparison of consumer expectations with actual service delivery performance on a number of dimensions (Lewis 1989). The Servqual model provides the dominant approach to the measurement of service quality (Lovelock and Gummesson 2004). As shown in Table 1, Servqual has five dimensions which can be grouped into technical quality and functional quality (Gronroos 1984). Technical quality refers to the
outcome of service delivery (i.e. what has been received by the customer). Functional quality relates to the process of delivery (i.e. how the customer receives the outcome). The model has been used in many studies across a range of sectors, including healthcare (see Table 1), although its application has generated mixed results (Duggirala, Rajendran and Anantharaman 2008). Another popular model of service quality considers that customers evaluate three dimensions of the service encounter (i.e. functional quality, technical quality and environment) (Rust and Oliver 1994).

Voss et al. (2008) have criticised the literature for focusing on individual, isolated and static encounters, whereas an experience is a dynamic, cumulative journey. An experience occurs when a customer and a provider interact. Customer experiences are multi-faceted and refer to the customer’s perceptions of their interactions with any tangible or intangible contextual element (e.g. staff, facilities) created by the service provider (Pullman and Gross 2004). Payne et al. (2008) put forward a broader, holistic perspective on experience encompassing all of the direct and indirect encounters between the firm and the customer before, during, and after service delivery. The whole customer journey includes the “communication encounter”, the “usage encounter”, as well as the “service encounter”. Similarly, Neslin et al. (2006) and Verhoef et al. (2009) offer a comprehensive customer-centric view of experience comprising the customer’s needs recognition, information search, purchase, consumption and after sales service. Recently, Lemke et al. (2011) proposed the concept of customer experience quality, defined as “a perceived judgement about the excellence or superiority of the customer experience”. They show that customers perceive experience quality and not just service quality. Their work supports the holistic conceptualisation of experience and the view that customers assess their experience in a holistic manner. Accordingly, experience quality is a broader construct than service quality. Their conceptual model of experience quality identifies 15 dimensions grouped into the three categories of communication encounter, service encounter, and usage encounter (see Table 1). The construct contrasts with the definition and measurement of service quality, which focus on the customer’s evaluation of service encounters and does not tap into the dimensions of communication encounter and usage encounter. As argued above, the customer journey may precede the service encounter and continue after it, and empirical research that takes a holistic perspective on healthcare experience is needed. This is consistent with the holistic approach recently
taken by the field of service design (Patrício, Fisk, Falcão e Cunha and Constantine 2011) as well as with Gabbott and Hogg (1996) who note that understanding the healthcare experience requires a holistic approach.

Moreover, there is a clear need to develop valid and reliable measurement scales of experience quality in different contexts (Verhoef et al., 2009). Lemke et al.’s model (2011) was developed based on 40 interviews of B2C and B2B customers using the repertory grid technique. Their generic experience quality scale is made up of 15 dimensions (see Table 1) but they also note that “the importance of context in our data might suggest some significant variation in such a scale by context. As a minimum, the relative importance of the experience categories might be found to vary according to context”. The role of context is central in the service-dominant logic (Vargo and Lusch 2008) which emphasises the primacy of “value-in-use” and “value-in-context” to highlight that customers perceive, construct, and assess their use and consumption experiences subjectively and individually (Helkula 2012). A contingency perspective on customer experience management has become the dominant view in the service design literature. While the experience concept applies to all organisations (i.e. a service or a product always comes with an experience) (Pine and Gilmore 1999), experience design is not universal and design principles differ across contexts (Stuart and Tax 2004). For instance, experience-centric organisations and traditional organisations outside the entertainment sector use different design practices (Zomerdijk and Voss 2010; Ponsignon and Maull 2012a). This suggests that the experience quality construct is context-specific. The need to develop contextual measurement instruments in healthcare was pointed out previously (Gabbott and Hogg 1996).

Based on the literature (Gruber and Frugone 2011; Berry and Bendapudi 2007), we identify four distinctive characteristics that, taken together, make the healthcare experience unique. First, healthcare services are inseparable, customer-processing contexts (i.e. service production and consumption is simultaneous). The patient is physically present and directly involved in the process of service provision (Lovelock and Gummesson 2004). Second, co-production is usually high with numerous and lengthy interactions between patient and staff. Co-production means that the patient provides information inputs about their state or condition to help staff to perform medical activities, which shows the importance of trust between the physician and the patient. An implication of
inseparability and co-production is that patients are likely to introduce variability and uncertainty in service delivery (Frei 2007). Third, the quality of the medical act performed by the physician (i.e. a technical expert) is hard for patients (i.e. non-experts) to evaluate even after the act is performed (Taylor and Cronin 1994). Fourth, healthcare often is a service that patients need but do not desire. Patients are likely to engage in the process reluctantly. These characteristics suggest that functional aspects of quality may be more important than technical aspects for healthcare patients (Wisniewski and Wisniewski 2005). The contextuality of experience quality and the idiosyncrasies of the healthcare context suggest that an exploration of patient experience quality is required to advance theory.

Since experiences are subjective and construed individually, experience quality refers to a judgement about the superiority of the experience as perceived by the customer (Lemke et al., 2011). A conceptualisation of the determinants of healthcare experience must be developed from the perspective of the patient. A patient-focused approach ensures that quality attributes emerge only if they are important in the patient’s construction and perception. A clear understanding of customer-perceived quality is necessary to design the service delivery system for experience and improve it accordingly (Johnston and Kong 2011). This is important given that studies suggest the existence of a mismatch between customers and providers regarding service quality expectations. Bitner et al. (2000) state that providers are often unaware of customers’ expectations regarding technology infusion in the service encounter. O’Connor et al. (2000) find that healthcare organisations often focus on the tangible aspects of service provision (e.g. quality of beds, technical equipment) whilst patients lay more value on service reliability as well as on the responsiveness and empathy of staff. Similarly, Fottler et al. (2006) suggest that staff and patients do not perceive the quality of service delivery in the same way. Whilst survey research has been the dominant methodology, they point out that survey results do not always enable the identification of the quality attributes that truly matter to patients. Deductive research may miss out on the dimensions of experience quality that customers see as important. Recently, the health literature has moved towards a patient orientation to understand service quality issues. Gruber and Frugone (2011) interview 58 respondents to identify the characteristics of GPs that patients value most in medical service recovery encounters. Andaleeb
(2001) conducts a series of exploratory interviews with 20 patients to surface the important dimensions of hospital service quality. Gabbott and Hogg (1996) isolated the determinants of patient evaluations of GPs based on 120 interviews. In the same vein, we propose that a conceptualisation of experience quality in healthcare must be developed from the patient perspective to account for the richness and importance of contextual issues. This would allow the critical determinants of experience quality to emerge from patient data. Our suggestion is consistent with Verhoef et al. (2009) who argue that “research should focus on a richer conceptualisation of the customer experience”. It is therefore necessary to explore the patient’s cognitive and emotional response to their experience with the health service provider in order to gain an in-depth insight into the determinants of experience quality. This brief review of the literature has highlighted the need for exploratory research into experience quality from the patient perspective in healthcare. To address this need, we formulate the following research question:

**RQ1:** What are the determinants of patient experience quality in the healthcare context?

Furthermore, previous literature has highlighted that the determinants of service quality that lead to positive customer evaluations are not necessarily the same as the determinants that lead to negative customer evaluations. Johnston (1995) found that the causes of satisfaction and dissatisfaction differ in the retail banking context. Attentiveness, responsiveness, care and friendliness are associated with customer satisfaction, whereas integrity, reliability, responsiveness, availability, and functionality are a source of dissatisfaction. A number of studies have compared customer stories about satisfactory and unsatisfactory service incidents. Friman and Edvardsson (2003) analyse 236 complaints and 69 compliments collected by a public transport company. They find that service reliability causes more complaints than compliments, and that customer’s treatment by employees generates more compliments. Similarly, Gabbott and Hogg (1996) have investigated this issue in the primary healthcare context. Using CIT, they find that the determinants of patient satisfaction can be partly distinguished according to their association with either positive or negative patient outcomes. This suggests the importance of comparing the determinants of a positive patient experience with the determinants of a negative experience. Thus, we propose the following research question:
RQ2: Among the identified determinants of patient experience quality, which ones lead to positive experience evaluations and which ones lead to negative experience evaluations?

RESEARCH METHODS

A major goal of this research is to introduce a grounded model of patient experience quality in healthcare. The research methods follow the recommended guidelines for theory development in management research. First, we collected the empirical material that consists of selected cancer patient stories describing their experiences with healthcare services, which can be considered “grounded stories” (Glaser and Strauss 1967). Second, we performed a content analysis of these stories using CIT procedures to identify to the dimensions of experience quality as described by patients (Gremler 2004).

Data Collection

Customer feedback (e.g. complaints and compliments) is a commonly-used data source to evaluate the performance of a provider. Since the advent of the internet, online written feedback has become an important means for customers to voice their opinion about the quality of their experience. Established in 2005, Patient Opinion⁴ is the leading independent non-profit feedback platform for health services in the UK. Patients give feedback about their experiences of UK health services on the website by responding to two simple, open-ended questions: ‘What is your story about?’ and ‘What happened?’ Over 150 healthcare organisations (i.e. hospitals and GP practices) subscribe to Patient Opinion, and over 40,000 patient stories have been published since 2005. The research team was given full access to all published stories.

The empirical material provides an important opportunity to identify the determinants of experience quality from the patient perspective. Owing to the open-ended nature of the questions, stories are likely to reflect a variety of aspects of patient the experience. Analysing a large number of stories maximises the chances to provide a holistic account of patient experiences. Moreover, since the data was created in a non-obtrusive way and independently from the research, patients are not prompted for pre-determined experience quality dimensions. Patients freely and willingly decide to provide information about their experiences and to communicate their perceptions. Thus, the

⁴ www.patientopinion.org.uk
important determinants of patient experience quality emerge from the data as they appear in the patient’s construction. Finally, healthcare is well suited to the use of content analysis of stories. Burns et al. (2000) argue that contexts characterised by high customer involvement generate information-laden experiences. It is therefore likely that patients provide rich and deep accounts of their experiences allowing for the generation of meaningful insights into the elements of experience quality.

Content analysis is a scientific, objective, quantitative, systematic, and generalisable description of communication content (Kassarjian 1977). Content analysis of customer written feedback has been successfully applied to the study of online service quality dimensions in the financial services context (Zhilin and Xiang 2004). The nature of questions (i.e. “what has happened?”) makes us see patient stories as “factual reports of events” (Hopkinson and Hogarth-Scott 2001). Whilst stories may not be accurate and objective, we consider this not to be an issue. Indeed, experiences are individual and subjective by nature, and this is precisely what this research is interested in. Content analysis is often used to analyse customer stories collected as part of the CIT approach (Roos 2002; Gremler 2004). CIT usually relies on a qualitative interview procedure to gather information about important (i.e. “critical”) incidents from the perspective of the respondent. Gremler (2004, p.66) observes that “in service research, the approach generally asks respondents to tell a story about an experience they have had”. CIT has been widely used to identify dimensions of customer behaviour in service delivery in a variety of contexts including healthcare (Gabbott and Hogg 1996). Relying on an existing database of written stories has three advantages over traditional interview-based CIT. First, it minimises “recaller bias”, the risk that the respondent does not remember well the experience or has forgotten important aspects of it. This is so because patients are likely to write their stories shortly after they have experienced the service. Second, it avoids “interviewer bias”, the risk that the respondent’s recollection of events and story are influenced by the interviewer. Third, CIT focuses on specific individual encounters (“incidents”) such as customer switching behaviour (Keaveney 1995), satisfactory encounters (Bitner, Booms and Tetreault 1990), or satisfaction with technology-based encounters (Bitner et al. 2000), as opposed to the entire customer experience.
Among the variety of stories available, we decided to focus on stories of patients suffering from cancer for three reasons. First, using cancer-related stories provides a proxy for patient experiences in a hospital context. Second, focusing on a major illness with similar treatment aims to keep the context constant. Third, cancer patients are likely to make multiple visits to the hospital which maximises the chances to gain insights into the multiple dimensions of experience quality, thus fitting the requirement for a holistic perspective on customer experience.

We employed the following procedure to collect cancer-related patient stories that were suitable to meet the research objective. First, we identified the totality of stories dealing with experiences of cancer patient published on Patient Opinion. The search located 820 stories which we downloaded and exported into a Word file. Second, we selected a sample of stories from the total population through applying three criteria. To be included the final sample, each story was required (1) to include clear perceptions of positive or negative experiences, (2) to describe a complete experience (i.e. a series of encounters with clear starting and ending points), and (3) to have full and precise details about the experience to allow for the identification and classification of quality determinants. Third, the selected stories were copied and pasted into a separate Word file, numbered from 1 to 200, and imported into the NVivo qualitative data analysis software, ready for coding.

Data Analysis

**Unit of analysis.** Because content analysis can focus on measuring anything ranging from a word to an entire story, an important step is to determine the appropriate unit of analysis (Kassarjian 1977). A patient story contains feedback about an experience with the health services. It includes the patient’s judgement and assessment of a series of interactions with health services. Within this written account, we capture each discrete dimension of experience quality clearly mentioned in the story. The unit of analysis is a discrete determinant of experience quality. For example, consider a story in which an employee ignored a patient and was rude. That story would be coded as containing two quality determinants ("ignored" and "rude") (Keaveney 1995). Synonyms were coded as a single determinant.

**Category development and reliability.** Data analysis followed the CIT procedures shown in Figure 1. At the time of writing, the three researchers had collaborated in analysing the first 11 stories to inductively develop a set of discrete coding themes representing quality determinants as well as
their association with a positive or negative experience outcome. The average story length was 187 words.

**FINDINGS AND NEXT STEPS**

The preliminary results of the content analysis are reported in Table 2. We discuss these findings in relation to our two research questions. First, the content analysis identified 36 discrete determinants of patient experience quality. The results embrace most of the quality dimensions proposed by previous studies. Specifically, having kind, caring, helpful, professional, accessible and cheerful staff emerges as key drivers of experience quality. The importance of informing the patient and explaining the medical procedures was also emphasised by patients, as did the quality and quantity of the food provided. Compared with previous studies of service quality in hospitals (see Table 1), this study also identified several new dimensions that pertain to experience quality. For instance, the willingness of staff to accommodate special requests was perceived by patients as driver of a positive experience. "I was even granted my request on the day after surgery to just stay in bed and rest, even though the surgeon had wanted me to walk a short length of the corridor outside the bay. It's this sort of give and take that makes all the difference, I was allowed the rest I needed, at the time I felt I needed it the most” (Story 3). Some patients also wrote that the communication facilities (e.g. Wi-Fi, mobile signal TV) available in the rooms were not satisfactory. An ability to communicating with and receive information from the outside world is important for patients suffering from acute and long term conditions. “Wi-Fi availability and mobile reception could be improved; people want to hear from you to know you're ok” (Story 2). Interestingly, not providing these facilities leads to negative experience perceptions, whilst we did not find evidence that providing them would lead to positive patient perceptions. Another interesting finding relates to the importance for returning patients to be able to park for free: “car parking should be free for regular visitors to the hospital” (Story 1). Car park problems and accessibility were mentioned in three further stories. Finally, the role of fellow patients (“camaraderie”, “quiet at night”, “too big a ward”) in shaping positive and negative experience perceptions is also noteworthy. Furthermore, comparing the dimensions leading to positive experiences with the ones leading to negative experiences, it must first be noted that the vast majority of identified dimensions relates to positive experiences (41 versus 14). Positive experiences are much
more frequently cited than negative experiences. In addition, no clear dual factors leading to both positive and negative experiences were identified.

The development of the conceptual model is the first phase of a broader research programme aimed at advancing scholarly understanding and theory of the experience quality concept in healthcare and at providing the healthcare sector with practical tools to evaluate and improve the quality of the patient experience. Phase 2 will build on the conceptual framework to further develop the patient experience quality construct and empirically validate the associated measurement scales using the grounded model as a foundation. The new measurement scales will reflect a multi-dimensional construct, called patient experience quality. The scales will constitute a valuable tool for conducting survey research in both academia and practice (Lemke, 2011). They will provide a robust conceptualisation of the determinants of experience quality and useful measures that add to the experience management theory base. Scale development and validation will be achieved through employing a rigorous construct procedure advocated in seminal articles (Churchill, 1979; Hensley, 1999; Menor and Roth, 2007). The process includes purifying and pre-testing items using item-sorting techniques and feedback from patients and practitioners to generate a set of reliable and valid measurement items, designing and pilot-testing a survey questionnaire reflecting these items, sending the survey instrument to a large sample representative of the patient population and performing a series of confirmatory analyses to test the reliability and validity of the scale, and refining the measurement items and the scale through exploratory factor analysis. Additionally, in Phase 2, we will identify the drivers and consequences of a superior patient experience through investigating the relationships between experience quality dimensions and patient satisfaction. The survey will examine how patient perceptions of experience quality affect patient satisfaction. Finally, Phase 3 will aim to transform and build the capability of health care organisations and the UK National Health Service through the development, piloting, and implementation of an experience quality fitness test using action research. The fitness test will be derived from the experience quality measurement scales and will provide a useful diagnostic and benchmarking tool for health organisations seeking to assess, improve, and monitor their ability to offer a patient experience of superior quality.
REFERENCES


Table 1: selected contributions relevant to patient experience quality in healthcare

<table>
<thead>
<tr>
<th>Authors</th>
<th>Focus / Construct</th>
<th>Quality Dimensions</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parasuraman, Zeithaml and Berry (1985;1988)</td>
<td>Servqual – generic service quality construct</td>
<td>Reliability, Assurance, Empathy, Tangibles, Responsiveness</td>
<td>Focus groups and large scale surveys</td>
</tr>
<tr>
<td>Gronroos (1984)</td>
<td>Service quality – the Nordic model</td>
<td>Functional quality (the “how”), technical quality (the “what”), image</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Lemke et al. (2011)</td>
<td>Experience quality – generic experience quality constructs (B2B and B2C)</td>
<td>Communication, Relationship with company, variety/choice, value for money, accessibility, value for time, caring (attitude and procedures), reliability, atmosphere, application of knowledge, personalisation, network quality, relationship with other customers, social impact</td>
<td>Interviews of 40 B2C and B2B respondents using the repertory grid technique</td>
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<tr>
<td>Fottler et al. (2006)</td>
<td>Patient perceptions of customer service in hospitals</td>
<td>Friendliness, room/bed, environment, concierge, responsiveness, food service, surgery team, caring/empathy, pain management</td>
<td>Patient focus groups (35 patients)</td>
</tr>
<tr>
<td>Woodside, Frey and Daly (1989)</td>
<td>Evaluation of overnight stay in hospitals</td>
<td>Admission, nursing care, meals, housekeeping, technical services, discharge</td>
<td>Exploratory interviews of hospital service managers followed by a telephone survey of 20 recent overnight patients</td>
</tr>
<tr>
<td>Gabbott and Hogg (1996)</td>
<td>Determinants of patient evaluations of service provided by GP</td>
<td>Organisational factors: appointments, waiting time, continuity of care, home visits, practice facilities, administration Personal factors: GP responses to illness, time with GP, rapport with GP, diagnosis/information, practice staff</td>
<td>Critical incident technique. Interviews of 120 individuals registered with GP practice</td>
</tr>
<tr>
<td>Duggirala et al. (2008)</td>
<td>Total service quality in healthcare</td>
<td>Infrastructure, personnel, process of care, administrative procedures, safety indicators, overall experience of medical care received, social responsibility</td>
<td>Survey – 100 respondents</td>
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<tr>
<td>Andaleeb (2001)</td>
<td>Service quality in hospitals in a developing country</td>
<td>Responsiveness, assurance, communication, discipline, baksheesh</td>
<td>Exploratory interviews of 20 patients followed by survey of 216 patients</td>
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<tr>
<td>Gruber and Frugone (2011)</td>
<td>Service quality of GP in recovery encounter</td>
<td>Competence, Friendliness, Empathy</td>
<td>Interviews of 38 patients</td>
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<td>Vanniarajan and Arun (2010)</td>
<td>Service quality in health care centres</td>
<td>Physician behaviour, supportive staff, atmospherics, operational performance</td>
<td>Survey of 200 patients</td>
</tr>
<tr>
<td>Taylor and Cronin (1994)</td>
<td>Service quality in health services</td>
<td>Dimensions of Servqual: tangibles, reliability, responsiveness, assurance, empathy</td>
<td>Survey of 116 recent hospital patients</td>
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Table 2: Frequencies of experience quality determinants

<table>
<thead>
<tr>
<th>Item</th>
<th>Positive Experience</th>
<th>Negative Experience</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Accessibility of staff</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Accommodate request</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Attentiveness</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Camaraderie</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Car Parking</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Car Parking Costs</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Caring Staff</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Cheerful Staff</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Courteous Staff</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Diagnostic Delay</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>Explanation</td>
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<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Food Quality</td>
<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>Food Quantity</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Friendly Staff</td>
<td>2</td>
<td>0</td>
<td>2</td>
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<td>Helpful Staff</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Infection</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Informative (patients)</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Informative (relatives)</td>
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<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Internal Communication</td>
<td>0</td>
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<td>1</td>
</tr>
<tr>
<td>Kind Staff</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Noisy Staff</td>
<td>0</td>
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<tr>
<td>Pain Control</td>
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<td>0</td>
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</tr>
<tr>
<td>Polite Staff</td>
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<td>0</td>
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</tr>
<tr>
<td>Professionalism</td>
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<tr>
<td>Punctuality of appointments</td>
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<td>Quiet at Night</td>
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<tr>
<td>Speed of Treatment</td>
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<tr>
<td>Spiritual Care</td>
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<tr>
<td>Sympathetic</td>
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<tr>
<td>Time to leave hospital</td>
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<tr>
<td>TV/Radio Availability</td>
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</tr>
<tr>
<td>Understanding</td>
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<tr>
<td>Ward Environment</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wi-Fi and Mobile Reception</td>
<td>0</td>
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</tr>
<tr>
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<td><strong>14</strong></td>
<td><strong>55</strong></td>
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Figure 1: Coding, sorting, and classification process

Classification Sample (Stories 1-150)

- Judges A, B & C code stories 1-50
- Judges A, B & C sort and classify
- Judges A & B code stories 50-150 independently
- A & B compare decisions and resolve disagreements
- A & B sort and classify
- Interjudge reliability >80%?
  - No
  - Yes: Judge C sorts and classifies
  - No: Interjudge reliability >80%?
    - No
    - Yes: Analysis ends

Verification Sample (Stories 151-200)

- Judges A & B code stories 151-200
- A & B compare decisions and resolve disagreements
- A & B sort and classify
- New Categories?
  - Yes
  - No: Interjudge reliability >80%?
    - No
    - Yes: New Categories?
      - Yes
      - No: Analysis ends