

# **The Co-Creation of Public Healthcare Service Quality: A Triadic Model.**

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## **Abstract**

This preliminary qualitative triadic study has found that perceptions of service quality were influenced by three primary dimensions: Client Orientation; Client Involvement; and Service Participant Empowerment. On the basis of this exploratory research and a thorough literature review, a conceptual model for the triadic co-creation of perceived service quality of a public healthcare service is proposed. The independent variables in the model include: Client Orientation with the sub-dimensions Commitment, Benefit, Priorities and Improvement; Client Involvement with the sub-dimensions Confidence, Trust, Engagement, and Information Exchange; and Empowerment with the sub-dimensions Knowledge, Initiative, and Choice.

## **Background**

The unique nature of a healthcare service has been well documented; it requires a significant contribution from the client, the service provider and the service manager. Berry and Bendapudi (2007) stressed that the characteristics of a healthcare service make it entirely different to any other service, a service where increased supply increases demand and one where consumers do not know its actual cost. Healthcare services are provided by both the public and private sectors and there are considerable differences between these sectors which warrant further separation in the research agenda. The public healthcare sector must focus on making services equitably available to all within the available budget, and therefore access and cost containment are paramount; the private healthcare sector is driven by its need for business viability and economic success (Conway & Willcocks, 1997). Further, the traditional concept of healthcare relationships is based on three primary assumptions: the professional is the expert; the system is the gatekeeper for socially supported services; and the ideal patient is compliant and self-reliant (Thorne, Ternulf Nyhlin, & Paterson, 2000).

If a service encounter is based on the interactive process between the service recipient and the service provider (Grönroos, 2001), then the current measurement and assessment of perceived healthcare service quality, with its focus on the service recipient, has largely ignored the co-operative and interactive process that must occur in the creation of the service. A key health challenge facing Australia, and other western nations, is that of an ageing population; and the Australian government has developed a *Transition Care Program* to assist older people to remain in the community following a hospital stay, supported by State co-financed and delivered community-based aged healthcare services in the person's home. A preliminary qualitative study was undertaken aimed at investigating the factors influencing the co-creation of quality of a public community-based aged healthcare service through the three key levels of service participants: manager; direct service provider; and client.

## **Client Orientation and Service Quality**

Historically the definition and management of healthcare quality has been the responsibility of the service provider, and health services have been largely introspective in defining and assessing quality, focusing mainly on the provider components. The success of high-contact service providers is a direct result of their flexibility, their tolerance for ambiguity, their

ability to monitor and change their behaviour during the service encounter and their empathy for the client (Heskett, 1986) which can be best achieved through customer orientation. A customer orientation enables the organisation to create superior value for its customers because their needs are better understood (Narver & Slater, 1990). Brady and Cronin (2001) argue that customer orientation influences the consumer's evaluation of organisational performance and ultimately their outcome behaviours. They used the 12 positively worded items of the Selling Orientation-Customer Orientation Scale (Saxe & Barton, 1982) and identified that perceptions of being customer orientated were directly related to customer evaluations of service performance, and indirectly related to service quality and outcome behaviours, as well as customer satisfaction and service value. They concluded that the interactions with customers largely determine consumers' perceptions of their service experience. In the literature, customer orientation, despite its identified importance, has largely been studied as a component of the market orientation construct Hajjatt (2002). Daniel and Darby (1997) developed a healthcare specific Customer Orientation Scale, and on the basis of their research findings proposed that customer orientation had two dimensions: information exchange and professional relationship. Hajjatt (2002) argued the need for research into customer orientation, and on the basis of their research developed a Customer Orientation Scale (CUSTOR). They reported two customer related factors: intimacy and welfare; and two organisation related factors: transparency and continuous improvement. This literature offers four common sub-dimensions for the proposed model that can be identified in these two validated scales: Commitment; Benefit; Priorities; and Improvement.

### **Client Involvement and Service Quality**

Research indicates that individuals perceive greater benefits from service providers requiring high levels of customer involvement (Kinard & Capella, 2006) and point out that in order to customise a service, the client must be willing to share specific information with the service provider, which in turn allows the provider to understand the customer and their needs. They measured customer involvement using a modified version of Zaichkowsky's Personal Involvement Inventory (1994) and found that consumers perceive greater benefits when engaged in a relationship with a high contact customised service. Further, consumer confidence is the primary relational benefit influencing relational response behaviours. In the health services sector, the terms "involvement" and "participation" are used interchangeably (Cahill, 1998) and much of the work reported is on patient participation. Lammers and Happell (2003) highlight that there is a clear need to develop mechanisms to support consumer involvement and to influence the attitudes of health professionals to more highly value a client's perspective. Both Happell et al (2002) and Kent and Read (1998) have separately developed a Consumer Participation Questionnaire to measure client involvement. Arnetz et al (2008) highlight that patient involvement is affected by both patient and provider behaviour and opinions concerning patient involvement, as well as factors in the service delivery environment. Eldh et al (2006) found that conditions for patient participation included being informed based on individual needs; being regarded as an individual and treated with respect; having knowledge; making decisions based on one's knowledge and needs; and participating in planning one's care. Entwistle et al (2008) established that involvement has a relational dimension as it is a result of subjective perceptions of engagement and affinity, as well as having action and information exchange dimensions. In addition, Clark and Clark (2007) point out that long term service relationships are more highly dependent in their nature, and that the clients will adjust their expectations and therefore their assessment of the quality of the service they receive, due to their relationship

experience. From this literature, four client sub-dimensions are proposed: Confidence; Trust; Engagement; and Information Exchange, and these are applied in the model.

### **Client and Provider Empowerment**

The services literature has focused on empowerment at the service provider level, involving both the employee and the organisational context. This research has shown that employee empowerment is a component of service orientation (Kandampully & Solnet, 2005) and also that there is a link between service orientation and customer perceptions of service quality (Schneider, White, & Paul, 1998). Further, there is a wealth of health sector literature that focuses on patient empowerment, largely located in the mental health and disabilities area. Empowerment is identified as a motivational construct that impacts on outcomes; and a number of measurement scales exist, such as the Klakovich Reciprocal Empowerment Scale (Baker et al, 2007). A systematic review of this literature by Loukanova et al (2007) identified empowerment as an ongoing process that not only relates to patient skills but also to factors relating to the healthcare system. They defined empowerment as a continuous partnership which enabled patients to become more responsible for and involved in their treatment and healthcare. They proposed that patient knowledge, health literacy, initiative and service access were empowerment antecedents; supported by information sharing, communication, choice, and shared decision making; and these impact on health status, satisfaction, self-efficacy and adherence. However patient empowerment cannot occur without the service climate supporting empowerment, and Crane-Ross et al (2006) highlight that service empowerment is dependent on the collaborative relationship between the service provider and the client. The literature provides three service participant sub-dimensions for the proposed model: Knowledge; Initiative; and Choice.

### **Perceived Service Quality**

Over the past few decades, much work has been undertaken to evaluate the consumer's perception of service quality, and a number of service models have been developed, with the gap model (Parasuraman, Zeithaml, & Berry, 1985) and its accompanying SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988) having offered significant advances. More recently, Brady and Cronin (2001) advanced the multidimensional hierarchical conceptualisation offered by Dabholkar et al (1996) by combining that model with the three factor model of Rust and Oliver, and proposed a hierarchical multidimensional model of service quality. Based on this work, Dagger et al (2007) have proposed service quality as a multidimensional, higher order construct, with four overarching dimensions (interpersonal quality, technical quality, environment quality and administrative quality) and nine sub-dimensions. They suggest that consumers assess service quality at a global level, a dimensional level and at a sub-dimensional level, with each level influencing perceptions at the level above. From their work with private oncology patients, Dagger et al (2007) have shown that their model reflects the private patient's service quality perceptions, and they have developed and tested a scale for measuring perceived private healthcare service quality. This work has offered significant advances in measuring the patient's perceived service quality of a privately provided health service, but as a non-interactive phenomenon. As a health service is co-created then the service quality perceptions of the service manager and the direct service provider are also important. The Dagger et al (2007) determinants of interpersonal, technical and administrative quality are adopted for the proposed co-creation model, with the exclusion of the environment determinant because the service is provided in a client's place of residence.

## **Health Outcome Behavioural Intention**

Many public healthcare services are concerned with the patient's ongoing contribution to the service through their adoption and continuance of behavioural changes, as these directly impact on the long term service outcome. In the services marketing literature, behavioural intention has been largely studied as the customer's willingness to return and to recommend the service to others (Zeithaml, Berry, & Parasuraman, 1996). Service quality perceptions have also been shown to be positively linked to intentions to stay in a relationship (Venetis & Ghauri, 2004). Dagger et al (2006) concluded that overall service quality perceptions play an important role in determining behavioural intentions and the service outcomes achieved. The literature shows better health outcomes and significant reductions in the total cost of care when the quality of the service improve, with the dynamics of poor service often involving wasted effort, repetition, and misuse of skilled employees (Kenagy, Berwick, & Shore, 1999). Health behaviour theories explain how individuals adopt health supporting behaviours, and suggest that probably the best predictor of an individual's subsequent behaviour is their intention to change (Schwarzer, 1999). The Health Action Process Approach proposed by Schwarzer (1999) proffers a two dimensional model of behaviour change: preintentional motivation and postintention volition. Sniehotta et al (2005) and Schwarzer and Renner (2000) found that self-efficacy (a person's belief in their ability to accomplish a certain task by their own actions and resources) and outcome expectancies (a person's beliefs about the outcomes of alternative behaviours) were the most influential predictors of the motivational phase of behavioural intentions. They point out that the volition process is comprised of the adoption and continuance of new behaviours. Health Behavioural Intention is included in the proposed model as the outcome measure and utilises the variables identified in the literature: Expectancies; Self-Efficacy; Adoption; and Continuance.

## **Preliminary Study Design and Results**

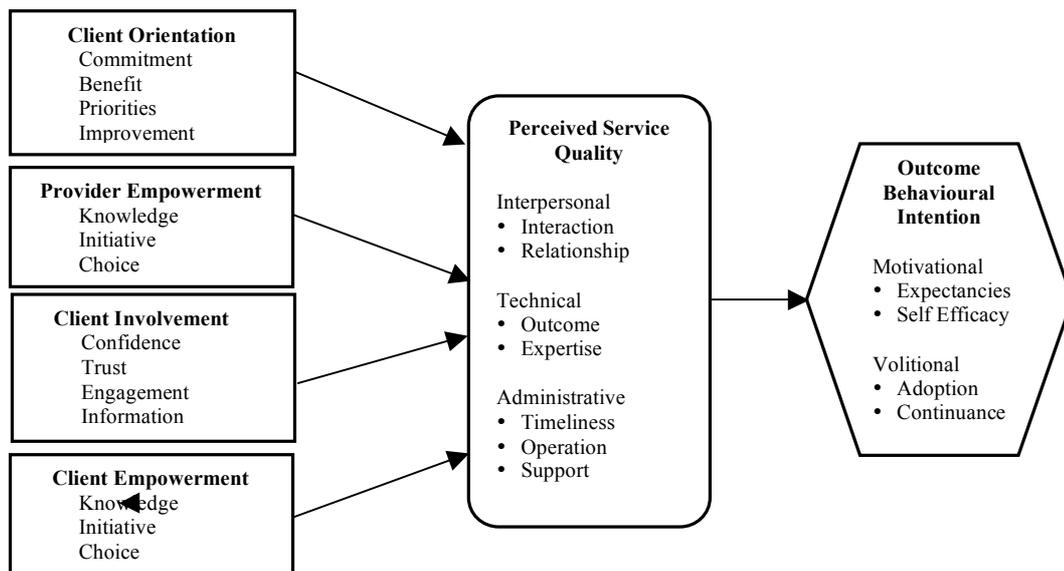
A small exploratory study was conducted to qualitatively identify the co-creation factors influencing perceived service quality. Participants were purposively recruited through the Research Manager of a large publicly funded community-based aged healthcare service organisation, and data were obtained from a single service unit. (The stated aim of this organisation was to enable its clients to remain living in their own home, and to avoid their unnecessary admission to hospital or permanent nursing home placement.) The clients interviewed were experienced service users, who required multiple healthcare services, and were aged over 65. Two managers, three care workers (service providers) and a total of seven clients were interviewed. Each interview was recorded and transcribed and data were sequentially analysed after each interview using a manual content system, with significant transcript highlighted, and then categorised into responses reflecting the key components of the co-creation of healthcare service quality. The study found four domains shared by the three groups of participants that directly influenced their perceptions of quality: the client orientation of the service; the service provider empowerment; the involvement of the client; and client empowerment. Client orientation was identified in the organisation's charter which focused on holistically improving the lives of older people, and was evidenced in the interviews with the two managers through their selection of their care workers "finding the right staff", their interactions with their workers "providing advice and support" as well as the availability of physical resources that they controlled "ensure necessary equipment is in stock". Further, the client orientation was reinforced by all three care workers who spoke of, "build a relationship" and "meet their needs". Client involvement was highlighted in the

interviews as all seven clients spoke of “work together” and “sharing information”. The three care worker interviews provided evidence of service provider empowerment through “deal with situations that arise” and “knowing when to call in the manager”; as well as client empowerment, with all clients interviewed referring to “answers my questions” and “respects my preferences”.

### A Proposed Model for the Co-creation of Public Healthcare Service Quality

On the basis that a service is co-created across the three levels of service participants, an initial conceptual model of public community-based healthcare service quality is proposed (Figure 1). This model views the client as a collaborative partner, a resource who can influence other resources in the service delivery process, and who co-creates the value of the service. Within this model, a health service is depicted as utilising the sum of the available resources such as competencies (skills and knowledge) that are capable of acting and producing effects in other resources for the benefit of the client. The rationale for the model is based on the premise that a healthcare service requires a very high level of client contribution and involvement, frequently with long-term behaviour change. The model suggests that the perception of the quality of a public community-based healthcare service is influenced by the client orientation of the service and the involvement of a client in the service creation, along with the empowerment of the service participants to collaboratively create the service. Further, it is suggested that the resulting perception of service quality will directly influence the service-reinforcing health behaviours that the patient adopts.

**Figure 1. TRIADIC PUBLIC HEALTHCARE SERVICE QUALITY CO-CREATION MODEL**



### Next Steps

More extensive qualitative research is proposed at other geographical locations of the service provider organisation from which interviews and data were drawn, as well as with at least one other public community-based aged healthcare provider organisation. This research will focus on the further investigation, development and refinement of the primary determinants and key sub-determinants for the proposed model of the triadic co-creation of perceived public healthcare service quality. A measure will then be developed to quantitatively test the model. This proposed triadic model offers the opportunity to evaluate the co-creation of service quality in the public healthcare sector, with a view to improving service delivery, achieving improved outcomes, and simultaneously reducing costs.

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