

Patient empowerment for healthcare service quality improvements: a value co-creation view

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Abstract

Purpose. This paper focuses on how a value co-creation view and Patient Empowerment can contribute to the improvement of the healthcare service quality.

Methodology. This conceptual contribution is developed by applying the theoretical perspectives of Service-Dominant logic to the study of quality in the healthcare service focusing on the Patient perspective.

Findings. According to a service logic, the healthcare service value is co-created through interaction and shared activities with all the participants of the healthcare network, including patients. Patient participation, as the part of shared decision making process, leads to improve mental well-being, medical status, satisfaction with the physician, therefore, perceived quality. The relationship between patient and correspondents becomes a dialogue in which both parties are engaged in pursuing the common goal: to achieve the better quality and safety of the healthcare.

Practical implications. To practitioners, the study provides suggestions how to improve the healthcare service quality by engaging patients in the processes of prevention, treatment and rehabilitation.

Originality/value. Since Total Quality Management insights to healthcare dating back to early 90s, several studies have been developed about the health service quality, focusing on procedures, methods, measurement tools, however, more efforts ought to be placed in pursuing patients' active role.

Keywords

healthcare quality; quality improvement; value co-creation; patient empowerment

1. Introduction

This conceptual work, with a contribution to the branch of the managerial research, investigates on the patient's active role in improving the healthcare quality using the theoretical framework of value co-creation.

Healthcare quality is a much debated issue in the literature and there is no still clear definition of this concept due to its multidimensional, complex, intangible and heterogeneous characteristics. Several authors have highlighted different features of the health quality, such as medical, clinical, technical, functional and interpersonal aspects. However, the majority of studies consider the healthcare quality as the performance achieved by the service provider (i.e. hospital) and patient is seen as a passive actor who undergoes the service and has the only role to judge its quality in terms of satisfaction, without be able to participate in its creation.

In the last years, new theoretical and marketing perspectives are moving beyond outdated approaches trying to overcome the passive viewpoint of customers and patients towards more relevant co-creative paradigms in value generation. In particular, Service-Dominant logic (Vargo and Lush, 2004; 2008), offers relevant suggestions to deeply understand the generative value relationship among the healthcare ecosystem actors (doctors, patients, caregivers). Patient becomes the most important actor in the network of value co-creation and his participation in the form of health literacy, shared decision-making, treatment control and communication with the health professionals (Patient Empowerment) may have several positive effects on the healthcare quality improvement.

This paper is organized as follows: initially, it is represented the prevailing literature on the topics of healthcare quality concept and improvement. The work continues by discussing health quality under the lens of the value co-creation framework and, finally, the main components and dimensions of Patient Empowerment are illustrated and their impact on the health service quality in terms of patient satisfaction, health outcomes and health service provider's performance is highlighted. In the final paragraph, conclusions and future perspectives are presented.

2. Healthcare quality and its improvement in the literature

The concept of healthcare quality is more difficult to define than other services (Donabedian, 1966) because it is the customer himself and the quality of his life being evaluated (Eiriz and Figueiredo, 2005). However, in literature we find numerous definitions of the health service quality and each author focuses on different aspects. We can group the definitions into two main categories (Mosadeghrad, 2013):

1. In the first category, quality is defined as “conformance to predetermined specifications, requirements or standards” and “satisfying provider's expectations”. The focus is internal (i.e. supply-side quality) and the components considered for its evaluation are accuracy, reliability and efficacy (Donabedian, 1980; Leebov et al., 2003).
2. In the second category, “quality” is defined as “satisfying patients meeting or exceeding their expectations and needs”. Hence, the focus is external (i.e. demand-side quality) and the attributes more important are effectiveness, empathy, safety and affordability (Øvretveit, 1992; Lohr, 1991).

Other authors, distinguish between the technical dimension of quality care, which refers to delivering core services or their outcomes (i.e. what is offered and received) (Grönroos, 1984) as well as to the competence of the providers as they go about performing their routines (Lim et al., 1999), and the functional dimension which refers to the healthcare service delivery

process or the way in which the customer receives the service (i.e. how the service is offered and received) (Grönroos, 1984). Patients usually rely on functional quality (facilities, cleanliness, food and provider attitudes) rather than technical quality when evaluating healthcare service (Wan Rashid and Jusoff, 2009). Several authors, instead, highlight the interpersonal aspect of quality care which is defined as the socio-psychological relationships between the patient and the healthcare providers (Joss and Kogan, 1995; McLaughlin and Kaluzny, 2006; Naveh and Stern, 2005, Lim et al., 1999).

Regarding to the Quality Improvement (QI), it is challenging to find the right practices for the healthcare service due to its multidimensional, complex, intangible and heterogeneous features. Literature shows that a lot of QI processes which have proven successful in manufacturing (Handfield and Ghosh, 2001; Handfield and Melnyk, 1998) have been adapted to healthcare (Barry and Smith, 2005), among which the most diffused are: statistical quality/process control, competitive benchmarking, supply chain management and customer satisfaction evaluation.

Since the 1990s there has been significant interest in the application of Continuous Quality Improvement (CQI) within healthcare organizations. CQI has the purpose of improving healthcare by identifying problems, implementing and monitoring corrective action and studying its effectiveness through quantitative tools (Bell and Krivich, 2000). It is focused on “process” rather than the individual (Graham, 1995).

The hospital industry, in particular, has substantially embraced the practices of Total Quality Management (TQM) (McLaughlin and Kaluzny, 1990; Ovretveit, 2000) and Malcolm Baldrige National Quality Award (MBNQA) (Douglas and Fredendall, 2004), with the belief that these concepts and programs will lead to an improvement in both the quality and efficiency with which health services are delivered (Carman et al. 2010). Another process control tool which is widespread in healthcare organizations is Six Sigma (Barry et al., 2002; Carey, 2003), a program based on the standard deviation which aims to achieve a high control of the production process in order to have only 3.4 defects per million opportunities (Pyzdek, 2001; Revere and Black, 2003).

Healthcare organizations have also recognized the powerful impact of supply breakdowns (Tucker, 2004) and have exploited supply chain management for their quality program, especially in terms of lean operations (Barry and Smith, 2005; Tan et al., 1999). Strategic supply chain management has become a vital element for the success of quality programs (Bendoly et al., 2004; Chen and Paulraj, 2004; Lejeune and Yakova, 2005).

Despite efforts to adapt the QI tools from manufacturing to the healthcare sector, many doubts remain on their validity. The service production is not separate from the service consumption; customer participates directly involving his emotions, moods, feelings, fears and expectations, affecting with his perceptions the service quality that, for this reason, cannot be determined objectively. Perceived quality thus differs from objective quality, which involves an objective assessment of a thing or an event on the basis of predetermined standards that are measurable and verifiable (Zeithaml, 1988). Grönroos (1984) defined perceived service quality as the outcome of an evaluation process, whereby the consumer compares his expectations with the service he has received, i.e. he puts the perceived service against the expected service. The difference between expected and perceived quality can be defined as the patient satisfaction and in the last two decades, the studies on the connections between service quality and patient satisfaction have increased exponentially.

Several authors highlight the importance of patients' views as an essential tool in the processes of monitoring and improving quality of healthcare service (Thi et al., 2002; Hiidenhovi, et al., 2002; Lim and Tang, 2000; Pakdil & Harwood, 2005; Badri et al., 2008); others have called for empirical cross-cultural studies of healthcare quality and patient satisfaction (Choi et al., 2004; Zineldin, 2006; Andaleeb, 2001; Brady and Robertson, 2001;

Badri et al., 2008). In all studies quality is positively correlated with satisfaction; however, the strength of this relationship remains unclear (Andaleeb, 2001; Taylor, S., 1994).

As we can see, the research literature on health service quality and satisfaction is very copious, with various contributions, however, most of them regard the SERVQUAL scale, elaborated by Parasuraman, Zeithaml and Berry (1988) and based on a questionnaire that measures both the customer expectations of service quality in terms of five dimensions (reliability, assurance, tangibles, empathy and responsiveness) and his perceptions of the service he receives. When customer expectations are greater than his perceptions of received delivery, service quality is deemed low. SERVQUAL research over 20 years has been found appropriate in healthcare settings (Canel and Fletcher, 2001; Lim and Tang, 2000; Jabnoun and Chaker, 2003; Pakdil, F & Harwood, 2005). In other cases, the scale need some modifications to be more applicable to health organizations (Choi et al., 2004; Ygge and Arnetz 2001; Suhonen et al., 2004; Zineldin, 2006; Andaleeb, 2001; Ramsaran-Fowdar, 2005; Sohail, 2003; Ramsaran-Fowdar, 2008; Priporas et al., 2008). The application of SERVQUAL in the health service quality analysis showed that intangible elements tend to be more influential than the tangible ones (Kara et al. 2005).

From the prevailing literature, it emerges that the concept of healthcare quality has been considered in many ways: medical, clinical, technical, functional, interpersonal, etc. However, the majority of studies consider the healthcare quality as the performance achieved by the service provider (i.e. hospital) and the patient is seen as a passive actor who undergoes the service and has the only role to judge its quality in terms of satisfaction, without be able to participate in its creation. Only a few works recognize the patient active role defining health quality as the good communication and shared decision-making between patient and professionals (Schuster et al., 1998).

In our opinion, healthcare quality is a more complex concept and it is the result of a co-creation process requiring the cooperation with all the actors involved, directly or indirectly, in the patient's health process (Polese, 2013). So, according to this aspect, the health provider is not the only responsible for the service quality but it also depends of the primary care physician, pharmaceutical companies, patients, their families and the relationships between all these actors. Despite literature has been recently moving towards a more subjective view of the health service quality by focusing on the patient, there is a lack of studies on what the patient active role could be in health QI.

3. Value co-creation as a lens for quality improvement in healthcare

Value co-creation, which develops as a new paradigm in the management literature, allows companies and customers to create value through interaction (Galvagno and Dalli, 2014).

The literature on value co-creation is strongly related to Service-Dominant logic (S-D logic) (Vargo and Lush, 2004, 2006) which has emerged as a service-centered alternative to the traditional goods-centered paradigm. It is based on the idea that service, the application of competencies for mutual benefit, is exchanged for service, thus all economies are service economies, and goods, when involved, are service-provision vehicles (Vargo and Akaka, 2009).

In S-D logic, the roles of producers and consumers are not distinct, meaning that value is always co-created, jointly and reciprocally, in interactions among providers and beneficiaries through the integration of resources and application of competencies (Vargo et al. 2008). Firms cannot create and deliver value; they can only propose value and provide service as input to its realization; value is phenomenologically and contextually derived by the service beneficiary (i.e., customer) (Vargo and Akaka, 2009).

The service nature of the health system allows us to state that the logic focused on service (S-D logic) find its perfect location in both theoretical and managerial healthcare context and help to define the most efficient routes for creating health quality. Providing quality in healthcare necessarily requires the active participation of various stakeholders such as patients, clinicians, private and public hospitals, pharmaceutical industries and institutions which are all source and contributors to the system's performance (Polese and Capunzo, 2013). An interpretation of the health system in a service logic highlights the role of relationships, interactions and co-creation networks and enables us to define the health service quality as the result of joint activities within the same system in which each actor, being satisfied by the system's outcomes, easily releases the possessed resource to the system, strengthening its sustainability (Carrubbo et al., 2015).

Just by way of an example, we cite Chakraborty and Dobrzykowski (2014) who under the lens of S-D logic analyze how the quality of the hospital services, understood as their performance (both clinical and financial), is the result of the value co-creation process in the supply network of the hospital. The results are the follows: collaboration in the supply chain has a significant positive effect on the value co-creation; value co-creation has a significant positive effect on the hospital services quality.

We can assume that, in a more closely service logic, the final quality of health service is co-created through shared activities, incorporating all the actors of the health network, which are thus defined as endogenous to the processes of delivery of health services (Ippolito, 2009).

According to this belief, patient becomes an important actor in the network of value co-creation; his participation in the form of shared decision making has been shown to lead to improved psychological well-being, improved medical status, and a greater satisfaction with his physician (Ashcroft et al., 1986; Fallowfield et al., 1990). Understanding how individuals co-create value to better manage their healthcare is important not only for the individual but also for healthcare service firms such as clinics, healthcare providers, and government (McCull-Kennedy et al. 2012). McCull-Kennedy et al. (2012) by elaborating Vargo and Lusch's (2004, 2008) conceptualization, explore in-depth what patients do when they co-create value through activities and interactions in their service network, thus more fully explicating the customer's role. Eight broad themes of activities were identified, comprising behavioral (doing) and cerebral (thinking) activities namely: (1) cooperating; (2) collating information (sorting and assorting); (3) combining complementary therapies; (4) co-learning (actively seeking and sharing information and providing feedback); (5) connecting with family and friends, doctors and other health professionals, and support groups; (6) changing ways of doing things; (7) coproduction (e.g., assisting with administering treatments, redesigning treatments, and reconfiguring the medical team); and (8) cerebral activities, such as positive thinking, psyching up one's self, reframing and sense-making, emotional labor, and being philosophical.

Nambisan P. and Nambisan S. (2009) identify four alternate models of patient value co-creation stating that all of them have a positive impact on important organizational variables such as innovation, cost and time, service quality, and consumer perceptions of healthcare organizations.

We can conclude that, in order to achieve a better quality, the modern Health Systems must engage citizens to participate in the processes of prevention, treatment, rehabilitation, increasing their direct responsibility for the operation, not only to make him aware of the care process and the reasons why business decisions are made, but of the willingness to share information with other patients, collection and proper management of data and information relevant to the history and traceability of the diagnostic or therapeutic, self-medication, medical checks and other preventive behaviors and proactive activities.

4. Patient empowerment for healthcare quality improvements

Patient empowerment is generally used to refer to patients control over their health and their condition, as well as their ability to be more involved in their healthcare. In other words, patient empowerment enables patients to “manage their healthcare and advocate for themselves as they use healthcare services” (Helmer et al. 2011). The patient is provided with knowledge, skills and awareness toward health self-determination, as part of a new process in which the health care professionals can get across with the patient, not as an authority but with a discrete partnership. So, using a value co-creation approach, empowerment implies a relationship between patients and providers in which joint responsibility plays a key role to achieve agreed-upon outcomes. In the empowerment model, healthcare professionals respect and assist the patient in making decisions in meaningful ways to him. Patient autonomy is seen as relational rather than independent. Patients are encouraged to act autonomously through shared information and mutual collaboration in the decision making process (Lau, 2002). The concept of ‘patient as partner’ is essential for efficient doctor-patient consultations, in which mutual understanding leads to rapid diagnosis and negotiated treatment options that are more likely to be adhered to (Slowie, 1999).

Patient empowerment could help to solve some of the most demanding problems in the modern healthcare such as the rising burden of chronic diseases; aging and end of life care; the need to encourage healthier lifestyles; and the challenge of coordinating care for people in multiple complex conditions. For all of these issues, greater self-management and individual responsibility are seen as important ways to design health services able to sustain quality under growing pressures.

Below, we show that the degree to which patients are involved in their care has a significant impact on the quality of their treatment and can also make a major difference to the cost (Ippolito and Zoccoli, 2013).

In order to better understand the implications of the patient empowerment on QI, we illustrate its main components and dimensions - as described by the Sustains Project on the empowerment of patients¹ - and their impact on the health service quality in terms of patient satisfaction, health outcomes and health services provider’s performance (Table 1).

The Sustains Project on the empowerment of patients recognizes different components of patient empowerment; the main ones are:

- **Health literacy:** it could be defined as a person’s capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions anywhere (at home, at the workplace, in the healthcare system, in the market place, in the political arena, etc.) and the capacity to use such information and services in ways that enhance health. Today, this ability has developed thanks to the internet web that offers the opportunity to gather information on any illness or treatment autonomously and to consult on line professionals or discuss with other patients. However, it could be negative if the patient is not educated to select the right information and manage it properly.

- **Shared decision-making:** it is a collaborative process that allows patients and their providers to make healthcare decisions together. Patients are involved as active partners with the clinician in clarifying acceptable medical options and in choosing a

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<http://www.sustainsproject.eu/sustainsproject/attachment/d32v10questionnaireforpatientempowermentassessment.pdf>

preferred course of clinical care. The provider is an expert in the clinical evidence while patients are experts in their experiences and what matters most to them; in this way high-quality decisions that align with patient preferences are achievable (Sheridan, 2004). Shared decision making is appropriate for any health decision where there is more than one medically reasonable option.

- **Patient’s control over their treatment:** it consists in patient’s ability to control and manage his health conditions. This is the case of the patient who regularly checks his health status and/or the progress of his disease; notifies healthcare professionals in case of any warning signs; makes regular health checks on himself; complies with lifestyle-related advice received from healthcare professionals; follows to his medication as prescribed (dosage, schedule, etc.); performs and documents the health checks/measurements that have been suggested to him by his healthcare professionals. As an example we can think of diabetic patients who are educated to control and manage their disease in order to have an independent life.

- **Communication with healthcare professionals:** it is a reciprocal, interactive process involving two sides, patient and professionals, in which they need to ensure that the message or information is received and also understood. Patient must be able to explain in detail his symptoms, express his considerations and preferences and ask for more information, however, studies on clinician-patient visits reveal that patients are often not provided the opportunity or time to tell their story/history, often due to interruptions, thus compromising diagnostic accuracy. Incomplete stories /histories lead to incomplete data upon which clinical decisions are made. A good communication is the most important aspect, because it is possible to achieve the goals mentioned above only through dialogue and mutual listening and comprehension. Namely the patient's health literacy, his participation in the decision-making process and his education to the control of the disease.

Each of these components impacts on one or more of the patient empowerment dimensions, which are:

- **Patient knowledge:** the extent to which the patient understands health information and can understand his/her disease and its implications.
- **Patient control:** the extent to which the patient monitors his/her treatment progress and adheres to treatment plans and disease-related life-style adjustments.
- **Patient participation:** the extent to which the patient is prepared for consultations with healthcare professionals and actively participates in these meetings.

Table 1. The effects of Patient Empowerment components and dimensions on the healthcare service quality

Patient Empowerment component:	<p>Effects on healthcare service quality:</p> <p>Health literacy is associated with a lower use of medical services and healthcare costs. People with low health literacy skills have limited ability to read and understand the instructions contained on prescriptions or medicine bottles, appointment slips, informed consent documents, insurance forms, and health educational materials; this leads to an increased need for disease management, higher medical service utilization, less efficient use of services (e.g., more ER visits), more hospital and doctor visits with profound economic consequences. So, by improving health literacy it would be possible to achieve results in terms of more appropriate and effective use of healthcare resources, lower use of drugs, less health inequalities among population, less treatment errors and an increased use of</p>
Health literacy	
Dimension:	

Patient knowledge	preventive services. Moreover, patients with a greater health literacy have less unrealistic expectations on the outcomes of the treatment and this could have a positive influence on their satisfaction.
Patient Empowerment component: Shared decision-making	Effects on healthcare service quality: Patients who are empowered to make decisions about their health have greater satisfaction because the chosen treatment or screening option better reflects their personal preferences, needs and values and the cost-benefit relation that he and his family see as appropriate. Both patients and physicians benefit from an increased level of understanding that allows discussions to focus on the critical risk/benefit trade-offs rather than a simple description treatment alternatives. This leads to more favourable health outcomes such as decreased anxiety, quicker recovery, lower demand for healthcare resources, increased compliance with treatment regimens and adherence to treatment improves, reductions in unwarranted variation in care and costs. Moreover, several studies show that patients who participate in shared decision making choose less invasive surgical options and more conservative treatment, thus lowering invasive surgery rates.
Dimension: Patient participation	
Patient Empowerment component: Patient's control over their treatment	Effects on healthcare service quality: Patients able to have control over their treatment are less dependent from the doctors and health services in their disease management with significant benefits on their well-being and quality of life. Just think of the considerable improvements achieved over the last years in the life of patients with diseases such as diabetes, HIV, asthma and hypertension achieved thanks to their education. This component is very important even for the healthcare system as it allows to apply the de-hospitalization policies aimed at reducing the high costs of hospitals. De-hospitalization can reduce the number of beds through the passage from the in-patient admissions to out-patient treatments, when technically possible and in the same conditions (efficacy, safety, etc.). For example, through the development of ICT, it is now possible to treat some types of patients at home with considerable advantages on their psychological state and quality of life and saving for the health service costs. Of course, all this is possible only if the patients, who are not under the constant supervision of doctors and nurses, are able to control and manage their disease. Patient's control over their treatment also reduce morbidity and mortality.
Dimension: Patient control	
Patient Empowerment component: Communication with healthcare professionals	Effects on healthcare service quality: A good communication between patients and healthcare professionals is a very important component of health quality because it may facilitate the identification of the correct diagnosis in a shorter time when the patient describes his symptoms in a detailed way; reduces the risk of medical errors when the patients provide clinicians with current information about their medical histories, medications and drug allergies; prevents failures of treatment when the patient notify clinicians of unexpected side effects or of difficulty completing recommended tests or treatments; reduces the patient's anxiety and increases his confidence in the physicians. When healthcare professionals are not communicating effectively, patient safety is at risk for several reasons: lack of critical information, misinterpretation of information, unclear orders over the telephone, and overlooked changes in status. Moreover, patient satisfaction is correlated to communications with professionals because it increases when members of the healthcare team took the problem seriously, explained information clearly, and tried to understand the patient's experience, and provided viable options.
Dimension: Patient knowledge Patient participation Patient control	

Source: Authors' elaboration

5. Conclusions and future research

From the analysis of the healthcare quality under the lens of the theoretical framework of value co-creation, some interesting elements emerged. Healthcare organizations do not produce a tangible good but a service: the collective health and its sustainability. This approach necessarily implies the involvement, empowerment and awareness of all the actors, such as health operators, patients, citizens, involved in a co-creation process for the benefit of all. At a time when is revealed this interdependence, their collaboration, for the purpose of creating a shared value just as health quality, it becomes inevitable.

The theoretical approach of S-D logic suggests to shift the focus from the performance of the single provider to the relationships. Thus, in a Service logic the healthcare organization has to operate according to the needs, expectations and pressures that the entire system exerts on it, necessarily embracing a relational orientation. The healthcare provider is called inevitable to consider the existence of the many actors involved in various ways in the health quality creation, including the patients themselves, and especially the entity with which their actions/interactions impact on the quality of the results. Therefore, an effective and efficient management of healthcare quality is not simply linked to the numerical results, nor to the internal organization, but also to the sustainable management of the network relationships. All the actors, directly and indirectly involved in the patient's health process are simultaneously source and contributors to the system's quality. Particularly, according to a value co-creation view, patients may have an active role in the improvement of the healthcare service quality. By improving the patient knowledge, control and participation, which are the main dimensions of the Patient Empowerment, it is possible to achieve results such as a lower use of medical services and lower healthcare costs, a more appropriate and effective use of healthcare resources, lower use of drugs, less health inequalities among population, an increased use of the preventive services, reduced risks of medical errors, decreased anxiety, quicker recovery, increased compliance with treatment regimens and adherence to treatment improves and increased patient satisfaction. In order to improve the healthcare service quality, it is therefore necessary to adopt policies aimed at providing patients with the essential information to expand their health literacy, educate them to have a control over their treatment and manage it more independently, stimulate their active participation in the diagnostic, preventive and treating phases through shared decision-making and adopt a communication oriented to the dialogue, mutual listening and comprehension.

In terms of management, all this implies an economic, interpersonal and cultural effort, as realize and promote the effective integration means investing time and capital (including human) in the re-education, both of the operators and patients, to a logic of mutual and sustainable benefit. At a macro level, instead, this implies the coordination of governmental, managerial and social systems and the introduction of stronger mechanisms of integration, that finally make it possible to operate in a new contemporary logic, which is no more sequential, but interactive and collaborative.

In the future, we believe that it could be interesting to deepen this research through an empirical analysis to check whether there is a correlation between the level of empowerment of the patients, measured in the dimensions of patient knowledge, control and participation, and the level of quality that they perceive from the health service they received, in terms of patient satisfaction.

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