

## **STUDY REGARDING CUSTOMER PERCEPTION OF HEALTHCARE SERVICE QUALITY IN ROMANIAN CLINICS, BASED ON THEIR PROFILE**

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### **Abstract**

The paper presents the differences in patient perception on healthcare services quality, on a sample of ten Romanian clinics. The global satisfaction evaluation was based on three analyzed variables, namely the perceived competence of physicians, the perceived competence of nurses, and the empathy of the hospital personnel. In a quality-oriented perspective and, at the same time, in a relationship-oriented perspective, these elements were regarded as essential for the way in which the patient, without being fully informed as far as the characteristics of the processes taking place in hospitals are regarded, evaluates, while being in a state of physical and psychical distress, the quality of the healthcare experience they live. Our purpose, while choosing these variables for analysis, was to approach this experience by keeping it as undivided as possible, because it is a latent concept, difficult to measure, and we have to account for the reductionism of the statistical model. The main data processing method is PROXSCAL (multidimensional scaling), in SPSS (Statistical Package for Social Sciences), by which we created proximities from data expressing patient satisfaction, grouping, then, the clinics based on their similarities, as far as patient perceptions on the service quality are concerned. The conclusions of our study serve as an orientation tool on the healthcare services market, by quantifying each clinic's proximity other, and by outlining the factors which make the patients perceive groups of clinics in similar ways. These factors explain the favourable, or unfavourable perceptions on a certain type of clinics and the general influences on the healthcare sector, in its entirety.

**Keywords:** quality management, healthcare services, patient perception, Romania

**JEL Classification:** M31, O14, O33

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### **Introductory remarks**

Recent advances in healthcare management regard patients as customers, whose expectations have to be met by the quality standards imposed by the hospital. According to Walters and Jones ([1]), the healthcare sector is a market, which shares some of the characteristics of the business markets. On a functional market, competition determines business success ([2]). Thus, issues as customer retention, customer loyalty ([3]) are significant for the case of hospitals as well, and their attainment, similar to business, depends on efficient quality management. The review in Komashie, Mousavi and Gore

([4]) presents, comparatively, the characteristics of quality management in industry and healthcare, respectively. They quote an almost fifty years old concern of Donabedian ([5]), that quality in healthcare is extremely difficult to define. One explanation for this intrinsic ambiguity of the concept may well be the multiplicity of stakeholders and the diversity of their stakes. Secondly, the degree of patient information and involvement in the process of care providing has dramatically modified over the last decades, driving a change in status, from that of follower of the medical prescriptions to that of active part in cure, which lead to an upgrading of standards, as far as quality is concerned. The patients clusters grow smaller, as their needs, based on their various lifestyles, begin to differ ([6]). Thus, the concept of *caveat emptor* (the buyer should make sure that he pays for the right good or service, for the most suitable for him) begins to make sense for healthcare as well. Still, the customer comes to the hospital with the preconception that quality standards will normally be above his expectations, which will result in high levels of deceit, if the case. Then, if the buyer beware, he will beware for ever. As outlined in Duggirala et al. [7], there should be considered, in addition to the aforementioned preconception, the effect of physical and psychical discomfort of the patient on his perception, the contribution of the subconscious factors, the disproportion between the patient's level of understanding of what is going on in the hospital and his expectations, leading to a distorted image, in which every error is emotionally amplified. Not to mention that not only the patient, but also what Ovretveit ([8]) names *carer*, the patient's relatives and/ or friends, sharing, usually, with him the experience of hospitalization, get a certain perception of what takes place in the healthcare facility, acting as multipliers of the hospital quality evaluation.

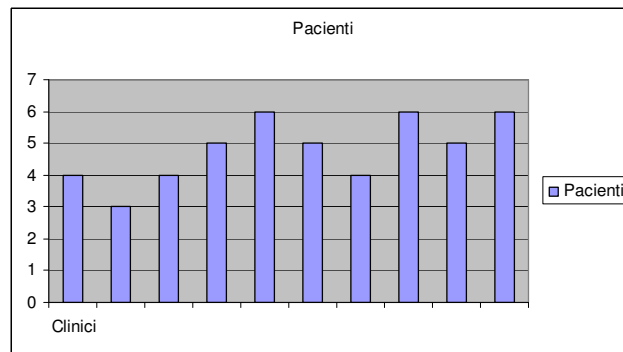
In this context, errors in healthcare have more lasting and significant effects as compared with regular fields of business. According to Gowen, McFadden and Tallon ([9]), there are several sources of errors in healthcare. First to mention is the inadequate job design, caused by complicated hierarchies, in which administrative and professional competence interfere. That "take me to your boss" situation Julian Ashley tested two decades ago would be a Sphinx dilemma for almost every hospital. Subcultures, groups of influence, the quarrel between the *cosmopolitans*, medical professionals reporting to their professional bodies, and *locals*, administrators attached exclusively to the culture of the hospital they manage ([10]), are unavoidable realities of all hospitals, to which the Romanian system makes no exception. Secondly, errors in healthcare arise from poor equipments, or from lack of technical expertise in adequately using equipments, or from people having expertise not having permission to use equipments, which amounts to a disproportioned, irrational resources allocation. The study of the three researchers points also at computer malfunctions and unplanned events. And, last but not least, the constrained resources ([11]) hinder quality initiatives in healthcare. All these, corroborated, contribute to an altered general perception on the quality of the place and, consequently, on the quality of the services which can be expected there. Patient safety, as a central issue in quality improvement initiatives ([12]; [13]), relies on this perception of being well taken care of in a certain healthcare facility. Which, as Jackson ([14]), quoting Crosby ([15]), suggests, does not always cost more, in financial terms, but it certainly implies more relational costs and a difficult to manage partnership between doctors and patients. The idea of *social acceptability*, which WHO (World Health Organization) quotes in relation to healthcare quality, points precisely at this aspect, of taking the patient's side in discussing about how efficient and effective a healthcare system is.

Issues like patient-doctor collaboration, which frequently involves disagreeing with the patient for the sake of defending his interest, particularizing significantly the basic rules of customer relationship management, the fair amount of guidance in situations when the “buyer” bears, finally, the risk, a persistent knowledge asymmetry (patients may be more informed, but not necessary more *rightly* informed), combined with the real need to incorporate patient expertise into the healthcare process, complicate the agenda of healthcare quality management.

Focusing, from the classical SERVQUAL (quality of service) model ([16]), on relational issues, like the quality of the personnel, the empathy, contributing to the overall quality of the experience, which is difficult, particularly in the case of hospitals, to break into clearly delimited components, we investigate how differently perceived hospitals are, from the point of view of the quality of the services they offer, considering ([17]) that the preference for a hospital is a fair indicator of content with its services. Thus, distances between clinics are measured, and perceptual clusters are being proposed.

**1. Methodology**

Using the answers of 50 Romanian patients having used, either directly or indirectly (as a carer), the services of ten Romanian clinics, in the last eight years (2001-2008), we analyzed their perception of each of these clinics based on three variables: competence of the doctors (**doctors**), competence of the nurses (**nurses**), empathy of the staff (**empathy**). Each of these variables was evaluated on a 1 to 5 Likert scale, where 1 = poor and 5 = excellent. The interviews were conducted in 2001-2008, as a component of graduation theses elaboration and research projects. The patients were selected by snow-ball sampling, starting from a small, random sample, progressively enlarged, as other patients, taken care of in the same clinics, during the considered period, were identified. The patients’ distribution on clinics is presented in Figure 1:



**Figure 1. Patients’ distribution on clinics**

Source: own processing

The distribution is equilibrated, reflecting adequately the patients’ dynamics in the respective clinics.

The descriptive statistics for the three variables is presented in Table 1 below:

### Descriptive statistics

Table 1

	N	Minimum	Maximum	Mean	Std. Deviation
doctors	50	1	5	3.92	1.217
nurses	50	1	5	3.81	1.509
empathy	50	1	5	2.67	1.155
Valid N (listwise)	50				

Source: own processing

As it can be seen, the perceived competence of doctors and nurses are comparable, on average, at the sample level, being regarded as fair to good, but the level of empathy is significantly lower.

The reliability analysis for the three variables indicates a value of .724 of the Cronbach Alpha, greater than the acceptable value of 0.6, which accounts for the positive average covariance among the items, supporting the reliability model assumptions.

The results of the PROXSCAL analysis are presented in the following section.

## 2. Results and discussions

The data regarding patients' perception of the quality of services in the ten considered clinics were turned into proximities, and analyzed with PROXSCAL (multidimensional scaling). The final coordinates of the ten clinics in the common space are presented in Table 2 below:

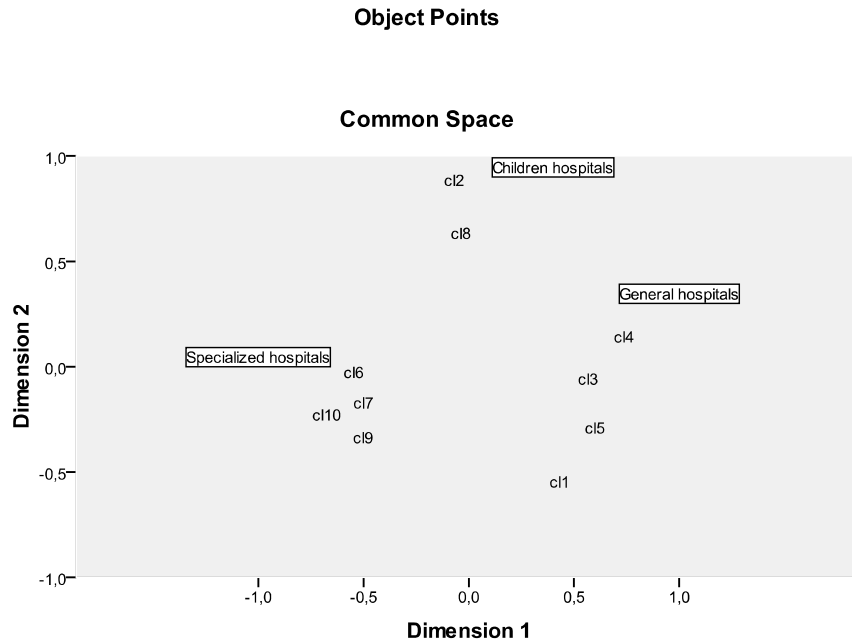
### Final coordinates of the clinics

Table 3

	Dimension	
	1	2
cl1	.432	-.547
cl2	-.070	.885
cl3	.566	-.058
cl4	.737	.142
cl5	.599	-.291
cl6	-.547	-.027
cl7	-.501	-.172
cl8	-.038	.633
cl9	-.503	-.337
cl10	-.676	-.229

Source: own processing

The closeness of the points, in the bi-dimensional space, expresses the degree of similarity of the clinics, from the point of view of the patients' perception on the quality of their services, divided between perceived competence of the doctors, perceived competence of the nurses, and overall empathy of the medical staff of the considered clinic. The graphical representation of this closeness of the quality in services in various clinics, in their patients' perception, is illustrated in Figure 2 below:



**Figure 2 Position of the ten clinics in the two dimensional space**

Source: own processing

As it can be seen, clinics similarly perceived by their patients, from the point of view of the quality of their services, cluster together. The cluster labels, added by us based on additional information on each of the clinics included in the study, shows that clinics in the same cluster share a particular profile. Thus, in the sample were included four general hospitals, four specialized hospitals, and two pediatric hospitals. It can be noticed that the most similar, from the point of view of the perception patients hold on their quality in services, are the specialized hospitals, while the general hospitals and the pediatric hospitals, which are also general, but targeted to a different age category, have less obvious similarities. This pattern may be explained by the fact that there are more diverse, clinic-specific, factors interfering with quality in general hospitals, for either adults or children, than in specialized hospitals. If we add to this a tendency, in the general population, to perceive specialization as synonymous to better services, to quality, this explains why specialized hospitals cluster more closely together. As this analysis was not aimed at

ranking clinics, from the point of view of the way the quality of the services they offer is perceived by their patients, but only to see how similar they are, as related to the quality perception, we leave open the way to further investigations in the respect in which hospital profile influences customer relationship to that respective hospital.

### Conclusions

Patient perception of the quality of the services offered in hospitals follows latent patterns, which can not be adequately reduced to a set of variables, but can be approximated by multidimensional scaling. Thus, hospitals which are similarly appreciated by their patients cluster close together. By examining what these hospitals have in common, what are their best practices and quality recipes, one can indirectly find out what is that which patients look for, in terms of service quality in healthcare. Our analysis revealed that the profile of the hospital (general vs. specialized) is related to the way the hospital is perceived, in terms of quality, and that there are differences, inside the clusters, in the quality perception, the sample of specialized hospitals being more homogenous than the sample of general hospitals. A further scanning of the factors influencing quality in each of the two categories will constitute the starting point of a future research.

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