Quality evaluation in health care services based on customer-provider relationships

Vasco Eiriz
University of Minho, Braga, Portugal, and
José António Figueiredo
Instituto Politécnico de Santarém, Santarém, Portugal

Abstract

Purpose – To develop a framework for evaluating the quality of Portuguese health care organisations based on the relationship between customers and providers, to define key variables related to the quality of health care services based on a review of the available literature, and to establish a conceptual framework in order to test the framework and variables empirically.

Design/methodology/approach – Systematic review of the literature.

Findings – Health care services quality should not be evaluated exclusively by customers. Given the complexity, ambiguity and heterogeneity of health care services, the authors develop a framework for health care evaluation based on the relationship between customers (patients, their relatives and citizens) and providers (managers, doctors, other technical staff and non-technical staff), and considering four quality items (customer service orientation, financial performance, logistical functionality and level of staff competence).

Originality/value – This article identifies important changes in the Portuguese health care industry, such as the ownership of health care providers. At the same time, customers are changing their attitudes towards health care, becoming much more concerned and demanding of health services. These changes are forcing Portuguese private and public health care organisations to develop more marketing-oriented services. This article recognises the importance of quality evaluation of health care services as a means of increasing customer satisfaction and organisational efficiency, and develops a framework for health care evaluation based on the relationship between customers and providers.

Keywords Health services, Patients, Portugal, Customer satisfaction, Quality, Performance management

Paper type Literature review

Introduction

Until recently, the majority of the health care industry in Portugal belonged to the public sector. Nowadays, however, the ownership of health care organisations is changing. Profit-oriented services, ranging from public limited companies to co-operatives or associations, are entering the industry, bringing increasing supply and more power of choice to customers. Simultaneously, people are concerned about health issues and customers (patients, their relatives and citizens) demand more sophisticated services. As a consequence of these changes in consumer attitudes towards health, the industry has become more attractive to the private sector. Such growth means that customers are increasingly able to choose among health providers, particularly based on the balance between their expectations and experiences.

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A different approach to health services can now be found in several hospitals, including those in the public sector, such as the provision of single rooms with beds that have orthopaedic and ergonomic features, private bathrooms, television, and sometimes a space with a second bed for relatives. Additionally, these facilities are far more user-friendly, with special areas for children, air-conditioning, vending machines with food and drink, television, security and information staff, information points and newspapers. This all means that health care organisations in Portugal are entering a more marketing-oriented stage. Under these new circumstances, hospitals are developing a more customer-oriented management approach.

In this changing environment, it is important both for the new profit-oriented health care organisations and public organisations to establish patterns of quality and to evaluate the balance between customers’ expectations and their experience. Naturally, it is much more difficult to define levels of quality in health care services than in other services, such as financial outlets or tourism, mainly because it is the human being and the quality of his/her life that is being evaluated (Herzlinger, 1997).

Nevertheless, it is important to define frameworks for quality evaluation applied to health care services. Such frameworks may provide the tools both for health care organisations and for customers to monitor services. This article starts by discussing health care quality and two broad approaches to its study, before focusing on one of the two approaches. Then it presents our view of health care evaluation based on the relationship between service providers and customers. We conclude with suggestions for further research.

Health care quality
In our view, health care quality can be studied at two different levels. At one level, it can be assessed as a performance issue related to the entire health care system. At the organisational level, on the other hand, actors such as patients and doctors involved in service delivery can assess health care quality. We will start by discussing health care quality at the health care system before focusing on the organisational level.

In research into health care performance indicators in the USA, the UK and Australia, McLoughlin et al. (2001, p. 461), concluded that “information about performance is increasingly seen at a national level in each of the three countries, as a crucial tool to promote improved performance across the system”. These authors see information on performance as crucial for accountability and building effective knowledge about safe care. In contrast, Rubin et al. (2001a, p. 472) approached the question of quality in health care in a different way. According to them, providers need to improve effectiveness based on clear and objective information. In other words, it is impossible for providers, especially doctors, to establish new processes to improve performance without proper information. More recently, Floyd (2003, p. 233) considered the performance of the health care system as a question of efficiency and by defining spending limits, given the fact that “government cannot afford to pay for or ensure access to health care without limitations for all its citizens”. Nevertheless, Rubin et al. (2001b, p. 489) added that it is important to define the purpose and goals of quality measurement, including the intended audience or information consumers. They also recognised the need to define the unit of analysis, the evaluation of the process and the type of outcomes to be evaluated.
The Baldridge National Quality Program, a North American approach health care quality, makes awards to health care organisations (National Institute of Standards and Technology, 2002). These awards aim to:

- improve organisational performance practices;
- share best practices among health care organisations; and
- guide opportunities to learn more.

The program is based on a scoring system, which evaluates the following seven items:

1. leadership;
2. strategic planning;
3. focus on patients, other customers and markets;
4. information and analysis;
5. staff focus;
6. process management; and
7. organisational performance results.

Evans et al. (2001) raised the question of quality in the health care system as a matter of outcomes at different levels of the entire system, rather than trying to evaluate the processes per se. This view poses a major problem: the relationship between outcomes and a specific variable. For example, it is difficult to establish a relationship between levels of training among neo-natal surgery personnel and a decline in the number of paediatric hospital deaths. This difficulty is increased since health outcomes vary widely across countries, even in those with similar characteristics. The authors based their investigation on a WHO framework, which is supported by three main goals:

1. to improve people’s health;
2. to respond to legitimate non-health-related expectations (respect for people and client orientation); and
3. fairness in financing.

This framework provides a vision of health system quality problems, because system quality and system equity are not always the same. In other words, it is important to separate and consider both technical and human aspects in order to develop a global view of quality of care.

Another aspect is the level of customer expectation in terms of health care responsiveness. Positive health care outcomes, such as life expectancy, are growing, which contributes to a constant increase in customers’ expectations. This can create irrational relationships: improved outcomes (for example, increased life expectancy) could mean a demand for an additional level of outcomes (in the same example, a more desirable life expectancy). At a certain point, this may bring some disappointment when expectations are not met (when a person dies prematurely) and a consequent perception of lower quality. Although a broad approach to the study of health care quality requires an analysis of performance at the level of the health care system, our main concern is with the organisational level, given that “patients’ expectations and priorities vary among countries and are highly related to cultural background and to
the health care system" (Salomon et al., 1999, p. 507). At the organisational level, customers traditionally define quality. In short, it is customer-perceived quality that has to be studied. Garvin’s (1988) different approach was based on the idea that quality depends on the context; that is, quality is largely a co-ordinated effort within an organisation. However, as mentioned by Lovelock et al. (1999), Garvin’s research was targeted at manufacturing. Parasuraman et al. (1985) studied services and identified ten criteria used by consumers when they evaluate service quality. In 1988, they classified them as five broad dimensions:

1. tangibles (the appearance of physical elements);
2. reliability (dependable, accurate performance);
3. responsiveness (promptness and helpfulness);
4. assurance (competence, courtesy, credibility and security); and
5. empathy (access, communications and customer understanding).

In the context of health care services, Baron-Epel et al. (2001, p. 317) concluded that “the relationship between the patient and the treating physician is based upon the mutual goal of optimising the patient’s health” and concluded that “the higher the perceived fulfilment of the expectation is, compared to the expectation, the higher the satisfaction is”. Next, we will discuss measuring health care quality at the organisational level.

**Measuring health care quality at the organisational level**

Besides establishing a definition for health care quality, it is important to develop a framework for evaluating and defining operational measures. There are many complexity with this type of measurement. According to Lawton (1998), these include:

- complexity of collecting and interpreting a large source of data quickly;
- defining the objectives of complex services where multiple objectives conflict;
- lack of correlation between overall organisational objectives and specific objectives;
- inexperienced of managers in developing and using performance indicators;
- lack of relevant and measurable targets for final outputs and outcomes;
- lack of resources to build data;
- staff resistance to data collection;
- lack of staff evaluation training;
- cost of performance measurement; and
- lack of interest.

Within health services, such evaluations raise further problems owing to the size, complexity and heterogeneity of national health care systems, including the large range of expertise and specialisations within health care organisations (Carter et al., 1992). Rubin et al. (2001b, p. 490) associated the measurement of health care quality with the audience or information consumer. These authors identified different types of audiences such as accreditation agencies, patients, administrators, regulators, doctors, and provider organisations. They pointed out that indicators are designed as a means...
to improve clinical, service, and economic performance. In terms of clinical performance measures, they stressed the importance of choosing the clinical area to evaluate and its impact on morbidity, mortality and costs. When analysing service performance measures, we can use the traditional customer quality perspective of services, through which patients may use qualitative measurements such as the doctor’s communication and interpersonal interactions. Traditionally, as discussed in the last section, measuring health care quality at the organisational level is focused on customers. For instance, based on the SERVQUAL model developed by Parasuraman et al. (1988), Lytle and Mokwa (1992) viewed health care services as a set of three types of benefits:

1. core benefits (the nucleus of the product offering or the outcome that the patient is seeking);
2. intangible benefits (interactions between doctor and patient largely based on reliability, empathy, assurance, and responsiveness); and
3. tangible benefits (physical surroundings such as the location, decor and appearance of facilities and personnel).

Ware et al. (1978), cited in Sargeant (1999), studied the measuring and meaning of patient satisfaction and identified four satisfaction dimensions that affect patients’ perceptions:

1. doctor conduct;
2. service availability;
3. confidence; and
4. efficiency/outcomes.

Other studies on customer satisfaction in health care stressed the importance of convenience, access, waiting times, choice, quality of information, range of services, nature of the patient’s medical problems, and patients’ demographic background (Brown and Swartz, 1989; Singh, 1990; Sage, 1991). Finally, Coddington et al. (2000) suggested “value added” as an alternative measure, which includes service, convenience, access, relationships with doctors, innovation, unit prices, and volume or intensity of use of certain resources. Nevertheless, measuring quality in health care has its drawbacks, as noted by Coddington et al. (2000, p. 51): “the unexplained large variations in medical practice in different communities with the same demographic characteristics are a continuing embarrassment to medicine”.

Although many factors influence quality perception, it should be pointed out that they predominantly emphasise the customer’s point of view. Other measures should also be developed beyond these customer-centred ones. In fact, given the complexity, heterogeneity and ambiguity of health care services, we believe that the more traditional customer-centred measures, which much of the marketing and health care literature has emphasised, should be complemented with provider-centred measures. In other words, it can be argued that health care services are particularly complex in their characteristics, are heterogeneous in their range of medical specialisations and associated services, and ambiguous in the sense that the average customer has no technical knowledge to understand his or her particular needs or the services available to satisfy them. Thus, accepting this complexity, heterogeneity and ambiguity, quality
should not only be assessed from the customer's point of view, but also from that of the providers. An approach based on both customers and providers offers a much more complete picture of health care quality than simply measuring customer satisfaction. These measures are related to health care services' financial performance, logistics and professional and technical competence. In the next section, we apply this approach to health care quality evaluation.

Health care quality evaluation based on the relationship between health service providers and customers
In order to administer a reliable health care quality inquiry, one needs to develop a framework and conduct empirical research to test it. The framework needs to consider the different perceptions and expectations of customers and providers, and the type of audience that will use the results. This means that the inquiry should adopt a different structure according to the population surveyed (customers or providers) and the audiences that will use the results (for instance, policy decision-makers, managers, customers, etc).

However, given the nature of health care services, there are many actors involved in the provider-customer relationship. In our view, the main service provider actors are senior and middle managers, doctors, other technical staff (e.g. nurses), and non-technical staff. Although outsourcing is used, we believe that external providers are less important than internal providers. On the other side of the relationship, customers must be divided into patients, patients' relatives and citizens. Patients and their relatives are directly connected with service providers, particularly doctors and other staff, while citizens are normally indirectly connected with health care services as taxpayers. All these actors are identified in Figure 1.

Sometimes the expectations and perceptions of different actors are different or even collide. For instance, doctors' perceptions and expectations are obviously different from those of patients. Equally, while patients and their relatives appreciate politeness

![Figure 1. Actors involved in the customer-provider relationship in healthcare services](image-url)
and friendliness from staff, in some cases perception is beyond their technical qualifications and professionalism. In an extreme situation, when an unconscious patient undergoes surgery, s/he has no perception of his/her needs. In this case, the decision of his/her relatives could be against the patient’s will. This is perhaps the best example of a situation in which measures of quality in health care services should go beyond the patient’s perspective because they frequently do not have the capacity to judge or assess the technical aspects of care.

In another example, customers at a hospital with a high level of technology in terms of clinical procedures and equipment may feel that it has low standards if, for instance, the level of responsiveness is poor. It is expected that each actor will have different expectations and perceptions for each of the four quality items (i.e. customer service orientation, financial performance, logistics, and levels of staff training) that can be used to evaluate health care quality. In this case, we need to define a health care quality inquiry for each actor. For instance, evaluating the financial soundness of health care services will not be a major item for the patient, but it will be for the citizen, since s/he is a taxpayer. In another example, the logistical aspects of the service are an important issue for the technical staff, but probably not so important for citizens.

Table I classifies the importance of these four quality items for each actor. Although this is a preliminary classification that still needs to be tested, we are assuming that the relevance of each quality item varies among actors.

After defining a health care quality inquiry for each participant in the customer-provider relationship, it is important to establish the weight of each participant in the inquiry. Depending on specific objectives of the research agenda, this means that it will be necessary to define the importance of each participant for a global perception of quality.

**Conclusions and recommendations**

Health care services are becoming more important, mainly because everyone is paying attention to quality of life. Health care services in Portugal are expanding, with public and private organisations fighting for an increased budget. Public and private health care services are entering a new stage of development, one that is more market-oriented. Health care deals with human beings, which is perhaps its main difference from other services. Nevertheless, private shareholders and governments

<table>
<thead>
<tr>
<th>Quality items</th>
<th>Managers</th>
<th>Doctors</th>
<th>Other technical staff</th>
<th>Non-technical staff</th>
<th>Patients</th>
<th>Patients’ relatives</th>
<th>Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service orientation</td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>H</td>
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<td>Financial performance</td>
<td>H</td>
<td>M</td>
<td>M</td>
<td>L</td>
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<td>Logistic functionality</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
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<td>M</td>
<td>L</td>
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<tr>
<td>Level of staff competence</td>
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<td>H</td>
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**Table I.**
Relevance of quality items by actor

*Note: Relevance of each quality item may be H (high), M (medium) or L (low)*

*Source: The authors*
demand higher efficiency levels in the health care system. It is important to define an evaluation tool to help governments, organisations and customers to choose the best service. Therefore, instead of evaluating quality based on clinical or technical processes, the evaluation needs to be based on outcomes, which is more appropriate for the audience's (governments, organisations and customers) information needs. It is fully accepted that customers are crucial for measuring service quality. Yet there are differences between health care and other services. First, humans are the subjects of the service. Second, the importance of technical aspects such as computer technology for diagnosis should also be considered. Third, given health care complexity, heterogeneity and ambiguity, we believe that the more traditional customer-centred measures should be complemented with provider-centred measures.

The authors propose a preliminary framework to evaluate health care quality that considers customers' (patients, their relatives and citizens) and providers' (managers, doctors, other technical staff and non-technical staff) expectations and perceptions. To encompass these different views, inquiries need to be different for each of these actors. Further research, therefore, will be conducted in order to evaluate these different perceptions and expectations. Subsequently, it will be necessary to establish the specific weights of these perceptions and expectations for each actor in order to produce a global result on the quality of health care services.

References


