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**THE REASONS BEHIND THE ADOPTION OF THE QUALITY CERTIFICATIONS:  
RATIONAL AND IRRATIONAL APPROACHES OF ITALIAN PUBLIC HOSPITALS.**

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**Purpose of the study**

The healthcare sector is characterized by high managerial and operational uncertainty. Very often hospital CEOs are obliged to face different pressures coming from external and internal stakeholders. While one hand they are interested to accomplish to the external requests in order to appear legitimate (Dowling, 1975; Di Maggio and Powell, 1983; Ruef et al. 1998), on the other hand they would like to preserve the core activities of the organization from dramatic changes (Denton 1996; Mariotti 1998; Appelbaum and Wohl, 2000). Although healthcare professionals are not generally prone to accept modifications and interferences in their activities (Mascia et al. 2014a), they daily need to face uncertain decisions, such as the best way to provide patients assistance, or the decisions about the best technologies or drugs to use. In addition, uncertainty is related to the increasing patients consciousness about healthcare processes. In order to face this uncertainty, healthcare managers adopt a number of strategies. Those strategies can generally be of two types: they can follow rational approaches, thus introducing changes that are really finalized to solve problems, or they can follow irrational approaches, adopting irrational solutions with the only interest to accomplish to the external requests and by this vein obtaining legitimacy.

Within the Italian Healthcare sector, the corporatization process started during the 90's, imposed to the Italian Regions to create a surveillance system, able to verify a minimum level of quality in the healthcare services provision. However, the Italian Ministry of Health didn't define a general quality surveillance system, thus giving to the Regions the possibility to decide autonomously. For that reason it is possible to suppose a certain degree of variability about the solutions adopted by Italian Regions. According to Edelman (1992), the response from the organizations in compliance with the regulations leaves ample room for mediation to the management, when the normative provisions are particularly ambiguous (Mascia et al

2014b). In other words, ambiguous language gives adopting organizations less structure and guidance in terms of how to implement standards. It seems to be the case of the indications provided about the necessity to introduce the quality certification, which not seems to be clearly stated by the national laws.

As a consequence hospital managers progressively have been obliged to ensure the quality improvement of healthcare, thus introducing a number of quality certification systems, as the ISO 9001. The central aspect of ISO 9001 certification is represented by the conception of quality management as a process-based approach.

In the healthcare context the implementation of a standard is able to reduce the mistakes deriving from healthcare processes, by maintaining the level of variability into physiological limits. According to Sandholtz (2012), standards represent “mechanism of social order”. Through standards everyone is clear about who is responsible for doing what, when, how, why and where. Standards help to “organize organizations”, giving legitimacy to adopters (Sandholtz, 2012; Fikru, 2014). Moreover in presence of work activities standardization, employees are less stressed, because they are assured about the level of safe and health of their work context (Fikru, 2014)

The purpose of our research is to investigate the dynamic of adoption and the rational/ irrational balancing in the decision to introduce quality certification within Italian healthcare organizations. We used an innovative framework in order to capture which are the most important organizational and institutional features able to determine an increasing in the adoption.

### **Theoretical background**

Within healthcare context, literature indicates the existence of both rational and irrational approaches managerial decision to adopt quality certifications. On one hand authors demonstrate that the manager’s decision is driven by a real necessity to standardize the procedures (Boiral 2012), answering to specific organizational and performance needs (Staines, 2000; Van den Heuvel, 2005 and 2006; Helbing, 2010; Rodriguez Cerrillo, 2012). In particular Staines (2000) by describing the certification process operated by a hospital located in Switzerland, highlights that the adoption was driven both by ethical and by organizational reasons. The ethical reasons are based on the idea that patients need to be guaranteed about the quality of cares being not able to fully know medical processes. The organizational reasons were instead recognizable as the need to align procedures and practices around a standard, to improve the responsibility sharing between professionals, to reduce processes redundancy and costs, but also to increase the safety and the quality of cares. The contribution provided by Van den Heuvel (2005 and 2006) illustrates the introduction of ISO 9001 quality management system at the Red Cross Hospital, in Netherlands. Here the adoption is related to an important change in the Dutch hospital funding system, which makes necessary a costs-minimization and an optimization of the quality of cares. For that reason ISO 9001 standards have been introduced in order to increase the number of admissions, reduce the length of stay and standardize the procedures. Helbing and colleagues (2010) analyze the experience of the Goethe University hospital, describing the development of the process of design, planning and implementation of the quality management system, according to ISO 9001’s standards. The adoption need is here represented by the

necessity to improve transparency and coordination within research, training and cares processes. Finally Rodriguez Cerrillo (2012) describes the certification process realized within the “Home care unit” of a tertiary hospital located in Madrid. In this case the adoption is related to the necessity to increase patient satisfaction, reduce complaints, medical equipment failures and percentage of hospitals readmissions.

Basing on these international experiences, the adoption of a quality certification system within healthcare organizations seem to answer to specific organizational needs. For that reason our first research hypothesis states that:

*Hypothesis 1. Within Italian healthcare organizations the probability to adopt quality certification standards is higher when a mayor organizational complexity occurs.*

In particular:

*Hypothesis 1a: the largest is the hospital size in terms of staffed beds; the higher is the probability to observe the adoption of quality certifications by Italian healthcare organizations.*

*Hypothesis 1b: the higher is the hospital productivity in terms of discharges, the higher is the probability to find an increasing in quality certifications adoption by Italian healthcare organizations.*

*Hypothesis 1c: the higher is the case mix index of the hospital, the higher is the probability to observe a larger adoption of quality certifications.*

The second perspective on which is based the analysis of the quality certification adoptions can be considered more based on irrational decision making processes. In particular drawing on the institutional theory, literature presents a number of contributions about the institutional environment impact on the decision to adopt a voluntary certification (Schaefer, 2007; Zhu, 2012 and 2013; Fikru, 2014a and b; Delmas, 2008). Very often organizations decide to introduce innovations, or to implement new practices, procedures, and structures in order to appear more legitimate to the external stakeholders (Powell and Di Maggio, 1983 and 1991; Meyer and Rowan, 1977; Helms and Webb 2014). As a result, organizations, which operate in the same context, will progressively incline to become similar to each others. This phenomenon, known as isomorphism, can be caused by the impact of different pressures: coercive, mimetic and professional.

Coercive isomorphism is driven by the decisions of third organizations. When the Lawyer or the external stakeholders establish that some kind of organizational model, procedure, or certification are necessary for the organizations operating in a specific context, all these organizations, modify their shape or their conduct in order to conform to the external expectation. An example is provided by Goodrick e Salancik (1996) concerning the diffusion and the consequent reduction of the cesarean birth section. The spread of this technique was initially caused by the external demand, which later has been limited by a legislative intervention. The second pressure, known as the mimetic one, is considered the source of the mimetic isomorphism. When organizations perceive that external conditions are dangerous and uncertain, they decide to follow, or to mime conducts and decisions of other organizations considered as to be the most successful.

The conducts and the decisions adopted are not always the best for the organization that mime, but they are considered as the simplest to identify and the safest in a surviving logic. An example of this kind of isomorphism is provided by Haveman (1993). In this work author demonstrated that organizations, in order to reduce research and innovation costs, decide to reproduce what other organizations have done. Finally professional isomorphism is driven by knowledge. Managers and professionals can modify processes and organizational practices taking into consideration their own knowledge. Generally it happens because professionals receive similar training about how to solve problems according to the Universities or the Training centers they attended, but also thanks to their interaction opportunities. Burns and Wholey (1993) provide an example of professional isomorphism by analyzing the adoption of the matrix organizational arrangement. This model has been implemented not for a technical need, but in order to answer to a professional pressure exerted by the most important organizations of a specific network.

With a particular regard to the introduction of quality certification, literature provides a number of examples about how the decision to adopt is affected by institutional pressures.

As for example Schaefer (2007) demonstrates that the adoption of the Environmental Management Systems, based on ISO's standards, can be considered to be driven more by the need to obtain external legitimacy, than by the perception of the related economic benefits. Another contribution is provided by Zhu (2012 and 2013). The author demonstrates that normative, coercive and mimetic pressures operating at an international level, are significantly related to the adoption of ISO's quality standards, due to the need to be more attractive for foreigner customers and partners. A similar result is provided by Fikru (2014a and 2014b). In particular author through two empirical papers demonstrates how organizations, located in developing Countries, are more prone to adopt quality certifications in order to accomplish to coercive pressures provided by the international laws. Moreover they are prone to assume a mimetic behavior in order to be more similar to developed Country organizations. Finally Delmas (2008) argues that organizations face different institutional pressures by adopting various strategies. While the coercive constraints represented by laws are accomplished in order to prevent legal actions against the organizations, the expectations exerted by customers, suppliers and competitors can be considered as a growth opportunity to be followed.

Basing on these evidences we can state the following research hypotheses:

*Hypothesis 2a: In the Italian context, it is possible to identify the presence of active institutional pressures able to affect quality certifications dynamic.*

And more in particular:

*Hypothesis 2b: Healthcare managers decision about quality certification adoption is influenced by the degree of the coercive pressure of the law.*

## **Method**

### *Data collection*

Our strategy of data collection consisted into three different steps. 1) We collected the list of the Italian public healthcare organization from the Italian Ministry of health website. The website contains demographic information of each organization, including organization name, geographical localization, and finally information about the level of activity such as number of staffed beds, discharge rate, case mix index. All those data refers to the year 2012. 2) In order to explore the quality certification adoption phenomenon, we collected data about the ISO 9001 quality certification adoption introduced by Italian healthcare organizations. We analyzed data coming from an international database. In particular the ISO 9001 quality certification database contained the name of the adopters, the year of the adoption, and the aim of the certification. 3) Finally we collected data about Italian regional laws in order to explore the level of formalization about the need to introduce quality control procedures within healthcare organizations.

### *Variables*

Our dependent variable measures the presence within the sampled hospitals of the ISO 9001 quality certification. In particular we scored 1 for the hospitals that had at least one department certified, and 0 for the hospitals not certified. The information about certified hospitals were obtained from a specialized company. The reference month for certification data was December 2014.

Moreover we identified 6 independent variables: Hospital's size, Productivity, Case mixes index, Geographical localization, Hospitals' membership and Regional laws formalization. All measures of those six variables refer to year 2012 except for the regional law formalization, which was determined analyzing the latest Regional Law and Rules, and refer to December 2014.

Finally we considered the Institutional profile of the sampled hospitals: local health unit hospitals, trust hospitals, teaching hospital and national institute for scientific research, as a control variable.

## **Analysis**

We tested the research hypothesis by using a Order Logit Regression Model. (Scott, Long, Freese, 2006).

## **Results**

Results partially confirmed our hypothesis. In particular Hypothesis 1b confirms that in correspondence of a certain degree of complexity, healthcare managers are prone to adopt quality certification in order to better establish how the activities need to be performed and to better allocate the responsibilities across professionals. The number of discharged patients seems to be the condition on which is based the decision: in correspondence of a high level of discharged patients, hospital managers feel the need to standardize procedures and practices, thus confirming the literature (Staines 2000; Van den Heuvel 2005, 2006; Helbing et al. 2010; Rodriguez Cerrillo 2012).

Regarding hypothesis 2, our results show that in the quality certification adoption, the mimetic and the coercive pressures are present and are active within Italian healthcare context. On the contrary, although

many of our sampled hospitals are members of the “Italian Federation of Healthcare Organizations (FIASO)”, the professional isomorphism seems to exert a marginal role in the decision to adopt a quality certification.

Even by following the neo institutional perspective, our results show that, according to Powell and Di Maggio (1983 and 1991) and Meyer and Rowan (1977) organizations belonging to a context in which coercive pressures exist, they tend to become progressively isomorphic by accomplishing to the law requests, in order to appear legitimate to the external stakeholders. In our context of analysis the achievement of the quality certification, for some Regions, represents a basic due for providing healthcare services on the behalf of the Italian ministry of health. When the legal prescription becomes more formalized, the probability to verify the introduction of quality certifications increases.

The results of the present paper allow to merge two different theoretical perspectives about the quality certification adoption, by illustrating that the decision can be derives from real organizational needs, but also on order to accomplish to external expectations. Our results determine a number of managerial and institutional implications about how decision making processes need to be driven.

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