

## DECISION MAKING PROCESS AND MODES OF GOVERNANCE: A COMPARATIVE STUDY BETWEEN BRAZILIAN AND BRITISH HOSPITALS

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### Abstract

This study was carried out to investigate similarities and differences in the decision-making process of managers (both, administrative and/or clinicians) within hospitals, taking as references Brazil and Great Britain and considering the cost information use. Exploratory and quantitative survey methods were used to test research questions. The research was undertaken in hospitals of the West Midlands Region/Great Britain and Minas Gerais State/Brazil. Hence, 26 hospitals in Great Britain and 22 in Brazil were detected as eligible and 150 intermediate level managers were randomly selected as units of research in each country. These organisations were considered public and possessing common and compatible characteristics with the intended research. After conducting the survey, using a structured questionnaire, semi-structured interviews with middle managers at chosen case study hospitals were undertaken. This work used quantitative survey methods to test the research questions but further understanding is gained through the use of case study interviews. In the cases analyzed, it was possible to identify significant differences in the decision making process considering the use of cost information in hospitals. This work also allowed inferences between the modes of governance in terms of the decision making process. The hospitals managers should curb situations that increase opportunism in decision-making process due to efficiency of process and control of costs procedures.

**Keywords:** Modes of governance, Decision making, Governance Health, Health Costs

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### Introduction

Due to their size and diversification as organisations, hospitals' management should be decentralised, as well as the healthcare systems (BRASIL, 1998; Collins et al., 2000). Also, the circumstances have favoured the increase of non-programmed decision-making and problem solving (see SIMON, 1976) in the areas of planning and control. It is well known that a multidivisional structure with increasing non-programmed decision-making and problem solving demands more investment and skills of lower managers in planning and control and, consequently, they are more vulnerable to opportunistic behaviour and bounded rationality (SIMON, 1976; OUCHI, 1980; Wang, 2007; Xu, 2007).

Therefore, considering the modes of governance (see OUCHI, 1980; Héritier et al. 2008; Börzel and Tanja, 2009), we sought to investigate and understand to which extent the available information supports the planning and control processes that occur within public hospitals in both countries: Brazil and Great Britain. This study does this through the 'use of cost information' from the middle management perspective (both, administrative and/or clinician). This is done through the comparison of the two countries in a cross cultural study.

Hospitals' internal environment can be divided, essentially, into two areas of knowledge or management reflecting the hierarchy and the clan (see LAPSLEY, 1993; Thompson, 2003; Klijn, 2008), administration and health structure respectively. Such a combination, and its decision-making process, reinforces internal complexity for hospitals. This complexity is built upon multiple issues, sometimes conflicting ones, considered by managers. Planning and control within hospitals require the meeting of the two areas because the clinicians are those who have knowledge about the performance of their tasks (Weisbord, 1976; Freidson, 1985; Lapsley, 1993; Moore et al., 2009).

It is common that the clan, i.e the clinicians, fights the hierarchy, i.e. the administrators, because of clinical freedom and other issues. The hierarchy wants to control the clan members; however they do not accept it easily. Nonetheless, the clan tries to control the hierarchy. Finally, Bourn and Ezzamel (1986, p. 213) set out that "clinical freedom is interpreted here as a form of clan control".

The relationships between managers and clinicians influence the decision-making process of the hospital, as well as the planning and control process, because the increase of ambiguity in the performance measurement and the incongruence of objectives that increases

uncertainty and produces an environment conducive to opportunism. This leads to increased transaction costs and thereby reduces the efficiency of hospitals. Given these aspects, it is wanted to answer the following questions in this study: how do they consider their (hierarchy and clan) decisional roles? What can be said about their goal congruence when performing planning and control processes? Are they effectively involved in decision-making and problem solving, in terms of non-programmed decisions and problems? What is the hierarchical influence on the non-programmed decision-making?

In trying to answer these questions, this study was carried out to investigate similarities and differences in the decision-making process of managers and clinicians within hospitals, taking as reference the two countries. It would be desirable to find the maximum degree of similarity between the process of decision making between managers and clinicians, as well as the congruence between the goals of these two groups. The similarity of goals helps in the planning and control, reducing transaction costs and, thereby, increasing the efficiency of decision making (CAMACHO, 2008; CABRERIZO, 2009). It is known that "planning and control are two sides of the same coin and must be considered together" (EMMANUEL et al., 1993, p.8).

This paper is divided into four sections. In the first one the literature was chosen based on certain characteristics, quoting the main ideas of modes of governance and, a comparative study between two countries excludes approaches that could be applicable only to a specific country. Then, the literature is presented at a level that embraces the core elements of the theory pertaining to environment, organisations and managers irrespective of country. Secondly, posterior data analysis compares occurrences in both countries considering that the social phenomenon is taking place under a common theoretical umbrella and not a specific one. The next section shows how this research was conducted followed by the data analysis. Finally, conclusions were drawn considering a common literature background and the effects of modes the governance in the usefulness of cost information.

## Modes of Governance

The organisational failures framework emerges from the work of Coase (1937) and was explored by Williamson (1970; 1975) and Ouchi (1980). The transaction cost theory is concerned with identifying the organisational arrangement that most efficiently saves on transaction costs (see Getz, 2002; CAMACHO; ROCHA, 2008). Getz (2002) and Héritier et al. (2008) accepted that firms opt for a transactional approach to political involvement. Therefore, the main focus is now the transaction between actors explaining the absorption of environmental influence by the hospital. Consequently, the focus now is on the forms of organisation within hospitals, rather than on the overall hospital and the external environment. Despite some differences in terms of names, the theory discussed is relevant and it seeks to cover hospital

management styles and structures within a complex environment, using markets, hierarchies and clans as modes of governance (see, for example, Osborne, 1997; Thompson, 2003; Börzel; Tanja, 2009). In this case, clinicians will be presented as the clan and administrators, the hierarchy.

Markets, hierarchies and clans are considered forms of organisation, i.e. "an organisation may be thought as any stable pattern of transactions between individuals or aggregations of individuals. Therefore, this framework can be applied to the analysis of relationships between individuals or between subunits within a corporation, or to transactions between firms in an economy" (see Ouchi, 1980, p.140). Thus, in this definition, "a market is as much an organisation as it is a bureaucracy or clan" (op cit., p.132). Despite the fact that these forms of organisations can be identified in the healthcare systems in a broader meaning in both countries, this paper emphasises their application in the traditional organisation setting, i.e. public hospitals (see Bourn; Ezzamel, 1986; CARVALHO, 2008).

As it is known, an organisation is a typical solution when the production is too complex for an individual alone. One can explain it using Barnard's (1968) technological imperative or Simon's (1976) idea that "an organisation will exist so long as it can offer its members inducements which exceed the contribution it asks of them" (see Carson et al. 2006, p.246). Blau and Scott's (1962) can also be used though it seems naive, i.e., "... a purposive aggregation of individuals who exert concentrated effort toward a common and explicit recognised goal" (p.148).

The emerging organisation was introduced by the classic work of Coase (1937), and later explored in depth by Williamson (1975, 1978, 1991). They argued that an organisation exists because it can mediate economic transactions between its individuals at lower costs than a market mechanism can or, organisation supplants markets for many products and the majority of services to minimise transaction costs. Klijn (2008, p.510) set out that "organisation or hierarchy arises when the boundaries of a firm expand to internalise transactions and resource flow that were previously conducted in the market place". Or in other words "it is more efficient to function as one large organisation than as numerous smaller organisations" (Lubatkin et al., 2007, p.384). This can be considered a typical reason for the current hospitals structure. They have to be necessarily large and naturally complex due to the environment and the nature of services provided.

The internal market (or "quasi-market") experience in Great Britain came up as an attempt to reduce transaction costs and sought efficiency through competition between hospitals or trusts (see Ellwood, 1996; Joseph; Hunyor, 2008). Markets should be more efficient because, in order to operate, they can mediate transactions without paying the costs of searching, contracting, managing, etc. It can be expected that in a perfect market "transactions are carried out without costs" (Carson et al., 2006, p. 37) and "the transaction cost approach explicitly regards efficiency as the fundamental element in determining the nature of

organisations” (Ouchi, 1980, p. 247). The actors contracting are free and totally informed about opportunities, decision-making is rational and there are always alternative and reliable suppliers and buyers.

When such conditions do not prevail, transaction costs will emerge due to the exigency of effort, and resource consuming, organising, carrying out and controlling transactions among different actors. The transaction cost approach is largely responsible for the institutional form, i.e., the governance structure of the transaction (Williamson, 1975, 1978, 1991; Thompson, 2003; Tenbensen, 2005). In this paper this is particularly important because it justifies the presence of different forms or structures within hospitals.

The arrangement that defines the mode of governance was built upon the conjugation of a certain group of characteristics described by Williamson (1975, 1978, 1991). He argues that there are two postulated behavioural characteristics that can interfere with contracting and upon which the management style or structure might change: 1 – decisions and actions are defined by bounded rationality; and 2 – opportunism.

Opportunism will occur and increase in cases of high uncertainty of a cause/effect relationship and high uncertainty about objectives (see Thompson 2003; Burchell et al., 1980). This will also take place in case of

an incompleteness of task instrumentality, i.e. beliefs about cause/effect knowledge and high degree of ambiguity in terms of objectives/goals (see Macintosh, 1994; Drury, 2001). Thompson (2003) and Tenbensen (2005) establishes the clan control as the form of control in case of an imperfection in the knowledge of the ‘transformation’ process and low ability to measure output. This is the case of hospitals and it is also an answer to the increased opportunism. Carvalho (2008) and Klijn (2008) posed that in case of a high degree of goal incongruence and a low degree of ambiguity in performance measurement, the market form emerges and is tolerated. In the opposite situation, i.e. low degree of goal incongruence and high degree of ambiguity in performance measurement, the clan emerges and is tolerated. The above mentioned authors said that the hierarchical form takes place and is tolerated in the case of medium or intermediate level of goal incongruence and ambiguity in performance measurement. It is important to notice that Bourn and Ezzamel (1986) stated that in the case of a high degree of goal incongruence and a high degree of ambiguity in performance measurement, a form of organisation and managerial functions does not emerge. In those cases the controls, for example, are more ritualistic/symbolic. Table 1 summarises this.

**Table 1** Forms of organisation

Degree of ambiguity in performance measurement		Degree of goal incongruence		
		Low	Medium	High
Low	Low			Market
Medium	Medium		Hierarchy	
High	High	Clan		Ritual/Symbolic

Source: adapted from Bourn and Ezzamel (1986).

Contractual relationships define market transactions, or exchanges. However, certain degrees of uncertainty, bounded rationality, and opportunism can make contracting fail. It is considered that in case of market failure, hierarchy should emerge (Osborne, 1997; Thompson, 2003; Klijn, 2008; Teisman, 2009). Therefore, every bureaucratic organisation can be considered an example of market failure.

It is important to note that within a market “individuals are motivated by self interest in the rational pursuit of maximising their well-being” (Osborne, 1997, p. 319). Given the market tradition in Brazilian healthcare, it is expected that clinicians within hospitals would maintain this level of expectancy. This would be comparatively more apparent in that country than in British hospitals, which did not experience this tradition.

A bureaucratic organisation involves a system of hierarchical surveillance, evaluation and direction. When the ambiguity of performance evaluation increases, the bureaucracies can fail. Also, “when tasks become highly unique, completely integrated, or ambiguous for other

reasons, then even bureaucratic mechanisms fail” (Ouchi, 1980, p. 134).

In this case, i.e. “a form of mediation succeeds by minimising goal incongruence and tolerating high levels of ambiguity in performance evaluation”, which is the clan (Op. cit., 135). It is also called organic solidarity and organic relationships are considered as the key to coordination (Osborne, 1997). In this case, any group, which has organic solidarity, can be considered a clan: a profession, a labour union, or a corporation. In the case of this research, the medical profession is considered a clan culture (see Bourn and Ezzamel, 1986). The organic solidarity that exists in the medical profession is well known, particularly in Brazil.

Ouchi (1980, p. 136) set out that “the professionalized bureaucracy may be understood as a response to the joint necessity for efficient transactions within professions (clan) and between professions (bureaucracy). Goal congruity, as a central mechanism of control in organisations” is also important. This is the case of hospitals.

In this case, the clan is composed of the clinicians (professionals) and the hierarchy is the professionalized bureaucracy. The goals of the clan and the hierarchy are not necessarily the same and clearly stated (see Bourn; Ezzamel, 1986; Klijn, 2008), particularly in Brazil. These authors posed that “management and control in the National Health System... exercised through a corporate culture, or clan form. In specific terms, this may be described as the hegemony of the medical profession to undertake patient-care through the exercise of clinical freedom” (p. 210f). These authors comment some quotations from a paper authored by a surgeon and, among them, we highlight: “Bureaucracy can, like a tumour, turn malignant and can metastasise throughout the whole body of medicine. We need a good bureaucracy and whether it is good or bad often seems to depend upon the sense of responsibility that the clinician shows towards it.” Thus, the clan in Great Britain is adhered to their clinical freedom.

As seen, the above mentioned authors have stated that one mode does not exclude another and even the three models can appear simultaneously (Klijn, 2008; Teisman, 2009). Tenbenschel (2005) set out that there should be one dominant type. Hospitals can be considered organisations where more than one type will appear, mainly the hierarchy and clan. There are reasons to believe that the clan formed by the medical profession within hospitals (or sub-culture, see Bourn; Ezzamel, 1986) in Brazil are dominant or try to be dominant. Because traditions are implicit, rather than explicit rules that govern behaviour (Ouchi, 1980), the clan which permeates the Brazilian hospitals is expected to be, due to the market tradition, motivated by self-interest and will tend to maximise their well-being or clan objectives. This can be conflicting with the hierarchical model (Souza et al., 2008). In Great Britain this situation can be different. Osborne (1997) and Boyle (2008) studying public institutions admitted, in organisations within the clan, not vertically integrated and loosely coupled and the existence of explicit organisational missions of its own.

Key points in analysing market and hierarchies in the context of health organisations, public general acute hospitals in particular, are: 1 – the ambiguity of the measurement of individual performance; and, 2 – the coherence of goals, of the individuals, the clan and hierarchy and of the organisation. Ouchi (1980), Lapsley (1993) and Ellwood (1996) consider the former more challenging than the latter. Based on the exposed circumstances, every organisation has to work on the reducing the ambiguity of the measurement of individual performance, in order to access an acceptable level of opportunism. The same thought can be applied to the coherence of goals between individuals and the organisation. Ouchi (1980) suggests that market relations are acceptable and efficient when there is a low level of ambiguity over performance evaluation and, bureaucratic relations will be efficient when both performance and goals are ambiguous and incoherent. In terms of tolerating high levels of ambiguity in performance evaluation and low levels of goal incoherence, the clan form prevails.

To reduce transaction costs, to become more competitive or to survive, organisations have tended to reproduce or even create ‘artificially’ the market situation. This creates ‘independent’ internal areas, sectors or groups that simulate a market within the organisation (see Bourn; Ezzamel, 1987). Hospitals in Great Britain have lived this experience since Management Budgeting (BOYLE, 2008). Brazilian hospitals have just started a process of hierarchy and decentralization with SUS.

The clinical group, mainly doctors, or area is the major professional and informational supplier and is also the major influence on decision-making process. There is a lack of communication between managers and clinicians and also, there are different lines of actions adopted in similar circumstances. Ashmos et al. (1998) and Snowden (2009), argue that these professionals essentially internalise models of problem solving and knowledge so that they can act more or less autonomously on the job; they control their own work, and they make decisions in accordance with their respective professions standards. This work is neither known nor understood by hospital managers with administrative background.

### **Methodological design and research phases**

This is an exploratory study because it is defensible that little is known in terms of comparative hospital management, and much less is known when it is referring to the British and Brazilian hospitals middle management. Thus, this work is considered an exploratory research in essence even though some perspectives closer to the descriptive approach are going to be used. Also, it is valuable to put that this is a cross cultural experience.

As stated before, this research was defined as eminently quantitative. However, it can be said that this research indicates the direction of a combined survey and case study, meaning that techniques that induce to a qualitative classification were used (Miller, 1991). The qualitative perspective is considered as illustrative and an enrichment of the results, i.e. a category of triangulation.

Actually, the use of quantitative or qualitative techniques is linked to the research’s objective. Thus, this work uses quantitative survey methods to test the research questions but further understanding is gained through the use of case study interviews. The survey enables the research findings to be generalised but the interviews improve the internal validity and understanding of the findings. After conducting a survey using a structured questionnaire, semi-structured interviews with middle managers at chosen case study hospitals were undertaken.

The research was conducted in four main phases in Great Britain and Brazil. In the first phase the main survey was conducted using a structured questionnaire seeking to answer the working questions and test the hypotheses. Also, a documentary analysis took place to provide a wide view of hospitals. This phase was also responsible for elements of generalisation and external

validity. In the second phase, two hospitals were chosen in each country, based on available official sources or judgement of experts, data processing, and indicators as being representative of best practice and/or high performance level. In the third, the qualitative approach was carried through to visits to these hospitals and using a semi-structured instrument to interview several managers involving decision making, planning and control processes. This phase enhances internal validity. In the last phase, we perform the discussion of the questions and the test of the hypotheses considering the data gathered in phases 1 and 3. Data was processed, analysed and interpreted. This phase consolidated the elements for generalization, reliability and validity (SNOWDEN, 2009).

The research was undertaken in hospitals of the West Midlands Region, Great Britain and Minas Gerais State, Brazil. These organisations were considered as public and also, possessed common and compatible characteristics with the intended results.

Seeking sample and data collection equivalence, public hospitals were determined using secondary data and general criteria to produce equivalent groups in both countries. As general criteria, the following were excluded from the study:

- Specialised hospitals (i.e., geriatric, psychiatric, and rehabilitation).
- Hospitals with fewer than 100 beds.
- Hospitals without an available and official information (system) about costs.
- Hospitals with average length of stay of longer than 30 days.

Hence, 26 hospitals in Great Britain and 22 in Brazil were detected as eligible and 150 intermediate level managers were randomly selected as unit of research in each country. The process in Brazil started in January and finished in April 2008. Following Table 2 gives a general view of the whole process.

**Table 2** Phases of research

	<b>Great Britain</b>	<b>Brazil</b>
Region	West Midlands Region	Minas Gerais State
Type of Organisation	Public	Public
Phase 1		
Number of Organisations	26 NHS trusts	22 Public Hospitals - SUS
Questionnaires sent out	150	150
Questionnaires returned	90	120
Phase 3		
Number of Interviews	10 middle managers	22 middle managers

This research has used several statistical measures of organisation characteristics seeking to gain a deeper understanding of the profile of both hospital and respondents. Examining the general profile of the public hospital managers, the first managerial factor corresponds to the respondent's background. It is not enough but it can be considered as the main characteristic that defines the association of the respondent as a member of the organisation and is, consequently, linked with the mode of governance. As shown in Table 3, 47.7% of the British respondents had an 'administrative'<sup>1</sup> background, whereas 26.7% of the respondents were 'clinicians' and respondents with 'both' backgrounds presented 25.6%

<sup>1</sup> Inverted commas are used to detach extracts from the questionnaire.

**Table 3** Background of the respondents

	Great Britain	Brazil
<b>Clinician</b>	26,7%	41,7%
<b>Administration</b>	47,7%	49,1%
<b>Both</b>	25,6%	9,2%

Brazil presented a similar distribution in terms of the administrative background and the other two categories. It is important to notice that the difference between the 'both' background categories is inherent to more clinicians receiving management training in Great Britain than in Brazil. This will favour future analysis in terms of a possible integration of both modes of governance, i.e. the clan and the hierarchy in British hospitals. It is not a surprise: British clinicians have been involved in management and being accountable for their administrative actions since the Management Budgeting in 1980s (see, for example, Llewellyn, 1999). Brazil presents a distribution of about 50% administrators and 50% clinician staff. There is a balanced distribution of respondents in terms of the different forms of organisation in hospitals in both countries.

### General results and analysis

The results present managerial roles or tasks. It also maps the perception of planning and control as managerial or organisational functional dimensions. As seen before, opportunism and bounded rationality manifest in a

composition of goals and objectives such as individual, organisational, and collective. Therefore, 'goals' are considered relevant items for other dimensions/constructs. Table 4 shows the questions explored in this research in relation to this dimension/construct.

In terms of planning and control as a managerial function or behaviour, there is almost no difference in Great Britain in terms of who should be responsible for this within hospitals, as shown in Table 4. This suggests a balance between planning and control and also proposes integration between modes of governance. The difference presented slightly favours administrators, or in other words, the hierarchy. 'Planning as an administrators' task is represented by a mean of 3.32 with an acceptable p lower than 5%. This can be considered equal to 'planning as a clinicians' task', that is represented by a mean of 3.17, with an acceptable p of virtually nil. Control divided between British managers is represented by means of 3.48 and 3.16 as an administrators' and clinicians' task respectively. There is an acceptable p of virtually nil for control as an administrator task.

**Table 4** Organizational, Managerial factors: Study of planning and control responsibility

Items	Means		Chi-Square	p
	Great Britain	Brazil		
Planning as a clinicians' task	3.17	2.53	11.17	0.00
Planning as an administrators' task	3.32	3.81	12.69	0.00
Control as a clinicians' task	3.16	2.84	2.786	0.10
Control as a administrators' task	3.48	3.79	8.143	0.00
Planning as a sector/area's task	2.84	3.01	0.466	0.50
Control as a sector/area's task	2.80	2.81	0.000	0.99

In turn, Brazilian managers explicitly stated that planning and control should be considered as administrators' tasks within hospitals. One of the reasons that justify this fact is the presence of different modes of governance within hospitals. It could mean a stronger hierarchy but, however, it seems to be more related to a lack of balance between modes of governance. 'Planning as an administrators' task' shows a mean equal to 3.81 versus a mean equal to 2.53 for planning as a clinicians' task with a p of virtually nil. Control showed a similar difference, with a mean of 3.79 for administrators' task and a mean of 2.84 for clinicians' task. This highlights

again the major integration between hospital managers in Great Britain, i.e. the movement of clinicians from the clan to be part of the hierarchy.

British hospital managers presented slightly different means for planning and control as being administrative (3.32 and 3.48 respectively) or clinicians' task (3.17 and 3.16 respectively). It can be seen that clinicians as managers, in Great Britain, are more involved in activities of planning and control than their counterparts in Brazil and that there is not a significant difference between these managerial functions. This suggests that the clan members accept and exert a certain

degree of vigilance that, consequently, decreases the opportunism. This fact, added to the objectives/goals congruence, supports the idea that the modes of governance are more integrated. Brazilian managers

placed certain emphasis on functionalism, which is shown by the high mean for 'planning as sector/area's task', however, p is not significant.

**Table 5** Organizational, Managerial factors: Study of goals present in planning and control

Items	Means		Chi-Square	p
	Great Britain	Brazil		
Similarity of goals between individuals	2.76 (3 <sup>rd</sup> )	3.03 (4 <sup>th</sup> )	1.657	0.20
Similarity of goals between clinicians	2.66 (4 <sup>th</sup> )	3.33 (3 <sup>rd</sup> )	12.385	0.00
Similarity of goals between administrators	3.24 (2 <sup>nd</sup> )	3.46 (2 <sup>nd</sup> )	2.548	0.11
Clinicians and administrators pursue similar goals	2.51 (5 <sup>th</sup> )	2.91 (5 <sup>th</sup> )	2.894	0.09
Hospital's goals are known and being observed	3.31 (1 <sup>st</sup> )	3.52 (1 <sup>st</sup> )	2.967	0.09

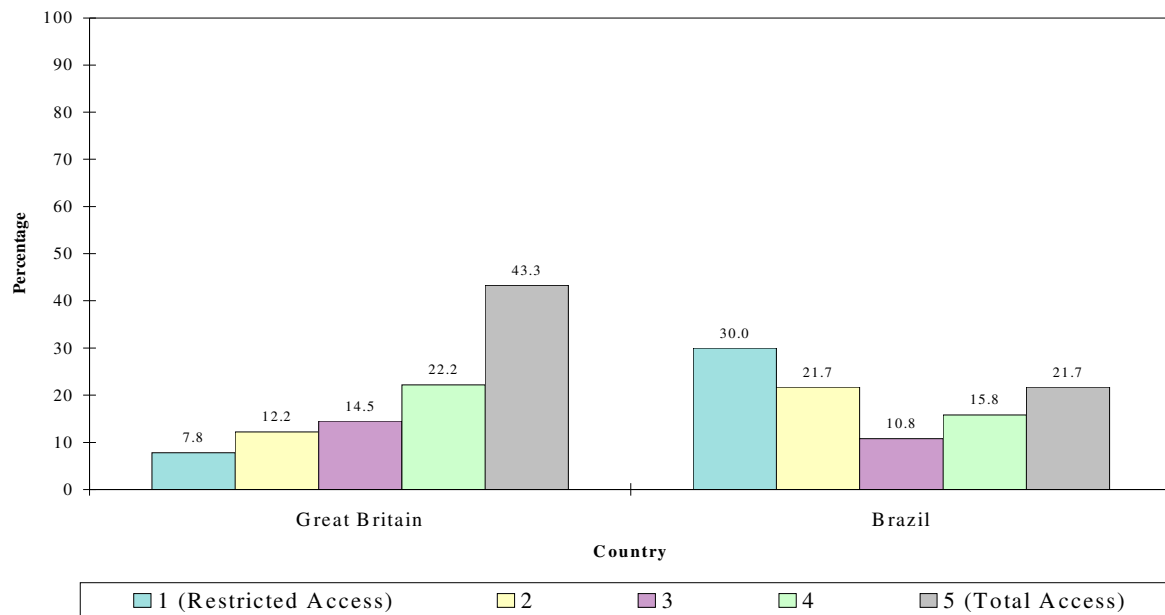
The perception of the hospital managers about the congruence of goals pursued when exercising planning and control was also investigated. This perception was tested considering the individual, clinicians, administrators, both clinician and administrators, and the hospitals' goals, as shown in Table 5. Both British and Brazilian managers stated that the hospital's goals are known and it was observed that hospital managers which exercise planning or control have the highest mean in each country, with 3.31 and 3.52 respectively; however, p is greater than 5%, which does not support a comparison between countries. It is important to highlight that overall goals are considered essential for internal consistency (see, for example, Mak, 1989). Also Simon (1976) recognises that overall goals favour behavioural congruence. This affects opportunism and bounded rationality. It is interesting to observe that managers of both countries presented almost an identical order in terms of similarity of goals. The fact that 'hospital's goals are known and being observed' as the highest mean (1st place) in both countries signals to the presence of more objectively rational decision-making.

The poorest means in Great Britain and Brazil (5th place) were computed for 'clinicians and administrators pursue similar goals', 2.51 and 2.91 respectively. This fact points to the existence of possible differences between modes of governance when planning and controlling, i.e. the hierarchy and the clan pursue different objectives/goals. Such a gap can clearly interfere with the middle management's mediation role because this is the central meaning of many of its assumptions.

This scenario should fuel the emergence of a complex rationality, i.e. subjective, individual and

collectivist rather than only objectively rational decision-making. This situation is reinforced when the similarity of goals in distinct groups presents higher means than those ones presented for both groups when considered together. In other words, there is a similarity of objectives/goals in terms of group members but not between groups. In cases of lower degree of goal incongruence, the clan form of organisation should prevail (Ouchi, 1980; Bourn; Ezzamel, 1986). It is possible to observe that 'the similarity of goals between clinicians' in Great Britain is well below the 'similarity of goals between administrators'. Given contingent factors such as general government policy, this suggests a better definition for the hierarchical form of organisation. Therefore, the knowledge (Tsoukas, 1995) has been shared between modes of governance, which decreases ambiguity in performance measurement. Brazilian managers present a similar profile; however, given contingent factors such as the (lack of) general government policy, this suggests that opportunism and ambiguity in performance measurement are still high.

According to Figure 1, more than 65% of British managers have a considerable level of access to information about cost. In terms of Brazilian managers the percentage is considerably lower, 37.5%. It is possible to assert that British managers have superior access to cost information than their Brazilian counterparts. Cost information should reduce uncertainty (Choo, 1996). Extensive cost information availability associated with high accessibility improves the decision-making process. Therefore, British managers enjoy a privileged position for reducing or eliminating opportunism and encouraging the programmed decision-making and structured problem solving.



**Figure 1.** Access to information about cost and resource consumption

Note:  $p < 0,001$  and Cramer's  $V = 0,341$

In terms of hierarchical influence on non-programmed decision-making, Table 6 shows that British managers have more 'autonomy' to decide about unstructured or critical problems than their counterparts in Brazil – mean of 3.70 and 2.64 respectively with an acceptable  $p$  lower than 5%. This can be considered as being a result of the decentralised hospital structure in Great Britain. British hospitals present a structure that suggests or can be associated to the M-form (see Thompson 2003; Emmanuel et al., 1993), which simulates the market form of organisation within a hierarchical structure (Ouchi, 1980). It can be said that this form of organisation started with management budgeting. It is coherent with a simulation of competition for resources and improvement in performance. In this case, it decreases the ambiguity in performance measurements. It is interesting to notice that the three modes of governance could be identified and found in British hospitals.

Brazilian managers seem to have no autonomy in unstructured decision making. This characteristic presents

a mean lower than all the others but consulting of computer systems. Brazilian managers have shown to be attached to the hierarchical structure because of the item 'advice from superiors' presented the highest mean, 3.81. Hierarchies are appropriate for a moderate degree of goal incongruence and also for a moderate degree of ambiguity in performance measurement. Given the contingent factors, such as governmental policies and environmental uncertainty, this definitely is not the current situation of the Brazilian hospitals. Lack of process standardisation and, consequently, a high degree of ambiguity in performance measurement is a common characteristic of the Brazilian public hospitals. Therefore, these circumstances show that hierarchy as a mode of governance is not coherent. In this case a higher degree of opportunism emerges and, at the same time, the modes of governance face difficulties to interact. This situation can be purposively generated, seeking to keep the clinical freedom and, consequently, advantages and opportunist behaviour.

**Table 6** Decision-making and problem solving: Hierarchical characteristics

Items	Means		Chi-Square	p
	Great Britain	Brazil		
Autonomy for decision-making	3.70	2.64	29.393	0.00
Advice from superiors for decision-making	2.98	3.81	26.984	0.00
Advice from subordinates for decision-making	3.33	3.65	4.818	0.03
Consulting of manuals for decision-making	2.64	3.17	7.552	0.01
Consulting of computer systems for decision-making	2.38	2.13	3.673	0.06



Overall performance was positively related to infrequent interactions with superiors (see, for example, Merchant, 1981). Even though this was stated for companies, it supports British managers. They presented the mean of the characteristic 'advice from superiors' as being one of the lowest ones, i.e. 2.98 or less than 'advice from subordinates'. This is coherent because the greater the autonomy on decision making and problem solving, the lower is the looking for 'advice from superiors', meaning decentralization and giving indicatives of a more co-operative network mode and of an integration between the clan and the hierarchy.

Putting together 'autonomy for decision making' and 'advice from subordinates' as highest values, British managers support the idea of organisational fragmentation, like islands being formed and ruled within the organisation. This is acceptable in terms that British managers are coping with non-programmed decision-making and are able to get involved in complex rationality. In turn, Brazilian managers, in this specific situation, seem to follow the rules being prescribed by the objective rationalism and hierarchy, however, this appears to be an ostensible or artificial situation given the contingent factors.

**Table 7** Decision-making and problem solving: Relation between programmed and non-programmed decision-making

Items	Means		Chi-Square	p
	Great Britain	Brazil		
Proportion between programmed (routine) and non-programmed (non-routine)	3.28	2.85	18.026	0.00

Managers of both countries are involved in decision-making and problem solving. The proportion between 'programmed or routine' and 'non-programmed or non-routine' decision-making (see, for example, Simon, 1976) shows that British managers represent what the theory has proposed, i.e. managers in the multidivisional environment (internal and external) of hospitals are expected to take more non-programmed decisions (see, for example, Emmanuel et al., 1993), as shown in Table 7. Brazilian managers present a mean slightly higher than 2.5, which would represent 50% routine and 50% non-routine decision-making. As can be seen in Table 7, British managers presented a mean of 3.28 and their counterparts in Brazil, 2.85, with an acceptable p lower than 0.05 favouring comparison between countries. Non-programmed decision-making and unstructured problems can be related with a higher degree of ambiguity in services, the presence of narrative knowledge, the incompleteness of task instrumentality, the imperfection in the knowledge of the 'transformation' process and the 'asset specifications' within hospitals. This certainly propels the occurrence of higher degrees of ambiguity in performance measurement. When this is associated with goal incongruence, even more opportunistic behaviour can be expected. Therefore, hospitals should adopt integrated modes of governance to cope with this situation. Therefore, the clan has been integrated to the hierarchy in British hospitals. There is not a similar process occurring in Brazilian hospitals.

## Conclusions

It was possible to perceive in this study that there is a gap between administration and clinicians in hospitals in both countries in the decision making process. But this fact is more composite in Brazil. You could say that clinicians participate more in decision-making in Britain than in Brazil. Likewise, we perceived an incongruence of goals

between hierarchy and clan, further increasing the asymmetry of information within hospitals.

These facts, more pronounced in Brazil, are undesirable in any organization. For hospitals, we can say that this makes it difficult to measure the performance of clinicians as well as the costs of hospital procedures. This confirms the maintenance of high unit costs of hospital procedures, especially when compared with private hospital systems. Moreover, it takes into account that an incongruence of objectives and ambiguity of performance measurement leads to low efficiency, resulting in a poorer service for the population.

The lack of studies in planning and control with respect to public hospitals impedes any other comparison or assessment considering empirical data. One of the objectives of this paper was to generate initial material for future researchers. The hospital managers should curb situations which increase opportunism in decision-making process due to efficiency of process and control of costs procedures.

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