

Micro strategies and hospital management: an analysis through the lens of complexity

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ABSTRACT

Hospital organizations play an important social role. Its management, however, has been challenged to seek greater efficiency, quality and relevance of health services provided. The purpose of this study has been the analysis of innovative strategic practices that have affected performance of a hospital as an organization. This is a case study, focusing a community hospital, located in the State of Parana in Brazil. Data were collected through interviews, non-participant observation and document analysis. The analysis revealed that introducing innovative strategies in cost, medical and nursing areas have contributed decisively to the improvement in resource allocation and quality of the health services delivered. Factors such as the practice of micro strategies, support of top management and favorable organizational climate were decisive in this process. Results revealed that micro strategies employed in terms of cost contributed to the reduction of operational expenses, better reallocation of resources and greater investment in health services. Changes in patient care in the nursing sector promoted a higher quality of service. The strategy of introducing the hospitalist provided better management of complications and of care of patients and their families. Finally, we found a greater humanization of health services and improvement of organizational performance and image. The major contribution of this article is the finding that, in complex systems such as hospitals, the practice of micro strategies tends to be more effective in health services management.

PALAVRAS-CHAVE

Micro estratégias;
Hospital;
Custos;
Enfermagem;
Médico hospitalista.

RESUMO

As organizações hospitalares cumprem um importante papel social. Sua gestão, contudo, tem sido desafiada a buscar maior eficiência, qualidade e relevância dos serviços de saúde. Este trabalho teve como propósito analisar práticas estratégicas inovadoras que impactaram o desempenho de uma organização hospitalar. Trata-se de um estudo de caso, com foco em um hospital comunitário, localizado no estado do Paraná. Os dados foram coletados por meio de entrevistas, observação não participante e análise documental. A análise revelou que a introdução de estratégias inovadoras nas áreas de custos, enfermagem e médica contribuíram decisivamente para a melhoria na alocação de recursos e na qualidade dos serviços de saúde prestados. Fatores como a prática de micro estratégias, o apoio da alta administração e o clima organizacional favorável foram decisivos neste processo. Resultados revelaram que micro estratégias praticadas na área de custos contribuíram para a redução de despesas operacionais, melhor realocação de recursos e maior investimento nos serviços de saúde. Mudanças de cuidado com o paciente, no setor de enfermagem, promoveram maior qualidade de atendimento dos serviços. A inserção da estratégia do médico hospitalista proporcionou melhor gerenciamento das intercorrências e nos atendimentos a pacientes e familiares. Por fim, verificamos uma maior humanização dos serviços de saúde e a melhoria no desempenho e imagem organizacionais. A contribuição maior deste artigo está na constatação de que, em sistemas complexos como hospitais, a prática de micro estratégias tende a ser mais eficaz na gestão dos serviços de saúde.

1 Introduction

Due to their social nature, hospital organizations fulfill a fundamental role in society as they focus on health promotion services. In the last decades, hospital management has been driven to seek greater organizational efficiency and reliability, a fact that constitutes a great challenge to managers (Porter & Teinsberg, 2006). It is a type of organization identified in its literature as complex, surprising, ambiguous and as such paradoxical (Etzioni, 1964; Bolman & Deal, 2008; Scott, 2008). There work specialized professionals with the purpose of promoting patients' health and providing accessible and reliable services demanded by society.

Once there are no managerial models or approaches appropriate to hospital specificities, management of these organizations has incorporated business managerial models with the purpose of improving organizational performance (Parker, 2002; Grey, 2004; Meyer & Meyer, 2013; Meyer, Pascucci, & Mamedio, 2016) moved by mimicry, consultancies, seminars, literature and best sellers. It is a phenomenon called managerialism that is based on the principle that organizations, independently of their objectives, nature of activity and other specificities, can be managed on the basis of identical models and approaches, most of which of a rational nature (Parker, 2002; Grey, 2004).

However, as Mintzberg (1994) emphasized metaphorically, any attempt to fit rational models in professional organizations, as it is the case of hospitals, becomes an effort similar to fitting square pegs in round holes. This results in unnecessary expenditure of resources, loss of time and frustrations, besides distancing from the organizational mission.

This way it is important to know which practices can be more effective in strategic management of hospitals and, especially, their contributions to the performance of these organizations. In this particular, the concepts arising from organizational strategy and from complexity theory provide solid support for a thorough analysis of management in hospital organizations.

In the perspective of the complexity theory, order emerges from the interactions between the individuals that form it, which are responsible for innovative and transformative actions in the

organizational environment (Stacey, 1996; Cilliers, 1998; Bolman & Deal, 2008). In complex organizations, such as hospitals, it is the micro activities of daily life that materialize the strategy, through speech, initiatives, interactions and rationality that justify and legitimize its practice (Whittington, 2003; Kornberger & Clegg, 2011).

This article presents some main contributions. In the first place, we stand out the examination of the factors responsible for triggering innovative strategies in a complex system. A second contribution refers to the recognition of micro activities materialized as innovative strategies, through experience, creativity, interactions and negotiations of health professionals. Finally, a third contribution is in the rescue of micro strategies as a practice capable of promoting changes in the hospital environment.

2 Literature Review

2.1 Organizations, complexity and hospitals

Organizations are embedded in dynamic and turbulent environments, constantly confronted with challenges for which they need to find solutions and responses, otherwise they weaken, lose effectiveness, legitimacy, and extinguish (Scott, 2008). In this context, several organizational theories seek to contribute to a better understanding of how organizations function so that they can be better managed.

Organizational theory has been especially influenced by two thoughts from the natural sciences: classical thinking and systemic thinking (Morin, 2006). According to classical thinking, the organization is seen as a rational system, similar to a machine. It has routine operations, efficient and predictable, and reality consists of objects that can be subdivided until they reach their basic ontological units, irreducible and indivisible (Stacey, Griffin, & Shaw, 2000; Morin, 2006). From the perspective of the systemic thinking 'the whole is greater than the sum of the parts'. This means that there are emerging qualities that would not exist if the parts were isolated (Morin & Moigne, 2000).

Although classical thinking is widely disseminated and prevalent in organizational management literature, criticisms of this perspective have grown strongly in recent decades, considering it limited, reductionist, and far from

the reality of organizational management (Mintzberg, 1994; Stacey et al., 2000).

In contrast with simplistic thinking centered on the conception of the fusion of one and the multiple, complexity-based thinking (Stacey et al., 2000) considers the environmental influence on the organization as well as emerging actions that result from the dynamic interaction of individuals who form and transform it. Thus, complexity is seen as a web of events, actions, interactions, feedbacks, determinations, and happenings that constitute the phenomenal world (Morin, 2006).

From the point of view of complexity theory, reality is constituted of abstract relations adopting a paradoxical vision of human nature. Individuals form the organizations, but at the same time they are formed by them. In human systems, unlike other systems, reality can not be expected to be modeled and have its performance or results predicted (Tsoukas, 1998).

In complex systems the interaction between elements is dynamic creating models in which unpredictability is constant. A complex system is distinguished by the multiplicity of interacting elements, by its interdependence and diversity (Sargut & McGrath, 2011).

In the case of hospital organizations, complexity is related to internal factors such as the nature of health promotion services, the organizational structure focused on different areas of specialization, the autonomy of health professionals, the dynamics of interactions between agents, plurality and power of interest groups that strongly influence strategic decisions and practices in this type of organization (Pascuci & Meyer, 2013; Meyer et al., 2016).

Hospital organizations are also characterized as loosely articulated systems. They are structures where multiple agents are connected and interact sharing common aspects, while protecting their identities (Weick, 1976; Orton & Weick, 1990). In hospitals, there is interaction of professionals from different areas of knowledge, grouped in semi-autonomous units of decision and action, that preserve their autonomy and independence forming a complex network of interactions, whose actions and results are unpredictable.

Management of these organizations has been increasingly challenged to seek greater efficiency, quality and social relevance of their services. Their organizational complexity, however, has been poorly understood and managed (Mintzberg, 1994;

Bolman & Deal, 2008; Meyer et al., 2016), with negative implications on the organizational performance.

2.3 Strategy in Complex Systems

The concept of strategy does not find consensus in the literature, the debate about its formulation and implementation is extensive and controversial (Mintzberg, 1994; Mintzberg & Quinn, 2001). There is, however, a convergent point, the fact that strategy represents a link between the organization and the environment, from which decisions and actions unfold, configuring organizational behavior directed towards future growth and sustainability. In this particular, the strategy is seen as a rational, intentional process where there is a clear articulation between planning and action, that is, the formulation of the strategy precedes its implementation (Chandler, 1962; Ansoff, 1965; Steiner, 1969; Andrews, 1971). In this perspective are inserted the deliberate strategies, based on the premises of direction and control (Mintzberg & Waters, 1985).

A distinct perspective treats strategy as a set of activities, resulting from a dynamic, social and emergent process and resulting from the interactions between agents present in the daily life of organizations (Quinn, 1980; Mintzberg & Quinn, 1991; Mintzberg, 1994; Mintzberg, Ahlstrand & Lampel, 2000). A third perspective regards strategy as action and reflection that can only be identified *ex post facto*, that is, retrospectively. In this case the strategies would be not only emerging, but also resulting from factors such as luck or chance (Weick, 1987).

The formation of strategy in "professional" organizations - such as universities, hospitals, engineering companies, among others - encompasses multiple elements and rational, psychological, social, cultural and political factors. It involves professionals who work in core activities in this type of organization. The result is a fragmented process of strategy formation that includes initiatives and interactions of individuals and groups (Hardy, Langley, & Rose, 1983; Mintzberg, 1994).

Because they operate in unstable and complex environments, the distinction between formulation and implementation of strategies is not observed in hospital organizations (Meyer,

Pascuci, & Murphy, 2012). In this context, formulator and implementer merge into the same individual or group (Meyer et al., 2016).

In this perspective, the strategy can be understood as a social practice, since it is not an attribute of the organization, but a result of the interaction and daily activities of the people.

For sociologists like Garfinkel (1967) and Cicorel (1975) organizations involve materialization and the social processes in these organizations tend to focus on micro events. And, therefore, they constitute micro foundations, many of individual character, with impact on the organizational action (Felin & Foss, 2005).

It is understood as practice a pattern that involves several interconnected elements that use objects, emotions, intuition, creativity and behavior. Such practice, however, may or may not assume a strategic character (Reckwitz, 2002).

2.4 Strategic Practices

Management is an activity that results much more from practice and experience than from science (Mintzberg, 2010). Strategy, in its turn, refers to a set of practices, initiatives and intuition of many agents in organizations. In hospital organizations, where autonomy of the agents predominates, health professionals are the main agents responsible for materializing the strategy (Denis, Langley, & Rouleau, 2007; Meyer et al., 2016).

In a complex system the strategy can be considered a practice. It is a social phenomenon inserted in a certain organizational environment in which autonomous agents work and interact in different forms and intensity (McDaniel, 2007).

Thus the strategy can be understood as a practice arising from interpretations, interactions and activities of people involved in the daily life of organizations (Mintzberg, 1978; Reckwitz, 2002; Johnson, Melin, & Whittington, 2003; Tsoukas & Knudsen, 2005; Whittington, 2006; Fenton & Langley, 2011). The unpredictability of the environment, the internal dynamics as well as the plurality of interests present in the organizations contribute to the emergence of strategies on different fronts and in different places. This includes from small individual actions developed on a daily basis by the agents to group initiatives of agents that enjoy some autonomy (Meyer et al., 2016). In this environment creative and innovative

capacity, as well as interactions, influence actions that can become very relevant for innovation and promotion of organizational changes. Analyzing organizational strategy management Felin and Foss (2005) highlight the importance of the individual as well as the role of their individual and/or group capacities in the materialization of actions. The relevance of micro actions has also been highlighted by Johnson and Huff (1997) in relating strategic innovation to 'periphery' actors rather than central management.

In complex organizations, such as hospitals, strategies emerge from professional levels through initiatives and improvisations, guided by few rules and then validated by the top management, integrating the micro and macro cosmos of these organizations (Eisenhardt & Piezunka, 2011). These actions, carried out by several agents, are considered strategic when impacting the quality of the services and the organizational performance (Johnson et al., 2003; Denis, Langley & Rouleau, 2007; Fenton & Langley, 2011), taking on, therefore, the characteristic of micro strategies.

3 Methodology

This research has a qualitative character, characterizing itself as exploratory and descriptive in nature (Denzin & Lincoln, 2006). It was a unique case study (Yin, 2005) that focused on the experience of a Brazilian community hospital, located in Curitiba, Paraná State. Among the criteria adopted for the development of the research at the hospital stand out the most recent innovations that have been adopted by its management, as well as its recognized managerial capacity.

The Hospital was founded in 1947, being the first emergency room in the city of Curitiba and, for years, maintained the main pediatric care sector in the State. In 2016, the infrastructure of the Hospital consisted of 144 beds, seven operating rooms and two Intensive Care Units (ICUs) and approximately 1,000 contracted employees. The Hospital performed an average of five thousand patient attendances in the emergency room, four thousand outpatient visits and had an average of 950 hospitalizations per month (II Interview).

This article focused on the analysis of strategies practiced in the hospital by the administrative and operational centers. In order to do so, we investigated in the different departments the cases of innovative strategies practiced that

resulted in the improvement of hospital services. Three cases were selected for in-depth study: 1) the implementation of the cost system; 2) in nursing the introduction of patient safety protocols, 3) insertion of the concept of the hospitalist. The selection of cases was based on the relevance of health activities that most impacted organizational performance in the period from 2014 to 2015.

Data collection was performed from March to November 2015, through open interviews, documents and non-participant observation.

Selection of the interviewees was made from a non-probabilistic or intentional sample (Richardson, 1999), in view of the interest in people involved in the development of strategic practices focus of the research. Twenty-one interviews were conducted, whose interviewees are referenced throughout this article, as specified in Table 1:

Table 1. List of interviewees

Interviewees		
Profile		No.
Director	Technical Director (I1)	04
	Administrative Director (I2 and I3)	
	Nursing Director (I3)	
Manager	Nursing Emergency Manager (I4)	06
	Nursing Surgery Center Manager (I5)	
	ICU Head Nurse (I6)	
	Manager of Nursing Hospitalization Beds (I7)	
	Cost Manager (I8)	
	Contract Manager (I9)	
Coordinator	Nurse Coordinator – Outpatient Clinics (I10)	01
Nurse	Palliative Care Nursing (I11)	01
Physician	Hospitalist (I12 until I20)	09
Total Of Interviewees		21

Note: "I" is used as an abbreviation for "interviewee"

Source: Research data.

Initially, people directly involved in the investigated processes were interviewed, from top management and middle management. From the initial interviews were selected interviewees by means of "snowball" sampling (Malhotra, 2001). In this type of sampling, each of the initial interviewees identifies other individuals belonging to the target population of interest and the interviews continue until the names start to repeat.

The use of open interviews had the objective of extensively exploring the issues studied, stimulating the speech of each interviewee. In this type of approach, the interviewer introduces the subject to be discussed and the interviewee is free to think about the suggested topic (Yin, 2005). The questions focused on the reasons that triggered the strategy, as well as on the way in which the process was developed, observing which practices were adopted, whether they were guided by managerial models or whether they had their origins in initiatives of individuals and leadership groups (individuals and/or groups) that have led and materialized such strategies.

The pre-test of the research instrument occurred through an interview with a director of another organization with similar characteristics.

The non-participant observation happened through the participation of one of the researchers in meetings of the administration and managing committee. The interviews were recorded and transcribed and, in addition to the field journal entries, they totaled 294 pages. Documents such as hospital reports were collected from hospital managers.

For the analysis of the data we used techniques of content and document analyses (Yin, 2005). For Bardin (2006), content analysis is a set of communication analysis techniques, which uses systematic and objective procedures to describe message content. The adoption of different techniques of data collection allowed its triangulation (Denzin, 1989).

4 Analyses of Results

Data analysis is concentrated in three important sectors of hospital management (cost, nursing and medical) where relevant strategic practices were developed. For each of these we analyzed the triggering strategies, purposes, processes and results, as well as their respective impacts on the quality of services and

organizational performance, which we now examine.

4.1 Implementation of a cost system

The economic and financial sustainability of a hospital organization always requires special attention due to the nature of the services provided, unpredictability and interdependence among the various sectors that make up the organization. Increasing costs have pressed hospital managers to seek more efficient management systems. The implementation of a cost system has become a strategic challenge for the hospital since management models designed for "machine" organizations (Mintzberg, 1994) are not very suitable for complex and loosely articulated systems for this type of organization.

The implementation of cost system provided support for the strategic decisions made at the Hospital and a more real basis of operational costs. In this regard, the Technical Director expressed himself:

"[...] the cost system greatly modifies the vision of what was being profitable for the hospital. [...] So when you begin to see this in a different way, you begin to give the decision maker completely different information. You begin to see the hospital from a point of view that had not been noticed before" (I1 Interview)

The decision of the hospital management to provide the organization with a system to support strategic and operational decisions regarding the expansion, maintenance or even cessation of activities was guided by the mission and the main strategic objectives of the organization. In the same way, this same system contributed to a greater agility and safety in the allocation of resources to the different units. An inefficient cost system distorts the actual cost in the organization (Cooper & Kaplan, 1988) and triggers misleading decisions and actions generating management problems. The objective of the cost system was to provide the hospital manager with an information system that offered more reliable parameters for decisions and actions aligned with a budget process.

Hospital management services are essentially qualitative in nature, that is, subjective. Any cost system in a reality so characterized, to become relevant and strategic, needs to consider this factor. In the hospital the current system did not provide

reliable information for the best decisions and actions. Thus, the implementation of the cost system began with the hiring of a qualified financial manager with experience in hospital management, who worked with professionals in the affected areas, providing another way to observe the generated numbers.

We identified that management of the cost system led to safer decision making regarding revenues and expenditures as well as to investments generating internal economy savings and greater operational efficiency. It also allowed the organizational development and attraction of more qualified professionals. As the Cost Manager stated:

"[...] the cost system obviously influenced the organization for good, so that it could achieve its sustainability and strategic objectives". (I8 Interview)

Another contribution of cost management was that it provided a better resource allocation and greater internal savings by reallocating resources to priority strategic areas of the organization. In this particular, we observed a strategic practice that confirms this understanding. The managers of the hospital chose to outsource the outfit and linen, a fact that brought cost reduction, reduction of physical space for storage, and that generated savings in operations.

The fact that operating costs are growing at a faster rate than the capacity to adjust the collection of hospital services has made the implementation of cost management a strategic initiative. This can be confirmed by the opinion of one of the Directors:

"The cost system was fundamental for the hospital to be able to maintain its level of service, often it is, it is not possible to adopt the same management practice of care to a SUS (Sistema Único de Saúde, the Brazilian Public Health Service) patient as to the patient that has medical insurance, because of an issue of payment and viability, but when we show this, that in this mix of medical insurance and such, we have been able to establish a standard. That the SUS (Sistema Único de Saúde, the Brazilian Public Health Service) patient be treated with the same hospital supplies used for the patients that have medical insurance" (I1 Interview)

We have observed that the cost system was also strategic for the organization as it improved its image in the community by offering better quality services and by contributing to the achievement of

economic and financial sustainability and fulfillment of the organizational mission.

4.2 Nursing – patient safety

Nursing services play a key role in the hospital organization. Direct contact with patients, their treatment and recovery depend, in large part, on the professional work of the nursing service. In this particular one of the activities identified as critical was the safety of the patient due to an increasing occurrence of adverse events (AE), such as incorrectly administered medicine, exchange of medical records, among others. Such adversities imply considerable social and economic costs (WHO, 2004; Porto, Martins, & Mendes, 2010), in addition to compromising the reliability of hospital services, which led management to consider it as one of the priority areas.

We observed that several decisions and actions contributed to the transition to a safe environment for the patient in the hospital. The first one, established by top management, was to achieve hospital accreditation. To reach this objective, the hospital constituted a center of patient safety with representatives of the board of directors and assistance care. Six protocols were adopted for this purpose. Top management had identified negligence in the treatment of patients with the occurrence of adverse events. The consequence was the decision to implement the protocols required by the Brazilian Department of Health (WHO, 2004) that aimed at minimizing the occurrence of risks and failures that may compromise patient safety. These are: (i) identification of the patient; (ii) prevention of pressure ulcer; (iii) safety in the prescription, use and administration of medication; (iv) safe surgery; (v) hand hygiene practice in health services; and (v) prevention of falls. In commenting this fact, an experienced nurse said:

"[...] adverse event [...] ended up being common in institutions, I come to operate the left foot, they operate the right foot, [...] but okay, let's continue, no one takes any action, there is no action in relation to this, I hospitalize the patient and he/she acquires an infection in the hospital, it is common." (I5 Interview)

The implementation of the protocols demanded a new standard of care by the nursing team. Professionals in this area began to adopt a multidimensional view on patient care that

contributed to the adoption of treatment plans for each patient. As a result, there was a more dynamic and active attitude, because the nursing team had the greatest contact with the patient.

The insertion of the hospitalist in the organization constituted a relevant strategic decision, analyzed later on, with a strong impact on the nursing sector. This decision triggered the need for a new vision and reformulation in nursing service. The main one was the change in the focus of the routine and in the procedure in terms of the patient and his/her needs. The main strategy here was to integrate the nursing team with the team of hospitalists, in order to develop the patient's therapeutic plan.

We observed that the nursing team proved to be safer when working with the team of hospitalists. This micro strategy introduced a longer stay of doctors at the hospital based on a strong informal relationship among health professionals, characterizing an important and successful action (strategy). The nurses' reports showed this interpretation:

"[...] this hospitalist-nursing relationship is differentiated, this even provides more safety for the team" (I5 Interview)

The adopted practice was carried out with interrelated routines in an integrated practice between the medical and nursing staff. The change of routines promoted greater interaction between nurses and hospitalists represented by the integration of collective practices, giving place to new patterns, routines and structural arrangements (Jarzabkowski, 2003), as was the case with hospitalist medicine. In this same line and reinforcing the importance of this micro strategy for the quality of hospital services two hospitalists expressed themselves plus the technical director:

"[...] Previously the doctor made a short visit and did not know what happened. Not today, the doctor comes, is there, talks, makes questions, discusses, offers an attendance [...]" (I16 Interview)

"[...] The nursing team began to realize that there was a doctor on the patient's side, that there was a doctor that was more available, that there was a doctor who talked to the family, they noticed a difference in the improvement of care. For several months now, we have not had an unexpected cardiorespiratory arrest in the ward in our group." (I12 Interview)

The superior administration also desired that the nursing team developed a greater sensitivity with respect to the patient, mitigating suffering — as it was observed in the case of palliative care, in which the patient has no prospect of cure. In these cases, the nurse began to question certain patient requests and even talk to the family. This behavior served as a mitigating factor to suffering [...] at this moment, certain concessions moderate the psychological suffering of the patient, without worsening the clinical condition" (I1 Interview)

We observed that the change caused opposition from a group of nurses who resisted the process, especially due to the changes in the routines of the nursing sector. The autonomy of nursing professionals, the plurality of interests and the attachment to routines, typical of professional organizations and complex systems (Stacey, 1996; Cilliers, 1998; Jarzabkowski & Fenton, 2006; McDaniel, 2007) can explain the barriers faced by the coordinator of the department. This was corroborated by the statement of a director of nursing that declared "[...] (someone) recently said: it is no good for you to come and keep us on a short leash, because we know how to do it, we do it our way" (I3 Interview)

Change in the procedures in the nursing sector caused a concern with changes of ingrained practices and growth of bureaucracy in the sector. This is reinforced by the report of a nursing professional:

[...] the nurse will be a little overburdened because he already has several activities, this will burden more, because you will stay too much in the system, too much on paper, [...] I think this will create a little more resistance [...] You will have more resistance in this sense, to have to fill out things, to have one more thing to do [...] (I7 Interview)

Then, the chairman of the hospital, encouraged by the feedback of other directors and hospitalists, opted to replace the director of nursing for the lack of follow-up of changes that were happening.

The resistance of the group made it difficult to consolidate strategies. One of the causes of this resistance was attributed to the unpredictability of the environment (McDaniel, 2007), to the uncertainty and autonomy and multiplicity of the agents involved that had different expectations (Jarzabkowski & Fenton, 2006). This has meant that the practices and initiatives of several agents could have contributed for strategies not

materializing in their entirety. As evidenced by the report of a Director:

[...] we depend on the professional to do his way, it will not be a command that will change the way he works [...] or he agrees with it, or he assimilates this, he accepts this, he lives this, as the hospitalists are doing or this does not happen (I1 Interview)

One of the factors that hampered the change in the nursing sector in terms of the development of the necessary strategic practices was the absence, over a long period, of the director responsible for implementing the protocols. Instead, in her place, a former director informally became responsible for the activities of the sector.

Due to this the process of change was interrupted which affected the pro-change attitude of the nurses who followed the guidance of the licensed director and leader of this process. The result was the fact that only two protocols, out of a total of six, advanced in their implementation. With the return of the director of nursing, the process was resumed and continued to develop the strategies aimed at making the safe environment for the patient viable.

This micro strategy, with the change of procedures in nursing, brought clear benefits for the hospital. We can highlight the increase in patient safety, humanization of services and an increase in its reliability, which contributes positively to the performance of the sector and strengthens the image of the hospital with stakeholders (Pascuci, Meyer, Nogueira, & Forte, 2017).

4.3 Hospitalist

The continuous improvement of the quality of hospital services has become a priority and strategic objective of hospital management. Inspired by a recommendation from the Mayo Clinic (Berry & Seltman, 2008), top management introduced a new concept, that of hospitalist. This practice became responsible for the management of hospitalized patients, just as general practitioners became responsible for outpatients in their offices. The understanding, at the time, was that it would be undesirable to provide high-quality care with doctors working only a short time in the hospital.

In the concept of hospitalist medicine, the doctor takes on the care command, guaranteeing care to all inpatients, regardless the presence of a

medical specialist. The objective of this micro strategy was to promote a professional team work in a cohesive and collaborative way, with clear benefits for the care of patients.

The process of implementation of this new concept of hospitalist medicine started in 2014 at the initiative of the technical director with the support of the chairman. As can be observed in the report of two hospitalists:

"[...] the model was brought to the Hospital by the current management and colleagues were invited to incorporate this model." (I13 Interview)

"[...] I was hired here by the director of the hospital and then we found here, in this hospital, an ideal environment to put the model into practice, because the chairman of the institution highly regards this model. (I14 Interview).

The purpose of this micro strategy was to provide the hospital with a reliable medical staff that would attend the most complex hospitalized patients, as well as improve the quality and reliability of the care service. We observed that middle managers have gradually created a favorable climate to incorporate this strategy through meetings and training of a select and competent group of professionals.

We verified that institutional support was essential for the success of the strategy of hospitalist medicine. In the first moment the process required a high financial allocation that was only possible due to the implementation of the cost system with the reduction of operational expenses and reallocation of resources thanks to the savings generated.

The hospitalist strategy combined the reduction of the number of patients seen by the doctor as an important return to the high initial investment, and the reduction of the length of stay of the patient. As a consequence, we observed an increase in the satisfaction of users with the services offered by the hospital. The following account corroborates this interpretation:

"[...] it is no longer expensive to maintain such a system, you end up seeing that it is not, because if this patient is admitted to hospital and he leaves the hospital more stabilized and earlier, logically within a margin of safety, that hospital has a free bed to put another patient that needs the hospital, so we end up making that this bed is used by more patients during the month than it would be in the visiting model in which you have extensions in the time for each one

and at the end of the month you will see that you had less use of this physical structure than in the visiting model [...]. " (I17 Interview)

The process of implementation of the hospitalist strategy presented some resistance on the part of medical specialists. Since it was a model unknown to many it caused a feeling of loss of power, The hospitalist model, introduced with the strategy, attributed to this professional the care leadership, consulting medical specialists only in sporadic and specific cases.

In hospital organizations integrating the multiple divisional units always results in an extraordinary effort for managers. The existence of innumerable specialized sectors that are not very well articulated (Orton & Weick, 1990) and that group professionals with autonomy represent an obstacle to any effort of innovation and integration in health services. In this environment ambiguous objectives and diversity of interests produce conflicts and political disputes that also make the introduction of changes difficult (Meyer et al., 2016).

We have observed that the autonomy and power of health professionals constituted elements that contributed significantly to adapt the new strategy to a context as complex as the hospital (Gell-Mann, 1994; Stacey, 1996; Cilliers, 1998; McDaniel, 2007). This could be identified when a new dynamics of care was developed by hospitalists who started adopting new routines and different daily workflows. This was the result of individual micro strategies that were developed informally within the group.

Learning by the negative feedback mechanism (Stacey, 1996) was used at informal meetings between physicians, message groups via WhatsApp, and through classes between medical specialists and hospitalists. The learning resulting from these interactions initiated the modification of routines.

The longer stay of the team of hospitalists at the hospital resulted in a decrease in unexpected complications, since there was a follow-up of the patient's evolution throughout the day and greater openness to the discussion of cases with nursing. Hospitalists entered the patient's safe environment and, from the moment they stayed longer, they began to observe and intervene in situations that exposed the patient to risk.

In the case of the hospitalist, we were able to

observe the introduction of a new pattern of behavior among the professionals, providing improvement of existing practices as well as innovation. If on one side there was a focus on improving and bettering procedures and routines, there was, on the other hand, concern for creativity and innovation, allowing it to be characterized as an ambidextrous organization (March, 1991). On the other hand, we have observed the resistance to change and pressure to maintain the status quo as occurred in the case of nursing, requiring specific actions of managers and groups interested in change.

Three critical factors were identified during the period of materialization of the strategies in cost, nursing and medical areas. The first was the existence of an unpredictable and changing environment pressing the hospital organization towards change. The second was the fact that the work was carried out by health professionals with autonomy in their areas of activity. And finally, the third, the imperative need of the hospital to respond to external pressures and challenges in promoting better and more accessible and liable health services to its users. In this context, the predominant strategies were characterized by their emergent nature (Mintzberg & Waters, 1985) and as a result of individual efforts and simultaneous action of diverse actors supporting the changes. These emerging strategies were later approved by the chairman.

We could identify that important initiatives and changes contributed to the viability of the hospitalist strategy: (i) agility in the process of care; (ii) support to the multidisciplinary team; (iii) attraction of a new patient profile: the patient with chronic disease; (iv) patient safety; (v) improvement of the hospital image; (vi) reduction of hospital stay and rapid turnover of beds; (vii) attraction of good professionals; and (viii) interaction with diagnostic services.

For the clinical staff it was observed positive factors such as: (i) feeling of safety by the nursing staff; (ii) better management of complications, reducing the number of unexpected events; and (iii) incentive to continuous improvement of care.

Table 2 presents the summary of the main micro strategies practiced in the three focus areas of this analysis: cost, nursing and medical.

Table 2. Summary of Main Micro Strategies

Main Micro Strategies	
Cost System	<ul style="list-style-type: none"> • Decision of the top management to implement a cost system to support management actions. • Outsourcing services with significant cost reduction advantages.
Nursing (Patient Safety)	<ul style="list-style-type: none"> • Informal dissemination of the relevance of patient safety to improve hospital services. • Turnaround strategy with the resumption of the implementation of safety protocols.
Hospitalist	<ul style="list-style-type: none"> • Dissemination of the concept of the hospitalist in the medical area. • Change of working time of doctors from "visiting doctor" to "hospitalist".

Source: Research data.

5 Discussion

The relevant role of organizations as providers of specialized health services is undeniable. However, one of the aspects that has been neglected in the literature of the area has been its management.

The difficulty of promoting change stems from the complexity of hospital organizations. Factors such as the complex nature of this type of organization, ambiguity of objectives, plurality of interests and autonomy of specialized professionals constitute barriers to the introduction of innovative practices and behavioral changes.

The fact that there is a strong autonomy of agents (Stacey, 1996; Cilliers, 1998; McDaniel, 2007) present in the multiple divisional units resulted in a loose coupling (Orton & Weick, 1990) between the units making a desired and necessary integration quite difficult. This becomes more serious in view of the interdependence between the various specialized areas, all of which are directed towards the recovery and promotion of health. In this environment, ambiguous goals and diversity of interests lead to conflicts and tensions and political disputes that hinder the introduction of innovation and improvement of professional practices (Meyer et al., 2016).

It was evidenced that the strategy in hospitals is much more the result of a set of social practices, arising from initiatives of innumerable agents with professional autonomy, than from deliberations and integrated actions arising from top

management and then disseminated in the organization (Reckwitz, 2002; Whittington, 2006; Stacey, 2011). As agents, groups of health professionals who work close to patients were responsible for the strategic initiatives, many of them micro strategies (Johnson et al., 2003) that resulted in the improvement of hospital services.

Humanization is a strategic factor in the hospital environment (Pascuci et al., 2017). In this particular the care provided by the professional nurses and hospitalists resulted in the reduction of the hospital stay and therefore exposed the patient to a lower number of infections. With this, the turnover of beds increased - a positive factor from an economic point of view and an improvement in the quality of care.

In addition to the benefits provided by the innovative strategies for the patient and the hospital, we can also highlight the organizational capacity to attract qualified professionals, from the medical and nursing area, from the market and the fast inclusion of new professionals in the organization. Thus, the integration of these professionals into the diagnostic services generated a clear improvement in the quality of the services provided.

We have noticed that the existence of a friendly environment to new initiatives was fundamental to the development of innovative strategies. This environment was created by management in making decisions and providing incentives and empowerment to critical areas such as costs, nursing and medical, all relevant to improving organizational performance and strengthening the institutional image. This initiative and autonomy granted to the team also allowed the emergence of micro strategies, by giving the group the opportunity to explore their individual and group capacities (Felin & Foss, 2005).

The strong influence of informality on the relationships between specialist professionals (shadow network, Stacey, 1996, 2011, Bolman & Deal, 2008) was present, particularly in the cases of nursing and hospitalist. In the nursing sector, advances in the implementation of the protocols suffered strong resistance and were blocked by the informal influence of the former nursing director that interfered with the aforementioned process, delaying its implementation.

In the case of the hospitalist strategy, the dissemination of the new concept, among the

medical and nursing staffs, initially provoked strong resistance. It was gradually removed by the leaders of the strategic initiative (Mantere, 2005) as agents responsible for introducing changes in routines through new micro strategies. This reinforces the understanding that in professional organizations, real strategists are the agents that spread strategic thinking and practice in the organization in a collective learning process (Mintzberg, 1994, 1996). It also emphasizes the micro character of some strategies, that is, small changes, individually led, in an integrated way or not, but which have been able to promote gradual changes, as in the presented situation,

The search for more effective management has guided the changes that have triggered micro strategies. This was evidenced by the outsourcing of activities that were not related to core or essential functions of the organization, which allowed the reduction of operational costs, improvement of the quality of the services and strengthening of the image.

In addition to a favorable climate, the introduction of innovative strategies also required investments. The introduction of the cost system, for example, required the hiring of specialized professionals. It was the need of management to improve the allocation of resources and investments that guided the investments made. One of the concerns of management was to seek greater coherence between the mission and practiced actions, which has proved to be a partial substitute for the problems of profitability in the hospital management as a non-profit organization (Oster, 1995; Moore, 2000; Powell & Steinberg, 2006).

In order to fulfill its mission and maintain the financial sustainability of the hospital, it was necessary to search for internal revenue sources to compensate the difference between the actual operating costs of hospital services and the amounts received from medical insurance and SUS (Sistema Único de Saúde, the Brazilian Public Health Service). In this particular the savings promoted internally was generated, in large part, by the new cost system, strategically implemented, that provided relevant financial support for consolidating the "hospitalist" strategy. Once again, the importance of the individual performance of autonomous agents in promoting actions (micro strategies) to achieve the effective implementation of the system and its benefits is rescued.

6 Conclusions

One of the greatest challenges of hospital management is the continuous search for more effective ways of providing quality, reliable and at the same time accessible services to the population. This requires an integrated and innovative effort with the commitment of managers and professionals operating as agents in different parts of the organization.

This work revealed the practice of strategies that reconciled innovation, audacity, risks, competence and autonomy along with empowerment of top management. The introduction of the cost system provided greater financial control, better allocation of resources and focus on the aim of hospital activity. Benefits such as savings allowed for investments in new initiatives and the reformulation of the nursing sector, bringing greater reliability and humanization to services. The incorporation of the practice of the hospitalist, in its turn, proved to be an innovative initiative by introducing a new pattern of behavior among doctors and nurses with an incentive to continuous improvement of patient care. In this process, we highlight the essential role of micro strategies promoted by agents, individually or in groups, empowered by their autonomy, ability to interact and persuade peers. Adoption of micro strategies also allowed minimizing impacts by acting on the focus of resistance, integrating groups and, mainly, promoting the changes desired by hospital managers, gradually and legitimately.

One of the main contributions of the article was to reveal that the main strategic initiatives, with the exception of the cost system, occurred at the micro level of the organization supported by the autonomy, team spirit and initiatives of nurses and doctors, breaking internal resistance. It was also evidenced that without the existence of an organizational climate favorable to innovation, the strategies would not have achieved the results.

Management of complex systems such as hospitals requires in-depth studies of individual and group behavior, as well as their relationships and interdependencies and influence on organizational performance. In order to contribute to literature of this area we recommend that future studies explore the practice of micro strategy and its effects in hospitals.

Likewise, we believe that in-depth studies focused on the use of improvisation as a complement or substitute for the strategy practiced in hospitals would reveal relevant and poorly explored aspects of management in such complex systems. The development of comparative case studies that consider organizational culture in hospitals and its influence on the practice of innovative strategies would provide a significant contribution to this area of knowledge.

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