Budgetary control is pointed as a managerial mechanism suitable for cost reduction and control as well as performance evaluation of the institutions. In health organizations, the budget works as a tool of funds allocation, coordination, control and communication of the institution strategies. In this context, the research will observe the phenomenon of budgetary process under the perspective of Health Service managers of public and private hospitals, called “clinical managers”, aiming to check whether there is a relation with the budgetary process characteristics and the budgetary execution performance. The results showed that Participation, Feedback and Budgetary Evaluation have a positive relationship, but only the last one presented a significant relation with the budgetary execution performance. These evidences indicate that Health Service managers recognize the Budgetary Evaluation as a predominant characteristic which interferes in budgetary execution of their field due to the liability on the result of such execution and the possibility of use of this metrics in performance evaluation.
BUDGETARY PARTICIPATION, FEEDBACK AND PERFORMANCE UNDER THE CLINICAL MANAGERS’ PERCEPTION

ABSTRACT
Budgetary control is pointed as a managerial mechanism suitable for cost reduction and control as well as performance evaluation of the institutions. In health organizations, the budget works as a tool of funds allocation, coordination, control and communication of the institution strategies. In this context, the research will observe the phenomenon of budgetary process under the perspective of Health Service managers of public and private hospitals, called “clinical managers”, aiming to check whether there is a relation with the budgetary process characteristics and the budgetary execution performance. The results showed that Participation, Feedback and Budgetary Evaluation have a positive relationship, but only the last one presented a significant relation with the budgetary execution performance. These evidences indicate that Health Service managers recognize the Budgetary Evaluation as a predominant characteristic which interferes in budgetary execution of their field due to the liability on the result of such execution and the possibility of use of this metrics in performance evaluation.

Key words: Budgetary Control; Budget; Budgetary Evaluation; Performance.

1 INTRODUCTION
The need to increment the managerial control in hospitals in response to the pressure for cost reduction and efficiency of the institutions has promoted the development of several studies on the Health area, such as those of Abernethy & Stoelwinder (1991), Jacobs (1998), Aidemark (2001) and Lu (2011), which point the budgetary control as a suitable managerial mechanism for the reduction, cost control and performance evaluation of a hospital institution. Specifically in the Health environment, the budget acts like a tool of funds allocation, coordination, control and communication of the institution strategies, since there is a growing search for cost reduction and efficiency due to the shortage of funds present in this sector (Zucchi, Del Nero & Malik, 2000).

A hospital institution efficiency is translated in the way the funds available are used to produce treatments and other clinical and non-clinical services. The inappropriate use of these funds prevents the efficient service provision, jeopardizes the quality of the service and results in higher costs (La Forgia & Couttolenc, 2009).

In the Health area, the budget process can be influenced by the complexity of the peculiar health service characteristics, such as the difficulty in measuring the service quality because of the intangibility, the heterogeneity of the procedures, the inseparability of the service production and consumption, besides the tension existing between the clinical and administrative areas of the hospital when establishing the goals (Pettersen, 1995; Silva, Lancman & Alonso, 2009).

In the face of this environment characteristics, the difficulty to measure the agent's effort is greater due to this tension between the clinical and administrative areas, since the

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1 The word “agent” refers to the agency relationship, in which the Principal (owner) delegates the agent (manager) the right to act on his behalf. The Principal delegates decisions to the agent, hoping that the agent acts in accordance with his interests (Jensen & Meckling, 1976).
clinical one, in the face of the complexity of the service characteristics, will tend to protect itself from the lack of funds, inducing goals which will bring more funds for the accomplishment of the procedures to care for the patient, while the administrative area will seek the funds allocation that reflects the efficiency for the institution.

In this respect, in the scope of the Managerial Control Systems, the budgeting tool is inserted, since it consists of both a management plan, represented by the quantification of the economic and financial objectives to be reached by an organization, expressed via the formalization of projections of revenues and expenditures, and in a process, comprising the relationships between the elements of the control system of an organization, such as performance indicators, incentives and control (Lunkes, 2009; Merchant & Manzoni, 1989).

Thus, in this budget process, besides the managers being inserted into the definition of the budgetary goals which will set this plan of expenditure projections of their sectors/units, they are also part of the process that comprises the relationships of the institution control system, such as the budget execution performance evaluation, which may be tied to the system of benefits and remuneration.

From the studies of Kenis (1979) and Lu (2011), it is intended to study the budget system characteristics – budgetary participation, budgetary feedback and budgetary evaluation – in which the managers of the Health Service, called “clinical managers” in this study, are involved, analyzing which of these characteristics influence the budget execution performance of these managers´unit/area. Therefore, the aim of this study is to analyze the relationship of the budget process characteristics with the effectiveness of budget execution in the view of “clinical managers”.

The structure of this paper comprises the theoretical development on the budget and its applicability in the Health context, the methodology applied and the results evaluated from the use of the Structural Equation Models, followed by the final considerations and references.

2 THEORETICAL DEVELOPMENT
2.1 Managerial Control and Budget Economic Approach

In the context of the firm contractual approach, which has the allocation of decision-making rights as the main idea, established when the Principal (owner) delegates the power of decision to an agent (manager) who must act on behalf of his interest, that is, aligned to his interests. The agency relationship can be defined as an agreement under which the Principal uses another person (agent) to do, on his behalf, a service which implies the delegation of some decision-making power to the agent (Jensen & Meckling, 1976).

Since the agent and the principal are maximizers of their utility function, the agent will not always act according to the principal's interest, generating misalignment of interest and agency cost. These costs refer to the agent’s monitoring costs to break the information asymmetry, aiming at limiting the agent’s irregular activities; cost of generating benefits or outlining the behavior (bonding cost) and the residual losses due to the monitoring inefficiency – (Jensen & Meckling, 1976).

The agents participate in a relationship with the firm to increase their utility function given the remuneration and the benefits received to keep them interested and acting in behalf of the principal, however, the agent’s individual behavior enhances moral hazard, since the agent's effort is not observable. The moral hazard is a person's behavior change after determining a commitment, when he is not being observed, to increase his well-being and reducing the Principal’s result (Macho-Stadler & Pérez-Castrillo, 1995).

Since the agent’s effort is not observable, the benefit problem arises because the firm will have to design contracts which bind the contract result – the proxy used to measure his
effort – with a reward system so that the agent reveals his information on the non-observable behavior (Gibbons & Roberts, 2013). In this context, the Controllership deals with the management artifacts - such as the budget and its elaboration process, which will originate the relevant information for the performance and benefits measurement system, being part of the organization control system.

The budget must be defined as part of a control system since the elaboration of achievable goals cannot be separated from matters such as benefits, reward function, accounting measures in performance and benefit evaluation and in the organizational structure, that is, it comprises the relationship between the elements of control system of an organization but not as an own system (Merchant & Manzoni, 1989).

The budget preparation process, in many organizations, is coordinated by the Controller, or a budget committee which addresses the high management. This committee is responsible for issuing the policies and guidelines which regulate the budget preparation and which will have the company strategic planning as basis (Anthony & Govindarajan, 2008).

These guidelines will be distributed to all of those who are involved in the process, usually to the managers of the responsibility centers, so that, along with their staff, they develop the budget of the unit/division which is under their responsibility (Anthony & Govindarajan, 2008). In this budget interaction process which involves funds distribution, goal establishment, performance and motivation, behavioral aspects of the budget must be considered (Atkinson et al., 2011).

The participation of the agents involved in budget planning is a relevant aspect of this process, and since the budgeting goals may be related to benefits and compensation systems, those can influence the agents' behavior (Atkinson et al., 2011).

In the Economy view, budget is seen as a component of the Managerial Accounting system, and it is important in the coordination of activities and benefits within the organization (Covaleski, Evans, Luft & Shields, 2007). The budget is analyzed as a decision-making facilitator due to its role in the performance and benefit evaluation system, besides promoting a communication process between the managers and employees, anticipating decisions by facts which are already known by the employees and also by the participation in the budget process (Covaleski et al., 2007).

Thus, the study focus in this perspective is in the budget arrangements which maximize the Principal’s and agents’ interests, investigating the use of the budget practices (such as the setting of budget goals, participative budget, reward system based on budget), besides analyzing how the choices of budgeting practices produce outcomes, such as the individual well-being, the performance of the organization and budgetary slack (Covaleski et al., 2007).

2.2 Budget process and the Health Service

Studies in the field of health portrait the budgetary control as managerial mechanism suitable both for the reduction, and the cost control in the clinical area, besides being able to be used in the evaluation processes and performance improvement (Abernethy & Stoelwinder, 1991; Jacobs, 1998; Aidemark, 2001; Lu, 2011).

The budget refers to a plan the organization uses to obtain and consume financial and non-financial resources during a period of time (Lu, 2011). It can be used as a management mechanism, as a permit so that the managers spend a certain amount of funds, as planning and control, as a tool to influence the manager's behavior and financially motivate his decision-making practices and as a manager's performance judgement and remuneration calculation (Macinati, 2010).

King, Clarkson & Wallace (2010) point that the budget is considered one of the most
important managerial control system in the organizations, which keeps on receiving significant attention in literature and is applied in several business types, since there is not only one budget type which is suitable for all the organizations, but it can be contingent on unique features of each one of them.

The managerial control systems, through their tools, such as budget, must be designed and developed considering the organizational context of both the institutions and the professional involved in this process, mainly the Health sector, because, according to Pizzini (2006), the hospital constitutes complex institutions whose clinical and patient care practices have high uncertainty level of the task.

The Health organizations have started to adopt suitable management tools so that the managers could carry out the management of these scarce funds, aiming the continuous search for efficiency and effectiveness of practices (Bonacim & Araujo, 2010; Dallora & Foster, 2008). The managerial efficiency and effectiveness surely involve the cost matter, since the hospital excellence requires efficiency in cost associated with quality of the service granted and the consequent satisfaction of the patient (Bonacim & Araujo, 2010).

The system of determination and cost control takes an important role in these institutions, but in the Health scope, the cost management has quite unique characteristics, made of different types of procedures, practices and numberless projects carried out within a single organization, making the cost determination a challenging task (Almeida, Borba & Flores, 2009).

The budget was also pointed as a tool for performance improvement in hospitals since it would perfect the processes, promote cost efficiency without sacrificing the quality of the institution service and the funds maximization, besides facilitating the decision-making process, according to Abernethy & Guthrie’s (1994) previous studies, corroborated by Hammad, Jusoh & Oon (2010).

Kenis (1979) examined some effects of the budgeting goal characteristics, such as feedback, clearness, difficulty and the evaluation of the attitudes related to work development – satisfaction, involvement and tension, in the attitudes related to the budget. According to this paper, the budget characteristics have an important role in the improvement of the managers attitudes towards the budgets, since the results revealed that the budgetary participation tends to raise the managers’ budgetary performance and that there is positive relationship between the budget, motivation and performance characteristics.

Lu’s (2011) studies had Kenis’s (1979) research as basis, however it was applied to budget managers of public hospitals in China, and the unit service managers as clinical departments, Nursing, auxiliary and administrative departments, seeking to investigate the budgetary perceptions (attitude, tendency to budgetary slack and motivation) of the members and the influence of these perceptions on the hospital performance.

Regarding the goal clearness and the budgetary participations, Kenis (1979) identified that they are positively correlated and that the difficulty level of the budgetary goal demonstrated adverse effects in attitude and budgetary performance. The budgetary participation is defined as the extension in which the managers participate in the budget preparation and influence the budgetary goals under the responsibility of their centers. The budgetary feedback is the level in which the budgetary goals have been reached (Kenis, 1979).

Abernethy & Brownell (1999), in a studied carried out, confirmed the hypothesis that the managers’ participation in budget preparation increases hospital performance.
The effective budget, according to Lu (2011), would motivate the members to work in pursuit of the organization objectives, involving the participation of the members (managers and subordinates) in the budget preparation process, since the managers would obtain detailed information of each department’s daily operations.

The Health Service managers’ participation would be essential, since these professional make up an important decision-making level in funds allocation, when they decide on the priorities of their services and which funds will be used, besides being pointed by the World Health Organization as the ones with the greatest potential in the Health area to ensure profitable assistance (Francisco & Castilho, 2002; Oliveira, Haddad, Vennuchi, Rodrigues & Pissinnati, 2014).

These Health Service managers are defined in this study as “clinical managers”, to whom a decision-making level regarding the setting of budgetary goals is assigned (Macinati & Rizzo, 2014). According to these authors, these doctors’ (“clinical managers”) decision-making process is a key factor in the matter of funds consumption of the hospitals and their involvement in this process is seen as critical for the efficiency and performance of the institution.

Due to the evidences presented, the budgetary participation of health service managers of public and private hospitals can influence the definition of budgetary goals, whose reflex will be the most suitable budgetary execution, since the budget will be legitimized by these managers involved in the process. Thus, the following hypothesis is set:

H1 – When the Health Service managers’ participation in the budget process is high, the Budget Execution tends to be greater - Meeting the budget.

Budgetary feedback is the level in which the budgetary goals have been reached (Kenis, 1979).

According to Lu (2011), budgetary feedback refers to the level a department manager receives information on the accomplishment of budgetary goals, helping the managers, through the analysis of the information received about the budgetary execution, to check and adjust the expected performance, and also help setting the future budget. This study’s results demonstrated that when the budgetary feedback and participation are high, the managers’ motivation and attitude will be high and the tendency to budget slack will be low. When the level of budgetary motivation and attitude are high, the performance will be high as well.

Formally, there is the following hypothesis:

H2 - When the feedback received by the Health Service managers in the budget process is high, the Budget Execution Indicator tends to be greater - Meeting the budget.

As defined by Kenis (1979), budgetary evaluation refers to the extension to which the budgetary variations are reported to those responsible for individual departments and used in performance evaluation.

The comparison of the differences between actual values and those forecasted in the budget and the analysis of the cause of such differences represent the nature of budgetary evaluation. When the budgetary evaluation is relevant for the organization, the managers of the departments are more encouraged to have positive attitudes regarding budget execution since they will understand the strategy, agree with the budgetary control system and be able to mitigate negative impacts caused by budget slack (Lu, 2011). It is expected, therefore, that budgetary evaluation provides a more accurate budgetary execution. Thus, the second hypothesis is proposed:

H3 – When the Evaluation of the budget variations reported to the Health Service managers in the budget process is high, the Budget Execution tends to be greater - Meeting the budget.

The performance indicators reflect the achievement level of budgetary goals which are part of the performance measurement system. The literature presents several indicators dealt
with in the studies. Govindarajan (1984) and Govindarajan & Gupta (1985) used indicators such as operating profit, programs of cost reduction, market share, return on investment (ROI) and research and development.

For Lu (2011), the basic performance measure of the institution would be detected by the “achievement” rate or the range of the budgetary goal, among others, such as doctor’s prescription, medical gross margin, hospital occupancy rate.

Macinati & Rizzo (2014) used, in their study, the budgetary performance measure as a percentage of attainment of budgetary goals.

Abernethy & Stoelwinder (1991), in a study applied to non-profit hospitals, used indicators such as patient satisfaction, quality of the care with the patient, ability to attract funds, satisfaction of the unit staff and the level of meeting the budget, which were weighted and made up the average result for the performance measure.

Taking over the expression Meeting the budget of Abernethy & Stoelwinder’s (1991) study and Macinati & Rizzo’s (2014) definition of budgetary performance, the budgetary performance measure is defined for this research, and it is called Budgetary Execution Indicator, mentioned in the hypotheses presented.

3 METHODOLOGY

From the theoretical framework written about, mainly on the studies of Kenis (1979) and Lu (2011), the theoretical research model, structured by four constructs: Budgetary Participation, Budgetary Feedback, Budgetary Evaluation and Budgetary Execution Indicator - Meeting the Budget - was built.

The four constructs analyzed will be measured by indicators – questions of the data collection instrument developed – since the questionnaire is a category of the survey data collection method to obtain primary data, whose development presupposes a series of activities which must be considered (Hair, Babin, Money & Samouel, 2005).

The Budgetary Execution Indicator - Meeting the Budget, defined as budgetary performance measure, is formed by two questions whose objective is to measure how suitable the budgetary execution was in terms of meeting the budgetary goals and remark of the fulfillment the budget percentage (Mucci, Freszatti & Dieng, 2016) because, if the goals were met, the fulfillment percentage would reflect this reach.

The organizations use budget for the funds allocation to their departments and divisions. The budgeting process suggests that the budget reflect the strategy of the institution, being able to indicate the goals of the organization, directing the agents’ behavior and offering mechanisms for these agents’ performance evaluation, thus, this device translates the organization strategies in quantitative, qualitative metrics and it is relevant for both the planning of future actions, and the control of current actions (Cardoso, Mario & Aquino, 2007).

The endogenous design choices, in turn, determine several functional attributes of the budgetary system, including the accounting metrics used and the managers’ discretion in the use of funds (Campbell, Escobar, Fenton & Craig, 2018).

The hospital institutions, object of this study, are highly complex institutions, formed by several departments of high specificity and qualification, with strongly distinct features which need to be integrated in order to provide the most suitable treatment to their users. Such complexity leads to difficulties in management and challenges in the adoption of managerial accounting devices in hospital institutions comparatively larger than those faced by other kinds of enterprise (Abernethy, Chua, Grafton & Mahama, 2006).

The design of the budgetary system depends on specific organizational contexts. According to Pizzini (2006), hospitals are complex organizations whose clinical activities and
Studies on budget slack published in international journals consider some variables, among them, task uncertainty, budgetary emphasis, complexity level and process technology. In Brazil, the studies focused on the contingency approach to discuss how uncertainty, strategy and technology influence the use of the device and, consequently, its execution (Mucci et al., 2016).

In this context in which the hospitals are inserted, these variables can influence the use and the execution of the institution budget, however, in the development of the Budgetary Execution Indicator - meeting the budget - construct, the assumption of the remark by the manager of the percentage of budget fulfillment is in the budgetary emphasis, that is, in meeting the budget set for the period (Buzzi, Santos, Beuren & Faveri, 2014), without surpluses nor remains.

Thus, it is understood that the objective of the budgetary execution is to meet the budget planned. In case there are variations, differences between planned and performed, there is a sign that the operations did not happen as planned. These variations are part of a control system to monitor the results (Athinkson, 2000).

The questions which form this construct complement each other and provide internal validity for their formation, identifying, therefore, manager’s qualitative perception (question 28) and its execution in proportional terms to the allocated one in the budget of the year analyzed (question 29).

Regarding the development of the data collection instrument, it was based on the previous studies of Swieringa & Moncur (1975), Kenis (1979) and Lu (2011). Since these questions arose from data collection instruments applied in English language studies, the translation and validation of this instrument for subsequent application, applying the cross-cultural adaptation proposed by Beaton et al. (2000) were necessary.

After this validation, the instrument was finalized, and it consists of 29 closed questions, measured in five-point Likert scale, and, in the end, nine personal information questions for classifying the respondents were included, according to Table 1 (Attached).

The pre-test was carried out with a five-Health-Service-manager sample, who had similar characteristics to those aimed by the sample longed, having no amendment been indicated.

In the research, the sample was non-probabilistic for convenience, like snowball sampling, in which the researcher makes the first contact with a small group of people who are relevant for the research and who will indicate possible respondents and, from these new respondents, more indications will take place until the number desired for the sample is reached (Hair et al., 2005).

There was the researcher’s contact with a small group of professional and teaching staff of the Health area, who first indicated the managers of the Health Service of Public and Private hospitals.

From this first meeting, the return of emails containing new managers’ indication was set. It was when 33 surveys were answered and validated. Still regarding the data collection, the Project was approved by the Ethics Committee in Research of the Universidade de São Paulo, according to the CAAE protocol: 13520813.3.0000.5407.

The Structural Equation Modeling technique based on components, Partial Least Squares Path Modeling – PLS-PM, was used in the study, since it favors the studies with small samples, presenting high level of statistical power (Hair, Sarstedt, Ringle & Mena, 2012).

By the descriptive statistics regarding the clinical managers’ profile, it is highlighted that the managers of private organizations are younger (age range from 31 to 40 years old) compared to those of public ones (41 to 50 years old), however, they work in the same
position for about 1 to 5 years, predominantly, in both organizations.

These managers have up to 50 subordinates allocated under their responsibility. In the public sector, this index is more relevant (64%) while in private institutions, it was more balanced (53% up to 50 subordinates and 47% more than 50 subordinates).

It is highlighted that the professional experience of these managers ranges predominantly from 1 to 10 years, but we observe that, in public hospitals, there is a concentration of managers (36%) distributed in ranges above 21 years and 30 years. In private hospitals, however, only 10% of them are in the 21 to 30 year-range.

4 RESULT ANALYSIS

From the theoretical model proposed, the result analysis follows two steps: analysis of both the measurement and structural models. The measurement model refers to the formation of constructs (latent variable) by the indicators (variables measured by the survey) representing how these variables measured gather to represent the constructs, while the structural model aims to statistically discuss the relationships between the constructs, that is, how they are associated among themselves (Hair, Babin, Money & Samouel, 2009).

In the measurement model, it was analyzed whether the indicators (questions of each construct) measure the Budgetary Participation, Budgetary Feedback and Budgetary Evaluation constructs, while the structural model checks the validity of the presumed theoretical relationships, that is, how well the empirical data give support to the theoretical model.

The measurement and structural models were validated in accordance with the statistical criteria set for the Structural Equation Modeling, and the final model is presented in picture 1:
The adjusted final model is presented with the t-value statistics, the structural coefficients and the p-values, in brackets, and are presented in table 2:

**Table 2:**

<table>
<thead>
<tr>
<th>Structural Coefficients and t- and p- value Statistics</th>
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<tr>
<td><strong>Structural Coefficient</strong></td>
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<tr>
<td>AO -&gt; IE</td>
</tr>
<tr>
<td>FO -&gt; IE</td>
</tr>
<tr>
<td>PO -&gt; IE</td>
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</tbody>
</table>

Source: Created by the authors.

It is observed, in Table 2, that for the Student's T-statistics, the t-value above 1.96 is significant for the 5% reliability level adopted in this study. If the p-value is greater than 5%, the hypothesis is rejected, otherwise, it is accepted.

Regarding the relationship of the Budgetary Participation construct and the Budget Execution Indicator (Meeting the Budget), the structural coefficient of 0.128 indicated that its effect on the Budget Execution Indicator (Meeting the Budget) is positive, but weak in comparison to the other constructs, since it explains just 12.8% of the variation of the Meeting the Budget indicator in relation to 1% of variation in the Budgetary participation.
Regarding the significance of the relationship between these constructs, H1 hypothesis is not sustained.

This ascertainment does not corroborate with the findings of Kenis’s (1979) studies because the relationship was not only positive, but also significant to explain the budgetary performance of the area/unit of the managers researched, revealing that the budgetary participation tends to improve the managers’ budgetary performance. On the other hand, in Lu’s (2011) study, the budgetary participation is also related positively to the performance, but it is mediated by variables which represent budget perceptions.

The structural coefficient of the Budgetary Feedback and Budget Execution Indicator (Meeting the Budget) relationship was 0.274, indicating a positive effect, and being responsible for explaining 27.4% of the variation of the Meeting the Budget indicator in relation to 1% of variation in the Budgetary Feedback.

In Kenis’ (1979) study, the Budgetary Feedback presented a positive, but not significant relationship to explain the Budget Execution performance, as observed in the research. According to the author, the results suggest that the feedback on the level of meeting the goal was inefficient in promoting performance.

According to Lu (2011), the Budgetary Feedback information has power on supervision, performance measurement and control, but such ascertainment was not obtained in the study. Yuen (2004) points that the central idea is that the Budgetary Feedback in the performance evaluation, when carried out in constructive, objective and fair manner, is essential for setting up the budgetary goals during the budget process, reducing the possibility of budgetary slack as well.

The Budgetary Evaluation and Budget Execution Indicator (Meeting the Budget) relationship presented the structural coefficient of 0.479, the one which has the greater effect, also positive, in comparison to the Budgetary Participation and the Budgetary Feedback, explaining 47.9% of the variation of the Meeting the Budget indicator in relation to 1% variation in the Budgetary Evaluation.

This ascertainment goes against Kenis’ (1979) results, in which the relationship between these variables was weak, but in the study developed by Elhamma (2015), the results corroborate the finding of hypothesis 3, in which the budgetary evaluation presented a significant and positive relationship to explain performance. Regarding the statistical significance of the relationship between these constructs, the values presented are considered significant, supporting hypothesis 3.

Thus, the only statistically significant relationship of the structural model proposed was the one of the Budgetary Evaluation and the Budget Execution Indicator (Meeting the Budget) construct, explaining approximately 50% of the variation in the Budget Execution Indicator – performance measure and still interacting positively.

This result attests that the Health Service managers, mainly the ones in the Nursing Service, recognize the Budgetary Evaluation as a predominant characteristic which interferes in the budget execution of the area/sector under their responsibility, due to the liability on the results presented for producing scarce funds and for being inserted in this process, many times without the necessary set of knowledge, abilities and skills for such activity.

To better elucidate the analysis of the Budgetary Evaluation characteristic, it was interesting to check if there were differences in the perception of the Health Service managers regarding the funds Budget Execution, whether they were public or private.

In order to do so, a non-parametric test called Mann-Whitney was performed, comparing the results of the questions of the Budget Execution Indicator of the managers who work in institutions in which the funding of the service was predominantly public or private.

The result of this test generated a 0.701 p-value statistics, above the 5% reliability level, claiming the hypothesis that there is no difference in the perception of both Health
Service managers in relation to the Budget Execution Indicator, which demonstrates that the funding type does not interfere with the form of budget execution of these funds by the managers of this study.

5 FINAL CONSIDERATIONS

The present research sought to investigate the relationship of the budgetary process characteristics, under the perception of health service managers of both public and private hospitals, on the performance of budgetary execution, based on Kenis’ (1979) and Lu’s (2011) studies.

The hypotheses elaborated based on covered literature culminated in the theoretical model developed, in which it was sought to statistically test the relationship of the constructs which comprehend these characteristics with the budget execution performance measured by the Budget Execution indicator called Meeting the Budget.

By the result analysis, it was determined that there is positive relationship between the Budgetary Participation and Budgetary Feedback and the Budgetary Execution Indicator, despite the fact they did not present statistical significance, causing the H1 and H2 hypotheses to be rejected.

This ascertainment has not corroborated with the findings in Kenis’ (1979) study, since the relationship was not only positive, but also significant to explain the budgetary performance of the area/unit of the researched managers, revealing that budgetary participation tends to improve the managers’ budgetary performance. On the other hand, in Lu’s (2011) research, the budgetary participation was also positively related to performance, but it was intermediated by variables which represent budgetary perceptions.

Macinati & Rizzo (2014) argue that the introduction and the use of techniques and tools of the business environment in the Health care sector can improve these managers’ decision-making process if the participation in setting budgetary goals are properly stimulated.

According to the few studies carried out in Brazil, in the Healthcare sector, this participation is not so substantial because it depends on education and training on costs, change on the liability form and autonomy within the hospitals since their activities focus on patient care.

Regarding the Budgetary Evaluation construct, it was determined that there is a positive and statistically significant relationship between the constructs, sustaining the H3 hypothesis. Thus, the Budgetary Evaluation, a budgetary characteristic, explains 47.9% of the variation of the Budgetary Execution Indicator (Meeting the Budget) in the research model proposed for this sample of Health Service Managers.

The confirmation of this hypothesis was not corroborated by Kenis’ (1979) study, but it was a relevant ascertainment for this environment of the Health sector, regarding the sample studied, since, despite having Budgetary Participation and Budgetary Feedback, these managers guide themselves by the Budgetary Evaluation, that is, how much the budget variations are reported to the responsible ones and used for purposes of liability of these managers.

When it comes to a complex service with unique characteristics, the Health Service managers make decisions to allocate scarce funds, whose consequences of such allocation impact directly the assistance given to the patient, since they tend to guide themselves to a short-term decision.

This decision may interfere directly in the budget execution performance, that is the reason why the managers care about the outcomes of a not appropriate execution, since they are responsible for the result generated.

The results obtained also present contributions to the Management Accounting
literature, regarding the budget and the interaction of this tool with the agents involved who are inserted in complex environments, as the health organizations are. In this environment, the services have peculiar characteristics, highlighting that the participation and feedback received from the budgetary information are relevant so that the budget is properly executed, but what matters is the budgetary evaluation, since these goals can be related to incentive and compensation systems, besides being liable for the results of this budgetary execution.

It is highlighted that when the introduction of these mechanisms as something which will improve performance, process refinement, cost control, efficiency in funds allocation, performance evaluation and the kind of institution, the characteristics of the service provided and how the relationships between the agents and the principal in this process take place can not be ignored.

The findings of this research are not limited to the sample studied, since a non-probabilistic sample which interferes in the power of result generalization was used, considering the origin of the collection instrument and the cultural aspect which can interfere in the translation and validation process as limitation.

Future researches can be developed, considering the expansion of the health service manager sample to seek greater generalization power of the model proposed, the conduction of case studies to deepen analysis and promote the data triangulation, as well as associate the questions of remuneration and incentive system and the inclusion of behavioral and attitudinal variables of these managers with this study, which can improve this analysis of the adoption of Managerial Control devices in Healthcare sector and how they are related to the budgetary execution performance.
REFERENCES


<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>Questions</th>
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<tbody>
<tr>
<td>Budgetary Participation</td>
<td>PO_q1</td>
<td>I am involved in setting all portions of my budget.</td>
</tr>
<tr>
<td></td>
<td>PO_q2</td>
<td>My budget is not final until I am satisfied with it.</td>
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<tr>
<td></td>
<td>PO_q3</td>
<td>My opinion is an important factor in setting my budget.</td>
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<td></td>
<td>PO_q4</td>
<td>I work with my subordinates in preparing the budget for my unit.</td>
</tr>
<tr>
<td></td>
<td>PO_q5</td>
<td>I am consulted about special factors I would like to have included in the budget being prepared.</td>
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<tr>
<td></td>
<td>PO_q6</td>
<td>New budget include changes I have suggested.</td>
</tr>
<tr>
<td></td>
<td>PO_q7</td>
<td>I am allowed a high degree of influence in the determination of my budget goals.</td>
</tr>
<tr>
<td></td>
<td>PO_q8</td>
<td>I really have little voice in the formulation of my budget goals. (reverse item)</td>
</tr>
<tr>
<td>Budgetary Feedback</td>
<td>FO_q9</td>
<td>I receive a considerable amount of feedback about my achievement concerning my budget goals.</td>
</tr>
<tr>
<td></td>
<td>FO_q10</td>
<td>I am provided with a great deal of feedback and guidance about my budget variances.</td>
</tr>
<tr>
<td></td>
<td>FO_q11</td>
<td>My boss lets me know how well I am doing in terms of achieving my budget goals.</td>
</tr>
<tr>
<td>Budgetary Evaluation</td>
<td>AO_q12</td>
<td>My superior demands that I am responsible for budget gap.</td>
</tr>
<tr>
<td></td>
<td>AO_q13</td>
<td>My superior has asked me to keep up with schedule as to fulfill budget objectives.</td>
</tr>
<tr>
<td></td>
<td>AO_q14</td>
<td>My superior would consider my performance unsatisfactory when a big budget gap occurs in my department.</td>
</tr>
<tr>
<td></td>
<td>AO_q15</td>
<td>My superior would be discontent with my budget gap in my department.</td>
</tr>
<tr>
<td></td>
<td>AO_q16</td>
<td>I am required to prepare reports comparing actual results with budget.</td>
</tr>
<tr>
<td></td>
<td>AO_q17</td>
<td>My superior calls me in to discuss variations from the budget.</td>
</tr>
<tr>
<td>Indicator of Budget Execution</td>
<td>IE_q28</td>
<td>Observing the achievement of budgetary goals for 2014, my unit/area executed the budget appropriately.</td>
</tr>
<tr>
<td></td>
<td>IE_q29</td>
<td>Indicate the percentage range of budget achievement of the unit/area under your responsibility. Such execution percentage refers to the amount estimated for 2014 in relation to the budget actually performed for the same year. In case it surpassed the amount estimated, consider the percentage higher than 100%.</td>
</tr>
</tbody>
</table>

Source: Created by the authors