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# Philanthropic hospitals and the operation of provider-owned health plans in Brazil

## ABSTRACT

**OBJECTIVE**: To describe the management performance of philanthropic hospitals that operate their own health plans, in comparison with philanthropic hospitals as a whole in Brazil.

**METHODS**: The managerial structures of philanthropic hospitals that operated their own health plans were compared with those seen in a representative group from the philanthropic hospital sector, in six dimensions: management and planning, economics and finance, human resources, technical services, logistics services and information technology. Data from a random sample of 69 hospitals within the philanthropic hospital sector and 94 philanthropic hospitals that operate their own health plans were evaluated. In both cases, only the hospitals with less than 599 beds were included.

**RESULTS**: The results identified for the hospitals that operate their own health plans were more positive in all the managerial dimensions compared. In particular, the economics and finance and information technology dimensions were highlighted, for which more than 50% of the hospitals that operated their own health plans presented almost all the conditions considered.

**CONCLUSIONS**: The philanthropic hospital sector is important in providing services to the Brazilian Health System (SUS). The challenges in maintaining and developing these hospitals impose the need to find alternatives. Stimulation of a public-private partnership in this segment, by means of operating provider-owned health plans or providing services to other health plans that work together with SUS, is a field that deserves more in-depth analysis.

**KEYWORDS: Hospitals, voluntary. Prepaid health plans. Supplemental health. Health administration. SUS (BR).**

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## INTRODUCTION

The philanthropic hospital segment is an important service provider for the *Sistema Único de Saúde* (SUS - Brazilian National Health System) and for the Supplementary Health sector in Brazil, for a variety of reasons:[5,6] it accounts for around one third of the hospital beds in this country; it has a diffuse network covering the whole national territory, with a large number of small low-complexity hospitals distributed among municipalities in the interior of the country and also including some high-complexity hospitals, which are generally located in the metropolitan regions; and half of its hospitals are the only hospitals in their municipalities. However, concerns have emerged regarding their level of managerial development, which is still predominantly characterized by the absence of many basic structures and tools. The present incipient condition has the implication of risks relating to the survival of the sector, thus demanding adequate incorporation and efficient use of management tools and also adjustment measures to be taken by its own managers and by public agents.[5]

The main sources of revenue for the philanthropic hospitals are SUS (64.0%) and accords with operators (16.0%). However, operation of provider-owned health plans may constitute a second source of revenue that is only less than the SUS source.* Some philanthropic hospitals therefore are differentiated through the operation of their own health plans, which are seen as a strategy for enabling financial sustainability for these organizations.

In general, hospitals with their own health plans maintain prices that are lower than those of the other operators in the market, thereby constituting an alternative for the middle segments of the population that cannot afford the average prices observed. These lower prices are made possible by the direct provision of services for the hospital's plans (in most cases the hospital is the main provider for its plans), by the tax incentives available for the philanthropic sector, and by the amortization of part of the hospital's investments through public financing provided by the concomitant offer of services to SUS.

The role performed by the sector is important as it and the identifies strategies that would ensure its maintenance, development and greater integration with the Brazilian health system. Furthermore, considering that the operation of provider-owned health plans is one of the strategies possible, the present article had the objective of describing the managerial performance characteristics of philanthropic hospitals that operate their own health plans, in comparison with philanthropic hospitals as a whole.

## METHODS

The study had an exploratory descriptive nature and focused on a comparison of some managerial variables between hospitals with their own health plan operators and philanthropic hospitals as a whole (with and without health plan operators).

For this, the managerial structures present in the former were compared with those observed in a representative group from the sector, by making use of two studies of national coverage: a study on the philanthropic sector that was developed with funding from the *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES - National Bank for Economic and Social Development) between 2000 and 2002;[6] and a study on the health plan operators of philanthropic hospitals** that was developed between 2003 and 2004, with funding from the *Agência Nacional de Saúde Suplementar* (ANS - National Agency for Supplementary Health), a body that is linked to the Ministry of Health and is responsible for regulating the different types of health plan operators in the market.

The studies utilized were cross-sectional: the subject of the first study was the whole group of philanthropic hospitals, and the subject of the second study was the subgroup of philanthropic hospitals with their own health plan operators.

In these two studies, the registers for selecting the samples were built up from cross-referencing several registers (SUS Hospital Information System, National Council for Social Assistance, Confederation and Regional Federations of Philanthropic Hospitals, and ANS), with confirmation of institutional data by telephone contact, to ensure that the units fitted into the inclusion criteria established.

One of the objectives of both of these studies was to characterize the level of managerial development of the hospitals, which involved data collection by means of interviews with their managers. The questionnaires, which were applied by trained investigators, were very similar and recorded the existence of

*Barbosa PR, Portela MC, Ugá MAD, Vasconcellos MM, Lima SML, Gerschman SL. Hospitais filantrópicos no Brasil. Rio de Janeiro: BNDES; 2002. (Caderno Social, 5, v. I- III).
**Ugá MAD, Barbosa PR, Lemos SML, Vasconcellos MM, Gerschman S, Portela MC. Dimensionamento dos planos de saúde comercializados por hospitais filantrópicos no Brasil. Rio de Janeiro: ENSP/Fiocruz; 2004. Disponível em: http://www.ans.gov.br/portal/site/Biblioteca/biblioteca_topico_17702.asp [acesso em 28 dez 2005]

managerial structures relating to six dimensions: management and planning, economics and finance, human resources, technical services, logistics services and information technology. The multidimensional analyses of managerial performance and the managerial dimensions herein considered have been extensively validated in the literature.[2,3] Moreover, the variables selected as markers of the state of the managerial structure in each dimension were duly considered and deemed pertinent by a group of specialists. Some variables that were common to the two studies utilized were selected for each managerial dimension mentioned.

The study on the philanthropic hospital sector[5,6] considered three subgroups: a random sample of 69 hospitals with less than 599 beds that were service providers to SUS, selected from a total of 1,658; 26 entities that were service providers to SUS with at least 599 beds – 15 individual hospitals and 11 hospital conglomerates; and 10 entities that were selected intentionally, on the basis of their recognized quality of care, from among the group of philanthropic hospitals that are not service providers to SUS. The first subgroup contained five hospitals with health plan operators.

The study on philanthropic hospitals with health plan operators, in turn, started from a total of 163 entities that were service providers to SUS with health plan operators, either registered with ANS or not – 150 individual hospitals and 13 hospital conglomerates. The conglomerates and 29 individual hospitals without ANS registration were excluded. These hospitals did not present the basic structural conditions that ANS deemed necessary for characterizing health plan operators. With the aim of ensuring comparability with the sample from the other study, three hospitals with more than 599 beds were excluded. Among the remaining 98, the data from 94 were taken into consideration, because of refusals by four hospitals.

In summary, managerial performance characteristics were compared between 94 philanthropic hospitals with less than 599 beds that had health plan operators and 69 philanthropic hospitals that were representative of philanthropic hospitals as a whole with less than 599 beds.

The difference of around two years between the two studies utilized was not deemed to be relevant.

## RESULTS

In the first group, concerning the philanthropic hospital sector as a whole, hospitals with up to 50 beds predominated (mean of 39.7 beds). These provided low complexity care and were mostly classified as *Basic Clinics without Intensive Care Units*. Only one third of these hospitals performed teaching activities: residence courses, specialization and master's or doctoral degrees. In the second group, consisting of hospitals with health plan operators, there were only medium and large-sized hospitals (mean of 175 beds). These predominantly had various medical specialties and intensive care units, and a sizable proportion (40.2%) performed high-complexity procedures on hospitalized patients. In this group, more than 80% of the hospitals reported that they conducted teaching activities, which were generally present in hospitals that provided greater complexity care.

In the following, the variables that could be compared between the two studies are categorized according to the different managerial dimensions.

With regard to the dimension of management and planning tools, although the two groups of hospitals considered presented limited managerial development, more than 85.0% of the hospitals with health plans registered the presence of organizational charts, customer communication channels and information technology and information advisors, and 59.6% performed market analysis. Among the philanthropic hospitals as a whole, no variable considered within this dimension was represented by percentages greater than 50% (Table 1).

It was observed that, except for the presence of an annual budget, the other organizational structures of management and planning considered were more present in the hospitals with health plans than among the philanthropic hospitals as a whole (Table 1).

In the economic-financial dimension, the results from the philanthropic hospitals with health plans were seen to be superior to those found for the philanthropic hospitals as a whole (Table 1).

More than 58% of the hospitals with health plans declared that they had almost all the conditions considered, except for credit risk assessment. However, even the latter was more common among the hospitals with plans than in the sector as a whole.

With regard to the human resources dimension, the results found in the philanthropic hospitals with plans were also better than those for the sector as a whole. This was expressed, for example, through more rigid criteria for absorbing new professionals and through the stronger presence of norms for the clinical staff (especially important in hospitals that function with an open clinical body) and of salary tables. Moreo-

**Table 1** - Presence of organizational structures for management and planning and for economic-financial management in philanthropic hospitals. Brazil, 2002-2003.

| Variable | Philanthropic hospital (N=69) | Philanthropic hospital with operator (N=94) |
|---|---|---|
| Management and planning | % | % |
| Formal organizational chart | 43.5 | 89.4 |
| Customer communication channels | 43.5 | 89.4 |
| Information technology and information advisor | 49.3 | 85.1 |
| Market analysis | 26.1 | 59.6 |
| Advertising | 27.5 | 47.9 |
| Epidemiology advisor | 17.4 | 39.4 |
| Ombudsman | 14.5 | 37.2 |
| Marketing advisor | 10.2 | 37.2 |
| Planning advisor | 24.6 | 36.1 |
| Formal plan | 26.1 | 36.2 |
| Annual budget | 36.2 | 31.9 |
| Quality advisor | 13.1 | 28.7 |
| Economic-financial management | | |
| Closed balance for previous year | 50.0 | 95.7 |
| Own accounts plan | 63.6 | 92.5 |
| Independent auditing | 30.3 | 90.4 |
| Periodic balance sheets | 51.5 | 88.3 |
| Inventory, at least annually | 30.3 | 87.2 |
| Financial stock control | 45.5 | 85.1 |
| Cash flow forecast | 31.8 | 73.3 |
| Asset depreciation | 30.3 | 62.8 |
| Reevaluation of assets after 1994 | 22.7 | 58.5 |
| Credit risk assessment | 7.6 | 33.0 |

ver, these hospitals more frequently had incentives for their human resources, such as health plans, sponsorship for participation in congresses, promotion of social activities and long-service awards (Table 2).

In both cases, the hospitals left something to be desired in relation to incentives considered to be more innovative and with greater potential for having an impact on the final activities, such as: acquisition of scientific journals, support for research, productivity-related pay and innovation awards. Lastly, high staff turnover was observed among the contracted employees in the two groups studied. Annual staff turnover of more than 20.0% was found in 16% of the hospitals with plans and in 26.1% of the hospitals in the sector as a whole.

In the logistics dimension, once again the hospitals with health plans stood out, with more than half of them presenting almost all the structured considered. The two conditions that formed exceptions were asset registers for all equipment and performing of preventive maintenance on more than 40% of the equipment, which were observed in 46.8% and 27.7% of the hospitals with plans. For all the variables included in this dimension, less than 50% of the philanthropic hospitals in the sector as a whole registered their presence, except for cleaning personnel training, which 58% of the hospitals reported having performed during the year studied (Table 3).

In the information technology dimension, like in the economic-financial dimension, the results from the

**Table 2** - Presence of organizational structures for human resources management in philanthropic hospitals. Brazil, 2002-2003.

| Variable | Philanthropic hospital (N=69) % | Philanthropic hospital with operator (N=94) % |
|---|---|---|
| Recruitment by public selection and/or curriculum vitae | 60.9 | 95.7 |
| Norms for clinical staff | 52.1 | 85.1 |
| Salary table | 50.7 | 79.8 |
| Health plans | 27.5 | 73.4 |
| Participation in congresses | 21.7 | 66.0 |
| Promotion of social activities | 24.6 | 57.5 |
| Long-service awards | 33.3 | 54.3 |
| Support for training lines | 36.2 | 44.7 |
| Appraisal mechanisms | 40.6 | 40.4 |
| Acquisition of scientific publications | 17.4 | 34.0 |
| Support for research | 5.8 | 23.4 |
| Position plans | 11.6 | 24.5 |
| Performance awards | 18.8 | 20.2 |
| Productivity-related pay | 7.2 | 5.3 |
| Innovation awards | 1.5 | 4.3 |
| Pension plans | 0.0 | 4.3 |
| Staff turnover greater than 20% | 26.1 | 16 |

**Table 3** - Presence of structures for logistics management in philanthropic hospitals. Brazil, 2002-2003.

| Variable | Philanthropic hospital (N=69) % | Philanthropic hospital with operator (N=94) % |
|---|---|---|
| Generator group | 49.3 | 92.6 |
| Water analysis no less than every six months | 31.9 | 80.9 |
| Standardized medical-surgical material | 37.7 | 85.1 |
| Training for cleaning personnel | 58.0 | 78.7 |
| Training for laundry personnel | 47.9 | 70.2 |
| Training for reception personnel | 44.9 | 60.1 |
| ABC curve for stock | 23.2 | 52.1 |
| Asset valuation for all equipment | 26.1 | 46.8 |
| Preventive maintenance for more than 40% of the biomedical equipment | 24.6 | 27.7 |

philanthropic hospitals with health plans were positively differentiated from those observed in the sector as a whole (Table 4). Except for the presence of two or more servers, offer of services on the Internet and presence of a computerized system for making test and consultation appointments, more than 50% of the hospitals with plans had all the conditions considered. Differing from this, the hospitals in the sector as a whole registered percentages of more than 50% only for Internet access (58%) and presence of a computerized billing system (55.1%).

In the technical services dimension, the philanthropic hospitals with plans continued to be prominent, with more than 60% of them registering the presence of the variables considered. In this case, however, it is emphasized that there was a smaller difference between these hospitals and the hospitals in the philanthropic sector as a whole.

In the hospitals with plans, dispensation of medications by unit and/or individualized doses and the existence of a medication standardization committee particularly stood out. These practices were reported by 87.2% and 78.7% of these hospitals, respectively. In the case of the hospitals in the sector as a whole, these conditions were registered in 71.1% and 34.8% of the hospitals (Table 5).

The presence of a single medical file for the patients was also highlighted, and this was found in 62.8% of the philanthropic hospitals with health plans. On the other hand, among the hospitals in the sector as a whole, only 27.7% registered this item (Table 5).

## DISCUSSION

There are two latent questions in the present article. On the one hand, it is of interest to know whether in fact the operation of provider-owned health plans constitutes a substantive strategy for ensuring the viability of philanthropic hospitals. On the other hand, it is of interest to ascertain to what extent the operation of these plans requires or implies differentiated levels of managerial development. Even though the present study was not conceived to respond to these questions, the possibility of exploring them through combined analysis of the results from the studies selected was seen.

In a general manner, the philanthropic hospitals pre-

**Table 4** - Presence of information technology in philanthropic hospitals. Brazil, 2002-2003.

| Variable | Philanthropic hospital (N=69) % | Philanthropic hospital with operator (N=94) % |
|---|---|---|
| Internet access | 58.0 | 98.9 |
| Internal network | 40.6 | 95.7 |
| Presence of two or more servers | 8.7 | 47.9 |
| Offer of services on the Internet | 7.2 | 9.6 |
| Computerized systems | | |
| Billing | 55.1 | 97.9 |
| Human Resources | 42.0 | 96.8 |
| Accounting | 0.0 | 96.8 |
| Medications | 47.8 | 93.6 |
| Materials | 40.6 | 88.3 |
| Production statistics | 40.6 | 86.2 |
| Beds | 34.8 | 81.9 |
| Charging | 34.8 | 78.7 |
| Purchasing | 30.4 | 75.5 |
| Costs | 27.5 | 70.2 |
| Hospital infection | 17.4 | 53.2 |
| Morbidity register | 20.3 | 51.1 |
| Assets | 24.6 | 50.0 |
| Test appointments | 29.0 | 48.9 |
| Consultation appointments | 26.1 | 44.7 |

**Table 5** - Presence of technical services in philanthropic hospitals. Brazil, 2002-2003.

| Variable | Philanthropic hospital (N=69) % | Philanthropic hospital with operator (N=94) % |
|---|---|---|
| Dispensation of medications by unit and/or individualized doses | 71.1 | 87.2 |
| Medication Standardization Committee | 34.8 | 78.7 |
| Sanitary Surveillance License for Imaging | 58.0 | 68.1 |
| Sanitary Surveillance License for Clinical Pathology Laboratory | 79.7 | 67.0 |
| Single medical files for patients | 27.5 | 62.8 |

sented underdeveloped managerial structures. However, there seems to be a positive differentiation among the hospitals with health plans, for all the dimensions considered, in relation to the means observed for the philanthropic hospitals as a whole.

The most marked differences related to the economic-financial and information technology dimensions. This was not surprising, given the requirements imposed by ANS for registering operators acting within the market. As the regulatory body for health plan operators, on the basis of Law No. 9,656 of June 3, 1998, which regulates the commercialization of health plans for the whole Supplementary Health segment, the agency imposes various documentary and account-reporting requirements, especially in the economic-financial and activity production fields. The operators are required or impelled to modernize in order to meet such demands, including the adoption of economic-financial management practices and the use of automated systems.

Although the two studies did not consider specific indicators for care quality, there seems to have been greater concern for quality in the hospitals with health plans. This was shown by analyzing the results relating to the dimension of technical service, such as pharmacy and medical documentation. Regarding pharmaceutical care, these hospitals were highlighted by the use of unit and/or individualized doses when dispensing medications, which is indisputably more recommended for patients and for hospitals, and by the important presence of medication standardization committees. Considering the medical documentation services, the hospitals with health plans utilized single medical files for patients more often, which is the minimum requirement for achieving greater continuity, completeness and quality for the care provided in a hospital.

Human resources management continues to be a critical node for the sector as a whole. For the quality of care to really achieve desirable levels, greater investment in this field will be necessary, given that the hospital organization is centrally dependent on its human resources, and especially those that are directly connected with the care provided. Regular training that makes it possible for employees to periodically review their administrative and care practices, the institution of incentives for professionals, especially for those performing care-related functions, and the diminution of staff turnover in the sector[5] are essential conditions for these hospitals to become strengthened in relation to the regulatory governmental institutions, SUS and the population.

In the sparse literature on not-for-profit hospitals, there are important findings indicating that there is:[7] a perception of greater access to better-quality health services in profit-making organizations; greater confidence in the adequacy of the care offered and an expectation of greater humanization of attendance in not-for-profit organizations; and an observation that when the population is well-informed, it gives a higher rating to the quality of care provided by not-for-profit hospitals and health plans, resulting in a decrease in the perceived quality difference between these organizations and the profit-making ones. Questions relating to the financial sustainability of philanthropic hospitals and the extent to which the tax exemptions enjoyed justify the services provided have also been highlighted, along with their capacity to marry the perspective of doing business with the exercising of their social function.[4,7-9]

In Brazil, prominent among these questions is the extent to which operations within the supplementary health sector form an alternative for the economic sustainability of philanthropic hospitals that are heavily dependent on SUS. This is because 72.4% of the philanthropic hospitals are simultaneously service providers to SUS and to third-party health plans, independent of whether they have their own plans. Such an alternative would imply challenges for the regulatory bodies and health policymakers, in the sense of establishing strategies and complementary incentives extended into the philanthropic segment so as to bring it into the supplementary health market and into the public health system.

On the other hand, it is difficult to assess the extent to which better managerial structuring for these hospitals could stimulate the opening up of health plan businesses, or whether a decision to offer health plans would lead to better managerial structure. Manage-

rial qualification for the philanthropic sector at a minimum level would probably be imposed as a condition, but this could also be increased as a result from the operation of health plans.

Moreover, it is feasible to establish an endogenous relationship between managerial structuring, hospital size and complexity of care. In this, it is observed that, on average, the hospitals with plans are of larger size and provide care of greater complexity, with a more marked presence of teaching activities, which in the final analysis also contributes towards better managerial structuring.

Independent of managerial qualification, other conditions that are necessary for plan operation as a strategy for giving financial viability to philanthropic hospitals must be considered. Some of the facilitating conditions for success in operation provider-owned health plans in integrated health service systems in the United States include location in rural areas with limited competition, high service utilization rates, greater profit margins because of the low price and greater acceptance of the premiums to be paid by the plan purchasers (employers).[1] These conditions pointed out in this American study[1] were considered to be rare in the United States, and the authors concluded that integrated systems should choose to become partners in existing plans, rather than starting up their own plans.

However, some of these conditions are relatively common in Brazil, and fit in with the specific market characteristics of the philanthropic operators. In the study on health plan operators in Brazilian philanthropic hospitals that was utilized for the present work, it was clear that the creation of these operators fundamentally corresponded to a search for resources additional to those from SUS. At the same time, these operators sought to attend a specific market: small cities in the interior of the country with few large-sized health plan operators and therefore a weak market for company (collective) plans. Furthermore, individual plans predominate among the operators in philanthropic hospitals, thus differing from the rest of the market, in which collective plans prevail.

Taking into account the relevance in quantity and quality of the philanthropic hospital sector for SUS, as considered by the Ministry of Health in its proposals for reforming the hospital care system,* it can be assumed that SUS cannot do without the participation of the philanthropic hospitals. Moreover, the philanthropic segment brings together three conditions that confer on it a position of great interest in the formulation of health policies: service provision for SUS, health plan operation (sometimes), and service provision for other health plan operators.

Therefore, creation of conditions for the survival and qualification of the philanthropic hospital segment becomes an obligation for SUS itself. A need is imposed for identifying mechanisms for greater integration, joint responsibility and account-reporting. Alternatives for encouraging a public-private partnership in this segment require operations of great political and managerial complexity. Thus, there will be an open field for autonomous action by the respective hospitals, as plan operators or service providers to other plans, coexisting with provision for SUS, even though the State will have regulatory powers over both systems.

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