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Accounting for Health Care: Corporate Social Responsibility

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Nota Introdutória

A Escola Superior de Tecnologia e Gestão (ESTG) do Instituto Politécnico da Guarda IPG) congratula-se pelo facto do Professor Doutor *David Crowther*, da *London Metropolitan University*, Reino Unido ter aceite o convite para realizar uma visita de trabalho e investigação científica a decorrer entre os dias 9 a 15 de Novembro de 2002. Temos a certeza que com esta visita será possível desenvolver um debate privilegiado entre toda a comunidade Docente e Discente.

É igualmente um enorme privilégio dar início à série *Estudos e Documentos de Trabalho* com seis *paper*s da autoria do Professor David Crowther. Esperemos que este seja o estímulo e o incentivo que falta para que, em particular a comunidade académica da ESTG, apresente trabalhos científicos que estimulem a discussão científica.

Não se poderá deixar de agradecer à Fundação para a Ciência e Tecnologia que, através do Fundo de Apoio à Comunidade Científica, generosamente aceitou a nossa candidatura, bem como todos aqueles que directa e indirectamente contribuíram para a sua concretização.

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ACCOUNTING FOR HEALTH CARE: THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY

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Abstract

Accounting for health care should provide information about trends, recent developments and prosperity of an entity based in the range of its activity. In this context, the human life is the beginning and the ending of everything and the impact of the corporate social responsibility in the health care presents its maximum exponent. Attempts have been made to answer with the accounting systems in part as the increase need of information and in the other part to serve the public interest.

The authors consider that hospitals need to base their disclosure police in transparency in order to allow patients and society to identify their own priorities and that this should be driven mainly by corporate social responsibility from entities operating as a public service. The sample used in the empirical analysis is based in the 31 corporate hospitals that belong to the Portuguese health care system. Relevant organizational variables were managed statistically through the multivariate analysis. The research shows implications at the operational level, the efficiency and the effectiveness of the health care with differences between hospitals. There are inequalities in the distribution of hospitals in Portugal. Neither corporate nor social agendas will be subordinated in favour of the other, so health care should be a strategic imperative. It must recognize the general collective obligation of preserving a sustainable health care system for the present and future generations.

Topic: OBA – Organizational and Behavioural Aspects of Accounting

Key Words: Corporate social responsibility, Health, Accounting, Portuguese Hospitals

Data: is public available in *Unidade de Missão dos Hospitais SA*.

JEL Classification: M40 – Accounting general

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INTRODUCTION

Health care exist as a fundamental element that assures life and high standards of living. It should be available to everybody and for everybody. Researchers focus substantial attention on public spending and financial resources. The focus on accountability has not opened up to a new field for accounting for health care. This analysis is supported in the diversity of accounting plans and there is not a conceptual framework followed by health care system.

The major problem in accounting for health care is the lack of a conceptual framework especially as a result of differences in each national structure and legal environment. Currently, the objectives to these entities will reflect the economic, social, political and cultural environment of a specific country. And, the last word is left to policymakers and governments that establish the health care policy and use the term of universal care.

In this policy is essential the structure of health-care costs that have been increasing year by year and there are a political pressure to eliminate redundant costs. For example, this question seems to be connecting with the financing process wholly or in majority part with public spending. The general objective of Governments is protecting citizens against health threats; offering healthier way of life; reducing the incidence of major diseases and improving effectiveness and efficiency in health systems (see EU, 2005a).

One obvious point of discussion is the disclosure of the accounting information published by health care entities that meet the needs of information of society, including taxpayers, patients, and other interest groups, such as policymakers and non-governmental organizations. Indeed, the financial statements of an entity in the health care system will full field the general purpose that is show the financial position, the performance and cash flow of the entity. But the increasing concerned about corporate social responsibility (CSR) should improve the quality of this information.

This research presents dual theoretical frameworks for the analysis of accounting for health care. The first theoretical framework is based in accounting theory and disclosure information, providing explanations for economic and social decisions (see Gray *et al.*, 1994; Tilt, 1994). The second theoretical framework as is origins in organisational and sociological theory (see Rahaman *et al.*, 2004) that will assure the link of corporate social responsibility as a fundamental objective to influence accounting for health care.

1. ACCOUNTING FOR THE PORTUGUESE HEALTH CARE

This research promotes the organizational report and the financial statements of the health care entities in the field of the true and fair view. Recently, the effects of the relaxing of regulation within the United States and Europe as a bad examples of the collapse and the bankruptcy of major corporations that cause major consequences, such as thousands of people being thrown out of work, many people losing the savings of all life and the lost of credibility of accounting profession.

The development of internationally comparable health care accounts can be traced back to two seminal studies for the World Health Organization (WHO) made by Abel-Smith in 1963 and in 1967. Both of these studies included lower-and middle-income nations along with those of higher income (see Berman, 1999). The authors agree with Berman, in the sense that there is not yet an internationally accepted terminology for health accounting, as result of different methods and approaches that may represent the same. For example, the Organization for Economic Cooperation and Development (OECD) relatively with health finance statistics, strictly speaking, are not compiled within a National Health Account framework derived from a flow-of-funds analysis in each country. Rather, statistical information on spending for a set of defined categories of uses is collected for two aggregate sources public (including social insurance) and private.

Following this perspective, the Portuguese health care system is characterized by three coexisting sub-systems: the National Health Care Service (NHCS), health subsystems for certain professions and voluntary private health insurance. These make a comprehensive comparison of differences between the accounting information system produce by each one.

The Portuguese Health Care system is characterised to have each single aspect of the system subject to laws, regulations and other legal documents. The same happens in other develop countries in European Union (see Mougeot and Naegelen, 2005). Thus, the authors agree with the commentary made by Santana (2002: 42), that "some of the Portuguese NHCS weaknesses are due to the poor planning, organisation and management; to the lack of a clear vision of the national health market; and to the fact that health policies are susceptible to political pressure and electoral requirements". All these aspects increase social organization, but the delay the national strategy to health care system.

In 1974 with the democratic revolution and with the Portuguese Constitution (see AR, 1976), Portugal changed deeply, because new social policies emerged. The new constitutional law established the right of all to health protection and required the creation of a universal, comprehensive and free NHCS with a hospitals network approved in the *Decreto-Lei* nº 129/77 (see MAS, 1977). It also referred to a sustainable economic, social, cultural development in order to ensure and promote health. The *Lei* nº 56/79 (see AR, 1979) institutionally creates the NHCS that changed after by the *Lei* nº 48/1990 (see AR, 1990). This system should be socially responsible as a condition of each entity jointly promote productivity, universally and generality. The established of the NHCS was seen as the most appropriate response to the society needs for a more extensive and equitable health service coverage.

The NHCS based in centralized in the control made by the Health Minister. Through the Ministry the Government holds the legal responsibility for the regulation, organization and direction of the health care system as a whole. At the same time is a decentralized management developed by five strong regional structure of health administration approved by the *Decreto-Lei* nº 335/93 (see MS, 1993c). These five regional agencies are called North, Centre, *Lisboa* and *Tejo* valley, *Alentejo* and *Algarve.* One of the main aspects of these entities are to be near the citizens and to assurance equity in health assistance that everybody as full right.

This research will show several case studies in relation with health care system that prove the weakness of the accounting for health care. In code law countries, the accounting regulator establishes an accounting plan with detail format that will oriented entities to the aim of the financial accounting that is a true and fair representation of the entity. For example, the *Despacho* nº 22650/2000 (see MS, 2000) creates the group of normalization of the official accounting plan of the Health Minister. The main objective of this entity is to support the implementation of this accounting plan in connection with management accounting for health care system. Attempts have been made to find information about the work that this entity made, but the authors could not find anything.

The Portuguese Health Minister has a dual role, as the statutory entity responsible for health care strategy and as the major provider of health care services. The following case studies are presented as two separate items, but they are link together in the accounting perspective. The authors will discuss into the possible causes of differences that has been observed in the Portuguese accounting.

1.1. THE STATUTORY ENTITY RESPONSIBLE FOR HEALTH STRATEGY

The XVII Portuguese Government decided to change the health care strategy. The *Decreto-Lei* nº 79/2005 (see MS, 2005c) establishes the organic and statutory law of the Health Minister. In relation with organic law the *Despacho* nº 13118/2005 (see MS, 2005d) presents several statutory entities, such as National Institute of Pharmacy and Medicines, National Institute of Emergency

Care, Health Quality Institute and Health Regulatory Agency which accounting effects will be now disclosure.

The National Institute of Pharmacy and Medicines called *Instituto Nacional da Farmácia e do Medicamento* (INFARMED) was approved by the *Decreto-Lei* nº 495/99 (see MS, 1999a) as statutory law. The INFARMED is a Government agency accountable to the Health Ministry and a public entity with its own property and administrative and financial autonomy. The objective is to monitor, assess and regulate all activities relating to both human and veterinary medicines and health products for the protection of Public Health and pharmaceutical activity in the health care system. The accounting system that the INFARMED obliged to follow is the Public Accounting Official Plan. The budgets and annual accounts shall be presented in accordance with the aforesaid Code. One reason for this entity to follow the public accounting plan is that before *Decreto-Lei* was published in 1999 and the Official Accounting Plan of the Health Minister in 2000.

The National Institute of Emergency Care called *Instituto Nacional de Emergência Médica* (INEM) was approved by the *Decreto-Lei* nº 167/2003 (see MS, 2003b) as statutory law. This public entity has legal personality, with its own property and administrative and financial autonomy. The main activity is being national responsible by the emergency services. The accounting system that the INEM obliged to follow is the Official Accounting Plan of the Health Minister. As a result, the accounting reports and information produced, primarily, to provide information for interest groups in the health care system. This plan will allow to uniform definitions for the boundaries of the health system; to have standard accounting classifications of operational, financial and investment activities; and to include the possibility to make comparisons in time and space.

The Health Quality Institute called *Instituto da Qualidade em Saúde* (IQS) was approved by the *Portaria* nº 288/99 (see MS, 1999b). The IQS is a Health Ministry service, depends from the National Health Director with scientific, technical and administrative autonomy, and its own property. The main activity is being responsible by the better and continuous improvement in the quality of the health care services. The accounting system that the IQS obliged to follow is the national accounting that follows the rules of ESA-95 that is the European System of Accounts (see UE, 1996). This rigid framework of law was established so within this system accountants have a prime function of compliance the law rather exercises an independent opinion. Accounting reports and information are produced primarily to provide information for national policy-makers rather than other interest groups (see Oldham, 1987).

The Health Regulatory Agency called *Entidade Reguladora da Saúde* (ERS) was approved in the *Decreto-Lei* nº 309/2003 (see MS, 2003c). The new independent regulatory body is public with financial and administrative autonomy and is designed to ensure that productivity gains are not detrimental to quality and equity is an important step in the reform process. The new public, private and non-profit mix of health care providers to the NHCS for hospitals, health care centers and continuous care and the need to separate the state's tasks of provider and financing from its regulation role. The accounting system that the Health Regulatory Agency obliged to follow is the *plano oficial de contas dos serviços de saúde*. Indeed, the search in the Portuguese regulation about this accounting plan show that does not exist. Probably, the legislator wants to talk about the *plano oficial de contas do ministério da saúde*. The danger is not understood what is suppose to follow the entity and the need of legal concerning aspects does not translate to accounting procedures. Apart of this reason, the accountant should follow the principles and rules of European System of Accounts (ESA 95) followed by the State Accounts.

1.2. THE MAJOR PROVIDER OF HEALTH CARE SERVICES THROUGH HOSPITALS

In the years 2000, the *Lei* nº 27/2002 (see AR, 2002) approves the new legal regimen of hospital administration. This law establishes four different legal status for each hospital that co-exist, such

as the official hospitals divided in the public hospitals and the public-private partnerships, the corporate hospitals with public equity, and finally the private hospitals.

The official hospitals called *hospitals SPA* (*Sector Público Administrativo*) approved in the *Decreto-Lei* nº 188/2003 (see MS, 2003a) have an administrative and financial autonomy. Public hospitals are under public management, must oblige the public sector administrative law and national accounting. Despite the special task forces that have been created and trained within the five regional structure of health administration to monitor these hospitals, as Guichard (2004: 27) comments "preliminary estimates for hospital SPA show that, in 2003, production increased but also costs, and debt continued to rise, by about 60 per cent."

Before 1970, the Portuguese health care had few large state hospitals, same social security medical ambulatories, same public health services with 'well baby clinics', same tuberculosis and mental health dispensaries, and the medical services were particularly based in ambulatory sector (see OPSS, 2003). By that time, the financial resources for the health sector were very small and human resources had to adapt to this social and economic situation.

The public hospitals are obliged by enforced law to follow the Public Accounting Official Plan and the budgets and annual accounts shall be presented in accordance with the aforesaid Code. Accounting reports and information are produced primarily to demonstrate the efficiency of public spending without regards any particular interest group and according with a standard format to facilitate the compilation of statistics and comparisons. Accountants have as principal function being in accordance with the law.

The Portuguese public hospitals (87) that belong to the Portuguese health care system as a National Health Service structure have been classified in three levels through the *Portaria* nº 281/2005 (see MS, 2005b). The first level is the central hospitals and involves thirty three hospitals; the second level is the district hospitals and includes thirty five hospitals and the third level is the first level hospitals and aggregate nineteen hospitals.

The public-private partnerships (PPP) have an administrative, financial and asset management autonomy. These hospitals are under contracted private management, must oblige the public sector administrative law and the official accounting plan. The general rules are ten-year contract for the medical services and thirty-year contract for the infrastructure will be granted after competitive bidding, with technical competence and economic terms offered being the most relevant criteria.

The *Decreto-Lei* nº 10/93 (see MS, 1993a) establishes the organic law of the Health Ministry and the *Decreto-Lei* nº 11/93 (see MS, 1993b) reorganized the national health care system. Since that the legislation also aimed to stimulate the Portuguese private sector in the health care arena, including the public and private management of NHS facilities (see OPSS, 2003). The only previous experience of a PPP hospital in the Portuguese health care system started in 1995 with *Amadora Sintra Hospital* as a pilot experience. This justifies the adoption of market philosophies into the health care system that has been clearly noted in developments over the last decade[1].

In relationship with the corporate hospitals, the contract-programmes with each hospital was established setting objectives, quantitative targets, priorities and modalities for the provision of services, quality standards, monitoring and evaluation systems. Health care reforms change public hospitals to corporations started in 1998. For all these reasons, the authors aimed to explore the CSR in health care system based in the corporate hospitals.

[1] For a review of such developments from an international perspective see Lowe (2000).

The corporate hospitals are obliged by enforced law to follow the Accounting Official Plan. Accounting reports and information are produced primarily to provide information for national policy-makers rather than other interest groups and according with a standard format to facilitate the compilation of statistics and comparisons. Accountants have as principal function being in accordance with the law and *Directrizes Contabilisticas* of the *Comissão de Normalização Contabilistica.*

The XVII Portuguese Government decided to change the health care strategy followed for the XVI Portuguese Government. For example, the *Decreto-Lei* nº 93/2005 explains that "as referred in the Programme of the XVII Portuguese Constitutional Government, now is necessary to transform the corporate hospitals in public entities" (MS, 2005a: 3636). The authors could justify this as a political decision and a tendency against the privatization of health care system, so the need of enforcement was the *Decreto-Lei* that specify new rules to these hospitals. This position is in favour of Wykle (1992: 50) that defends "today decisions concerning public interests such as health, safety, environment, and the type of technology with which we live are increasingly concentrated in the private hands of a few corporate managers." Actually, this will modify the legal structure of the 31 corporate hospitals, but the doubt understands at an accounting level the effects.

Different levels and types of resistance have introduced problems and difficulties in the implementation of the balanced scorecard in corporate hospitals. This was used in 2003 to measure and compare hospital performance, but several problems remain such as the appropriateness and usefulness of the balanced scorecard for promoting accountability and strategic management in the health care system (see Aidemark, 2001; Modell, 2004).

Another important effect that appears from these changes is that each new implementation of the accounting system occupied a good deal of staff time and management attention while the resulting data came to play a significant role in decisions within the institution (see Lowe, 2000). It seems that accounting systems and legal structure of hospitals are used only to satisfy political objectives and vary far from the main objective of the conceptual framework of accounting.

As EOHCS (1999: 16) specifies, in Portugal "the public health services only begin in 1901 with the creation of a network of medical officers responsible for public services. Before that, in the eighteenth century, health care was provided only for the poor by hospitals called *Misericórdias"*. During a large period of time, the Portuguese health care system was based in the network of the *Misericórdias Hospitals.* These religious institutions are independent charitable that concentrate their efforts in the health and social care systems to poor people in Portugal.

The *Misericórdias Hospitals* are obliged by enforced law to follow the mutualism official accounting plan approved by the *Decreto-Lei* nº 422/93 (see MESS, 1993) and the *Decreto-Lei* nº 295/95 (see MESS, 1995). Accounting reports and information are produced primarily to provide information service to non-profit activity and the perceived the distribution of private spending with regard of the particular interest group and, at last, according with a standard format to facilitate the compilation of statistics and comparisons. Accountants have as principal function being in accordance with the law, present a true and fair view of the financial information on an independent and self-regulatory basis.

All these happen because there has been a lack of truly reform initiatives that will have influence in citizen's life. Such instability in the NHCS often lead to the generation of unnecessary and undesirable variety of organisational structures and the principal consequence is an increase in complexity for the hospitality operations manager and for the National Health Care Policy.

The new field for accounting for health care based in the Official Accounting Plan of the Health Minister is not possible. First, the Lei nº 3/2004 (see AR, 2004) obliges all health care public Institutes to use Public Official Accounting Plan and management accounting to obtain the main activity results. Second, all health care corporations that belong to private sector are obliged to use the Official Accounting Plan. Third, the legal enforcement of Official Accounting Plan of the Health Minister is very weak and not promote by the Health Ministry itself.

In countries where entities in the health care system are financed through the public spending, the problem of the orientation of the all system is fundamental. In those entities an economic conception of the social responsibility as a global corporate citizenship and stakeholder management practices will emerge as an alternative to traditional management practices (see Windsor, 2001).

2. THE SUSTAINABILITY ON HEALTH CARE

Sustainability "is concerned with the effect which action taken in the present has upon the options available in the future. If resources are utilised in the present then they are no longer available for use in the future, and this is of particular concern if the resources are finite in quantity" (Crowther and Rayman-Bacchus, 2004: 239. This principle of CSR has a significant role to play in the development of accounting for health care based on the relationship between Government, Health Care and Society.

Several institutions[2] around the world have focus in the health strategy, such as the World Health Organization that promotes health care and well being. In 1978, the Declaration of Alma-Ata specifies that "primary health care is essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community" (WHO, 1978: 1).

In 1997, the Jakarta Declaration on Leading Health Promotion into the 21st Century promotes "emerging threats to health, new forms of action are needed. The challenge for the coming years will be to unlock the potential for health promotion inherent in many sectors of society, among local communities, and within families" (WHO, 1997: 4).

In 2004, the treaty that establishes a Constitution for Europe, the article II-95 says that "a high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities" (EC, 2004: 49). The new European Union (EU) Health strategy promotes by the European Commissioner for health and consumer protection defends that "good health is a state of physical and mental well-being necessary to live a meaningful, pleasant and productive life. Achieving good health for all means not just reacting to ill-health, but proactively promoting health, preventing diseases, helping people make healthy choices and is a shared responsibility that requires co-operation between the EU, its Member States and its citizens" (Byrne, 2004: 1).

Recently, in 2005, the fifty-eighth World Health Organization Assembly approved the revision of the International Health Regulations, "to build, strengthen and maintain the capacities required under the International Health Regulations, to mobilize the resources necessary for that purpose…as to ensure their effective implementation" (WHO, 2005: 3).

In relation with the effective implementation, the authors decide to analyse the sustainability of the health care supported in their resources in fifteen countries of the EU. Santana (2000: 1025) argues that "examining the distribution of the health services resources is an important way to understand the inequities of access to health and to health care". It is important to notice that data in Table 1, in

[2] For example, the EU Agencies includes: European Medicines Agency, European Food Safety Authority, European Monitoring Centre for Drugs and Drug Addiction, European Centre for Disease Prevention and Control and European Agency for Health and Safety at Work.

general, belongs to 2002, but there are four countries: Greece, Sweden, Netherlands and United Kingdom with different year of information. So, comparisons should be made carefully.

Table 1 –Human and Financial health resources in EU-15

Country	Human resources (1.000 inhabitantes)		GDP	Expenditures on health					
				Total expenditures		Public expenditures		Private expenditures	
	Physicians	Nurses		% of GDP	per capita (1)	% of GDP	per capita (1)	% of GDP	per capita (1)
Portugal	**3,2**	**4,0**	**18.376**	**9,3**	**1.702**	**6,5**	**1.201**	**2,7**	**501**
Austria	3,3	9,3	28.842	7,7	2.220	5,4	1.551	2,3	669
Belgium	3,9	5,6	27.652	9,1	2.515	6,5	1.790	2,6	725
Denmark	3,3	9,7	29.228	8,8	2.580	7,3	2.142	1,5	438
Finland	3,1	9,0	26.616	7,3	1.943	5,5	1.470	1,8	473
France	3,3	7,2	25.843	10,6	2.736	8,0	2.080	2,5	656
Germany	3,3	9,9	28.168	10,0	2.817	7,9	2.212	2,1	605
Ireland	2,4	15,3	32.575	7,3	2.367	5,5	1.779	1,8	588
Italy	4,4	5,4	25.569	8,5	2.166	6,4	1.639	2,1	527
Luxembourg	2,6	10,8	49.207	6,2	*3.065*	5,3	*2.618*	0,9	447
Spain	2,9	7,1	21.592	7,6	*1.646*	5,4	1.176	2,2	470
Greece	4,5 (2000)	4,0 (2000)	19.041	9,5	1.814	5,0	*960*	4,5	854
Sweden	3,0 (2000)	8,8 (2000)	27.255	9,2	2.517	7,9	2.148	1,4	369
Netherlands	3,2 (2001)	12,8 (2001	29.371	8,8	2.564	5,8	1.704	3,0	*881*
United Kingdom	2,1 (2001)	9,2 (2001)	27.959	7,5	2.160	6,4	1.801	1,3	*359*

Note: 1. In US dolars purching power parity.

Source: DGS (2005: 44).

Table 1 presents the human resources separated by physicians and nurses that provide health care and the expenditures on health divided by the total and the public expenditures. In the EU-15, the human health resources have an average of 3.2 physicians and of 8.5 nurses per 1,000 inhabitants (see DGS, 2005). Portugal has the lowest number of nurses with four per 1,000 inhabitants and Ireland the biggest number of nurses with 15.3 per 1,000 inhabitants. It will be important to notice that the Portuguese Government should invest more in High Level Schools that will promote new degrees in Medicine and Nursing, by that way will increase the number of experts and new jobs in that area. Despite of that, Portugal has a similar average of physician in the EU-15.

There are differences in GPD as result of the outcomes across countries. This research does not intend to discuss the reasons of that fact, but the emphasis should be given to the general impact of expenditures in the private and public perspective. For each of the fifteen countries, the largest share of value of the total expenditure was in Luxembourg and the lowest share in Spain, and generally between 10.6% and 6.2% of the GDP. Table 1 show that the interpretation of these variations is not straightforward. Nordhaus (2002) concludes that, over the last half-century, health care expenditure appears to have contributed as much to economic welfare as the rest of consumption expenditure.

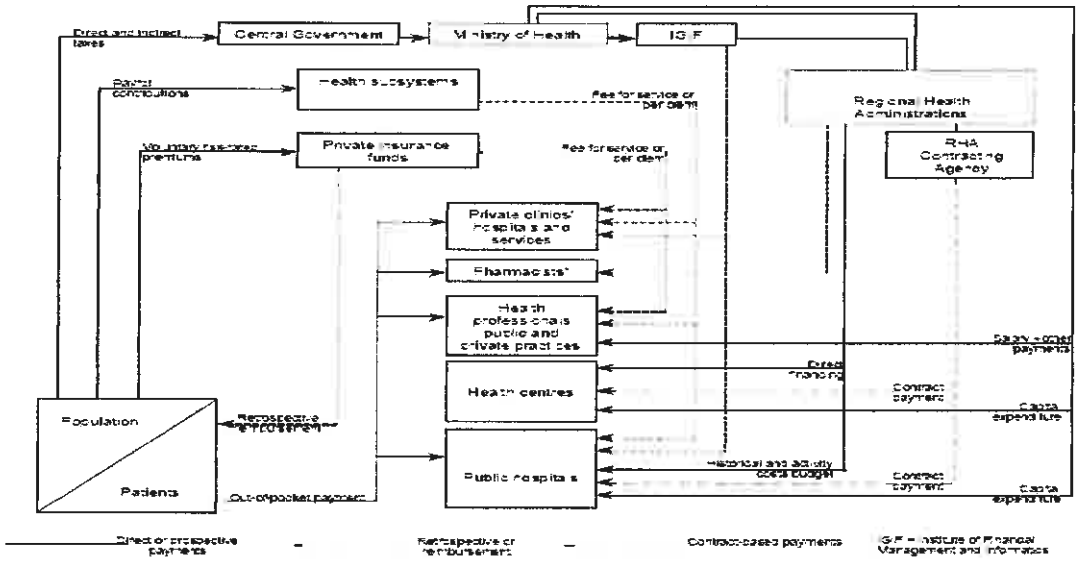
3. THE ACCOUNTABILITY ON HEALTH CARE

Accountability is "concerned with an organization recognising that its action affect the external environment, and therefore assuming responsibility for the effects of its actions" (Crowther and Rayman-Bacchus, 2004: 240). Accountability therefore necessitates the development of appropriate measures of the performance and the reporting actions. This principle of CSR knows that the financial flow of health care system managed by different entities will recognize trends, recent developments and prosperity in a range of its activity.

Before understand the financial performance of the health care system, it is important to clarify two main aspects. Firstly, as Ginzberg (1998: 31) defends to United States "health care sector cannot be meaningfully analyzed in terms of competitive market theory". And secondly, as Byrne (2004: 4) promotes "health expenditure is, however, too often viewed as a short-term cost, not as a long-term investment, and is only now starting to gain recognition as a key driver of economic growth."

The NHCS is mainly financing by the state budget through direct and indirect taxes pay by each citizen. Since 1990, the Portuguese Government introduced the payment of fees or charges for each service that a patient need, with same exemptions for poor and high risk groups in society. In the past years, successive Health Minister has formally introduced the application of charges in the health care system, but these charges were mainly identified with private for-profit health care. Each health euro better spent could make a net saving both for individual well-being and for Portuguese economic competitiveness (see Byrne, 2004). As Arnold (1991: 122) states "the choice of accounting methods used to measure costs, thus had direct economic consequences since accounting calculations determined the amount of Medicare's cash payments, and the distribution of public monies to the private sector". Figure 1 presents the financing flow chart of the Portuguese Health Care System.

Figure 1 – Financing flow chart of the Portuguese Health Care System



Source: EOHCS (1999: 81).

The OECD promotes a study between the members related with the public expenditure on the health care. This study shows inequalities between the members countries of OECD in terms of the percentage of gross domestic product (GDP) spent on health care. It is important to notice the change in Portugal from 3.6% of the trend of 1980 GDP to 6.4% of the trend of 2000 GDP (see OECD, 2004). In the Stability and Growth Programme 2005-2009, the financing requirements of several public Ministries had been grossly underestimated, among them the National Health Service revised upwards by €1,513 million (see PCG, 2005). Similar results, in Table 2, were presented by Germany, Australia and Japan that change the trend of 2000 GDP.

Table 2 – Evolution of the Public expenditure on health care (% of trend GDP)

Country	1980	1990	2000	Δ 1980-1990	Δ 1990-2000
Australia	4.6	4.9	6.3	0.2	1.5
Austria	5.2	5.2	5.4	-0.0	0.2
Canada	5.3	6.6	6.2	1.3	-0.4
Denmark	8.0	7.0	6.9	-1.0	-0.1
Finland	5.0	6.3	5.0	1.3	-1.3
France	5.7	6.6	7.1	0.8	0.5
Germany	6.8	6.5	8.3	-0.3	1.9
Greece	3.7	4.0	5.2	0.3	1.3
Iceland	5.5	6.9	7.7	1.4	0.8
Ireland	6.8	4.4	4.7	-2.4	0.3
Japan	4.6	4.6	6.1	0.0	1.5
New Zealand	5.4	5.7	6.2	0.3	0.5
Norway	5.9	6.4	6.5	0.5	0.1
Portugal	**3.6**	**4.1**	**6.4**	**0.5**	**2.3**
Spain	4.3	5.3	5.3	0.9	0.1
Sweden	8.4	7.5	7.2	-0.9	-0.4
United Kingdom	5.0	5.0	5.9	-0.0	0.9
United States	3.6	4.7	5.8	1.1	1.1
OECD[1]	5.2	5.1	5.7	-0.1	0.6
EU[1]	5.6	5.7	6.0	0.0	0.4

Note: 1. Unweighted average; includes all available countries at the relevant point of time.
Source: OECD (2004).

Table 2 distinguishes between the tax-financed systems of Portugal, UK and Denmark; the social insurance systems of France, Spain and Netherlands; and the predominantly private systems of the United States and Switzerland (see Wagstaff and van Doorslae, 1992).

This question rises to the important aspect of the free-payment for everybody. But, the change happens in 1989. The Portuguese Parliament's approved the tendency of leaving free-payment considering the economic and social conditions of citizens. Nowadays, it is increasingly understood that user fees cannot become the preferred health care financing alternative and a new target population for the extension of coverage is the very large number of migrant workers. But as Ron (1998: 20) argues "free care is an inaccurate term. Health services funded through general taxation revenues are indeed paid for by the economically active members of society, and then provided free of charge to those who use it. In this era of structural adjustment and economic liberalization, public expenditure and direct public responsibility for the provision as well as financing of social services, including health care, are likely to decline rather than grow and to be limited to the most needy and noneconomically active individuals".

Despite of the importance of this question, the authors will not consider these impacts of health care system expenditure in this research, because the data is not available and allows to explain that the decreasing importance of the social welfare State in the Portuguese healthcare system should give place to the increase of the social responsibility and cooperation among the private sector, improving quality and welfare competitiveness between the civil society. For example, the United States has maintained detailed expenditure accounts in health care since the early 1960s and has developed a time series on health expenditure that goes back to the 1920s (see Berman, 1999).

The authors according to Gelb and Strawser (2001: 1) comment that "there is a positive relationship between disclosure level and CSR. That is, firms that engage in socially responsive activities provide more informative and extensive disclosures than do firms that are less focused on advancing social goals".

4. THE TRANSPARENCY ON HEALTH CARE

Transparency is "the external impact of the actions of the organization can be ascertained from that organization's report, pertinent facts are nor disguised within that report and can be seen to be a part of the process of recognition of responsibility" (Crowther and Rayman-Bacchus, 2004: 241). This principle of CSR is not followed by entities in the health care system despite of being used in promotion information. For example, Gelb and Strawser (2001: 1) express that "socially responsible firms are more likely to provide this increased disclosure through better investor relations practices". Against this tendency the disclosure of health care information does not include the available choices made by the citizen and usually promote disinformation to the society, especially based in the political objectives. For example, patients are obliged by physicians to signed non-prosecution documents before surgeries services.

In several medical facilities, patients are merely a commercial commodity, but they are not ordinary consumers, they are special clients and in a vulnerable position. Patients are particularly affected by asymmetric information, in several situations, they do not themselves freely choose what health services and treatment want to receive (see EU, 2005b).

All these CSR principles affect not just the accounting for the activities of an entity but also recognise the effect of the entity' actions upon its external environment. Problems in this complex system also rises due to the lack of understandable and factually accurate information and disclosure should be in time and constantly up-to-date to provide relevant decision to the society and not excessive controlled by the centralized state.

More and more, in the perspective of the society, the health care system should have well behaviour of Government and human resources and at the same time present a sustainable development that could increase the CSR in the system. These challenges are related with demographic indicators including resident population, ageing–related conditions, birth and fertility rate that promotes high levels of lifestyle and enables health to each citizen.

In the relationship between transparency and health care, the CSR can work where regulations and laws are necessary but cannot work itself (see Mintzberg, 1983). Around the world, health care system face funding problems, especially related with new innovations in heath care that are expensive. And there is a growing percentage of population that is elderly and needs more health care, while the percentage of working population and thus tax-paying decreases. These questions affected the State Budget and the financing of the system. As was defended by Chuan and Preston (1994), there is also evidence that substantial capital sums have been invested on legal changes, information disclosure and accounting systems in corporate hospitals. But, more than concerned about money spending, the health care system should play a more important role in the overall welfare of society.

5. AN EMPIRICAL STUDY ON HEALTH CARE

The authors used the same research design by Llewellyn and Northcott (2005). Several sources and types of documents were employed. Firstly, statistics related with Portuguese Health Care System[3] obtained through the Health Minister and *Hospitais SA* that allow authors to collect the data. Secondly, Government documents and European Union papers and official statements were analysed. Third, academic papers were used to conceptually frame the issues under discussion.

[3] See DGS (2002; 2003; 2004); UMH (2004a; 2004b).

5.1. THE UNIVERSE

The Portuguese health care system is complex as a result of constant reforms. The system has succeeded in drastically improving the health status of the population and bringing it close to the European average in many health indicators in the last 30 years (see Guichard, 2004).

Health care reforms start with the transformation of 34 public hospitals into 31 corporate hospitals called *Hospitals SA*. In this case, there is only one shareholder that is represented by the Portuguese State with public equity. It has launched through thirty one similar *Decreto-Lei*[4], which one highlight reforms in legal structure and in accountability systems of each corporate hospitals. These hospitals remain under the supervision of the regional structure of health administration and their development and performance have been monitored closely by a special task force called *Unidade de Missão Hospitais SA* directly attached to the Health Minister.

The health care system shows a complexity and chain of entities and organizations spread all over Portugal. Table 3 presents the physical resources in Portugal, in 2002, representing the public official hospitals the universe of this research with a total of 108 units.

Table 3 – Physical resources in the Portuguese Health Care System in 2002

NUTS II	Health centers			Official hospitals				Private Hospitals		Medical Centers (2001) (3)		Pharmacies	Pharmaceutical departs
				General and specialized									
	N	Hospitalization units		Public (1)		Others (2)				Official	Private		
		N	Beds	N	Beds	N	Beds	N	Beds	N	N	N	N
Portugal	391	76	1,217	108	27,649	11	1,100	94	8,960	205	291	2,567	331
Mainland	362	60	886	104	26,213	11	1,100	82	7,256	190	281	2,478	301
North	124	21	400	33	8,204	2	152	27	2,423	40	97	757	55
Center	109	14	181	33	7,248	2	111	19	1,063	23	42	655	126
Lisboa and *Tejo* valley	54	2	14	27	8,424	6	722	29	3,503	105	118	718	13
Alentejo	59	16	167	7	1,510	1	115	3	194	19	13	244	99
Algarve	16	7	124	4	827			4	73	3	11	104	8
Açores	17	13	279	3	685			5	748	10	6	46	19
Madeira	12	3	52	1	751			7	956	5	4	43	11

Source: DGS (2005: 11).

The physical resources in 2002 are 391 health centers, 213 official and private hospitals, 496 medical centers, 2,567 pharmacies and 331 pharmaceutical departments. The total of beds in the system is 38,926. When these data were comparing with data from 1999, the authors observed the decrease of official and private hospitals, medical centers and pharmaceutical departments. In other perspective, the authors observed the increase of health centers and pharmacies. The geographical distribution of physical resources shows differences between the administrative regions of Portugal. Social inequalities and inequities in Portuguese health care system are also larger and they are more concentrate in the mainland, particularly in the north of Portugal and *Lisboa* and *Tejo* valley.

During the last years, the private hospitals and medical centers have benefited from a lack of legal and financial detailed of the public-private mix. There were still financed by public funds. At the same time, the private sector operates inside public facilities without being adequately paying for the use of these facilities, equipments and human resources.

5.2. THE SAMPLE

The sample of this research manages 28.7% of the total of public official hospitals and focus in the 31 corporate hospitals that belong to the network called Hospitais SA. Table 4 presents the 31 corporate hospitals that will be object of study in this research. Each hospital was distributed by

[4] Each hospital has one specific *Decreto-Lei* that has been published in 2002 in the *Diário da República*, 284, I Série-A, December 9; *Diário da República*, 285, I Série-A, December 10; *Diário da República*, 286, I Série-A, December 11.

one of the five regional structure of health administration that are: Centre with seven hospitals, North with eleven hospitals, *Lisboa* and T*ejo* valley with eleven hospitals, *Alentejo* with one hospital and Algarve with one hospital. In this sense, these corporate hospitals follow a public limited company as a legal structure model and were given 100.0% public equity capital, inherited assets and liabilities of former public units.

Table 4 – Sample of the research

Code	Name	Local	Code	Name	Local
1	*CH Alto Minho*	*Viana Castelo, Ponte Lima*	17	*H São Sebastião*	*St Maria Feira*
2	*H Distrital Bragança*	*Bragança*	18	*H São Teotónio*	*Viseu*
3	*UL Saúde Matosinhos*	*Matosinhos*	19	*H Egas Moniz*	*Lisboa*
4	*IPO Porto*	*Porto*	20	*H Garcia Orta*	*Almada*
5	*H Padre Americo*	*Vale do Sousa*	21	*CH Médio Tejo*	*Abrantes, Torres Novas, Tomar*
6	*H Santa Maria Maior*	*Barcelos*	22	*H Nossa Senhora Rosário*	*Barreiro*
7	*H Santo António*	*Porto*	23	*IPO Lisboa*	*Lisboa*
8	*H São Gonçalo*	*Amarante*	24	*H Pulido Valente*	*Lisboa*
9	*H São João Deus*	*Famalicão*	25	*H Santa Cruz*	*Lisboa*
10	*H Senhora Oliveira*	*Guimarães*	26	*H Santa Marta*	*Lisboa*
11	*CH Vila Real, Peso Regua*	*Vila Real, Peso Régua*	27	*H Distrital Santarém*	*Santarém*
12	*CH Cova Beira*	*Covilhã e Fundão*	28	*H São Bernardo*	*Setúbal*
13	*H Infante Dom Pedro*	*Aveiro*	29	*H São Francisco Xavier*	*Lisboa*
14	*H Distrital Figueira Foz*	*Figueira Foz*	30	*H José Joaquim Fernandes*	*Beja*
15	*IPO Coimbra*	*Coimbra*	31	*H Barvalento Algarvio*	*Portimão*
16	*H Santo André*	*Leiria*			

Source: UMH (2004c: 8).

In relation with human resources is important to specify that there are incentives for health care agents such as physicians, who receive salaries in the public sector but who also work simultaneously on a fee-for-service basis in the private sector. Table 5 presents the distribution of the Human resources of the sample.

Table 5 – Distribution of Human resources of the sample

Variables	Average	Median	Std. Deviation	Minimum	Maximum	Total
Human resources	1.360	1.262	558	431	3.151	42.157
physicians	239	217	139	52	732	7.400
nurses	421	424	190	152	1.019	13.061
medical technicians	88	82	44	19	200	2.728
other personnel	612	601	236	201	1.200	18.968
Board of the hospital						
general assembly members	2	2	1	0	3	58
executive members	4	4	1	1	5	126
non-executive members	1	0	1	0	3	23

The authors decide to analyse[5] the Human resources and board members of the sample. As Ibrahim *et al.* (2000: 91) defend "in health care, the issue of board member's corporate social responsibility is likely to gain increased attention because of societal demands on hospitals and growing concern regarding the ethical and economic dimensions of decision making".

Table 3 presents the total of Human resources in the 31 corporate hospitals. They employ 42.157 persons divided by 45.0% of other personnel, 31.0 % of nurses, 17.5% of physicians and 6.5% of

[5] It was not possible to analyse the background of each member, but usually are physicians and nurses that tend to be concerned with issues related with patient well being.

medical technicians. There are a higher proportion of executive members (126) in the board of the hospital and less proportion of non-executive members (23). But, on the average, the board of each hospital has a similar distribution of members, such as four executive and one non-executive. As Ritchie (2002: 122) defends, clinical governance in the National Health Service in United Kingdom will improve patient's health, psychological welfare and quality of life but "requires that managers within the health service to monitor current performance and develop service delivery to predetermined standards".

The health care human resources, generally, consider and protect the interests of the patients. As EU (2005a: 9) promotes "health providers have great responsibility when they deliver services. Any 'after sales' claims for poor quality service are unlike to compensate for permanent health damage or loss of life".

The health care professionals should be well co-ordinated and made all their important decisions about the welfare and treatment of each patient (see Lawrence *et al.*, 1997). In consequence of the scarcity of human resources, the government should establish a national recruitment of health personnel and distributed them for the each job in the each Portuguese hospital.

5.3. THE VARIABLES

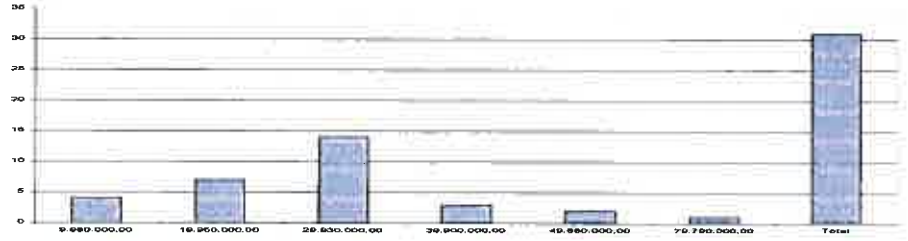
This research allows that accountability and medical practices came face to face and increase the acceptance that accounting cannot be understood as an autonomous sphere of activity, but needs to be recognized as part of a complex series of political, economic, and organization contexts in which it operates (see Lawrence *et al.*, 1997). But, the authors had difficulties in obtaining recent data with the same degree of detail that would allow for data comparison.

After preliminary analysis, fifteen original variables are presented and were retained to produce an exploratory model. This system will contribute to development the society, as Becker and Potter (2002: 46) argue "instead of assuming that both efficiency and social responsibility can be or should be maximized, we may want to consider what a change in one is likely to do to the other". The operational performance of each 31 corporate hospitals of the sample will provide explanations for the impact of corporate social responsibility in the accounting health care decisions.

The non-financial variables of the sample are fourteen non-financial data that captures aspects of hospital performance, because the financial data may not totally translate and perhaps has informational value that makes manager take financial decisions (see Watkins, 2000), such as: inpatient discharge (x_1), surgery services (x_2), external consultation (x_3), emergency medical services (x_4), day hospital session (x_5), patient-standard (x_6), total expenses (x_7), unit expenses (x_8) adjusted average delay (x_9), medical personnel per 10 beds (x_{10}), charges of ambulatory surgery (x_{11}), personnel (x_{12}), patient/personnel (x_{13}) and inpatient occupancy rate (x_{14}). The main advantage of non-financial variables is the possibility to measure benefits in different units than in money that will take from the balance sheet approach the benefit analysis (see Donaldson *et al.*, 1996, 2002).

The financial variable is the equity of each corporate hospital *(x_{15})* and the financial analysis of 31 corporate hospitals are supported in the Official Accounting Plan that follows the same accounting trend of corporations. The variable equity represents net worth of the entity or the equivalently total net assets minus total liabilities. The amount show in the balance sheet is not intended to be a measure of the market value of the hospital (see Alexander *et al.*, 2003). Comprehensive review of this literature can be found in Zeller *et al.* (1996) that examine the different financial characteristics of hospital performance. The distribution of the equity in the sample is shown in Figure 2.

Figure 2 – Distribution of the equity (x_{15}) between 31 Corporate Hospitals (EUR)



5.4. THE HYPOTHESIS

In producing a definition of health care operational performance, there is an implication that performance can be objectively measured. This hypothesis confirms that hospitals are complex multi-product organizations (see Smet, 2002). This model based some findings in similar results of the Ozcan *et al.* (1997) study.

The operational level of the health care in hospitals is result of their activity level and capability to provide to citizens reliable health care programmes and user friendly information about how hospitals develop their activity usually centred in main services as surgeries, external consultations and day hospital sessions. All these services are available to patients in hospitals.

First hypothesis: the operational level of the health care will be represented by surgery services (x_2), external consultation (x_3), day hospital session (x_5), total expenses (x_7), medical personnel per 10 beds (x_{10}), charges of ambulatory surgery (x_{11}), personnel (x_{12}) and equity (x_{15}) in each hospital of the sample.

The efficiency of the health care in hospitals are affected by options made in the service offer to the patient, especially in emergency medical services, because everybody wants and expects access to the latest and best treatment, in a small period of time. Related with these are two other variables by patient that are the unit expenses and the personnel. The inpatient discharge tries to reduce the longer periods and at higher cost that medical care in hospitals require.

Second hypothesis: the efficiency of the health care will be represented by inpatient discharge (x_1), emergency medical services (x_4), patient-standard (x_6), unit expenses (x_8) and patient/personnel (x_{13}) in each hospital of the sample.

The effectiveness of the health care in hospitals presents the relation between the occupancy rate in the hospital and average delay in the medical treatment or the time spend to be in good health. But, improving effectiveness of the health care must become an economic priority with CSR, because health care and social costs will continue to rise and the economy of Portugal will suffer.

Third hypothesis: the effectiveness of the health care will be represented by adjusted average delay (x_9) and inpatient occupancy rate (x_{14}) in each hospital of the sample.

All these factors are extremely difficult to quantify, not only because they have medical uncertainty, but because they are intangible variables. Santana (2000: 1035) defends that "research studies carried out in many countries on the effects of the various factors in the healthcare usage clarify the effects of individual variables. Nevertheless, the difficulty to achieve their precise role deals with the interrelationship between the variables and the specificity of each country concerning health policy and the cultural structure of the population."

5.5. THE METHODOLOGY

The multivariate technique used was principal component analysis with *varimax* rotational approach. This technique can achieve their purposes from an exploratory perspective whose primary purpose is to analyse the structure of the interrelationships among a large number of original variables by defining a set of common underlying dimensions (see Hair *et al.*, 2004). This issue is addressed through an analysis of the sources of variability of original variables and a consideration of potential techniques to reduce or eliminate the incidence of this instability as a means to reduce complexity and enhance performance.

The methodology of this analysis is to present the global perspective using a panel data. So, the sample consist in n corporate hospitals [$a_1, a_2, \ldots, a_n$] described over a set of m evaluation criteria with variables [$f_1, f_2, \ldots, f_m$]. Henceforth, f will be used to construct the vector of the evaluation criteria, and vector [f_j] will be the representation of the performance of the enterprise [a_j] on the criteria vector [f]. It is developed the R-type factor analysis that analyzes seven variables as set to identify the dimensions that are latent and not easily observed (see Hair *et al.*, 2004). The R-type factor analysis is to find a way of summarizing the data into a smaller set of new composite factors of components PC_1, PC_2, ..., PC_q con q=3. There would be a minimum loss of information from the seven original variables, with mean μ, covariance and correlation matrix Σ.

$$\underset{\sim}{X}' = [X_1 \; X_2 \; \ldots \; X_{15}] \qquad [1]$$

The software package *SPSS* for *Windows*®, version 12.0 was used. When selecting the factor method, the authors wanted the total variance so the procedure used was the principal components analysis. This method of statistics analysis should lead to uncorrelated results, so the authors used all the extraction method available Var $[PC_1] \geq$ Var $[PC_2] \geq$Var $[PC_q]$:

$$\begin{aligned} PC_1 &= a_{11}x_1 + a_{21}x_2 + \ldots + a_{21\_1}x_{21} \\ PC_2 &= a_{12}x_1 + a_{22}x_2 + \ldots + a_{21\_2}x_{21} \\ &\ldots \qquad\qquad \ldots \\ PC_q &= a_{1q}x_1 + a_{2q}x_2 + \ldots + a_{21\_q}x_{21} \end{aligned} \qquad [2]$$

One important step in factorial analysis is the estimation of number of factors or principal component that results from the seven original variables. The perspective of analysis relies upon explanatory models of CSR theoretical that are proposed by many experts presented before. The method applied is a principal component analysis that attempts to identify the principal components with the experience of the analysts, which try to explain the pattern of correlations within the information system. As factor analysis, the main objective is used to data reduction and to identify a small number of factors or components, which explain most of the variance observed in the seven original variables (see Field, 2000) and with the authors best knowledge it will be represent conceptually what the component means.

In the factor analysis, the main objective is used to data reduction and to identify a three factors or components, which explain most of the variance observed in the fifteen original variables and with the authors best knowledge it will be represent conceptually what the component means. In this case with some original variables in the health care the interpretation of factors is much more difficult, but one of the most interesting works that is the analysis and understanding of them.

5.6. THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY

The statistics of the exploratory model for the period 2002-2003 are showed in Table 8. The explanatory power of the factorial analysis that produced the exploratory model will be summarized by the Kaiser-Meyer-Olkin, Bartlett's test of sphericity and the proportion of the total variance explained in the factor analysis by each factor.

Table 6 – Statistics of the exploratory model

Statistics		2002	2003
Kaiser-Meyer-Olkin (measure of sampling adequacy)		0,71	0,67
Bartlett's Test of Sphericity	Approx. Chi-Square	580,38	609,42
	df	105,00	105,00
	Sig.	0,00	0,00
Total variance explained		79,41	78,83

Table 6 shows the exploratory model for the period 2002-2003 and includes all the variables, so non-financial variables are added to the equity to create a combined model. The exploratory model uses both data and it demonstrates greater explanatory ability and it provides some empirical evidence that financial data conveys incremental information beyond that provided by non-financial variables. Additionally, these show that non-financial data may be relevant in assessing the impact of CSR in hospitals.

Table 7 – The exploratory model

Year	*Factor*	*Variables*
2002	operational level	$0.93\ x_{15} + 0.93\ x_7 + 0.92\ x_3 + 0.94\ x_{12} + 0.81\ x_2 + 0.63\ x_{10} + 0.63\ x_5 + 0.56\ x_{11}$
	efficiency	$0.90\ x_4 - 0.84\ x_8 + 0.78\ x_6 + 0.82\ x_{13} + 0.78\ x_1$
	effectiveness	$-0.80\ x_9 + 0.68\ x_{14}$
2003	operational level	$0.95\ x_{15} + 0.94\ x_7 + 0.89\ x_3 + 0.89\ x_{12} + 0.76\ x_2 + 0.78\ x_{10} + 0.61\ x_5 + 0.57\ x_{11}$
	efficiency	$0.94\ x_4 - 0.76\ x_8 + 0.87\ x_6 + 0.88\ x_1 + 0.75\ x_{13}$
	effectiveness	$0.74\ x_9 + 0.65\ x_{14}$

The exploratory model proposed in Table 7 shows the complexity and different scale in the 31 corporate hospitals presented in Table 8. The operational performance is concentrated in the operational level of the activity combined with efficiency and effectiveness of each hospital. The model shows the intensifying competition between all the hospitals as a result of unstable and rapidly changing strategic and operational environment for each hospital.

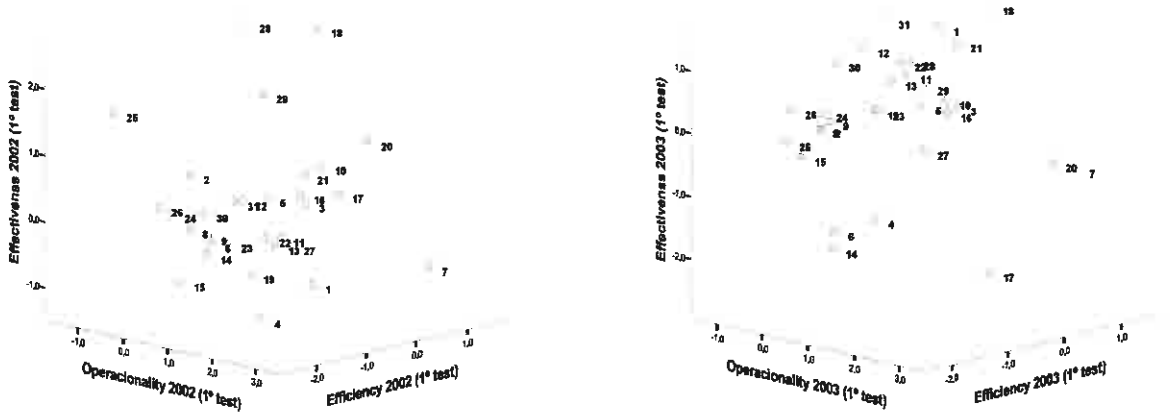
Table 8 – Distribution of the exploratory model by factor of each hospital

Year	*Factor*	-	↔																												+
2002	operational level	6	8	2	9	14	12	30	5	26	29	13	15	24	11	25	28	31	22	17	10	18	16	21	27	1	19	3	4	20	23	7
	efficiency	25	23	26	24	15	4	19	30	31	2	14	8	9	28	3	22	12	27	6	29	7	13	1	5	11	16	21	20	18	10	17
	effectiveness	4	1	15	6	14	13	19	11	27	9	8	22	7	30	17	12	5	16	23	31	24	26	3	2	21	10	20	29	25	18	28
2003	operational level	8	6	9	2	12	30	5	14	13	11	10	26	15	31	22	24	16	1	29	28	21	18	27	17	25	19	3	4	23	20	7
	efficiency	25	26	23	15	4	24	19	14	30	2	9	8	31	6	12	22	28	3	27	13	7	11	29	1	16	21	5	10	20	17	18
	effectiveness	17	14	6	4	20	27	7	8	15	2	9	5	16	10	25	3	24	29	13	26	19	11	23	22	28	30	12	21	1	18	31

The classic cost effectiveness approach defends to do the same, but more cheaply. So, effectiveness of the health care arises when benefits are maximised and opportunity costs minimised in a range of CSR behaviour. Otherwise, conclusions drawn by this research could be harmful to patients' health (see Donaldson *et al.*, 1996). For all these aspects, the exploratory model considers other factors as the operational level and efficiency of the health care of health care, because in the case that not all factors have been considered suggests it could improve.

Effectiveness of the health care in hospitals presents a lower level due to the lack of appropriate public infrastructure for long-term care, so elderly tend to use hospitals to seek assistance, blocking beds that would be otherwise used for acute care. Oliveira and Bevan (2003) show evidence those older age groups in Portugal increase the high hospital spending. But probably will change these results in relation with the creation of a Long-Term Care National Network approved in 2002 that provide norms related to the quality, financing and general management of long-term care units. The goal is to create a strong network, mainly built with private entities, in particular the *Misericórdias*. This network will include units for long-term hospitalisation, home care and day care, well integrated with primary health care and hospitals.

Figure 3 – Distribution of 31 corporate hospitals of the exploratory model



Hospitals (facilities and high technology equipments) are concentrated in three main urban areas (*Lisboa*, *Porto* and *Coimbra*) leaving the mainland of Portugal under-served. It was possible to observe the individual effect of each factor in the corporate hospital. Hospitals are diverse in medical services, located in different cities of Portugal and comparing hospitals involves its classification in categories. Through the empirical investigation, the research shows differences in the distribution of factors: operational level, efficiency and effectiveness by hospital.

Figure 3 provides the distribution differentiated by each year of the analysis 2002 and 2003, such as:

- the operational level, the three big hospitals with higher effect are *H St António* (*Porto*), *H Garcia Orta* (*Almada*) and *IPO Lisboa* and the two small hospitals with lower effect are *H Sta Maria Maior* (*Barcelos*) and *H São Gonçalo* (*Amarante*).
- the efficiency, the higher effect is in *H São Sebastião* (*Sta Maria Feira*) and *H São Teótonio* (*Viseu*) and the lower effect is in the *H Sta Cruz* (*Lisboa*), *H St Maria* (*Lisboa*) and *IPO Lisboa*.
- the effectiveness, the higher effect is in *H São Bernardo* (*Setúbal*) and *H São Teotónio* (*Viseu*) and with lower effect in *IPO Porto* and *H São Sebastião* (*Sta Maria Feira*).

The exploratory model proposed in this research seems to confirm that the bigger corporate hospitals could provide medical responsive services at least with higher operational level, efficiency and effectiveness, but, probably, these hospitals are more vulnerable to economic, financial and social problems. The same happens in the research develop by Becker and Potter (2002: 46) as they say "there appears to be an inverse relationship between hospitals efficiency and social responsibility." In a specific hospital, these factors provide flexibility to adapt to the community needs.

Strategies decided upon included the enlargement and renewal of hospitals and health centers as well as an improvement in the management of the NHCS but poor accessibility to health services is the most serious barrier (see Santana, 2000). Programs to reduce outpatient clinic congestion, to improve links between hospitals and the community needs and to disclosure full information should receive special attention (see Andrulis *et al.*, 1996). All these aspects combined with the exploratory model proposed by the authors should retain the traditional public hospital mission that creates an alternative model of corporate governance surround by CSR.

DISCUSSION

This research provides an understanding of the accounting applied in the health care environment and it includes an overview of sources of various health care entities. In the health care system coexist three different accounting contexts: national accounting (produce and disclosure the consumption of Nation's resources), financial accounting (produce and disclosure the organizational resources) and management accounting (produce and disclosure the organizational decision-making process). It confirms that, as a global strategy for the health care system, CSR is urgently needed in accounting. As a finite resource, the health should demand a permanent attention from society, as well as the Government in accomplishment prevention and monitoring systems, with a view to the defence of a sustainable health care and bell-being.

In order to develop the Portuguese health care information system, the new field for accounting for health care will be the general achievement and will imply that health care policies promoted by Governments to citizens specially concerned with basic principles of universality, accessibility, continuity, quality, and affordability in the health care system (see MF, 1999). Although, the society expected that each legal or institutional modification to be followed by detailed examination of the outcomes of these changes. However, not always this information is disclosure and public available, especially the quantum and quality of analyses of effects. More than merely investing efforts in fighting for political changes, without any advantage for society it is crucial to invest in prevention of life as a basic requirement to honour the CSR of hospitals.

The disclosure and interpretation of the accounting information is an important skill of accountants. But, however, this accountability system is not based in the Official Accounting Plan of the Health Minister. For this reason, more accurate and reliable accountability must be developed for the health care system to be transparent to society needs. It will be necessary that different approaches of financial analysis are recognise the benefits of the integrate the economic and financial indicators used in the financial and management accounting as well as assess the health care indicators based on CSR principles. This offer a context to study several and fundamental social responsibility aspects that allows the right of all citizens to have health care that provides well-being and good quality of life.

Resources should be available to all citizens according to their needs and not concentrated in the coastal area of Portugal. The challenge of the NHCS should be realist to local and regional needs of the Portuguese society. These meant to promote better integration of primary, secondary, and tertiary care. Despite of that objective, in reality, the health care strategy faces several problems around the world. For example, Portugal has special characteristics as hospitality, good weather conditions and with health care improvements in the system as well as in infrastructures, in human resources, in training and in research and development could be promoted the medical tourism with important economic influences.

In summary, the health care information is an essential need of the society and disclosure full accounting information that yields better policy to be promoted by policy-makers. The health care system exists as a fundamental element that assures life and quality of living and it should be available to everybody and for everybody…

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