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Abstract

The introduction of NPM principles changed the meaning and the contents of public sector accountability as it is no longer intended as a mere compliance with rules and procedures but as the need to give an account to the citizenry, in terms of how results are achieved and resources are used in their pursuit. Accountability for results requires the modernisation of traditional control systems. These check whether regulations are followed without ensuring that the achievement of objectives is controlled. Confirming the growing need in modernizing internal control systems and increasing managerial accountability and transparency in spending public money, the European Commission has developed a reference model for the public sector: *Public Internal Financial Control* – PI*f*C.

The paper tries to contribute the relevant debate on the usefulness of internal control systems by exploring the implicit positive relationship between them and managerial accountability envisaged in the PI*f*C model. To this end the research focuses on a case study set in the context of Italian health care sector and in the main health care organization located in the Region of Sardinia.

Keywords: internal control, accountability, health care organisations, PI*f*C

1 – Introduction

In the public sector increasing accountability has become a worldwide issue as it is regarded as a means for improving public administration efficiency, effectiveness and economy. Its meaning changed with the introduction of New Public Management – NPM – principles (Hood, 1995; Barzeley, 2001; Pollit and Bouckaert, 2004) as it is no longer intended as a mere compliance with rules and procedures but as the need to give an account to the citizenry, in terms of how results are achieved and resources are used in their pursuit.

Accountability for results requires the modernisation of traditional control systems. These check whether regulations are followed without ensuring that the achievement of objectives is controlled (Sterck and Bouckaert, 2006; Sterck *et al.*., 2005). Confirming the growing need in modernising internal control systems in line with international standards, and increasing managerial accountability and transparency in spending public money, the European Commission – EC – has developed a reference model for the public sector: *Public Internal Financial Control* – PI*f*C. This model posits that if a government needs to move towards higher levels of managerial accountability and transparency, it should start by analysing its internal control system and benchmarking it against the most relevant international standards such as those of the International Organization of Supreme Audit Institution – INTOSAI – and the Insti-

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tute of Internal Auditors – IIA (De Koning R., 2007; 23).

The present study tries to contribute to the relevant debate on the usefulness of internal control systems by exploring the implicit positive relationship between them and managerial accountability envisaged in the PI*f*C model. To this end the paper focuses on a case study set in the context of Italian health care sector and in the main health care organization located in the Region of Sardinia. More specifically the study analyses the internal control rules adopted in the Italian health care sector in order to ascertain, on the one hand, if there is any consistency between the key elements that qualify the PI*f*C and the health care control model; on the other hand it inquires how the control rules are implemented in practice and whether there is any relationships between clinical and administrative internal control tools and the managerial accountability.

The paper is organised as follows. Section 2 provides the concept of accountability in health care sector, while section 3 refers it to the Italian case. Section 4 presents the research questions and the adopted methods. Section 5 describes the PI*f*C model key elements, while Section 6 analyses their consistency with the Italian regulations on health care organisation control systems. Section 7 focuses on the case study. The final section draws some concluding remarks.

2 – Accountability in health care

Literature on accountability has attempted to define this concept whose meaning is different according to the referential context (Dubnick 1998; 2005; Mulgan, 2000; Sinclair, 1995; Stewart, 1984; Gray and Jenkins 1993) and whose theoretical bases can be found in the agency theory (Mayston, 1993). It involves two parts: a principal – accountee – who delegates tasks and an agent – accountor – who is entrusted to perform the delegated tasks and who has to present an account of his actions (Mulgan, 2000). Therefore talking about accountability means to ascertain who is accountable, to whom, how, for which actions and results, and what are the tools for rewarding and punishing the accountor's behaviour (Feron 1999; Behn, 2001). In fact answerability without incentives and sanctions is generally considered to be weak accountability (Brinkerhoff, 2004).

In order to answer the above mentioned accountability questions for health care organisations L.D. Gamm (1996) has developed the following definition: "*Accountability of health services organizations is defined as taking into account and responding to political, commercial, community, and clinical/patient interests and expectations. Accountability is the process by which health leaders pursue the objectives of efficiency, quality, and access to meet the interests and expectations of these significant publics*". According to this definition, in short, it follows that health care organisations are accountable for demonstrating and explaining their value to interested stakeholders, (AHA Board of Trustees, 1999: 2) and, consequently, accountability seems to be qualified as a mechanism to dealing with social demands and expectations (Dubnick, 2005: 380).

To help elucidate the concept of accountability in health care some authors consider its components by defining the parties that can be held accountable – the loci –, the issue for which a party can be held responsible – the domains –, and the appropriate mechanisms for accountability – the procedures (Emmanuel and Emmanuel, 1996).

It is critical to identify health sector stakeholders who, in general, can be classified as follows: health service users/patients, ministry of health, parliament, regional and local government officials, health councils and hospital boards, professional associations, health care providers (facilities and individuals, public and private). The list is neither exhaustive nor immutable, and all those stakeholders are connected to each other in networks of control, oversight, cooperation, and reporting (Brinkerhoff, 2003), and create what might called a complex reciprocating matrix of accountability. Health care accountability consists of at least six domains: professional competence, legal and ethical conduct, financial performance, adequacy of access, public health promotion, and community benefits. Finally accountability procedures stand for the dissemination of the responses by the accountable parties (Emmanuel and Emmanuel, 1996).

This study focuses on health care organisations HCOs – and on their general manager (GM) accountability – managerial accountability. According to academic literature on the topic, managerial accountability stands for making managers responsible for their decisions and actions to the elected officials (Sinclair 1995; Stewart 1984; Romzek and Dubnick, 1987). The actual discharging of this type of accountability requires the disclosure of specific information and relating accounting tools – managerial code (Gray and Jenkins 1993, Reginato, 2010). This code provides information on cost, quality, effectiveness, efficiency and appropriatness of services delivered, and safeguarding of HCO assets.

Within accountability relationships, internal control system is particularly relevant as it can be used by the principal to reduce the negative effects of information asymmetries and to reward or punish the agent's behaviour. At the same time the agent has a powerful tool to manage human resources in line with the accountability objectives. Health services are, for example, characterised by strong information asymmetries between providers and oversight bodies at different levels. In fact the latter can have difficulties in monitoring provider performances since providers of-

ten control the necessary information (Millar and McKevitt, 2000). As stated by Jones (2008): "*internal control is one of the most important mechanism of delivering accountability and enables organisations to monitor and control their operations*".

The relationships between accountability and internal control has also been taken into account by the INTOSAI according to which the latter is geared to the achievement of a separate but interrelated series of objectives, and accountability is one of those.

3 – Italian health sector accountability

Italian National Health Service – NHS – was instituted in 1978 and is based on a three level decentralised organisational structure: the central government; 21 regional governments – Regions –; local health units – USLs [1] – charged of providing services in a given area, and highly specialised hospitals (Borgonovi, 1988).

Within the international NPM movement, at the beginning of the 1990s the NHS underwent a comprehensive reform process – L.D.[2] No. 502/1992 and L.D. No. 229/1999 – through which it was newly designed and articulated on a regional basis (Anselmi, 2000; G. Donna *et al*.., 2001; Marcon and Panozzo, 1998; Pavan and Olla, 2000). In fact the reform process introduced managerial principles, significantly increased the legislative power devolved to the regions, and introduced a quasi-market model[3] (Anessi-Pessina and Cantù, 2006). The main aim of this model was to enhance the efficiency, effectiveness and quality of all the health services (France *et al*., 2005).

The USLs were transformed into autonomous local health care organisations – ASLs [4] –, while highly specialised hospitals were given the status of public hospital organisations – AOs [5]. Both ASLs and AOs – henceforth referred to as HCOs – were given financial independence as well as full responsibility for their budgets and management.

Accountability in Italian health sector can no longer be specific to a single entity, but to the system as a whole, and several actors at different levels contribute to it. Its NHS context is characterized by a high division of tasks and responsibilities together with a devolution process which has increased the regional autonomy degree in health care matters. According to this context the need for mutual accountability relationships among the different government levels is particularly relevant; this kind of accountability is called inter-institutional accountability (Ongaro, 2003).

At the central level the Ministry of Health[6] is responsible for supporting, monitoring, and assessing the implementation of National Health Plan – NHP – which defines: the general objectives and fundamental principles of the NHS; the essential levels of care[7] – ELCs –; the economic resources to be assigned on the basis of the National Health Fund – NHF[8]. Each health objective included in the NHP is then further developed into a set of targets that have to be met at the regional level.

The regional level has legislative and executive functions. According to the former, regional legislation should define: the principles for organizing health care providers and for providing health care services; the criteria for financing all health care providers; the HCOs' control and accounting systems. Regions are answerable for pursuing national care objectives according to their own political agenda and in particular are responsible for ensuring the delivery of ELCs. The regional strategic planning process is formalized into a three-year Regional Health Plan – RHP – which defines the regional health-care system's political, institutional and strategic framework. In order to be accountable to the central government, Regions provide an annual report on the implementation of their RHPs, which have to be consistent with national guidelines and priorities, but adapted to fit regional health needs.

Finally health services are delivered through a network of public and private health care providers which operate at the local level. It is relevant here to point out the ASLs case, that are geographically based organisations responsible for assessing health needs and providing comprehensive care services, through their own facilities – directly managed hospitals and territorial services – or through services supplied by public and private accredited providers. ASLs are directly accountable to the regions; in particular they have to guarantee equal access to services for all citi-

[1] An English translation for: *unità sanitarie locali.*

[2] Legislative Decree.

[3] The model in which providers, regardless of public or private status, are expected to compete on cost and quality, and the NHS acts as a third-party payer, is called a quasi-market model.

[4] An English translation for: *aziende sanitarie locali.*

[5] An English translation for: *aziende ospedaliere.*

[6] According to law no. 244/2007 the Ministry of health has been replaced by a joint Ministry of Labour, Social services and Health.

[7] Essential levels of care are minimum health services that have to be guaranteed to all citizens.

[8] Although L.D. no. 56/2000 formally abolished the NHF, it still operates as a kind of accounting container for monetary resources to be allocated to the regions. The Decree also stated that a fixed proportion of national VAT revenue is used to build a National Solidarity Fund, used to redistribute funds to regions unable to raise sufficient resources to provide the basic package of services (Lo Scalzo *et al*.., 2009:53).

zens, the effectiveness and efficiency in the production and provision of services, and are responsible for maintaining the balance between the funding provided by regions and expenditures.

Each ASL is managed by a GM, appointed by the regional health department under fixed-term renewable private contract. GM's contract includes targets to be reached within the term, but his/her results are assessed eighteen months after his/her appointment and thereafter annually, and if objectives are not achieved he/she may be dismissed.

Regional legislation defines the GM's targets and assessment procedures and provides them with substantial autonomy in managing human, financial and technological resources. This autonomy is expressed in the GM's power to define organization's mission and goals through a three-year strategic plan consistent with the recommendations of the RHP. GMs are supported in their functions by a managing director and a medical one.

Among the different levels of government involved in the inter-institutional accountability, this paper, as stated above, focuses on the lower one represented by the HCOs and on their GM accountability relationship with the Region – managerial accountability.

According to the managerial code Italian HCOs are required to provide information on cost, quality, effectiveness, efficiency and appropriatness of services delivered, and safeguarding of their assets. The provision of all these kind of information has led to the introduction in Italian HCOs of the accrual accounting, which, according to the legislature intention, should have replaced the cash and obligation accounting and the related documents, the cost accounting, the management control, a performance measurement information system based on outputs and efficiency, and of documents such as the accrual budget, the statement of financial performance and the balance sheet (Anselmi, 2002).

4 – Research questions and methods

As stated above the topic onto which the research focuses is the relationship that could be found between the internal control system and the managerial accountability which, in Italy, as it will discuss in the next section, shows better results in the health care sector compared to the public sector in general.

Moreover in the study context managerial accountability is considered *per se* and as a proxy of good management which in public sector is a concept that can be hardly operationalised.

A good management measure is here provided considering some international public sector rankings such as the World Bank governance indicators on Voice and accountability and Government effectiveness[9], and the Open budget initiative which assesses government transparency and accountability. With regard to the health care sector the Euro Health Consumer Index[10] which measures and ranks the performance of health care provision from a consumer point of view is considered.

The general research issue is then divided into other three specific research questions:

1. verifying the consistency between the PIfC key elements and the internal control rules adopted in the Italian public sector in general and in the health care sector in particular;
2. analysing the internal control system practices in order to inquire how the Italian health care model is actually implemented. As it will be better explain below, in answering these research questions a dichotomy between the control tools in the clinical area and in the general administration one was found out; therefore the opportunity of a third research question emerged;
3. inquiring if and how the revealed differences between clinical and administrative internal control tools are related to corresponding differences in the managerial accountability.

In order to answer the research questions the PI*f*C model, assumed in this paper as a benchmark, was first analysed in its key elements. In addition a documentary analysis based on the main national and regional regulations on public and health care sector internal controls, and a case study was conducted. The latter focused on a HCO of the Region of Sardinia: the ASL No. 8. The case study consisted of a website document analysis, as these documents represent the first expression of ASL's accountability discharging, together with an in-depth semi-structured interview

[9] Voice and Accountability indicator captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media; Government Effectiveness indicator captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

[10] The Euro Health Consumer Index covers 38 healthcare performance indicators for 33 countries. These indicators are selected within a definite number of evaluation areas - patient rights and information, e-health, waiting time for treatment, outcomes, range and reach of services, pharmaceuticals - which in combination can present a telling tale of how the healthcare consumer is being served by the respective systems.

with the managing director, carried out in order to clarify and strengthen what is disclosed by web.

5 – The Public Internal Financial Control - PI*f*C - model key elements

The PI*f*C model was developed by the European Commission during the second half of the 1990s as a means for countries, which have submitted an application to become an European Union – EU – Member State, to implement a modern public internal control system (De Koning R., 2007; Cohen, 2007). Because of its usefulness, some of the original EU members including France, Austria, the Netherlands and Belgium, have decided to comply with such a model (AIIA - Ernest & Young, 2008), which is now a priority for all EU members and candidate countries as well as recipients of EU funding (Cohen, 2007). Moreover, PI*f*C principles are now imposed by the World Bank and the International Monetary Fund before they support any project. The objective of PI*f*C is to establish a comprehensive framework, which applies to both accession and member states, for achieving sound financial management[11] (Cohen, 2007).

The abbreviation PI*f*C was used for the first time in an article in the SIGMA[12] Public International Forum (De Koning, 1999) in order to create a kind of brand status which covers some specific aspects which are not found in other national internal control systems. The covered aspects are two: financial management and control systems[13] – FMCS – and internal auditing – IA. In addition a centralised body, called Central Harmonisation Unit – CHU –, is requested for harmonising and co-ordinating both the internal control and the internal audit standards and rules.

Among the different PI*f*C elements, we focus here on the internal control ones just as defined in the international standards developed by the INTOSAI that have now become the authoritative norms on this issue (De Koning R., 2007; 43). The research does not inquire internal auditing whose benefits or added value according to academic literature on the topic is difficult to measure (Power, 2000; Morin, 2008). Internal audit supports management in analysing and understanding the weak areas of the control systems developed by management. According to De Koning (2007: 15): "*If management was fully aware of the quality of its control systems and encouraged its staff to follow the rules by setting a good example there would hardly be need for an internal auditor*.

INTOSAI "Guidelines for Internal Control Standards for the Public Sector" define a general framework for internal control in the public sector and provides a basis against which internal control can be evaluated. The guidelines are inspired by the principles outlined in the Committee of Sponsoring Organizations – COSO – reports and take into account the characteristic of the public sector.

As defined by INTOSAI, internal control is: "*an integral process that is effected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity's mission, the following general objectives are being achieved:*

- *executing orderly, ethical, economical, efficient and effective operations;*
- *fulfilling accountability obligations;*
- *complying with applicable laws and regulations;*
- *safeguarding resources against loss, misuse and damage".*

This definition involves several key concepts. Firstly, internal control is a series of actions that permeate an entity's activities and is most effective when it is built into the entity's infrastructure. Secondly internal control supplies the mechanisms needed to help understand risks in the context of the entity's objectives, and, finally its purpose is to ensure that these objectives are achieved while minimizing the risk of failure. In this regard, however, internal control can provide only reasonable – not absolute – assurance.

Internal control consists of five interrelated components which represent what is needed to achieve the general objectives:

1. control environment
2. risk assessment
3. control activities
4. information and communication
5. monitoring

The control environment is the foundation for all other internal control components, as it provides discipline and structure as well as the climate which influences the overall quality of internal control. It has

[11] As defined by EC Regulation 1260/99 and 438/01, sound financial management is underpinned by "regularity", "efficiency", and "security", with the latter being defined as the "protection of the financial interest of the European Community".

[12] Support for Improvement in Governance and Management in Countries in central and eastern Europe – CEEC.

[13] According to the Tallin Discussion Paper on Public Internal Financial Control, financial management systems are: organisation/accounting/information/ aiming to achieve the agreed objectives and to ensure that programs are protected from waste, fraud, and mismanagement. With regard to the EC financial and management control systems comprise: budget programming, public accounting, expenses accounting, cash flow management and payment systems (Cohen, 2007: 44; De Koning 2007: 51).

overall influences on how strategy and objectives are established and control activities are structured.

Having set clear objectives and established an effective control environment, the next step is an assessment of the risks. Organisations have to confront all types of risks, which may affect achievement of their objectives. Risk assessment should be an ongoing iterative process which implies identifying and analysing relevant risks to the achievement of the entity's objectives and determining the appropriate response. It entails: risk identification, evaluation and appetite assessment, and the development of responses. This process plays a key role in the selection of the appropriate control activities to be undertaken.

Control activities are the policies and procedures that an organisation establishes to treat the risks that may hinder the achievement of the entity's objectives (INTOSAI, 2004: 26). They occur throughout the organization, at all levels and in all functions, and include a range of activities as diverse as for example: authorization and approval procedures, reconciliations, reviews of operating performance, reviews of operations, processes and activities. Furthermore an integral part of most control activities are those on information technology.

Risk assessment and control activities together constitute what is called the risk management process which is one of the main aspects of internal control (De Koning, 2007: 59). Risk management is the overall process of identifying, assessing – risk assessment –, treating and monitoring risks, and implementing the necessary controls in order to reduce those risks to an acceptable level – control activities (Rossi, 2008). It requires managers to assess the severity and incidence of risk, the cost-efficiency and effectiveness of their risk controls. Thus where the cost outweighs the benefits, the risk is accepted by management as a residual risk (Cohen, 2007).

Information systems play a key role in internal control elements as they produce reports, including operational, financial and compliance-related information that make it possible to fulfil public accountability obligations. This objective can be achieved by developing and maintaining reliable and relevant financial and non-financial information and communicating this information by means of a fair disclosure in timely reports. A precondition for reliable and relevant information is the prompt recording and proper classification of transactions and events. Management's ability to make appropriate decisions is affected by the quality of information that has to be appropriate, timely, current, accurate, and accessible. Information is the basis for communication which have to enable all personnel to carry out their control responsibilities effectively. Effective communication should occur in all directions, flowing down, across and up the organisation, throughout all components and the entire structure.

Finally internal control systems have to be monitored in order to ensure that controls are operating as intended and that they are modified appropriately for changes in conditions. Monitoring is accomplished through ongoing activities, separate evaluations or a combination of both. Internal control deficiencies detected through these monitoring activities should be reported upstream, and corrective actions should be taken to ensure continuous improvement of the system.

6 – Italian public sector and NHS internal control model and their consistency with the PI*f*C

This section focuses on the drawing inductively from the Italian regulations of a comprehensive internal control model for the public sector in general, and the HCOs in particular, to be compared with the PI*f*C international reference model. The comparison was carried out in order to answer the first research question aiming at evaluating the degree of consistency of the two Italian internal control models with the PI*f*C basic elements.

Until the early nineties Italian public sector control model was based on the Napoleonic approach focusing on ex-ante compliance control on public sector organisation administrative acts (Ladu, 2009). In 1999 a decree. – L.D. No. 286/1999 – redesigned the intricate public sector internal control system by better specifying some concepts and their implementation tools[14].

The decree introduced five types of control (Chiappinelli *et al*, 2010):

1. the administrative control, aimed at guaranteeing the legitimacy, regularity and fairness of the administrative action;
2. the accounting control, aimed at guaranteeing the compliance with accounting rules and the certitude in the production of accounting information;
3. the management control, aimed at the verification of the efficiency, effectiveness and economy of the administrative action;
4. the managers' performance evaluation;
5. the *strategic*[15] appraisal and control, aimed at the assessment of the adequacy of administrative action

[14] We have to observe here that the Italian legislator seems do not distinguish internal controls and internal audit; consequently, he provides for controls to be made by the auditor boards and according to audit standards; in the paper we will try to make a distinction looking at the substance found out within the rules.

[15] The word "strategic" is used by the Italian legislator in the particular meaning explained in the text, very

concerning the adoption of plans, programs and other tools deriving from political decisions.

The Italian legislator highlights that all these kind of controls have to be intended as integrated. More specifically, the *strategic* control is devoted at affecting the top managers behaviour by providing the criteria to assess their performance, whereas the management control provides the criteria to assess the performance of other managers through the appraisal of the results obtained by the various responsibility units (Sorace, 2010). Moreover the *strategic* control is the basis for the formulation of detailed goals which are monitored under the management control. It appears that, within the system of internal controls, the *strategic* one, the managers' performance evaluation and the management control are all focused on results, whereas the administrative and accounting controls are focused on actions.

Comparing the above-mentioned regulation with the INTOSAI Guidelines what emerges is that the former explicitly defines the different types of internal controls specifying for each of them their objectives. The latter provides a broad framework whose internal control definition covers the area of government administration (Troupin *et al*.., 2010). According to these remarks the examination of the decree 286/99 is not sufficient to create a comprehensive Italian model to compare with the PI*f*C/INTOSAI one. Thus other Italian regulations have to be investigated in order to find the corresponding elements of the PI*f*C/INTOSAI framework. These elements are included in the L.D. No. 165/2001 – general rules on the civil service –, in the L.D. No. 150/2009 – general rules on the improvement of civil servants' labour productivity as well as of public entities' efficiency and transparency –, and in the Law No. 241/1990 – general rules on administrative procedure and the right to get access to the administrative documents.

With regards to the HCOs, the specific national sector regulations – mainly the L.D. No. 502/1992 – include the decree 286/99 concepts, with some modifications according to the health sector features. Moreover the NHPs, the RHPs and the Sardinian region regulations contain relevant rules about internal control in the clinical activities that have to be considered in the research path.

The comparison between the PI*f*C/INTOSAI and the Italian internal control models was carried out as follows. At first it was conducted a detailed identification of the internal control elements that is possible to find in the Italian regulations, with reference to the public administration in general and to the health care sector in particular. Then these elements were referred to a taxonomy derived from PI*f*C/INTOSAI, in order to verify whether and to what extent internal control concepts and tools overlap – see table 1 in the Appendix.

The first PI*f*C/INTOSAI internal control component is the control environment whose main elements are: professional integrity and ethical values, commitment to competence, management's operating style, organisational structure – i.e. assignment of authority and responsibility, empowerment and accountability – and human resources policies and practices.

The professional integrity and ethical values imply the existence and implementation of codes of conduct or expected standards of moral behaviour that have to be communicated inside and outside the organisation. In Italy these elements can be found in the decrees 165/01 and 150/09. The former provides for the publication in all public sector entities of a code of conduct. In addition, HCOs have to issue disciplinary codes in compliance with the national labour contracts relating to the medical and veterinary managers, to the non-medical managers and to all other civil servants. The latter provides for the issuing of a three-year plan for performance transparency and integrity and for the establishment of a specific web page on these matters.

Such two regulations, together with the decree 502/92 and the NHP 2006-2008, also emphasize the importance of managers and employees training that is related to the commitment to competence. The continuing education together with the clinical audit and the risk management are clinical governance tools (Starey, 2001). According to Scally and Donaldson (1998: 61) "*Clinical governance is the system through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care, by creating an environment in which clinical excellence will flourish*". In Italy the clinical governance concept was introduced in 1999 with the aim of increasing physicians and health managers involvement in the strategic choices of HCOs (Macinati, 2007).

The existence of an internal unit specifically devoted to control activities, as a part of internal control system, is considered by PI*f*C/INTOSAI a strong signal of top management interest on internal control, and the establishment of this type of units is provided by Italian national or regional regulations.

According to the decree 286/99 the assignment of authority is necessary for the management control purposes. In HCOs – decree 502/92 and Sardinian Regional law No. 10/2006 – the organisational structure is defined by means of the Entity chart [16], which is drawn under the responsibility of the GM.

Provisions on human resources policies are included in the decrees 165/01 and 150/09. Moreover, a

different from the one coming from the managerial literature; in order to indicate to the reader this particular meaning, the word will be presented in italics: *strategic*.

[16] An English translation for: *Atto aziendale.*

priority in the NHP and RHP 2006-2008 is the implementation of a policy for the qualification of human resources. With regards to evaluation policies, and in particular to the manager's performance evaluation, HCOs are characterised by different kind of managers, namely the medical and veterinary managers and the non-medical ones. The national labour contracts, in line with HCO legislation, identify two bodies responsible for managers' performance evaluation: the Evaluation Unit and the Technical Board. The former monitors and evaluates the managers' results in relation to the objectives assigned, even for the allocation of performance-related pay. The latter is responsible for a more comprehensive managers evaluation on their technical/professional skills (Bandini, 2002).

The second component of the PI*f*C/INTOSAI internal control system is the risk assessment which can be considered as a part of the more comprehensive risk management process. Risk management is an organizational response to the need to reduce likelihood of errors, unwilling negative events and their costs, and its principles – namely identification, analysis and control (Dickenson, 1995) – apply as much in health care as in other organisations (Vincent and Moss, 1995). In its widest sense, risk management programmes involve all aspects of work, production, and interactions within an organisation, and in health care this includes looking beyond clinical care (Moss, 1995). For instance, security and fire risks and the operation of the health and safety at work regulations, all come within the remit of risk management. In Italy the development of risk management is a health sector peculiarity, since there is no general national law applying to the public sector as a whole on this subject. Its origin can be traced back to 2003 when the Ministry of Health set up the "Technical Committee on clinical risk". The Committee drew up a document which contains a sort of general indication on HCO risk management that specifically refers to clinical risk management. In fact most of the clinical risk management strategies adopted have still regional features lacking common guidelines for the development of organisational models for this kind of risk (Pelliccia, Pieralli, 2005). Clinical risk management can be broadly defined as: "clinical and administrative activities undertaken to identify, evaluate, and reduce the risk of injury to patients, practitioners, and visitors and the risk of loss to the organization itself" (JCAHO, 2001). According to literature the clinical risk management aims at:
a) reducing the frequency of adverse events and harm to patients; b) reducing the chance of a claim being made; c) controlling the cost of claims that are made; d) minimising the damage caused by adverse events (Clements, 1995; Vincent and Moss, 1995). Effective clinical risk management therefore has links with quality care improvement and patient safety (Canitano *et al*.., 2010) and, as stated above, it is a tool of the clinical governance whose promotion is a major priority in both NHP and RHP 2006-2008.

The Committee's document on clinical risk management defines the four stages and, for each of them, the appropriate tools, through which it is developed:
1. risk identification which uses techniques such as incident reporting, medical record review, claim analysis;
2. risk analysis which measures its impact on the organisation and whose main tools are Root Cause Analysis – RCA –, Failure Mode and Effect Analysis – FMEA, Failure Mode and Critical Effect Analysis – FMCEA;
3. risk control which implies the monitoring of actions implemented to prevent risks;
4. continuous improvement of tools and techniques used in order to guarantee the effectiveness of risk prevention.

The first two stages are related to the risk assessment, while the last two could be considered as a part of the INTOSAI's control activities. Among control activities, the authorization and approval procedures should include the specific conditions and terms under which authorisation are to be made. In this sense the Law No. 241/90 provides that public sector entities are requested to state who is the civil servant or which is the organisation unit responsible for each administrative procedure.

The reconciliations and the reviews of operations, processes and activities could be included in the administrative and accounting controls, that in HCOs are entrusted by the decree 502/92 to the statutory auditor board. In order to guarantee the reliability and integrity of financial and accounting information, this board monitors the compliance with laws and regulations, verifies the economic performances, certifies the accuracy of the bookkeeping and the consistency between financial statements and accounting books and records, and makes periodic cash checks (Persiani, 2008). This kind of control is seen by the legislator as referable to internal auditing and, more specifically, to financial internal audit (Hinna, 2006) [17]. Moreover, at least quarterly, the audit board refers to the region on the results of audits performed, exposing the facts if there is suspicion of serious irregularities, and periodically, at least every six months, the board submit a report on the state of HCO activity to the Conference of Mayors. Based on

[17] The nature of the statutory auditor board is questionable; as it is included within the entity's chart, it is considered by the legislator as an internal body; however its members are not entity servants but external consultants; consequently, in our opinion, it has to be considered, in the substance, as an external audit body.

these functions it can be argued that the statutory auditor board represents the body through which the regional health department operates the direct supervision on the HCO activities. Finally the statutory auditor board submits a report on the budget and another one on the balance sheet to the regional control section of the Italian Supreme Audit Institution[18].

The reviews of operating performance could be considered as part of the management control and of manager's performance evaluation. Consistent with the reform focus on improving efficiency and limiting spending (Marcon and Panozzo, 1998), management control was the first managerial system to be adopted by HCOs, in some cases as early as 1990 (Anessi-Pessina and Cantù, 2006). According to the decree 286/99, the GM, by means of the Evaluation Unit, is directly responsible for implementing the management control system.

As for ICT system national regulations exist which prescribe the basic rules, applying to all public administrations, for safeguarding against unauthorised access to and misuse of both electronic documents and systems. In addition the Ministry of Health in 2002 has established the so-called "Control Room"[19] that carries out the functions of planning, coordinating and monitoring the implementation stages of the New Health Information System – NHIS. In particular the "Control Room" defines and adapts over time, information content and methods of NHIS, in line with the NHP guidelines and with the other health monitoring needs. The NHIS was introduced in 2001, following on a framework agreement between the Ministry of Health and the Regions, as a governance tool to support, oversee and monitor the ELCs. Its main objectives are: integrating different information systems that are autonomously managed by regional authorities; developing integrated systems of individual health information in order to create an electronic patient file; monitoring health care providers; monitoring the cost, quality, efficiency, and appropriateness of services and the waiting lists; developing an observatory on public investments in the health care sector (Lo Scalzo *et al.*., 2009). In Sardinia the regional information system is the so-called "SISAR", closely linked to the NHIS, which was introduced in 2008 and whose implementation is still ongoing. The system includes both the central services, managed directly by the Regional Health Services' Centre – CRESSAN – and the local ones managed by the HCOs.

Finally management should clearly communicate to its personnel their roles and responsibilities in effecting and supporting the components of internal control system that have to be monitored. Communication channels are defined by internal regulations, while ongoing monitoring activities and separate evaluations are assigned by the decree 150/09 to an independent evaluation body established in every administration.

With regard to managerial accountability *per se*, academic literature on the topic reveals that Italian public sector managerial accountability is generally weak. In fact its budgeting and accounting systems lack information on efficiency, costs and performances (Pavan and Reginato, 2005; Reginato, 2010). On the contrary health care sector managerial accountability is better, as HCOs are required to provide information on cost, quality, efficiency and appropriatness of services delivered, and safeguarding of their assets. Furthermore accrual budgeting and accounting, management accounting and performance measurement systems are in use.

As for managerial accountability as a proxy of good management, Italian public sector scores low in different international rankings. In fact, with regard to the World Bank governance indicators on Voice and accountability and Government effectiveness[20], and the Open budget initiative[21] Italy presents lower scores compared to those of the other European Countries. Italian health care sector scores are instead better; in fact according to the Euro Health Consumer Index 2009 Italy ranks in 15th place out of 33 countries showing a steady improvement with regard to clinical treatments, although less remarkable results can be observed in terms of patient rights and access to information.

7 – The case study

The case study focused on the internal control system practices of a Sardinian HCO: the ASL No. 8[22], chosen since the size of its target territory, the population served, and the epidemiological and geographic peculiarities make it one of the most complex HCOs in Italy and certainly the most complex in the Region. Its

[18] An English translation for: *Corte dei conti.*

[19] An English translation for: *Cabina di regia.*

[20] See: info.worldbank.org/governance/wgi/sc_country.asp

[21] See:www.internationalbudget.org/what-we-do/open-budget-initiative/

[22] The number of ASLs currently operating in Sardinia is 8, out of a national population of 195 ones. The ASL No. 8 was founded in 1996, according to the Regional Law No. 5/1995, by merging the former USLs No. 20, 21, 22 and a part of the USL No. 18. At present it covers an area of 4,569 square kilometers, which coincides with the province of Cagliari territory, with a population amounting to 562.974 inhabitants and 71 municipalities.

first aim was concerned with the actual implementation of the Italian health care regulatory model and with inquiring whether any of the PI*f*C/INTOSAI elements, which are not present in the Italian regulatory model could be found in the control practices. The second aim was to assess whether the aforementioned dichotomy found in the internal control regulatory models can also be observed in the control practices.

The primary data collection method consisted of a website document analysis as these documents represent the first expression of ASL's accountability discharging. Among these documents the main ones are: the Entity chart, the three-year strategic plan (2007-2009), the three year social reporting (2005-2008), the internal regulations and the GM's resolutions on ASL's management and organisational structure. Besides an in-depth semi-structured interview with the managing director was carried out in order to clarify and strengthen what is disclosed by web.

The analysis was carried out as follows. The ASL No. 8 internal control practices were referred to a taxonomy derived from PI*f*C/INTOSAI, as it has already been done for the regulatory model – see table 1 in the Appendix. As for the integrity and ethical values it can be observed that the ASL No. 8 publishes in its website the code of conduct in compliance with the national regulations, and the specific disciplinary codes in compliance with the national labour contracts applying to the civil servants in general as well as to the medical, non-medical and veterinary managers. Furthermore, as the decree 150/09 compels public administrations to provide in their websites specific information to enhance their integrity and transparency the ASL has reserved a specific web page to such issues.

Ensuring equality in the access to vocational training is a priority objective for the ASL No. 8. In April 2010 the entity issued an internal regulation on education and training courses for medical and non-medical personnel, which led to the publication of the ASL's 2010-2011 training plan. The vocational training management is carried out through the Regional Information System for Continuing Medical Education – SARECM. Every six months the ASL is required to draw up a report on SARECM training activities which also includes information on the resources allocated for such activities.

According to the INTOSAI model, the establishment of an internal unit specifically devoted to control activities is a strong signal in assessing the existence of a positive and supportive top management attitude towards controls. In the ASL No. 8 this positive attitude could be seen in the establishment, in the position of staff to the top management, of two organisational units respectively called: Strategic planning and control, quality and risk management unit and Planning and control unit.

As already said, each ASL is managed by a GM appointed by the regional health department and the Regional legislation defines his/her targets and assessment procedures. The GM draws up the Entity chart which defines the ASL's organisational structure which is articulated into departments and territorial districts. The Entity chart also contains the assignment of authority and responsibility and defines the appropriate lines of reporting for the managing director and the medical director. In addition, as the ASL organisational structure is based on departments, the aforementioned contents are subject to a supplementary specification within the department regulations and the GM's resolution on powers delegation to the department's managers. In particular the head of each department is appointed by the GM to whom he/she is accountable, and he/she have to draw up the "report of activities" which relates to the attainment degree of the assigned budget objectives.

Human resource management according to the logic of motivation and empowerment is one of the ASL No. 8's strategic plan priorities. Performance evaluation and incentive systems seem to play an essential role in directing personnel behaviours towards organisation objective achievement. The interview pointed out that every year, at the departmental level, a performance appraisal is carried out in order to verify if the budget objectives assigned to the structure have been met. Performance indicators, connected with incentive/disincentive systems, should be used in order to pay the result and productivity wage.

With specific regard to managers' performance evaluation, in case of negative results, due to managers' negligence and non-compliance to the organisation directives, the internal regulation stresses that there can be the entire or partial result wage loss and a lower pay position assigned.

The recruitment process of the ASL's personnel is carried out in compliance with national and regional regulations conforming to the principles of transparency, impartiality, economy and celerity of selection methods and procedures. Every year a personnel requirement plan is attached to the annual health plan and drawn up in line with programs and projects contained therein.

The implementation of a risk management process is an ASL No. 8's strategic objective. To this end the organisation has started a project divided into several stages for the management of clinical risks as well as security, fire, financial and economic risks. Currently the organisation is focusing on the clinical risk management through the adoption of an organizational model, which provides for the creation of a specific board devoted to this activity, and the development of a risk management plan. This plan

identifies several tools for the clinical risk detection and analysis, including: Incident Reporting Systems, the FMEA, the FMECA and the RCA.

As stated in the previous section, among the control activities authorization and approval procedures should include the specific conditions and terms under which authorisation are to be made. In this sense the ASL's GM in 2005 issued a resolution by which criteria and delegation limits of the persons in charge of services were set.

The reconciliations and the reviews of operations, processes and activities are included in the administrative and accounting controls carried out by the statutory auditor board. In addition to the control activities provided by the decree 502/92, this board carries out sample checks on the organisation resolutions according to the criteria established at the time of its installation.

The reviews of operating performance are part of the management control and of the manager's performance evaluation. The former is carried out in the ASL No. 8 by a Program and Control top management staff unit. The latter is conducted by Technical Board and the Evaluation Unit.

Effective information technology controls could provide management with reasonable assurance of the completeness, timeliness, and validity of data processed. According to the department regulation the responsibility for the monitoring, collection and validation of the information provided is entrusted to the head of the department.

The ASL No. 8 adopts the regional information system called "SISAR" whose implementation, as already said, is still ongoing. The current information system is not yet completed in all its parts. In fact only some modules – such as the accounting and administrative module, the general protocol module, the human resources module – have already been started. These modules allow to provide the mandatory information flows to the regional health department and to the Ministry of Health. The missing of some modules implies that the information system is not able to guarantee an efficient and effective control process on the information flows.

The Entity chart establishes the Communication Division as a top management staff unit with the task of integrating the ASL's external and internal communication activities. Within the Communication Division specific Offices for public relations[23] – URP – are set up in the headquarter, in the hospitals and in the territorial districts. These offices provide information to citizens and, in many cases, monitor the quality of services from the citizens' point of view. They also carry out initiatives to overcome any shortcomings and to improve the services delivered. Furthermore, the central URP is responsible for the drafting, publication and disclosure of the Health Service Chart. With regards to internal communication, the Communication Division unit is responsible for informing staff on the main strategic policies laid down by the top management, in order to increase the level of awareness, involvement, motivation and responsibility with respect to the attainment of the organisational goals. The main tools used for this purpose are an organisation e-mailbox and a website area with personnel restricted access. No ongoing monitoring activities or separate evaluations exist in order to assess the effectiveness and efficiency of the control system.

[23] An English translation for: *Ufficio relazioni con il pubblico.*

8 – Conclusions

Frequently it is the perception of failed or insufficient accountability that provides the stimulus for change. For example, within the rationales for health sector decentralisation reforms there is the need to establish stronger accountability linkages among citizens, policymakers and service providers (Brinkerhoff, 2004). Italy's NHS decentralisation reform seems to be based on this aim and changed the meaning and the content of accountability relationships, which evolved to an inter-institutional level. Among the different levels of government involved in this type of accountability, this paper has focused on the lower one represented by the HCOs.

In order to increase transparency and accountability an international reference control model for the public sector, called PI*f*C has been recently developed by the EC, and was chosen in this research as a benchmark to which to compare the Italian regulations on HCO internal control system. The comparison was carried out in order to explore the relationship between internal control system and managerial accountability.

This general research issue was then divided into other three specific research questions.

The first one aimed at verifying the consistency between PI*f*C/INTOSAI key elements and the internal control rules adopted in the Italian public sector in general and in the health care sector in particular.

The conducted analysis allows to conclude that between the PI*f*C/INTOSAI elements and the Italian public sector control model, there is a general consistency as concepts are usually close but hardly overlap.

However the Italian public sector control model appears formalistic; according to academic literature it is only partly implemented (Reginato *et al*.., 2011; Turri, 2010), and presents a dichotomy with the health care sector control model as it does not take into account risk management.

The analysis also reveals that the health care sector is characterized by a dichotomy between internal control tools in the general administration area and in the clinical one, as in the latter rules are better defined compared to the former.

The second research question aimed at analysing the internal control system practices in order to inquire how the Italian health care model is actually implemented.

In this respect the case study reveals first of all that there is consistency between the NHS regulatory internal control model and the one actually in use – in fact the model is almost completely implemented and shows the same kind of flaws.

What is more the research highlights, on the one hand, the risk management good practices which not only considers the mandatory area of clinical risk but also other risk areas such as those related to fire, financial and economic risks and, on the other hand, the poor practices with respect to the performance evaluation.

Thus the research confirms the existence of the aforementioned dichotomy also in the control practices and provides grounds for its possible explanation. It seems, in fact, that somehow the quality of clinical controls exercise a beneficial drawing power on the operation of the non-clinical management.

As for the third research question the study reveals a dichotomy between public sector managerial accountability and the health care sector one which seems to be better.

A possible explanation for the revealed dichotomy might be related to the fact that better health care sector managerial accountability can be observed compared to the general public sector one because of: pressures due to a significant interest in health sector issues because of their influence on people's life and well-being as well as on public budget; the fact that health care constitutes a major budgeting expenditure, hence proper accounting for the fund use is a high priority; the increasing designing and implementation of accountability tools such as the clinical governance system; medics commitment to provide high quality treatments induced by their professional standards (Merchant and Riccaboni, 2001).

According to the study analysis a hypothesis emerges: there is a positive relationship between internal control systems and managerial accountability. This relationship is consistent with the one implicit in the PI*f*C model.

Of course the present study does not allow to make any kind of generalisation thus these arguments need to be further investigated in order to assess their validity.

Anyway it tries to contribute to the relevant debate on the usefulness of internal controls. Future researches might try to confirm the above hypothesis and the nature of the relationship between internal control and managerial accountability.

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Appendix

Table 1 - Comparison between Italian internal control regulations and the PI*f*C model

Components of PIfC model		Italian regulations		Case study Practices
		Public sector	**Health care sector**	
Components of internal control – INTOSAI's model				
Control environment	Professional integrity and ethical values	Yes	Yes	Yes
	Commitment to competence	Yes	Yes	Yes
	Management's operating style (establishment of internal control unit)	Yes	Yes	Yes
	Organisational structure ▪ Assignment of authority ▪ Empowerment and accountability ▪ Lines of reporting	Yes	Yes	Yes
	Human resource policies: ▪ Performance appraisal and promotion processes based on merits ▪ Openness of recruitment processes	Yes	Yes	Yes
Risk management				
a) Risk assessment	Risk identification	No	Yes	Yes
	Risk evaluation	No	Yes	Yes
	Risk appetite assessment	No	Yes	Yes
	Responses to risks	No	Yes	Yes
b) Control activities	Authorization and approval procedures	Yes	Yes	Yes
	Reconciliations	Yes	Yes	Yes
	Reviews of operating performance	Yes	Yes	No
	Reviews of operations processes and activities	Yes	Yes	Yes
	Specific Information technology control activities	Yes	Yes	Yes

Components of PI*f*C model		Italian Regulations		Case study Practices
		Public sector	Health care sector	
Components of internal control – INTOSAI's model				
Information and Communication	Information system	Yes	Yes	Yes
	Internal communication	No[1]	No[1]	Yes
Monitoring	Ongoing monitoring activities	Yes	Yes	No
	Separate evaluations	Yes	Yes	No

Notes: 1) Internal communication channels are defined by internal regulations.