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## **Internal Audit as a Factor of Cost Management: 3<sup>rd</sup> and 4<sup>th</sup> Sanitary Periphery of Macedonia and Thrace**

**Prof. Dr. MYLONAS Dimitrios**

Thessaloniki Business College, Greece, dimmylonas@gmail.com

**MPETOS Konstantinos**

Ippokrateio General Hospital, Thessaloniki, Greece, kosbetos@gmail.com

### **Abstract**

The purpose of this article is to show the necessity of the procedure of Internal Audit, as a strategy of rationalization of cost management in a public health care organization. The objectives of this article in theory and research are:

1. to study the procedures of Internal Audit and to find methods of applying it
2. to bring up the importance of Internal Audit when it comes to the proper function of health care organizations
3. Registration and evaluation of the procedures that are made in order to rationalize the function cost of Internal Audit
4. Evaluation of the methods that are used by the Internal Audit department in the 3<sup>rd</sup> and 4<sup>th</sup> Sanitary Periphery of Macedonia and Thrace
5. Designation of the best application model of Internal Audit, so that the most possible participation is achieved when it comes to the rationalization of health care organization function cost.

Inquiries that are analyzed are:

1. Procedures and methods that help applying Internal Audit
2. Acceptance and application of operational procedures – Controls by the organization executives
3. Registration and evaluation of the procedures of Internal Audit and bringing up measures of correction or improvement with the purpose of controlling the function cost of sanitary organizations.

### **Keywords**

internal audit, controlling standards, cost rationalization, public health care organization

## **1. Main Presentation**

### **1.1. Conceptual framework of internal control**

Internal audit, in the modern concept of governance is a necessary exercise management tool, contributing in its own way to the correct diagnosis and management of risks, creating value in business. Also, the Internal Audit as a governance pillar is the necessary condition for the assessment and management of risks and the transition of business from traditional to modern management exercise [1]. Modern Auditing, as a scientific enterprise Management industry or bodies constantly produce knowledge through conducting rational and methodical investigation. For this reason, it is both science and engineering. Characterized as science because through the investigation, constantly provides new knowledge, technical as it leverages practical control applications, standards and procedures in conjunction with the generated scientific knowledge ensures the best possible result satisfying the auditing needs.

The Audit as philosophy and art is not interested in the legal form of units which it controls, whether a private or public nature, nor exploited, as for-profit or not their character. Accordingly, the body is controlled and purpose of an inspection shall, where appropriate, the corresponding control procedures, control methods and techniques. Audit is a special profession of administrative-economic science that deals with the general rules, terms and conditions for inspection by any business-entity-body aimed at safeguarding and proper management of financial resources, and the development and development of human resources [2].

The Leonard (2000: p.5) states [3]: "The audit detected any dangerous gaps, identify points that offer potential for improvement, the waste eliminated and the costs reduced. Determine whether the activity of the organization or public service satisfies predetermined production standards, the applied control systems are assessed, ensuring the adaptation of production processes and working methods to the objective and the various work programs monitored and their objectives".

### 1.2. Audit procedures - types and discrimination of tests

The Audit examines three key issues of interest to both the domestic and external audit: the object of the audit, the audit subject and the audit procedures. In the financial business, the term 'Internal Audit' is used to perform two basic concepts: Internal Control System and Internal Audit.

**Internal control system (CS):** It is what is called «Internal Control System» and consists of an organized whole; grid operating procedures and controls adopted by the management of an entity for the purpose of good governance to achieve business goals.

**Internal Audit (Internal Auditing):** Refers to the service- Internal Audit Unit and aims to assess the operational efficiency of the Internal Audit System, i.e. in evaluating and reviewing the implementation of operating procedures-Controls.

The main objectives of the Internal Audit are [4]:

- Systemic safeguarding of assets and the protection of the human resources of the financial unit.
- Full operation of the accounting system in accordance with generally accepted principles of accounting and the provisions of relevant laws.
- Appropriate allocation of responsibilities and personnel responsibilities.
- In constant encouragement and monitoring of direct application by the staff of the administration commands.
- Improving the efficiency of business.
- Continuous and comprehensive compliance management with the laws governing the operation of the entity that [5]: To limit the risk of errors and irregularities in the execution of transactions, to acquire greater accuracy and reliability of the assets of the company and to effectively keep the assets of the company.

### 1.3. Auditing principles - auditing standards

The internal control process of the public sector includes the policies and procedures used to direct the activities of an organization in order to provide reasonable assurance (reasonable assurance) that the objectives are achieved and that the procedures conducted in an ethical and responsible. In the public sector, governance concerns the means by which the objectives established and completed. It also includes activities that ensure the credibility of a government, establish the equitable provision of services, and evaluate appropriate behavior of senior civil servants, limiting the risk of corruption in public administration [6]. The supervisory authorities shall determine and indicate the concern and the need for control and the purpose and objectives of the Audit. Basic Auditing authorities, from which derives and to which internal control responds, in particular, relate to the following causes and necessities [7]:

- a conflict of interest involved in the current structure and operation (management-owners separation) economic operators;
- to ensure and improve the quality (accuracy, precision, etc.) are widely used financial instruments;
- Concentration checks and evidence findings;
- Exercise reasonable professional (audit) capacity and accountability;
- Independence and objectivity;
- Professional ethics.

According to the literature, the Auditing Standards can be grouped into the following categories: General Standards, Labor Standards and Reporting Standards. The development of individual standards in detail for every application is subject, of course, and theoretical but mostly practical study and application through professional seminars as well as to the preparation and application to control specific drivers and control programs, several specialized both in stages control, and in terms of business sectors [8].

As required by Greek legislation (Article 137 of Law. 2190/1920) the Greek Auditing Standards (SPD) formed in the frame specified by the International Auditing Standards of the International Federation of Accountants (International Federation of Accountants). The internal control standards are divided into three parts: A. Properties Characteristics Standards (Attribute Standards - Series 1000), B. Performance Standards - Series 2000 and C. Implementation Standards [9].

Through the conduct of internal audits including the importance of ethical conduct, and the prevention and detection of fraud and corruption in the public sector. Since the public sector funds normally originate from public funds and their use in the public interest generally requires special care, it is important to emphasize the importance of safeguarding resources in the public sector. Generally, it is expected that civil servants should serve the public interest with fairness and to properly manage public funds. Citizens should enjoy non-discriminatory treatment in terms of legality and justice [10]. Also, public organizations have to maintain and demonstrate integrity and ethical values, which should make it obvious to the public through its mission and its core values. In addition, the functions must be ethical, orderly, economical, efficient and effective, and, consistent with the organization's mission [11].

#### **1.4. The public health care sector in Greece: Hospitals of 3<sup>rd</sup> & 4<sup>th</sup> healthcare Macedonia - Thrace Region**

The Greek health system and especially the public is a newly established system with many important problems of economic, qualitative, organizational operational nature and effectiveness, and is required in many cases and the redesign of services it provides, and the operating costs of these changes and developments as demographic, new epidemiological model, new technologies, large population movements, internationalization of capital and the most important of all the economic crisis and the austerity policies in Greece in recent years (from 2008 onwards). The current state of the economy, for which the term was used Financial Crisis of 2008, initiated by the US to develop due to globalization international crisis of multiple sectors of the economy and today now talk about economic recession or crisis for many countries with low and income [12].

The provisions of Article 25 of Law 4025/11 for the "Reconstruction of Social Solidarity Institutions, Rehabilitation Centers, NHS Restructuring and other provisions" (Government Gazette 228 / 02-11-2011), instituted internal control in public health units administration, management and accounting. With these provisions, issue Rules which deals with all internal control issues and any necessary detail.

The provision of the internal auditor services is a contract for provision of service, the duration of which may not exceed three years. In the exercise of his duties enjoys full independence. The Audit Committee inter alia, monitor the process of financial reporting, efficiency of internal control and risk management system, and the development of the statutory audit of the financial statements. The internal auditor should report to the commander of the unit and to the Audit Committee any issue related to the course and the test results. Any other details concerning the responsibilities of the internal auditor and the Audit Committee, and the organization and operation of the internal control system is regulated by the Bylaws.

### **3. Methodology Research**

The purpose of this investigation is to draw conclusions as to the necessity of internal control as a cost reduction factor in a public organization of health services industry and involves the hospitals of 3<sup>rd</sup> & 4<sup>th</sup> Y.PE Macedonia - Thrace.

It is known that the category of people joining them some common characteristic called the research theory 'Population'. Always precise and strict definition of the population required [13]. As the third and fourth Macedonia-Thrace Y.PE covers the entire Northern Greece and throughout Thrace, as population out all the Governors and the Internal Auditors of the Hospitals of the third & fourth Macedonia-Thrace Y.PE (29 hospitals in total), where they work about 58 people. The development of this thesis was carried out with a combination of secondary and primary research. Secondary survey covered the theoretical background, with external data sources (Greek and foreign literature, articles in international and Greek journals, seminar notes), with main headings Audit, the Financial Management and Internal Audit.

Primary research was conducted using semi-structured questionnaire. The questionnaires were designed with the objectives of the investigation and were distributed electronically to the governors and the Internal Auditors of the 29 hospitals of the third and fourth Y.PE Macedonia - Thrace. The concentration of the desired quality data through questionnaires, achieved by the proper construction. Specifically they are given two different questionnaires, each addressed in both test groups.

#### **4. Findings Based on Survey Responses of Interior of Hospitals Auditors**

The 71% of respondents have experience over 10 years on the subject of Internal Audit, 25% 3-6 years and finally 4% said they experienced 6-9 years. It is observed that the largest part of Auditors has much experience. The experience of internal auditors contributes to the effective conduct of the audit and to better financial management of Hospital units.

To the question as to which internal control model applied by auditors, 58% of internal auditors answered that implements the internal control model C.O.S.O., 4% of the Business Excellence Model (EFQM), 7% of inland auditors applies a combination of C.O.S.O. models and E.F.Q.M. and the remaining 32% implement another model which is usually a combination of the above models. The survey results show that there is a common internal control implementation model. The C.O.S.O. model is dominant on the responses of internal auditors.

When asked whether the model applied by internal auditors in the execution of the project gives the expected results for the correct financial management of a health unit, 54% of respondents answered that the internal control system adopted gives the expected results for the correct financial management of hospital unit in very good satisfactory level, 14% at a very satisfactory level and the remaining 32% on a good level. Internal auditors are satisfied with the system of internal control that have adopted the health units are employed, which are adapted to the needs and characteristics of each hospital unit.

Through regular controls carried out by the auditors certifying the proper functioning basic health unit subsystems. Based on the survey results 29% of audits focused on cash flow, 25% in materials and drugs stocks, 14% in bad debt, 11% in accounts receivable past due fee of 7% a) taxes b) accounts receivable and c) payables.

When asked about the frequency of regular checks is observed that 50% of the controls carried out within the space of two to three months with the latter having the highest rate of 29% (21% in the space of two months). Here answers interval of six months, so it finds it necessary, the Internal Auditor 'found' at 18% and finally to 8% of the famous one and on the instructions of the Administration.

When asked about whether they are current officers of the hospital about the importance of internal control, 18% of Internal Auditors replied "a little", 32% answered "somewhat". While 50% of Internal Auditors considers "very" informed the department officials and "too much" to date. It is concluded from the above analysis that 82% of workers have understood the importance of carrying out the internal audit at the Hospital.

The 29% of internal auditors surveyed replied that the checks carried out are of general formula (extending across the management of a given period of time e.g. annual balance sheet and profit and loss), 14% of the controls carried out are experts (they concern a particular sector or theme e.g. inventory control, customer bad debts, etc.), it is permanent or lasting (executed then 29% of controls and throughout the course of the financial year), 14% of the controls are repressive (they performed retrospectively and are designed to uncover errors or omissions and irregularities) and finally 14% of the controls are superstitious (performed retrospectively and are designed to uncover errors or omissions and irregularities). Noteworthy is the fact that the checks are not made as a precaution based on the survey data and the majority of them carried out in exceptional cases for specific purposes e.g. suspected abuse. Instead of a comprehensive internal control system to prevention rather than repression processes, systems selected to address specific problems and occasionally and are usually made when suspected existence of similar problems.

When asked about the benefits arising from the application of internal control carried out in hospitals, 14% believe that eliminating the waste and the costs are limited, 18% of respondents believe that the Internal Audit enhanced transparency and smooth financial functioning of the body, 18% of

internal auditors considers that the implementation of internal control are tested and implemented ideas for the abolition of expensive, cumbersome and inefficient procedures in order to prevent or detect problems and to protect workers from unfair deduction from responsibilities. Also, 11% of respondents considers as the most important benefit of the Internal Control that financially controlled and administrative problems of the hospital and treated independently and therefore objectively. 11% of respondents answered that the most important benefit of the internal audit is the fact that opportunities for automation processes identified and to 11% of respondents considers that the internal audit collected revenue foregone. Finally, 18% said that timely detect problems before it is brought to the attention of others.

Through the applied, internal control system carried out by the internal auditors random checks confirming the proper functioning basic health unit subsystems. Based on the survey results 25% of internal auditors perform checks on the management of the Hospital relationships with suppliers, 18% random controls subsystem of drug management biotechnology materials, consumables, spare parts and services, 18% internal auditors random controls subsystem of the Asset Registry, 15% of internal auditors shall carry out random checks on the subsystem payroll, 11% controlled by sampling the patient motion subsystem - patient billing - outpatient - afternoon clinics, while end 7% of the sample checks carried out on management subsystem diagnostics - imaging laboratories. Sample checks of internal auditors covering almost the entire circuit of the commercial, accounting, general management and financial operation of a hospital unit.

Regarding the degree of implementation of the proposals of the internal auditors, a small only 7% responded that implemented "all", 29% of respondents answered that "many" of the proposals have been implemented and 50% said that they have implemented "several" therefrom. A 10% said that "a few" than proposals were implemented, while 4% of respondents said they do not know.

The 11% of respondents answered that "all" of their proposals have been made for a part to be implemented, while 78% of respondents answered that the proposals are being implemented: a) many b) is sufficient, while 11% answered that there are few ones that are being implemented. Almost all of the internal auditors' proposals were either implemented or are in progress.

## **5. Conclusions and Suggestions**

### **5.1. Conclusions**

Failure to incorporate the culture of hospitals providing a comprehensive and continuous education in the organizations personnel (Hospital), results consistent with theory, negatively affecting the development of employees' skills and the quality of service.

There is also the need for establishment (where there are) and the modernization of IT hospital systems, existing 'hospital information systems "do not provide a complete and horizontal coverage of all functional blocks of units, which can only be achieved by the implementation of an integrated information enterprise resource planning (ERP - Enterprise Resource Planning).

Regarding the existence of documented procedures in the departments of hospitals exported conclusion from the investigation that in most hospitals in the 3<sup>rd</sup> and 4<sup>th</sup> Y.PE no documented procedures, which "betrays" the functional weaknesses of the units and complicates the work of the Interior auditors. As a result, the unregistered procedures in most parts of the hospital units detected and their inability to obtain quality assurance certificates.

The necessity of Internal Audit in public health units, also illustrated by the fact that in most hospitals surveyed there switching functions between the departments employees, so that no person can not be responsible for the overall processing of a job.

Internal audit, identify and act proactively, reducing the risk of intentional or unintentional errors, and not the involvement of at least two mutually independent persons is necessary to complete a financial transaction (checking between them). Also, the non-switching function is a negative factor in the development and diffusion of knowledge in the workplace, they are not given the opportunity for officials to gain comprehensive experience working in various functions of each part.

Another finding of the survey is a useful conclusion is that Internal Auditors Hospitals carry out regular checks on cash flows in accounts receivable (assets), accounts payable (liabilities) in stocks of

materials and drugs and the payment of taxes and control of bad debts. Also in all hospitals surveyed, these controls are made with regular frequency mainly two or three months. The managements of the hospitals they consider most important purpose of the Financial Control approval, analysis and commentary of the accuracy and fidelity of the various financial statements. Also concluded that the controls carried out in hospitals, either general or specific and targeted, are more repressive, despite preventive. Having in mind that the Administrations are those that give directions and recommend to the internal control objects auditor found that the objectives set, mainly relating to the detection and suppression of specific and targeted irregularities. However, the development and promotion control systems that prevent and prevent mistakes and omissions, add more value to an organization. This should be the main objective of Hospital Administrations.

Before compulsory for hospitals implementation of Law 4025/2011 on the creation and operation of the Commission's Internal Audit with internal auditor, in any hospital had not established the Internal Audit Department. This shows that public organizations do not innovate and do not adopt modern business practices (such as the introduction of the institution of Internal Audit), and confine themselves to compliance and enforcement and the Ministry of Health guidelines.

With the launch of the Internal Audit in hospitals in 2012, they began to be submitted and the monthly reports of the Internal Auditors to the managements of hospitals. The role and importance of the work of Internal Audit also reflected in the proposals of the Auditors to the managements of hospitals.

The positive climate of cooperation is an essential prerequisite for achieving internal audit objectives. The internal auditor is difficult and a bit 'misunderstood' by nature. Acceptance of the investigation and the exploitation of its results requires great understanding and effort on the part of the test. Therefore, there should be informing staff on audit procedures, methodology, audit criteria and techniques used by internal auditor of each hospital, insofar as it concerns them.

Regarding the cost of internal audit compared with the benefits to hospitals, the views of Governors and the internal auditors differ. The hospitals that have provided higher allocation for carrying out the tasks of the Internal Control, considered very beneficial to the internal auditors work and taking into account that these proposals have improved the financial management of the organization. Instead, quite satisfactorily considered the results of the internal audit, the hospitals probably allocated a smaller budget. Obviously the expenditure chosen by each hospital to pay for the completion of the Internal Control, identified to a great extent the quantity and quality of service of internal auditors. The internal auditors from their side consider the cost of services provided mainly satisfactory and low.

Regarding internal control models implemented by the internal auditors in hospitals research, reflected that there is a common model, but dominates the C.O.S.O. model also evident that most internal auditors are very satisfied with the internal control model have been adopted and applied in health units. Several course of internal auditors judge the model applied quite satisfactory regarding the expected results to reduce the health unit operating cost control.

The study of current models and comparing the criteria of each model (according to theory) and the types of checks carried out in the framework, it is concluded that the application of the combined internal C.O.S.O. control model & E.F.Q.M, (which exploits the advantages of application of the two individual models), reducing their weaknesses and covers comprehensively all alternative types of controls, contributes to tackle any problems and outstanding issues and ultimately decisive contribution to rational financial management of health units.

The combination C.O.S.O. model & EFQM, based on the research findings, it is considered complete to deal with all the variables of an internal control mechanism and finally it is necessary to apply with the condition that the user's level of education will improve the necessary adjustments will be made and will be surrounded by trust the use of the administration of the health units of our country.

## **5.2. Suggestions**

The proposals summarized below, requiring:

- Adherence to international "standards" of internal control set by the Institute of internal auditors.

- Conducting competition with transparent procedures for the conclusion of the two-year contract with the respective internal auditor, setting out as necessary qualifications for internal auditors candidates being updated certification of their knowledge and proof of their experience in similar organizations.
- Promote actions to obtain quality assurance certificates and clinical departments of the hospital.
- Introduction of continuing education programs in the financial, administrative, medical and nursing services in hospitals, so as to gradually develop all public health units into "learning organizations".
- Introduction of new information systems or customization of existing and user training.
- Update administrations health units regarding the role, responsibilities, the importance and necessity of internal control, and integration efforts in the culture of public hospitals.
- Contact the hospital administrations in all strains (first) of the departments and their employees regarding the importance of internal control and the necessity of its existence as a system that adds value to the organization.
- Update of the hospital workers through month meetings of departments working on the planning of the annual audit plans, obligations and rights of the internal auditor, and the method of carrying out the internal audit in clear and unambiguous terms, in order to avoid any misunderstandings.
- Programming controls with prior information of sections of workers, as regards the checks start and the estimated timing of.
- Investigation of the causes of non-implementation of internal control in all parts of the hospital and planning to carry out controls in other sections, the gradual and methodical inclusion in the next annual audit plans.
- Defining specific procedure for measuring the performance of internal control indicators in the annual report of the action.
- Informing members of the audited departments of the hospital to measure the results and benefits arising from the implementation of the proposals of internal control.
- Strengthening the preventive character of internal control including the prevention and avoidance of mistakes is more important and more beneficial to an organism than the identification and correction of errors or irregularities realized.
- Deposit regular reporting of controlled sections in Internal Audit Committee, at least on a quarterly basis, to detect deviations and failures, with the possibility of corrective interventions.
- Focus of internal control not only financial controls, but mainly the improvement of hospital procedures.
- Free and immediate access of internal auditors in all hospital data to be faster and more reliable information
- Application of the combined C.O.S.O. Internal Control Model & E.F.Q.M, well known for its completeness and instrumental in controlling the operation of health facilities costs.
- Monitoring the application / implementation of the proposals of the Internal Control and measuring their results.
- Non-conducting internal controls in the form of half-time, but incentives from the Ministry of Health, that each Y.PE have their own permanent internal auditors.
- Transfer of internal auditors reports / reports to an independent authority and not only to the governors of hospitals
- Create a central database in the Ministry of Health with all the applicable recommendations of Internal Auditors for the smooth operation and improvement of procedures.
- Mandatory implementation of the best proposals / operating procedures of Internal Auditors with any achieved cost control through ministerial decision to be issued at the beginning of each year to all hospitals in the country.

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