Internal Control in Healthcare Units

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School of Economy and Public Administration
Department of Public Administration
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AIKATERINI KANELLOU

Registration Number: **7115M104**

Thesis Advisory Committee:

Associate Professor I. Filos (Supervising Prof.)

Professor Emeritus A. Tsamis

Professor Emeritus A. Apostolou

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Αριθμός Μητρώου: **7115Μ104**

Τριμελής Επιτροπή:

Αναπλ. Καθηγητής Ι. Φίλος (Επιβλέπων)

Ομότιμος Καθηγητής Α. Τσάμης

Ομότιμος Καθηγητής Α. Αποστόλου

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In my father's memory

Abstract

The infant stage of development of internal audit function practices in the context of public healthcare units in Greece, or the astonishing absence thereof, dictates the necessity to lay out, in more extensive detail and length than would be normally required, the fundamental characteristics of such functions and the basic rules that need be applied or even enforced. Implementing as rigorously as scientifically possible the methodological rules applicable on such a research, the result reached is rather a display of the internal audit principles and processes than a study on the reality thereof, as the initial intention was. And this is so because internal audit functions in the context of public healthcare units in Greece are still at a stage where a paradigm, i.e. the standard towards which the internal audit functions should undoubtedly lean, is still sought to be implemented. The competent persons supervising or in charge of performing such functions confirm the aforementioned necessity of implementation of basic internal audit processes. The lack of raw data on the subject matter reinforces such fact.

Περίληψη

Το εμβρυακό στάδιο ανάπτυξης της λειτουργίας εσωτερικού ελέγχου των δημοσίων μονάδων υγείας στην Ελλάδα, ή η παντελής έλλειψή τους, υπαγορεύει την ανάγκη να αναφερθεί κανείς στα θεμελιώδη χαρακτηριστικά των λειτουργιών αυτών και στους βασικούς κανόνες που πρέπει να εφαρμοστούν, ή ακόμη και να επιβληθούν σχετικά, σε μεγαλύτερη λεπτομέρεια και μήκος απ' ότι κανονικά θα απαιτούνταν. Εφαρμόζοντας με όση κατά το δυνατόν επιστημονική αυστηρότητα τους μεθοδολογικούς κανόνες που εφαρμόζονται σε μια τέτοια έρευνα, τα αποτελέσματα που προέκυψαν μοιάζουν μάλλον με μια παρουσίαση των αρχών και των διαδικασιών ενός πρότυπου συστήματος εσωτερικού ελέγχου, παρά με μια μελέτη επί της σχετικής πραγματικότητας, όπως ήταν η αρχική πρόθεση. Αυτό συνέβη διότι οι λειτουργίες που αφορούν στα συστήματα εσωτερικού ελέγχου των δημοσίων μονάδων υγείας στην Ελλάδα βρίσκονται ακόμη σε επίπεδο όπου, ακόμη, αναζητείται ένα πρότυπο, δηλαδή οι προδιαγραφές προς τις οποίες αναμφίβολα θα πρέπει να τείνουν οι λειτουργίες εσωτερικού ελέγχου. Τα πρόσωπα που αρμοδίως επιβλέπουν ή επιτελούν τις λειτουργίες αυτές επιβεβαιώνουν την προαναφερθείσα αναγκαιότητα εφαρμογής βασικών διαδικασιών εσωτερικού ελέγχου. Η απουσία πρωτογενών ερευνητικών δεδομένων ενισχύει περαιτέρω το γεγονός αυτό.

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Katerina Kanellou

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PART I

A. Methodological Parameters on Internal Control and Audit

A1 – Internal Control

In 1976, Cook and Winkle compared the Internal Control System to the human nervous system, which is spread throughout the entity carrying commands and responses to and from the management. Later, in 1997, Cai referred to Internal Control System as a direct link between the entity and its organisational structure and the general operating rules. On the other hand, the American Institute of Accountants first defined the term "internal control" in 1949, followed by further clarifications in 1958 and 1972. A report by the Committee of Sponsoring Organisations in 1992 and the Sarbanes-Oxley Act of 2002 are more recent documents defining internal control. (Drogalas, n.d.)

Internal control encompasses a set of rules, policies and procedures an organisation is to implement to provide reasonable assurance that its financial reports are reliable, its operations are effective and efficient, and its activities comply with applicable laws and regulations. The organisation's board of directors, management and other personnel are responsible for the internal controls system.

The purpose of the Internal Controls System is to offer reasonable assurance about achieving intertwined goals:

a) Financial reporting: financial statements' reliability by preventing material misstatements.
b) Compliance: complying with laws and regulations.
c) Operations: improvement of effectiveness, efficiency and economy for the company's operations, including the protection of the company's assets. (Karamanis, 2008)

According to the International Standards of Supreme Audit Institutions (ISSAI) issued by the International Organisation of Supreme Audit Institutions (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 and safeguarding resources against loss, misuse and damage".* The resemblance between this definition of internal control and the one that is given by the COSO Framework is expected, due to the fact

that, in 2001, INTOSAI decided to update the 1992 INTOSAI guidelines on internal control standards and take into account all relevant and recent evolutions in internal control and to incorporate the concept of the COSO report titled Internal Control - Integrated Framework in the INTOSAI document. (INTOSAI PROFESSIONAL STANDARDS COMMITTEE, 2004 (revised in 2016))

In other words, the internal controls system's mission is to contribute to achieving the management's goals and avoiding any kind of damages or losses of the company's assets. It could also contribute to complying with the law and regulations as well as to avoiding any consequences. However, neither the financial statements' absolute reliability nor the company's success could be guaranteed by the internal controls system's function. At this point, it would be helpful to underline that the system must be active continuously, have procedures running through the whole company (and not just a part of it) and as the company keeps growing and changing so must the system of internal controls, in order to be effective. (Karamanis, 2008)

Internal control consists of the following components: (Needles & Powers, 2010)

a) The control environment.
b) The entity's risk assessment process.
c) The information system, including the relating business processes, relevant to financial reporting, and communication.
d) Control activities.
e) Monitoring of controls.

Graph 1: Internal Control Components

Source: COSO Internal Controls Integrated Framework 2013

Framework

The framework of a good internal control system includes the control environment, risk assessment, monitoring and reviewing, information and communication, as well as control activities. Those are being explained within the next paragraphs.

Control Environment

The control environment is a set of standards, processes and structures that provide a basis for carrying out effective internal control activities across the organisation. (Moeller, 2016). It is constituted by many factors, each being highly important. (Karamanis, 2008)

a) Integrity and ethical values. Code of Ethics, Code of Conduct, conflict of interest policies, procedures about the way the entity interacts with suppliers, customers, working personnel, competitors, auditors etc.

b) Commitment to competence. Organisation structure and job description, formal or informal, a system that would ensure that every employee has the appropriate education, knowledge and skills to do the work assigned to him, etc.

c) The Board of Directors or the Audit Committee. Maintaining audit independence, meetings on a regular basis in order to share information about any significant issues the auditor identifies while performing an audit and channelling information towards the Board of Directors.

d) Management's philosophy and operating style. Risk appetite, frequency of meetings between senior management and heads of the departments and understanding and acting upon financial information or controversy over accounting issues, etc.

e) Organisational structure. The structure of the organisation should be adequate according to the size and the nature of the entity's operations. Executives should have sufficient understanding of the structure and the responsibilities each executive has in it.

f) Assignment of authority and responsibility. Assignment of authority with diligence and of responsibilities according to the determined goals, provision of resources to those charged with authority in order to accomplish their goals, sufficient personnel with the necessary knowledge and skills, encouragement of employees to take initiatives in resolving potential issues and clear job descriptions.

g) Human resources policies and process. Establishment of policies and processes about hiring, training and promoting employees, as well as defining their salaries. Determining the

minimum in terms of knowledge and experience when hiring or promoting an employee and establishing appropriate compliance measures.

(COSO, 2013), (Karamanis, 2008)

Risk Assessment

All organisations, regardless of size, structure, nature or industry, encounter risks. At this stage what needs to be done is to identify the areas in which the greatest risk of inaccuracies or loss exists. To be most efficient, the greatest risks should receive the greatest amount of effort and level of control. The organisation shall specify objectives with sufficient clarity to enable the identification and assessment of risks, shall identify risks to the achievement of its objectives across the entity and analyse risks as a basis for determining how the risks should be managed, shall consider the potential for fraud and identify and assess changes that could significantly impact the system of internal control. However, during the process of identifying risks, there is a possibility to also identify opportunities, which are the possibility that an event will occur and positively affect the achievement of objectives. Risk identification is an iterative process and is often integrated with the planning process. Furthermore, risk identification considers risks at various levels of the organisational structure, including the overall entity and its subunits and processes.

Entity level risks arise either from internal or from external factors. Internal factors include, among others, decisions on the use of assets and capital resources that may affect the ongoing availability of infrastructure, a change in management responsibilities that could affect the effectiveness of certain controls in place or the quality of personnel hired and methods of training that could influence the level of control consciousness within the organisation. On the other hand, external factors may include economic or social factors, changes in regulatory framework which would require different or addition reporting by a legal entity, natural or human-caused catastrophes or ongoing climate change that could lead to changes in operations, limited material resources or loss of information systems, all highlighting the need for contingency planning. (COSO, 2013)

Graph 2: COSO Enterprise Risk Management Framework

The COSO Enterprise Risk Management Framework

Source: COSO Internal Controls Integrated Framework 2013

Monitoring and Reviewing

The system of internal audit should be periodically reviewed by management. By performing a periodic assessment, management assures that internal control activities have not become obsolete. Control activities should be enhanced to remain sufficient for the current state of risks.

Internal control systems need to be monitored, which is a process that assesses the quality of the system's performance over time. The organisation selects, develops and performs ongoing and separate evaluations to ascertain whether the components of internal control are present and functioning. Ongoing monitoring occurs in the ordinary course of operations, and includes regular management and supervisory activities, and other actions personnel take in performing their duties that assess the quality of internal control system performance. The scope and frequency of separate evaluations depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be reported upstream, with serious matters reported immediately to top administration and governing boards. The organisation evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors. Internal control systems change over time. The way controls are applied may evolve. Once effective procedures can become less effective due to the arrival of new personnel, varying effectiveness of training and supervision,

time and resources constraints, or additional pressures. Furthermore, circumstances for which the internal control system was originally designed also may change. Because of changing conditions, management needs to determine whether the internal control system continues to be relevant and able to address new risks. (COSO, 2013)

Information System and Communication

The availability of information and a clear and evident plan for communicating responsibilities and expectations is paramount to a good internal control system. Pertinent information, from both internal and external sources, must be identified, captured and communicated in a form and time frame that enables people to carry out their responsibilities. Internal communication is the means by which information is disseminated throughout the organisation, flowing up, down and across the entity. All personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream.

According to the COSO Integrated Framework (2013), an information system is the set of activities, involving people, processes, data and/or technology, which enable the organisation to obtain, generate, use and communicate transactions and information to maintain accountability and measure and review the entity's performance or progress toward achievement of objectives. Some of the communicated information within an organisation are policies and procedures, specified objectives, roles and responsibilities both of management and other personnel in performing controls, expectations of the organisation to communicate matters of significance to internal control, as well as, importance, relevance and benefits of effective internal control. (COSO, 2013)

There are many different methods of communicating and management has to choose which one to use each time according to the nature of information, the audience, the timeframe, the cost and, sometimes, any legal or regulatory requirements. For instance, management could use written policies and procedures, presentations, email messages, one-to-one discussions, dashboards, social media postings and website postings.

Control Activities

Control activities are the policies, procedures, techniques and mechanisms the organisation uses to ensure that necessary actions are taken to minimize risks associated with achieving its objectives. As expected, different organisations face different risks, have different goals and approach to achieving

those goals, and each organisation has its one complex operations and environment and, of course, management's understanding of the entity's environment depends on each individual's perspective. An organisation's internal control system is flexible to allow management to tailor control activities to meet the organisation's special needs. Thus, controls have various objectives and may be applied at various organisational and functional levels.

To be effective, control activities must be appropriate, functioning consistently according to plan throughout the period, cost effective, comprehensive, reasonable, directly related to the control objective and must derive from a defined risk to the organisation (IIA).

There are three classifications of controls. Firstly, there are the preventive controls which are designed to deter the occurrence of an undesirable event, aiming to predict potential problems before they occur and implement procedures to avoid them. Secondly, there are the detective controls which are designed to identify undesirable events that occur and alert management about what has happened. This enables management to take corrective action promptly. Thirdly, there are the corrective controls which aim to repair the damage from or minimize the cost of an error or irregularity.

Internal Auditing is being used both as a preventive and as a detective control mechanism, but we should keep in mind that the most effective its preventive phase is, the less needed its detective phase is going to be.

Controls may be preventive or detective in nature and may encompass a range of manual and automated activities. Manual control activities are performed by individuals, such as preparing a bank deposit or performing reconciliation. Automated controls are incorporated into application systems. Automated controls are considered more reliable, due to their ability to prevent errors from being entered into the system and by detecting errors within the system. Additionally, manual control activities are more susceptible to human error, whereas automated ones occur consistently with every transaction.

Soft or Hard Control Activities

Control activities can also be classified as soft or hard.

Soft control activities are those that provide notice of a requirement but do not by themselves immediately terminate a transaction for failing to meet that requirement. Examples of soft control activities include statutes, rules, policies and procedures, all of which tell people what should and

should not be done. Soft control activities are less effective if not paired up with hard control activities to enforce them. Hard control activities are those that terminate a transaction for failing to meet a requirement. Examples of hard control activities include passwords and authorization codes. Hard control activities can be preventative, such as passwords, or detective, such as audits.

Then, controls can be categorized into different types using deferent criteria. For example, physical controls include security over the assets, limiting access to the assets to only authorized people, and periodically reconciling the quantities on hand with the quantities recorded in the organisation's records, while information processing controls are used to check accuracy, completeness, and authorization of transactions. Another differentiation of controls is based on the organisational structure and the level on which the controls are being applied, and thus, there are management controls and process controls. (Karamanis, 2008)

Management controls

Management control system is a way managers can document their organisation's objectives and organisational strategies and policies. Furthermore, it is a way managers can assess the performance of internal corporate processes and a way to show performance in relation to declared objectives and policies. The indication provides managers with the knowledge they need to take decisions and corrective actions where necessary in their organisation, and this translates to management control.

Management controls aim to monitor the direction of the entity towards predetermined objectives. For instance, a key control falling in this category is reviewing the entity's performance (top level review) using benchmarking. International practices use a series of performance indicators based on financial or non-financial data and the choice of indicators to be used depends on the nature of the entity. A useful tool is to compare the actual data to expected results, which could assist timely identification of deflections, and use the outcome to make informed decisions and act upon them. The analysis of such data should lead to corrective controls, where necessary.

Process controls

Middle and lower administration, as well as employees, is responsible for process controls. Those controls are usually implementation of the policies that senior management has put in place and they aim to ensure reliability in performing procedures and in complying with rules and regulations. Process controls are closer to financial reporting and, thus, internal auditors focus their attention on them while performing an audit. According to international practices, process controls are divided into general controls and application controls.

General controls refer to the design of processes and the way they have been organized and they are being managed. Such processes may be defining specific procedures of a process, job descriptions, security measures, etc. Application controls refer to execution of a procedure, such as specific duties, transactions, etc. Application controls aim to ensure that only preapproved procedures are being conducted and that there is validity, completeness and accuracy in transactions and data processing.

The following are example categories of commonly used control activities:

Authorization and Approval

Authorization is the power granted to an employee to perform a task. It is a delegation of duties. Management defines the terms of the authorization and ensures that these terms are documented and clearly communicated. Approval is the confirmation or sanction of employee decisions, events or transactions, based on an independent review. It signifies that the approver has reviewed the supporting documentation and is satisfied that the transaction is accurate and complies with applicable laws and regulations. Management's responsibility is to ensure significant transactions are approved and executed only by persons acting within the scope of their authority.

Verification/Reconciliation

Verification (or reconciliation) typically involves the comparison of an internally prepared document (e.g., purchase order) to an independent source (e.g., vendor invoice) to determine the completeness, accuracy, authenticity and/or validity of transactions, events or information. It is a control activity that enables management to ensure that other control activities are being performed in accordance with directives. Management determines what needs to be verified or reconciled, based on the inherent risk of the underlying process. Management also clearly communicates and documents these decisions in procedures. Employees responsible for conducting the verifications/reconciliations should be required to document that these activities did indeed occur.

Documentation

Documentation is perhaps the most critical control activity because it preserves evidence to substantiate a decision, event, transaction, or system. All documentation should be complete, accurate, and recorded timely. Documentation should have a clear purpose and be in a usable format that will add to the efficiency and effectiveness of the agency.

Supervision is the ongoing oversight, management and guidance of an activity by designated employees to help ensure the results of the activity achieve the established objectives. Those with the responsibility for supervision should:

•   Assign tasks and hold staff accountable for key control activities

•   Establish written procedures for completing assignments

•   Systematically review and evaluate each staff member's work

•   Approve work at critical points to ensure quality and accuracy

•   Provide guidance and training when necessary

•   Document supervisory reviews (for example, initialling examined work)

Separation of Duties

Separation of duties is the division or segregation of key duties and responsibilities among different people to reduce the opportunities for any individual to be in a position to commit and conceal errors (intentional or unintentional), or perpetrate fraud in the normal course of their duties. The fundamental premise of segregated duties is to prevent any one individual from controlling and performing all key functions of a transaction or event: authorization/approval, recording/accounting, reconciliation and custody. A combination of two or more of these functions performed by the same employee is called incompatible duties.

In cases where duties cannot be effectively separated, management can substitute increased review or supervision as an alternative control activity (i.e., a compensating control) to help reduce the risks. In an environment with a very limited number of employees, management needs to be involved in reviewing and approving transactions, reports, and reconciliations. Compensating controls are less desirable as they generally require more resources and typically occur after the fact.

Access Security

Securing access to resources and information reduces the risk of unauthorized use or loss. Management should protect the department's equipment, information, cash receipts, documents and other resources that could be wrongfully used, damaged or stolen. Management can protect these resources by limiting access to authorized individuals only. Management decides which resources should be safeguarded and to what extent. Management makes this decision based on the vulnerability of the items being secured and the likelihood of loss.

Access controls restrict access and safeguard data files and information maintained in information systems. Access controls are set based on the employee's need to access data files and information necessary to perform his or her specific job duties while maintaining acceptable separation of duties. Periodic management reviews of system access must ensure employee access is appropriate based on any new or changed job duties.

Reporting

Reporting is a means of conveying information. Effective and accurate reporting control activities provide information on issues such as timely achievement of goals, accurate financial position and payroll irregularities. Reporting also, helps promote accountability for actions and decisions. (Minnesota Management & Badget, 2014)

Limitations

It is important to note that no matter how well internal control is conceived and operated, it can provide reasonable, but not absolute, assurance that the objectives of an organisation will be met. The concept of reasonable assurance implies a high degree of assurance, constrained by the costs and benefits of establishing incremental control procedures, and the fact that people can make errors and omissions, or commit fraud. (Pfister, 2009)

Effective internal control implies the organisation generates reliable financial reporting and substantially complies with the laws and regulations that apply to it. However, whether an organisation achieves operational and strategic objectives may depend on factors outside the enterprise, such as competition or technological innovation. These factors are outside the scope of internal control; therefore, effective internal control provides only timely information or feedback on progress towards the achievement of operational and strategic objectives, but cannot guarantee their achievement.

Internal control involves human action, which introduces the possibility of errors in processing or judgment. Internal control can also be overridden by collusion among employees or coercion by top management. (Siwakoti, 2009)

Inherent limitations may derive from:

Judgment – The effectiveness of controls will be limited by the fact that decisions must be made with human judgment in the time available, based on information at hand and under the pressures to conduct business.

Control Breakdowns – Even if control activities are well designed, they can break down. Personnel may misunderstand instructions, or not having had proper training over new regulations, or simply make mistakes. Errors may be committed due to carelessness, distraction or fatigue. Errors may also come from new technology and the complexity of computerized information systems.

Management override – Even in an effectively controlled agency, high-level personnel may be able to override prescribed policies or procedures for personal gain or advantage. This should not be confused with management intervention, which represents management actions to depart from prescribed policies or procedures for legitimate purposes.

Collusion – Collusion between two or more individuals can result in control failures. Individuals acting collectively often can alter financial data or other management information in a manner that cannot be identified by the control system.

Costs versus benefit – In determining whether a particular control activity should be established, the cost of establishing the control must be considered along with the risk of failure and the potential impact. Putting in place too many controls is costly and counterproductive. On the other hand, too little control presents undue risk. Agencies should make a conscious effort to strike an appropriate balance.

Resource limitations – Every agency must prioritize control activities because resources are not available to put every control activity into practice.

A2 – Internal Audit

Definition

As found in the International Professional Practices Framework (IPPF) issued by the Institute of Internal Auditors, Internal auditing is an independent, objective assurance and consulting activity, designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. (The IIA, 2012)

In order for an ethical culture to be promoted in the profession of internal auditing, the institute of Internal Auditors adopted the Code of Ethics which states the principles and expectations governing the behaviour both of individuals and organisations.

Role

The role of internal audit is to provide independent assurance that an organisation's risk management, governance and internal control processes are operating effectively.

The primary goal of auditing is to serve the company by providing an independent and objective evaluation of the organisation's adherence to operational, financial and compliance policies, guidelines and regulations. (Kagermann, et al., 2008)

Internal controls is defined as a process affected by an entity's Board of Directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- reliability of financial reporting
- effectiveness and efficiency of operations and
- compliance with applicable laws and regulations

An internal auditor's duty is to provide an unbiased and objective view. They must be independent from the operations they evaluate and report to the highest level in an organisation. Typically this is the board of directors, the accounting officer or the audit committee. Internal auditors must work in accordance with the Code of Ethics and the International Standards.

Structure

The nature of internal auditing varies considerably between organisations and there is no single correct approach to internal auditing. Each company should use a personalized structure of internal audit according to their needs and, as long as it reflects the priorities and values of each organisation, it is a good function aiming to support management to improve operational and ultimately organisational outcomes. (Pitt, 2014)

For example, when using a vertical structure there is a different internal audit team for each business area (wholesale, retail, research, etc), function or department, which means that each audit team audits processes, procedures and records used by a specific department and does not cross inter-departmental boundaries, whilst there is a general internal audit team that carries out reviews across the group. That way, the teams are dedicated to each area and thus more efficient in auditing. However, a potential problem with such an approach would be that operational expertise and key skills would not be shared among the different teams or that work could be duplicated. (The IIA, 2012) When using a horizontal structure there is a single internal audit team which audits a process from one end to the other, across many business areas in the organisation. In this type of structure

there is a limitation in identifying the linkages between processes. The ideal audit would combine both methodologies with mostly horizontal auditing and occasional vertical auditing when possible issues are noted.

A3 International Standards

From a different point of view, auditing is a systematic process of objectively obtaining and evaluating evidence regarding the current condition of an entity, area, process, financial account or control and comparing it to predetermined, accepted criteria and communicating the results to the intended users. The criteria to which the current state is compared may be legal or regulatory standard, or internally generated policies and procedures.

There is a number of frameworks regarding internal control, allowing each organisation to select the one that is considered to be more fitted for them. Maybe the most acknowledged and in use framework in the US and around the globe, is the "Internal Control-Integrated Framework", published by the Committee of Sponsoring Organisations of the Treadway Commission (COSO). This framework was for the first time published in 1992, with the intention to successfully address key issues raised by an increasingly complicated corporate environment and to assist organisations to evaluate, plan and manage internal control, in a more efficient way. The COSO Framework describes an internal control as a process which is affected by the organisation's Board of Directors, Senior Management and Senior Personnel. This process is designed to provide "Reasonable Assurance" to the above parties, concerning the effectiveness and efficiency of key business operations, the accuracy and reliability of the financial statements reports and the compliance of the entity with respective Laws and Regulations.

The CoCo Framework (Criteria of Control) was initially published by the Canadian Institute of Chartered Accountants back in 1995. This framework is based on COSO but is considered by many to be more solid and easy to use. The CoCo framework defines the Internal Control as the actions which lead to the best outcome for an organisation and also, play a valuable role to the achievement of the organisation's goals.

In short, these actions focus on: a) the effectiveness and efficiency of operations, b) the reliability of the internal and external financial reporting, c) the compliance with the respective Laws, Regulations and corporate internal policies and guidelines.

CoCo specifies that an Internal Control comprises of all the elements of an organisation that, when combined, succeed in supporting the entity's Personnel to achieve the organisation's set objectives.

Key elements may be the organisation's human resources, IT systems, corporate procedures, corporate culture, internal structures etc.)

The UK Corporate Governance Code (previously known as ''Combined Code'') was initiated by the UK Authorities during the '90s and it was updated in 2010. The Code is based on core principles and key guidelines for best practice implementation. According to this Code, all organisations with a Premium Listing on the L.S.E. have to report on the ways they comply with the Code and they need to provide sufficient explanations in cases where they have not. Among the most important advantages for using Internal Controls are: a) By implementing efficient internal controls, an entity gains reasonable assurance that its objectives will be met. b) In a large corporation, focusing on internal controls may well encourage better standardization of corporate procedures. c) The proper implementation of efficient internal controls does not involve extra costs by default. On the opposite side, one cannot guarantee that, by using internal controls, the organisation's goals will be met.

For implementing an efficient internal control procedure, one should: a) Check local Laws & Regulations often; there are countries where the effective implementation of internal controls is obligatory and respective failure may lead to penalties, b) set up a process for timely reporting of internal control weaknesses, ensuring that critical issues are reported immediately to the Board of Directors, to Senior Management and involved Governing Committees, c) make sure that a clear message from senior level management to all company personnel is communicated, indicating that internal control responsibilities must be seriously addressed, d) ensure that a procedure assessing the quality of the system's performance over a period of time is monitoring through effective internal control systems, e) keep in mind that internal control systems undergo through changes and the process in which controls are applied may improve, f) ensure that newly recruited personnel is fully informed about corporate procedures and that Senior Management is aware of whether the internal controls system continues to be competitive and in position to face new risks, g) last but not least, one should always keep in mind that an internal controls system can never be flawless.

A4 Greek Legal Framework

The internal control concepts and notion was introduced for the first time into the legal framework in 1985, when the Institute of Internal Auditors was established. Since then, the establishment of legal requirements relevant to internal audit in the public sector and the private one (mainly the listed companies and the entities under critical state supervision, i.e. banking and financial institutions) follows one another.

Law 2477/1997 aspired to establish the central and peripheral internal inspection-control mechanism for the whole public sector, providing for the structure, the personnel and the basic operating procedures of the Inspectors-Controllers Body for the Public Administration; this is, of course, an investigation body, not an internal audit one, however this was as far as the Greek State could think of going with regards to its public administration and services at the time, and for many years thereafter.

The next initiatives had to do with sectors where the internal audit functions were operative and their merits appreciated at an international level early enough; in the year 2000, the Hellenic Capital Market Committee has decided upon the necessity of internal audit department in the listed companies, outlining its role and competencies. It should be noted that this is the same year that Professor Filos submitted his doctoral thesis on the subject and its ramifications on banking institutions, a thesis that marks the beginning of academic dialogue on the subject matter in Greece. Law 3016/2002 expands on the former relevant CMC decision, making a full-fledged internal audit department and function an imperative precondition to any private corporation putting its shares for public flotation in the Athens Stock Exchange.

Law 3429/2005 further expands the requirement of a proper internal audit function to all public enterprises and organisations, with the meaning of companies controlled by the Greek State. Law 3492/2006 establishes the necessity of internal audit departments in all public units and services. However, although there is a narrative on internal audit functions such departments would be commanded to perform, there is quite a mess-up with inspection-controller functions, demonstrating beyond any reasonable doubt that, in the eyes of the Greek legislator, the internal audit functions and the inspection-control mechanisms are parts of essentially the same function! This substantial misunderstanding, according to the global internal audit standards and practices, has grave repercussions on the internal control functions in the Greek public sector and is, at least partially, to blame for the lame introduction of internal control in such public units, services and enterprises. In addition, the need of issuance of a further Presidential Decree for each and every internal control department and function in each public unit or service is further required, making such bureaucracy hard to beat and defeating the efficiency of such mechanism at birth.

Shortly before the above mentioned law, also in 2006, but in total contrast with its bureaucratic and inefficient characteristics, the Bank of Greece has issued a decision on the internal audit operations in banks and financial institutions, summarizing and incorporating the legal provisions and best practices to this end. Law 3693/2008 dictates that any entity "of public interest" (i.e. listed ones)

should have an Audit Committee; this is stated in a piece of legislation otherwise dealing with the external auditor's profession, the external auditors' supervision body and its authorities, etc.

in the same year 2008, one month after the previously mentioned law, another piece of legislation, famous for its tax-related provisions (Law 3697/2008), expressly states that the budget and expenses of healthcare units should fall under the rules of all other public expenditure, including an internal audit system. Such law further establishes a committee competent to draft and implement medical protocols as per diseases categorized by the WHO and another committee to ensure transparency on the pharmaceutical expenditure.

Law 3873/2010 contains scattered provisions on internal audit functions, as incorporated in mainstream corporate law and company merger procedures.

Specific provisions on internal audit are included in the Code of Corporate Governance, a non-legally binding document compiled as of 2011 onwards and regularly updated since then (2013 and recently, 2017), under the auspices of the Hellenic Enterprises and the Industrialists' Association. The developments of issues pertaining to such Code are now monitored by the Hellenic Council on Corporate Governance, established in 2012, and operating as a joint initiative of the Athens Stock Exchange and the Hellenic Industrialists' Association.

Much like Law 3693/2008 published almost a decade ago, Law 4449/2017 reassesses the function of Audit Committees in a piece of legislation extensively discussing the EU Directive on the professional requirements, supervision etc. of external auditors.

As a (poor in practice) result of all the above, the question still remains as per how shall the internal audit system work in practice: the person assuming the role of the CAE (Chief Audit Executive) will propose an audit plan to the Audit Committee; who is in charge of approving such plan and commanding its execution, since the competent Minister (often viewed as the organ competent to order the execution of such plan) either delays, or raises bureaucratic impediments or totally abstains from ordering such work schedule executed, rendering the internal audit function in the Greek public administration as practically non-existent.

Table 1: Kontogeorgis and Filos (2012)

Year	Institutional Framework	Description
1985		Institutionalization of the Institute of Internal Auditors
1999	White Bible	Voluntary Code of Corporate Governance
1999	Law (No.) 273/1999	Internal Audit function in Public Sector
2000	5/204/2000 Decision of Hellenic Capital Market Committee	Decision regarding the function of the internal audit
2000	Doctoral Thesis	The first doctoral thesis about the internal audit of Mr. I. Filos
2002	N. 3016/2002	The A.S.E. requires that companies institutionalise the Internal Audit Function
2005	N. 3429/2005	Institutionalization of Internal Audit Department for listed companies in A.S.E.
2006	2577/2006 Decision of Bank of Greece	Audit Committee for banks and banking institutes
2006	N. 3492/2006	Foundation of a new Department in the Ministry of Finance responsible for conducting audits in the Public Institutions. Introduction of an Internal Audit Department in the Ministries and the Greek Regions
2008	N. 3693/2008	All listed companies in the A.S.E. are obliged to have an Audit Committee
2008	N. 3697/2008	The internal procedures in the healthcare units are audited by the internal audit system
2010	N. 3873/2010	The listed companies have to disclose the composition and the operating mode of their internal audit

2011	Code of Corporate Governance of the Hellenic Businesses Association	Code of Corporate Governance with important provisions for the internal audit

Source: Contribution to Accounting Research II: Scientific Studies, Panteion University

B. Topics related to internal control

B1 – Governance

The term Corporate Governance describes the way that organisations are managed and controlled. According to the Principles of Corporate Governance issued by the OECD (OECD, 2015), "*Corporate Governance involves a set of relations between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined.*"

While corporate governance has been reflected upon since the beginnings of the modern corporation (Kim & Nofsinger, 2007), it certainly has received increased attention and scrutiny over the last two decades. In this period, corporate governance issues have become important not only in the academic literature, but also in public policy debates. (Karagiorgos, et al., 2010) Effective corporate governance is based both on formal and informal rules, which contain the country's institutional framework, the structure of authority, the flow of information, etc. Corporate governance methodologies focus on the authorities of the Board of Directors, the voting rules, disclosure of balance sheets, etc. Although these rules would have several aspects, a strategic argument would be the improvement of the organisation's efficiency through optimised management of resources, effectiveness of management and exploitation of new opportunities. (Frangos, 2009). Good corporate governance ensures that an organisation and its management operate within a framework of checks and balances so they are accountable to the society at large. (European Commission, 2014)

As a tool of corporate governance, the Code of Conduct identifies corporate responsibilities towards stakeholders and obliges senior management to comply with certain guidelines when exercising authority. The Code of Conduct encompasses a broad range of topics because it addresses all the stakeholders who are involved in the formation of the operating scenario in which the corporate management evolves in relation to its environment. In other words, it could be considered as an expression of the corporate culture since it reveals how the rules of conduct towards any individual

or organisation or the society in general derive from cultural values and principles. The Code addresses all kinds of stakeholders, individuals or groups, each having specific expectations of a proper behaviour by the company, however, the standards concerning him refer to common and shared values such as honesty, justice, fairness and transparency. In particular, employees are institutional stakeholders and active members of the organisation and the Code sets out the rules in terms of complying with principles of fairness and legality, in order to guarantee a safe working environment and to avoid any kind of discrimination and favouritism in hiring. With regard to stockholders, who also have an institutional vested interest but are non-active members of the company, behaviour standards are designed to prevent improper behaviour and false declarations. In addition, relations with customers are analysed in order to establish a trusting relationship based on assurance of the safety and characteristics of the product offered, and the standards that regulate relations with suppliers are being set. (Arrigo, 2006)

To sum up, the Code of Conduct, makes clear to every stakeholder inside and outside the organisation the criteria that drive decisions, both strategic and operational, and as well as being a governance tool, it represents the organisation's constitutional charter, defining the responsibilities of each member of the organisation.

In carrying out their ownership responsibilities, governments can also benefit from following recommendations that are applicable to the private sector. It is good governance for public entities and employees to understand their role in the government's accountability structure and the matters with which they must comply in fulfilling that role.

In fact, in some countries "corporate" may be considered as a private sector term, in others the term "government governance" is acquainted to describe governance in the public sector. In this study, the term governance is being used to describe what is commonly referred to in the private sector as "corporate governance". In the public sector, all services play major role in the society and, thus, effective governance in the public sector can encourage the efficient use of resources, strengthen accountability for the stewardship of those resources, improve management and service delivery, and consequently contribute to improving peoples' lives. Another benefit deriving from good governance in the public sector is the increase if trust in the public sector entities, which is essential. The main concept may be the same both for the private and the public sector, in terms of best practises, but there are a few differences in the implementation. For example, in the private sector governance focuses on the board of directors, while in the public sector, boards are sometimes difficult to identify and define, as they operate in different statutory and managerial frameworks. It is not possible to develop one framework that would be similar for all public entities, but the principles

would be the similar whether the controlling body is elected or appointed. Furthermore, when it comes to accountability, in the public sector there are various stakeholders, including the Ministers, the Parliament, other government officials, customers and clients and, of course, the general public, each with a legitimate interest in the public sector entities but not all of them with ownership rights. (IFAC, 2001)

B2 – Risk Assessment

First of all, risk is anything that could negatively impact the organisation's ability to achieve its objectives (Papastathis, 2014). As found in literature, there are five types of risk. A strategic risk would prevent an organisation from accomplishing its objectives. A financial risk could result in a negative financial impact to the organisation. A regulatory (compliance) risk could expose the organisation to fines and penalties from a regulatory agency due to non-compliance with laws and regulations. A reputational risk could expose the organisation to negative publicity. An operational risk could prevent the organisation from operating in the most effective and efficient manner or be disruptive to other operations. (Jefferson Wells, 2009)

An organisation may be facing a variety of risks from external and internal sources that must be assessed. Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed. Due to the fact that economics, regulatory and operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change. The process of identifying and analysing risk is an ongoing process and is a critical component of an effective internal control system. Attention must be focused on risks at all levels and necessary actions must be taken to manage. Risks can pertain to internal and external factors. After risks have been identified they must be evaluated.

The profession of internal audit is fundamentally concerned with evaluating an organisation's management of risks. For example, risks to the organisation's reputation if it treats customers incorrectly, health and safety risks, risks of supplier failure, risks associated with market failure, cybersecurity and financial risks to name a few. The key to an organisation's success is to manage those risks effectively. In order to evaluate how well risks are being managed, the internal auditor will assess the quality of risk management processes, systems of internal control and corporate governance processes, across all parts of an organisation and report this directly and independently to the most senior level of executive management and to the board's audit committee. (The IIA, 2015)

Examples of risk factors may be the degree of financial impact, the complexity of activities, any significant changes to operations, programs or systems, management's concerns and public perception and the length of time and results of previous audits.

A contemporary risk assessment strategy, in order to monitor risks based on scientific methodologies, has to include: (Koutoupis, 2009)

1. Action plan for development, recording and monitoring of the implementation of the organisation's objectives and goals.
2. Action plan about identifying, assessing and appraising of risks that the organisation is facing.
3. Action plan about strategic risk management.
4. Action plan about monitoring risks and following up on the improvement of strategic risk management processes.

The procedure of risk assessment starts from the inherent risks, which may occur in the absence of internal controls, and ends up to residual risks, which are those that may occur even after have taken into consideration the management activities about managing risk and any controls that have been put in place in order to mitigate the possibility of supervening events. According to best practices, the overall assessment of risk and the auditor's opinion about the internal control system should be part of the annual report to the senior management. (Papanikolaou, 2015)

B3 – Compliance

Governing bodies of public sector entities need to establish effective arrangements to ensure compliance with all applicable statutes and regulations and other relevant statements of best practice. (IFAC, 2001)

It is increasingly important that the public sector reconsiders its approach to internal regulation to ensure that compliance burden appropriately addresses risk while contributing to accountability, productivity and performance goals.

The consequences often go far beyond the obvious downsides of breaking the law (fines and penalties) to more intangible side effects such as unwelcome publicity, wasted time and the attendant impacts on staff morale. On the other hand, significant benefits can result from good management of compliance responsibilities. Organisations need to plan and manage their compliance obligations and this process must be able to withstand external scrutiny. (Glass, 1998)

The purposes of compliance obligations in the public sector are manifold. In particular, organisations need to ensure transparency and accountability, provide information for planning and management purposes, ensure public policy outcomes are met and emphasise a strong commitment to an issue by highlighting its importance.

Effective compliance and regulatory programs, systems and processes are essential components of good governance and contribute to the achievement of broad public sector and individual agency goals and outcomes. Public sector bodies are obliged to comply with a number of obligations. It is good governance for public sector organisations and employees to understand their role on the government's accountability structure and the matters with which they must comply in fulfilling that role. It is critical that a public sector organisation considers its own governing, legislative, regulatory, policy, contractual or other requirements and achieves compliance through the establishment of internal policies, procedures and processes. It is also important to examine the external environment and consider the organisation's role in administering legislation and achieving government policy, as well as look into the future and consider the organisation's role in contributing to community outcomes through legislative and policy reform, ongoing inter-agency collaboration and cooperation, and appropriate regulation and enforcement. Public sector organisations must assure their Minister that they are complying with the current legislation enacted by the parliament that applies to them, that they are complying with policies established by central agencies, and that they have in place the controls to ensure the reliability of the information relating to the achievement of the purpose of the policies for which they were created and for which parliament or the Minister approved expenditures.

In order to follow good governance, public sector organisations have to implement, manage and maintain an effective compliance program to meet their legislative, regulatory, policy and contractual obligations. Such a program aims to provide a reasonable level of assurance that the organisation is meeting its key compliance obligations and it would include:

- ensuring the organisation promotes a culture of and commitment to lawful and ethical behaviour,
- embedding responsibility for compliance in the organisation's day-to-day operations,
- a charter or a terms of reference for the compliance program,
- alignment of the compliance program with the organisation's strategic objectives and performance management framework,
- direct reporting on key compliance obligations and compliance activity against those obligation to the audit committee,

- learning and development for employees in relations to their roles and responsibilities for compliance,

- sound recruitment techniques for the selection of the right people with the skills and abilities to undertake the compliance role and function,

- annual plan of work linked to the organisation's risk management framework,

- performance measurement through annual self-assessment,

- the capacity to acquire independent assurance through the internal audit review process,

- consideration of development of a compliance database or other effective records management processes and,

- a commitment to continuous improvement. (Governance Institute of Australia, 2015)

B4 – Information Technology Systems

Information Technology (IT) could be defined as integration of computer with telecommunication equipment for storing, retrieving, manipulating and storage of data. According to Information Technology Association of America, information technology is defined as *the study, design, development, application, implementation, support or management of computer-based information systems.*

Controls over the technology have a direct impact on the overall reliability of financial statements regardless of the size or nature of the organisation. Internal auditors are therefore required to obtain a general understanding of information technology (IT) controls as part of their audits. (Bablani, 2016)

Hospitals, just like other organisations, need to perform several actions by using IT systems. For example, there is the rather newly entered system of e-prescriptions, which allows doctors, serving both in the public and the private sector, to prescribe medicines using quite an easy and standardized process, whilst creating historical data for each patient individually.

Information technology controls (or IT controls) are a subset of an entity's internal control and they may be general controls or application controls.

IT General Controls apply to all system components, processes and data present in an organisation or system environment. The objective of these controls is to ensure the appropriate development and implementation of applications, as well as the integrity of program and data files and of computer operations. The most common ITGCs are:

- logical access controls over infrastructure, applications and data,

- system development life cycle controls,

- program change management controls,

- physical security controls over the data centre,

- system and data backup and recovery controls,

- computer operation controls.

Application controls are those controls that pertain to the scope of individual business processes or application systems, including data edits, separation of business functions, balancing of processing totals, transaction logging and error reporting. The objective of internal controls over application systems is to ensure that:

- all input data is accurate, complete, authorised and correct

- all data is processed as intended

- all data stored is accurate and complete

- all output is accurate and complete

- a record is maintained to track the process of data from input to storage and to the eventual output

- access to data is limited based on business need

- incompatible duties within an application are systematically prevented

There are several types of application controls, including:

- *Input Controls:* these controls are mainly used to check the integrity of data entered into a business application, whether the data is entered directly by staff, remotely by a business partner, or through a web-enabled application or interface.

- *Processing Controls:* these controls provide an automated means to ensure processing is complete, accurate and authorised.

- *Output Controls:* these controls address what is done with the data and should compare output intended result by checking the output against the input.

- *Integrity Controls:* these controls monitor data being processed and in storage to ensure it remains consistent and correct.

- *Management Trail:* processing history controls, often referred to as an audit trail, enables management to identify the recorded transactions and events by tracking transactions from their source to their output and by tracking backward. These controls also identify errors as close as possible to their sources.

Application controls may be either preventive, or detective. In other words, controls are built either to prevent an error from occurring within an application or detecting errors based in predetermined program logic.

Enhancements in technology have significantly changed the outlook of evaluating controls from an auditor's perspective. An IT encompasses review and evaluation of automated information processing systems, related non-automated processes and the interfaces among them. In particular, IT audit objectives focus on affirming that the internal controls exist and are functioning as intended to minimize business risk. IT audit's role is to provide an opinion on the controls in place to provide confidentiality, integrity and availability for the organisation's IT infrastructure and data which supports the organisation's business processes. For instance, when conducting a financial audit, an internal control objective could be to ensure that financial transactions are posted properly to the General Ledger, whereas the IT audit objective would be extended to ensure that editing features are in place to detect incorrect data entry. (Magee, 2015)

Traditionally, any kind of technology-related control was tested by an experienced IT auditor, while financial, operation or regulatory controls were tested by a non-IT auditor. Although the demand for IT auditors has grown substantially in the past few years and shows no signs of subsiding, all internal auditors need to be able to assess all business process controls from end-to-end. According to the IIA's International Standards for the Professional Practice of Internal Auditing suggest that internal auditors need to have the necessary knowledge of key IT risks, controls and audit techniques to perform their assigned work. To that end, every internal auditor needs to be aware of IT risks and controls and be proficient enough to determine if implemented application controls are appropriately designed and operating effectively to manage financial, operational or regulatory compliance risks. (Bellino, et al., 2009)

Adoption of information systems simplifies business processes and removes unnecessary activities, eliminate repetitive tasks and increase accuracy, allowing employees to concentrate on more high-level functions and lead to better project planning and implementation through effective monitoring and comparison against established criteria. Organisations become more and more dependent on information systems by using more and more features and applications of technology, and thus, internal audit needs to be quite thorough when auditing IT systems.

The application of information technology has become central to the strategy and business processes of many entities. Thus, just as IT has become an integral part of the business, IT governance is now seen as an integral part of enterprise governance.

In recognition of the importance of IT governance framework, *Control Objectives for Information and Related Technology* (COBIT) was developed in 1996 as a reference framework for developing and managing internal controls and appropriate levels of security in IT. COBIT provides a set of generally accepted IT control objectives to assist entities in maximising the benefits derived through the use of IT and developing the appropriate IT governance and control in a company. COBIT supports IT governance by providing a framework to ensure that IT is aligned with the business, it enables the business and maximises benefits, IT resources are used responsibly and risks are managed appropriately. Another fact that needs to be pointed out is that while COSO and the UK Corporate Governance Code focus on the achievement of business objectives at the overall entity level, COBIT complements the other two frameworks, applies this concept to controls over IT, and not the business as a whole.

B5 – Quality Management

Understanding the nature of quality is more than a philosophical issue. Despite the fact that quality is of utmost importance for every entity in every industry, there is no single definition for it. Quality is a perceptual, conditional and subjective attribute and may be understood differently by different people.

Many authors have defined quality differently. For instance, quality means fitness for use, compliance with specified requirements, conformance to requirements, conformance to specifications, degree of excellence, meeting requirements, customer satisfaction, freedom from defects, imperfection or contamination, or the total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product or service in use will meet the expectations by customers. (Singhal & Singhal, 2012)

F. Galetto (1985) defined quality as *a set of characteristics of a system that makes it able to satisfy the need of the customer, of the user and of the society*.

Quality management system (QMS) assists an organisation to maximize resources while minimizing waste, to consistently provide product that meets customer and applicable legal- both statutory and regulatory- requirements. A QMS is a management system to direct and control an organisation with regard to quality.

Quality management ensures that an organisation's products and services are consistent and it has four main components:

- Quality Planning: identifying which quality standards are relevant to the product or service and working out how to satisfy their requirements,

- Quality Control: ensuring that products and services have achieved their highest standard and that their manufacture, installation, modification and/ or repair have been completed in an efficient and timely manner,

- Quality Assurance: providing assurance to a customer that the standard of workmanship within a contractor's premises is of highest level and that all products and services leaving that particular organisation are above a certain fixed minimum level of specification,

- Quality Improvement: analysis of performance and systematic efforts to improve it. (Tricker, 2016)

C. Topics related to the Internal Audit Function

C1 – Audit Committee

According to best practises about governance, the audit committee must be elected by the organisation's Board of Directors. The last will also be responsible for determining the responsibilities of the audit committee as well as the way it will be operating. (Koutoupis, 2009). The most important task would be providing assurance about the reliability of the financial statements and ensuring the proper functioning of internal control. (Koutoupis, 2009). Furthermore, it is the audit committee's responsibility to ensure the legal and impartial conduct of internal and external audits, as well as the effective communication between the auditors and the Board of Directors. It is important to keep in mind that despite the fact that the audit committee reports to the Board of Directors, it should act in the interest of all shareholders and stakeholders at all times, to whom it has ultimate responsibility. (Koutoupis, 2009) An audit committee should operate under an official mandate and it usually consists of at least three members, most of which would be independent, non-executive members of the Board of Directors. Its members should have sufficient knowledge of audit, finance, risk and control, and should be chaired by a member who is not the same individual as the one to whom the Chief Audit Executive (or Head of Internal Audit Unit) reports administratively. International standards do not explicitly require an audit committee for internal auditing. The audit committee has emerged in the business sector as a sub-body of the board of directors. (European Commission, 2014)

According to the Institute of Internal Auditors, the purpose of the audit committee is "*the support of the board in fulfilling its oversight responsibilities. These audit committees provide oversight by*

offering objective advice and recommendations to the board on whether the organisation's governance, risk management, and internal control processes are suitably designed and working as intended to achieve the objectives". Some of the key governance areas for which an audit committee would have to provide assurance are the governance structure, Values and Ethics, risk management, internal control framework, audit activity, external assurance providers, management action plans, financial statements and public accountability reports. (The IIA, 2014)

In the case of public sector, internal audit is linked to and reports directly to the higher level of their public organisation. Therefore, depending on the organisation, internal audit may report to the minister, the deputy minister, the general secretary, the general director or the mayor (European Commission, 2014). In that case, the audit committee could be considered as a liaison between the Internal Auditors and the senior management, which facilitates the communication between the two parts while maintaining the independence of the Internal Audit function.

Audit Committees play an important role in the governance framework of organisations in both the public and the private sector. A distinguished feature of an audit committee within an organisation's governance framework is its independence from management. Audit Committees are recognised as a valuable provider of independent assurance and advice to the governing body on key aspects of an organisation's operations. They do not, however, displace or change the management and accountability arrangements within the organisation, but enhance the existing governance framework, risk management practices, and control environment, by providing independent assurance and advice.

The primary purpose of an audit committee is to provide oversight of the financial reporting process, the audit process, the system of internal controls and compliance with laws and regulations. An audit committee will review the effectiveness of the internal controls and will review the reports on observations and significant findings. Controls over financial reporting, information technology security and operational matters fall under the scope of the committee. The audit committee is responsible for the appointment, compensation and oversight of the work of the auditor and, thus, the auditor reports directly to the committee, not management. Furthermore, the committee will review and approve the audit plan, review staffing and organisational issues of the internal audit function and meet. Not all organisations have established audit committees, so there is a belief there it is not necessary for a company, but if we pay closer attention we will realise that in those organisations which does not have an audit committee, the Board of Directors is often responsible for doing the work of the committee. The benefits, though from having one are crucial. (Gelman, Rosenberg & Freedman, Certified Public Accountants, 2015)

The members of the audit committee, in order to perform their duties, should have the authorisation from the board of directors, to require any kind of information they believe is critical to obtain from any employee or manager or any third party with which the organisation is cooperating. They should also have the authorisation to require access to any documents, physical or electronic, and to ask for assistance from any legal advisors or other external associates which they consider would contribute to the committee's work. (Koutoupis, 2009)

Audit Committee Charter

The Audit Committee's mandate should be established through a written charter which would outline the roles and responsibilities of the audit committee and its members and establish authority to obtain information and required resources. In addition, it would outline respective roles and responsibilities of internal and external stakeholders who have an obligation to interact with the audit committee, as well as outline the process for developing, reviewing and updating the charter and the frequency of review. Once established, the charter should be maintained and communicated within the organisation. (The IIA, 2014)

C2 - Internal Audit Charter

An internal audit charter is a formal document that defines the activity's purpose, authority and responsibility. It establishes the activity's position with the organisation; authorizes access to records, personnel and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities.

IIA Standard 1000: Purpose, Authority, and Responsibility, prescribes that: "*The purpose, authority, and responsibility of the internal audit activity must be formally defined in an internal audit charter, consistent with the IIA Definition of Internal Auditing, the Code of Ethics, and the Standards. The chief audit executive must periodically review the internal audit charter and present it to senior management and the board for approval.*" (The IIA, 2012)

A typical internal audit charter should outline the following information: (Nzechukwu, 2016)

- Mission/ purpose and objectives
- Scope of Work
- Duties and Responsibilities of management
- Duties and Responsibilities of internal auditors
- Relationship with external auditors

- Relationship with the audit committee

- Independence, Objectivity and Authority

- Professional Audit Standards

- Organisation and resources of the internal audit function

- Quality Assurance and Improvement Program

- Approval of the charter

The internal audit charter provides the internal audit function with a formal mandate to do its work. It should define the following items with respect to the internal audit function:

- Define the position of the internal audit department within the organisation

- Indicate the extent, scope and nature of internal audit activities;

- Authorize the internal auditors' unconditional access to data, records, personnel, and assets, whenever this is needed to accomplish audit and consulting projects;

- Grant the head of internal audit unit the authority to allocate resources, establish schedules, determine the scope of audit work, and set audit objectives, without undue interference from management.

Clearly outline the department's reporting structure, giving the Chief Audit Executive (or Head of the Internal Audit Unit) full and unrestricted access to Senior Management.

C3 – Code of Ethics

Integrity – The principle of integrity imposes an obligation on all internal auditors to be straightforward and honest in professional and business relationships. Integrity also implies fair dealing and truthfulness. The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgement.

Objectivity – The principle of objectivity imposes an obligation on all internal auditors not to compromise their professional or business judgement because of bias, conflict of interest or the undue influence of others.

Internal auditors exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgements.

Confidentiality – The principle of confidentiality imposes an obligation on professional accountants to refrain from:

a) Disclosing outside the firm or employing organisation confidential information acquired as a result of professional and business relationships without proper and specific authority or unless there is a legal or professional right or duty to disclose; and

b) Using confidential information acquired as a result of professional and business relationships to their personal advantage or the advantage of third parties.

Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so.

Competency – The principle of professional competence and due care imposes the following obligations:

a) To maintain professional knowledge and skill at the level required to ensure that clients or employers receive competent professional service; and

b) To act diligently in accordance with applicable technical and professional standards when providing professional services. (Negkakis & Tachinakis, 2013)

Internal auditors apply the knowledge, skills and experience needed in the performance of internal auditing services.

According to the Institute of Internal Auditors, a Code of Ethics is necessary and appropriate for the profession of internal auditing, founded as it is on the trust placed in its objective assurance about risk management, control, and governance. The Rules of Conduct (Integrity, Objectivity, Confidentiality, Competency) describe behaviour norms expected of internal auditors. These rules are an aid to interpreting the Principles into practical applications and are intended to guide the ethical conduct of internal auditors.

Core Principles

An internal auditor should:

1. Demonstrate integrity
2. Demonstrate competence and due professional care
3. Be objective and free from undue influence (independent)
4. Align with the strategies, objectives, and risks of the organisation
5. Be appropriately positioned and adequately resourced

6. Demonstrate quality and continuous improvement

7. Communicate effectively

8. Provide risk-based assurance

9. Be insightful, proactive, and future-focused

10. Promote organisational improvement

C4 – Risk Management

Risk management enhances the understanding of the potential upside and downside of the factors that can affect an organisation. It increases the probability of success and reduces both the probability of failure and the level of uncertainty associated with achieving the objectives of the organisation. (AIRMIC, Alarm, IRM, 2010)

Possible responses to risks could be either to avoid them, or transfer them, or tolerate them. Another response to risks would be introducing some processes to reduce the consequence or likelihood of a risk. These processes are the controls being placed by management. (Papanikolaou, 2015)

Table 2: Contents of risk management policy

A risk management policy should include the following sections:

- Risk management and internal control objectives (governance)
- Statement of the attitude of the organisation to risk (risk strategy)
- Description of the risk aware culture or control environment
- Level and nature of risk that is acceptable (risk appetite)
- Risk management organisation and arrangements (risk architecture)
- Details of procedures for risk recognition and ranking (risk assessment)
- List of documentation for analysing and reporting risk (risk protocols)
- Risk mitigation requirements and control mechanisms (risk response)
- Allocation of risk management roles and responsibilities
- Risk management training topics and priorities
- Criteria for monitoring and benchmarking of risks
- Allocation of appropriate resources to risk management
- Risk activities and risk priorities for the coming year

Source: *The Institute of Risk Management*

The global financial crisis in 2008 demonstrated the importance of adequate risk management. Since that time, new risk management standards have been published, including the international standard, ISO 31000 'Risk management – Principles and guidelines'. This guide draws together these developments to provide a structured approach to implementing enterprise risk management (ERM). (AIRMIC, Alarm, IRM, 2010)

Originally issued in 2004 by the Committee of Sponsoring Organisations of the Treadway Commission (COSO), the Enterprise Risk Management – Integrated Framework is one of the most widely recognized and applied enterprise risk management frameworks in the world. It provides a principles-based approach to help organisations design and implement enterprise-wide approaches to risk management. The Framework provides guidance to boards and management to manage risks from strategy setting through execution and recognizes the increasing importance of the connection between strategy and entity performance. It creates a uniform process to (1) evaluate risks and opportunities, (2) assess the relative cost/benefits of these risk/opportunities, (3) identify external controls and mechanisms that address these risk/opportunities, and finally (4) determine what controls (if any) are needed to address these risks and opportunities.

An enterprise-wide approach to risk management enables an organisation to consider the potential impact of all types of risks on all processes, activities, stakeholders, products and services. Implementing a comprehensive approach will result in an organisation benefiting from what is often referred to as the 'upside of risk'. From a different point of view, the process of risk management could be described as a list of co-ordinated activities: (AIRMIC, Alarm, IRM, 2010)

- recognition or identification of risks
- ranking or evaluation of risks
- responding to significant risks
- resourcing controls
- reaction planning
- reporting and monitoring risk performance
- reviewing the risk management framework

C5 – Audit Steps

As mentioned before, an internal audit is a process containing several steps, aiming to determine whether existing processes and procedures (the condition) comply with predetermined rules and regulations (the criteria) or deviate in any way from this standard. Thus, the first step would be the

identification and understanding of the criteria to which the condition must be compared. The second step would be the collection of evidence regarding the existing condition and the third step would be analysing and evaluating the obtained evidence. The third step includes, among other activities, observing the processes and procedures, comparing the current period information with prior year information or with budgets and forecasts, comparing the current activities with approved policies and procedures, sampling and testing the actual performance to the desired performance and, of course, utilizing computer assisted audit tools to review, compare and analyse large amounts of data. The fourth step would be to draw conclusions about the effectiveness of the control systems and the extent to which the current condition meets the required criteria. Then, at the fifth step, it is time to communicate the results of the auditor's work and conclusions to the relevant parties along with any necessary recommendations for improvement in the form of an audit report. After that, it would be management's responsibility to act upon the results of an auditor's evaluation.

Although every audit project is unique, the audit process is similar for most engagements and normally consists of four stages: Planning, Fieldwork, Audit Report and Follow-up Review. The involvement of the senior management is critical at each stage of the audit process.

Planning

The first step an internal auditor has to do is to plan the audit and their work. So, the stage of planning comes first. In order to begin an audit, the internal auditor has to have an official mandate, usually called engagement letter. If the auditor is an employee within the entity, then that document would be an internal document signed by the governing body giving an official order to the auditor to proceed. At this stage the auditor examines all the data they may have in their hands, and after taking into consideration the risk areas identified during the risk assessment process, they design the audit plan and

Fieldwork

The next stage is the one of fieldwork which involves gathering information via interviews with key personnel, review of department manuals, policies and procedures, general operations, etc. This work is tailored to address the audit objectives determined during the planning stage. When performing tests on items, the internal auditor may select audit items through a sampling technique, because usually it is not feasible to audit all items in each area. For example, if the cashier is being audited about procedures when making transactions in cash, then it would not be feasible to check every single receipt or invoice. To that end, a sample of transactions would be selected to be audited. Sampling techniques are statistical sampling, attribute sampling, variable sampling and judgment sampling. Sampling permits the auditor to review a portion of the total population to determine the

percentage of error within a certain area and allows them to gather evidence on whether the established internal controls are actually in place and functioning appropriately.

Reporting

The principle product of the internal audit is the final report in which the auditor expresses an opinion, presents the audit findings and discusses recommendations for improvements. After the fieldwork is completed, the internal auditor will meet with the unit's management team to discuss the findings, conclusions, and recommendations. The auditor prepares a draft report, taking into account any revisions resulting from the closing meeting and other discussions. The report consists of several sections and includes: the distribution list, scope and objects, overall assessment, and the auditor's findings and recommendations. Then, a draft report is being issued to unit management only, along with a management memorandum detailing any less significant findings. It is recommended that the management provides written responses to the draft report, indicating how and when the recommendations will be implemented. Once the internal auditor incorporates those responses into the draft report, he finalises the report and submits it to the audit committee.

Follow-up

However the reporting stage used to be the final stage of the internal audit process, during the last years, the follow-up phase is considered to be the final stage. The reason for doing a follow-up is to determine whether the recommendations, which were provided by the internal auditor, had an impact on management. More specifically, follow-up is about determining whether management implemented the plan that was proposed after the submission of the audit report, in order to improve the areas for which the audit report contained recommendations.

D. Structure and Function of Healthcare Units

D1 Introduction

Healthcare is the maintenance or improvement of health via the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in human beings. Healthcare is delivered by health professionals (providers or practitioners) in allied health professions, chiropractic, physicians, physician associates, dentistry, midwifery, nursing, medicine, optometry, pharmacy, psychology, and other health professions. It includes the work done in providing primary care, secondary care, and tertiary care, as well as in public health. (Wikipedia)

Looking at the history of the healthcare systems in Greece, it is found that since the constitution of the Greek State until the year 1909, the hospital was a responsibility of the municipalities and charity organisations. From 1909 to 1952, there was the first active intervention of the state by creating military and refugee hospitals. The first attempt towards an organised healthcare system was between 1953 and 1982, when the foundation for organising healthcare units was put in place. In 1983, the founding law 1397/1983 established the National Health System. That was the first step towards a public Health System and with this act the Greek government took the responsibility of providing health care services impartially to all citizens, regardless their financial and social status. That was the first law providing that the President of the Board of Directors is the Head of all services of the respective hospital, monitoring and controlling their work, representing the hospital before any authority and ensuring the implementation of the Boards' decisions. (Chountala, 2007) Since 1983, there have been many efforts towards putting in place and improving the National Health System (ESY), with many state interventions in organisation, management and operation of hospitals. The goals of ESY included management decentralisation, development of primary health care, modernising of the hospitals, ongoing training and motivation of the employees working in ESY. However, those goals were not completely achieved according to the population's needs and increased demand of the citizens for qualitative and quantitative delivery of services in the healthcare system. (Dikaios, et al., 1999)

Since 1983, there have been quite a few laws passed by the parliament containing reconstruction measures for modernising the National Health System. In 2001, law No.2995/2001 about procurement in Hospitals and in other healthcare units was passed. Furthermore, there was the Presidential Decree No. 84/2001 about arrangements for the modernisation and operation of the private clinics which fall under the provisions of the law No2345/95. The same year, there was a Presidential Decree about the organisation of central agency of Regional Health Systems (Pe.S.Y.), No. 357/2001. Two years later, in 2003, the Law No3106/2003 was passed about reconstruction of the National Social Care System, with which there was an addition in the scope and objectives of the PeSY about creating full functioning systems for delivering welfare services in each region of the country. (Karathanou, 2014)

The National Health System in the form it has nowadays is called a mixed model due to the fact that it comprises elements from both the Beveridge and the Bismarck model, meaning that the state's and social security's role is major, while the private sector also plays quite an important role. The delivery of health services comes both from the public and the private sector. (Thanasas, 2012)

In addition, the healthcare services are divided into three categories: the Primary Care, the Secondary Care (or Hospital Care) and the Tertiary Care.

Primary Care

Primary care services are being delivered in outpatient clinics throughout the country, where people could find diagnostic and therapeutic care. Such services could also be delivered in the emergency room of hospitals. (Karagianni, 2007)

Secondary Care

Secondary care incudes laboratory tests, hospitalisation for treatment of the patient and general operations. (Karagianni, 2007)

Tertiary Care

The provided medical care is based on specialised knowledge and experience and demands the cooperation between doctors of different specialties. For tertiary care, special medical machines are also needed and sometimes there is a need for a building or a room with special specifications. University Hospitals may be more suitable for tertiary care due to the fact that doctors of all specialties work in such hospitals. (Karagianni, 2007)

D2 - Public Hospitals in Greece

Ministry of Health

The mission of the Ministry of Health is to maintain and promote citizens' health through prevention and equal access to public health services, as well as ensuring the provision of high quality medical, pharmaceutical and hospital services to all citizens of the country, in accordance with the modern standards and guidelines of the European Directives and the World Health Organisation.

Table 3 below demonstrates the structure of the Ministry of Health, as it is found on the website of the Ministry.

Table 3: Organisational Structure of the Ministry of Health
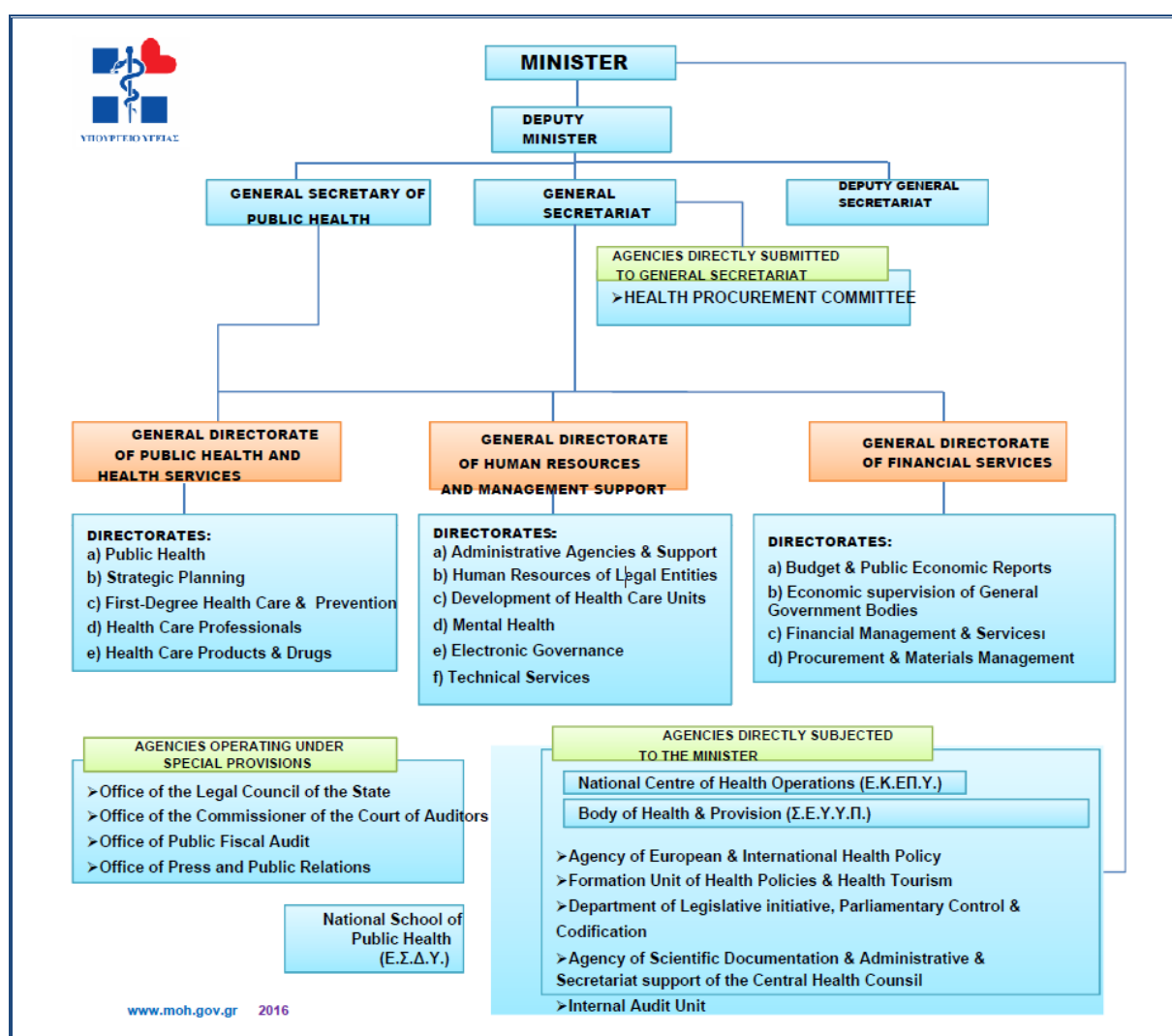
Source: Ministry of Health, website

<u>Health Regions</u>

According to the law No 3329/2005, the state is divided into seven (7) Health Regions, which match with the Administrative Regions. The objective of the health regions is to program, coordinate, monitor and control all units providing health services within each region. Furthermore, the Health Regions submit suggestions, measures and proposals, to the Minister of Health, aiming at a fuller and more efficient provision of health services and social solidarity to the population of the particular region. Finally, it is under their jurisdiction to monitor the implementation of the policy developed by the Ministry of Health, by the Management of supervised entities providing health services.

Table 4: Health Regions in Greece (YPE)

1st	YPE	Attica
2nd	YPE	Piraeus and Aegean
3rd	YPE	Macedonia
4th	YPE	Macedonia and Thrace
5th	YPE	Thessalia and Central Greece
6th	YPE	Peloponnese, Ionian Islands, Epirus and Western Greece
7th	YPE	Crete

Source: Ministry of Health

Hospitals

There are 127 ESY hospitals currently operating in Greece which are divided into different categories depending on their institutional framework. There are hospitals which are public entities, others that are private entities, military hospitals and private hospitals under the form of an S.A. company (Τούντας, 2008). Greek public hospitals are public entities, meaning that they are autonomous organisations, with independent governance and management. Furthermore, public hospitals are divided into four categories, those that operate under the National Health System, those that operate under the Social Insurance Institution (IKA), the university hospitals and the military hospitals. There is also a category of hospitals which are neither public nor private hospitals and they operate under the supervision of the state. (Τούντας 2005).

Hospitals of the National Health System are divided into a) general, which provide health care to patients whose condition falls under at least two therapeutic categories, and b) special, which provide health care to patients whose condition falls under one therapeutic category. (Karathanou, 2014)

The funding of the healthcare system comes from:

- Public Revenue, which comes from taxes,
- Compulsory contributions to social security organisations
- Private Expenditure, including any payments weighting the individual (out-of-pocket money) and expenditure for private insurance

In Greece, the biggest portion of ESY funding comes from taxation. Part of the public revenue is being used in order to fund the public hospitals, the deficient branches of social security institutions, as well as programs for public health, research on health issues and training of practitioners.

D3 Structure of a Hospital's Services

Hospitals are structured administratively and functionally in four services: the medical, the nursing, the administration and the technical (Sigalas, 1999). The medical service includes pathological, surgical, laboratory, psychiatric, outpatient, social medical and pharmaceutical departments. The emergency room is also included in the medical service. The activities of that service the provision of medical care, the training of junior doctors, as well as training of students of the medical science, and research. The nursing service is divided into nursing sectors, each of which has its own nursing departments and independent units, such as the Intensive Care Unit, the Artificial Kidney Unit etc., providing nursing care according to the principles, the methodology and the technique of the nursing science. The activities of the nursing service concern the management of the nursing sectors, departments and units and the cooperation with the other services of the hospital. In addition, there are training programs for the nursing staff and the students. The administration service has two sub-directorates, the Administration and the Financial. Their main activities are the coordination of operations and the support of the other services, asset management, maintaining independent function of the hospital and development, and training of the employees on administrative issues. Last but not least, the technical services works on programming and setting suggestions on development projects about buildings, mechanical and technological installations of the hospital. (Dikaios, et al., 1999)

D4 Hospital Management Bodies

Greek hospitals operate within a complex health system and are required to offer a differentiated range of health services. Increased cost, resource constraints, continuously growing demand and requirement for quality require the adoption of a management system both for addressing the challenges and changes, and for achieving the objectives.

The structure of a hospital has multiple levels which are interdependent, and thus managing a hospital becomes even harder. A hospital interacts with its environment, receives inputs and is consisted of sub-directorates with specific resources (human resources, assets, equipment, suppliers), all cooperating in order to achieve a common cause, purpose and business goals. (Liaropoulos, 2007)

The first time the title and position of a governor for a public hospital was found in the law was in 2001 (law no. 2889/2001). According to the law, the governors would be elected by the Assessment and Selection of Executives for Healthcare Services Committee and it was the first attempt to insert the concept of business management into the public hospitals. Management aims to coordinate material and human resources to achieve an optimum level of healthcare services for patients.

According to the provisions of the law no 3329/2005, there are two governing bodies for each ESY hospital: a) the Board of Directors, and b) the Hospital Governor.

The Board of Directors consists of seven members for hospitals that have up to 399 beds, and nine members for hospitals that have 400 beds or more. The Board is chaired by the governor of the hospital would be one of the members. Then, 3 members for hospitals that have up to 399 beds, and four members for hospitals that have 400 beds or more, would be assigned directly by the Minister of Health. One of those members would take the place of the Vice Governor. Following, there is the Deputy Governor of the Hospital, for hospitals with 400 beds or more, whose deputy would be the Director of the Administration Service. One member would be a representative of the hospital's doctors, who is elected by the doctors of the hospital. The Director of the Nursing Service sits, also, on the Board of Directors and, lastly, the rest of the hospital's employees, apart from doctors, would elect their representative to sit on the Board. The Governor sets the agenda of the Board's meetings and identifies the speakers for each issue in stake.

The peculiarity of the medical profession makes the decision-making hierarchy particularly complicated, in the sense that decisions taken by managers may conflict with decisions taken by doctors. This is because a manager is making decisions based on economic data and in terms of cost-effectiveness; on the contrary, the doctor is only interested in the best possible quality in the service produced and is meant to help each patient in the best possible way at the time it is needed. Therefore, special attention needs to be paid to decision-making and the implementation of internal controls by Management, as the optimum balance must be found so that with the applicable internal regulations, doctors and nursing staff will act within the desired framework, but without hampering their work.

D5 Legal and Regulatory Framework of Hospitals' Internal Audit

Law 3697/2008 (article11, paragraph 3) provides the formation of an internal regulation about managerial, administrative and accounting issues, which is monitored by the internal control system.

Law 4025/2011 (article 25) provided further instructions about the internal audit in public health care units as follows: the Ministry of health must issue an internal audit regulation about managerial, administrative and accounting issues for all health care units, within three months from the publication of this law. The implementation of this internal regulation shall be monitored by the internal control system. To this end, each health care unit has to employee up to three internal auditors, with the decision of the Board of Directors. Those internal auditors shall provide intellectual services as individuals (not as employees of the hospital) and the duration of their contract must not exceed the time period of three years. The internal auditors maintain their independence while providing internal audit services. With the decision of the Directors of each Health Region, an Audit Committee is being established, composed by two members of the Board of Directors and the internal auditor. The purpose of the Audit Committee is to monitor the process of financial reporting, the effective operation of the internal control system and the risk management system, as well as the process of external audit of the financial statements. The internal auditor reports to the Governor and to the Audit Committee on any issue about the process and the outcomes of the internal audit and file reports accordingly. Any other details about the responsibilities of the internal auditor and the Audit Committee, as well as the organisation and operation of the internal control system are being defined by the Internal Regulation.

On the website of the Ministry of Health, there are instructions about how to perform several processes in a hospital, limited to the administrative service. In terms of internal auditing in hospitals, it is mentioned that the purpose is the recording of actions that must be taken in order to monitor the operation of the hospital's departments, the procedures, the objectives and goals that have been identified by the Management. Internal audit should assess the efficiency and effectiveness of the hospital's individual operating units, ensure the employees' compliance with the applicable laws and regulations imposed by the hospital's Management, promote the reliability and accuracy of the processes and methodologies that the hospital's financial management uses and provide assurance about the hospital's resources management concerning waste, fraud, etc. As far as the regulations are concerned, for the function of a sufficient internal control system in the accounting-administrative sector of the hospital, it is required to implement the following rules: rational accounting organisation both in Public Accounting System and in the Double-entry System of general and analytical accounting, determination of procedures, documents and any attached supporting documents, computerised support for all systems, human resources management with clear job descriptions and responsibilities and designated functional structure with identified levels of responsibility and co-responsibility. The Head of the Internal Audit Office is in communication with the Governor and, thus, unobstructed access to all data and files is ensured for the auditor.

These instructions also include the main steps an internal auditor should follow once he gets an official order to perform an audit.

- Design of the audit plan, either for scheduled audits or for audits of special scope that the Management decides to assign

- Establishment of standards and procedures for internal audits; compliance with them is being monitored

- Internal audits are divided into four categories: managerial, accounting-administrative, preventive-detective and budget audits.

- Before initiating an audit, the auditee should be informed about being audited and, at the same time, a questionnaire is being submitted in order to obtain relevant information.

- Audits are performed where system data is being obtained, analysed and evaluated, in order to verify whether the relevant departments apply the rules and procedures established by the Management.

- In particular, it is examined whether: Internal and external transactions were made in accordance with the hospital policy and management's mandates, transactions have been entered into the information system, to allow for the accounting disclosure of revenues and expenses, transactions were conducted in accordance with the procedures and methods established by the Management for each hospital operating unit.

- The audit is based on sampling, which should consist of a representative number of transactions between a random and a statistical sample of transactions, with common features of the segment under audit.

- Reports on the audits carried out and their results are filed.

- The reports are submitted to the Management through a recommendation. The recommendation proposes necessary improvements - modifications of the procedures established for their greater effectiveness.

- Activities are undertaken to increase the productivity of each department and are recommended to the Governor.

- Ways and methods are proposed for improving the internal control system and the procedures followed in the various departments of the hospital.

- Regular reporting is made to the Executive Officers of the Management, to assist them in the sound management of the financial resources and the property of the hospital.

Inspectorate and Supervising Bodies

Inspectorate Body of Health and Welfare Services (SEYYP)

SEYYP was founded under the Law 2920/2001 (Government Gazette A' 131), amended by the Presidential Decree 278/2002 (Government Gazette 244a/2002) and it is subjected to the Minister of Health. SEYYP conducts inspections and audits after receiving orders from the Minister of Health, the Deputy Minister of Justice, the Minister of Labour (concerning issues of the General Secretariat of Welfare), the Ombudsman, the General Inspector of Public Administration, as well as on its own initiative, according to its founding Law.

The role of SEYYP is to develop and operate central and regional mechanisms for conducting systematic inspections, audits and investigations to all public agencies and bodies under the jurisdiction or the supervision of the Ministry of Health, as well as to the health care units of Social Security Institutions. Its purpose is to improve the productivity and the effectiveness of the above agencies and bodies, to upgrade the quality of the provided healthcare & welfare services, the elimination of maladministration and the protection of health and property of citizens from the abusing providence of healthcare services.

Subject under the jurisdiction of SEYYP are:

- The Central, regional or decentralised agencies of the Ministry of Health.
- The agencies of the Regions, the Prefectural Authorities and the Municipalities of A' degree, as well as the Social Security Institutions, which provide health & welfare services.
- The rest of Legal Entities of Public and Private Law (ΝΠΔΔ & ΝΠΙΔ) of the Public Sector, which operate in the health & welfare sectors and are supervised by the Minister of Health and Social Solidarity.
- All the health & welfare service providers of the private sector, which are supervised by the Minister of Health & Social Solidarity.
- Hospitals & private drugstores, the pharmacies warehouses, the laboratories and in general, every facility of production or distribution of any kind of pharmaceutical or hygienic material, such as Beauty & Diet Institutes, bottling factories as well as hot springs, where services are rendered for health reasons.
- The private bodies whose operation is the distribution of products, directly used for providing health services.

Court of Auditors

The Court of Auditors is one of the three supreme Courts of Greece, along with the Supreme Court of Civil and Penal Law (Areios Pagos) and the Council of State, while at the same time it also has administrative responsibilities, a fact that makes it an institution having a "dual function". Under its jurisdiction fall:

- Auditing expenditures of the State, as well as of the Local Government or of other legal entities, which subject to this status by a special provision of the law.
- Auditing contracts of great monetary value, in which the State, or another legal entity assimilated to the State, is one of the contracting parties, as defined by law.
- Auditing the accounts of the public accountants and the municipalities, or other legal entities.
- Expressing opinion on draft legislation acts concerning pensions or service recognition for the entitlement to a pension, according to paragraph 2 of article 73 of the Constitution, as well as for any other matter as defined by Law.
- The compilation and submit of a report to the Hellenic Parliament for the account and the Balance Sheet of the State, as per article 79 paragraph 7 of the Constitution.
- The judgement of differences regarding the entitlement to pensions, as well as the audit of accounts.
- The trial of cases which refer to the responsibility of politicians or military public officers, as well as employees of municipalities and of other legal entities of the public sector, for any loss caused to the State by intention or negligence, to municipalities or to other legal entities of the public sector.
- The trial of objections against acts or omissions of the Minister of Finance, regarding the entitlement or payment of pensions.
- The trial of appeals against the acts of Audit Teams and the chargeable actions of the bodies of the State.
- The trial of the requests of suspension against decisions of its Departments.
- The implementation audit of the provision of Law 1256/1982 for officer's multi-placing.
- The resolution of controversies regarding the reach of thirty five (35) years of service for Public officers.
- Auditing the management of Public Entities and Organisations.
- Auditing the ''Special Account for Guarantees for Agricultural Products''.

(Apostolidou, 2008), (Papadopoulou, n.d.)

The Court of Auditors conducts ex ante audits on the legality and regularity of payment orders in public administration. The auditors of the Court of Auditors have the exclusive right to conduct ex post audits of legality and regularity for all expenses in the public administration. (Kazatzis, 2006)

PART II

E. Review of previous research studies

In recent years, the world stage has seen companies of colossal figures collapsing under the weight of financial scandals, fraudulent actions, scams etc. In all such cases, the rules and best practices of corporate governance have been repeatedly broken. In most of the cases, the company boards have either not been receiving the information due or have been misusing such information properly given. (Koutoupis, 2009)

This above fact of global acceptance seems to have very small penetration in the Greek National Health System, if we were to judge from the absence of both raw data and empirical research efforts around the notions of internal audit and its functions in association with public healthcare units.

In a relentless effort to charter the history of such research in Greece, lots of time has been spent in both physical and electronic searches, which have produced extremely poor results indeed and a great degree of disappointment in the first place. The research methodology followed included repeated physical visits in the relevant libraries of the Economic University of Athens, the Panteion University and the University of Piraeus, while thorough research has been conducted in the electronic site www.unioncatalog.gr, which claims to include the titles of all academic libraries in Greece. Extensive search has also been conducted in the internet, using various search engines and all possible combinations of relevant key words, including "healthcare units", "public hospitals", "health system", "internal audit" etc. in a Greek context.

With the exception of the very few research studies and articles mentioned below, there have been no publications directly linking the internal audit function to the public healthcare units. Some results have been either relevant to countries other than Greece, e.g. there is a publication on internal audit of public hospitals in Malawi etc., or very distant from discussing the subject, e.g. Mosialos has recently (2016) published on China, but not on Greece, or basically covering general policy issues, providing comparative data in pharmaceutical spending, doctors and nurses resources, governance models etc.

The initial disappointment for the very poor results of such quest for previous research studies, despite the considerable time and effort spent on this, has finally produced a certain positive feeling, stemming from the realisation of the fact that the lack of raw data and empirical evidence signals the absence of basic work on these issues and the absolute need thereof.

This empirical research finding has reaffirmed the emerging necessity to elaborate more on the theoretical aspects of internal audit associated with healthcare units, now from the scope of serving the need to signal to all stakeholders and reassess the importance of applying such functions, policies and best practices in practice. An old Greek joke says that, if one legal provision is of essence in this country, this would be the one dictating that "all applicable laws should really be applied in practice". In our subject matter, this is exactly the case. Thus, although this approach has resulted in a gigantesque first part of the present research paper, compared with a much smaller second part (initially skimming through the poor history of other research efforts and then delving into the questionnaires of the present research). This apparent imbalance in size, however, is reflective of the reality found and demonstrated by the research undertaken on the subject; hence, it is considered as methodologically sound.

The initial intention was to discover past research studies conducted in Greece and both discuss their methodology (i.e. benchmark their research criteria against the ones used in the research questionnaire of the present paper) and use their data to show the evolution in certain issues since then. Unfortunately, none of the above research aspirations proved possible, since there was no such correlation found that would enable either the use and comparison of raw data (no comparable raw data on healthcare units have been found) or a certain degree of relevance between the research criteria used.

In specific, only four doctoral theses may claim the title of academic research on the subject of the internal audit function, the first of all being the doctoral thesis of now Professor Filos, back in the year 2000. The research methodology followed, the results obtained, the benchmark criteria against which the data gathered have been compared, the analysis followed, have set the academic precedent in the subject of internal audit in Greece. Unfortunately for the context of the present research paper, professor Filos had dealt with the banking institutions, not the healthcare ones; understandably, though, since at that time it was mainly (if not exclusively) the banking institutions in Greece to correlate with the notions of internal audit functions.

Professor Filos' early work has been pioneering in many aspects. He chose to write on the subject matter and initiated the relevant academic discussion, when there was practically no Greek academic paper on it. Understandably, a good part of such work of his dealt with the theory of the internal audit notions and methodology, often written in an introductory/teaching style, profoundly evidencing the fact that it was "the early times" and much was still unfamiliar both to the specialists and the general public. He chose to work on the Greek commercial banks, since that was the only sector with some relevance to internal audit, as above mentioned, and a central institution with

supervising authority over them, the Bank of Greece. He even conducted a field research based on a pretty extensive questionnaire with a good response rate that allowed the extraction of methodologically useful conclusions, which he benchmarked against a similar research conducted in the US. Although the infant stage of internal audit was widely proven, Professor Filos was optimistic about its future in Greece, giving credit to positive trends he clearly distinguished.

It is widely accepted that, almost 20 years down the line, the situation pertaining to the internal audit functions in the Greek commercial banks has substantially progressed and the gap between them and their foreign siblings has closed. However, looking at the level of conformity of the Greek public healthcare units with the internal audit standards and requirements today in the course of the present paper research, the similarities are stunning: the Greek public healthcare sector is, in terms of internal audit, pretty close to where the Greek commercial banks were almost 20 years before (if not even more immature in some aspects); reading parts of Professor Filos' work for one more time while at the final stages of the present paper, the reference reality of his doctoral thesis seemed so familiar with the reality confronted in this other sector today.

After two years, now Professor Varvatsoulakis had completed his thesis on the financial impact of the application of an internal control system in SME healthcare units, including the examination of a private maternity hospital, used as a research paradigm. The proximity of the subject is obvious, however the focus was on the financial ramifications stemming from the internal audit system application and the time passed since then is too much to make meaningful comparisons. Although the stage of application of the internal control functions in the healthcare sector has been very early, this doctoral thesis is the first one in the context of internal audit functions and healthcare units in Greece, seen now as a forerunner.

Some progress has been made to date with regards to the reality around the establishment and actual function of an internal audit system in the Greek public hospitals, as described by Professor Varvatsoulakis back in 2002. It is true, however, that said progress has been slow. Most deficiencies identified in the relevant part of Professor Varvatsoulakis' thesis regarding public hospitals are still haunting, one way or another and in different degrees of intensity, the everyday reality of the Greek public health system.

Although the issues described are not expressly stated to be based on empirical evidence or research results, everyone even remotely familiar with the Greek public health system would agree with the points made; of these, during the last 15 years progress has been made on the competence and skills of the management appointed, the implementation of modern medical treatment protocols and the

effectiveness in managing the public hospitals' assets. Moreover, based on recent data by the public services inspectors, the recent prevailing crisis and the limited resources available has cared for slashing the budget deficits and the excessive expenditure which was mainly due to corruption, as well as sharply decreasing the extent of unethical incidents including bribery etc.

The lack of prototypes measuring the efficiency of operational functions as well as securing the hospitalisation quality still prevails at large, while the bureaucratic conflict of authority between services, departments and units is also still evident.

It is interesting to note that, at the time, now Professor Varvatsoulakis was optimistic that the implementation of proper internal control functions would be the decisive factor in correcting all wrongdoings identified and laid out in his doctoral thesis. 15 years down the line, Greek reality proves to him and all of us that, also in this aspect, things have been left evolving frivolously, without taking action as due on implementing the remedy of internal audit in the public healthcare units. Any progress made seems to be an "act of God" instead of the planned and expected result of specific (and terribly needed) corrective actions.

Nine years after the doctoral thesis of Professor Filos, Mr. Koutoupis, in his doctoral thesis, has gone into examining in extensive detail the internal control systems of Greek listed companies from the point of view of corporate governance and entrepreneurial risk. The research methodology followed in the present research resembles in many aspects to the one followed by Mr. Koutoupis back in 2009, however the focus sector was different (and definitely larger) and the researcher's viewpoint examined the issues in much more detail, having available lots of data from questionnaires and interviews.

The fourth research was included in the doctoral thesis of now Professor Drogalas, focusing again on financial ratios but in the sector of hotel enterprises. Despite the non-relevance of the sector and the research focus, the research methodology followed was very elaborate and thorough, comparing existing data from available sector-specific statistics with raw data gathered through very analytical and well-structured questionnaires. On a personal note, Professor Drogalas' work was very inspirational; starting from his choice of tools to the way data is presented and so on.

Overall, although many aspects of the research methodology followed in the above mentioned research studies was inspirational and extremely helpful to the structure of the present research, little true relevance could be assessed, that would allow methodologically sound comparisons leading to scientifically useful results. The initial aspiration (set while the present project was still in

design stage) that the present research results could be compared to the ones of past researches proved unrealistic.

Last but definitely not least, we were honored to be given access to the unpublished conclusions of Mr. Christos Nomikos; such conclusions are the results of years of rendering internal audit services as a contractor to seven public healthcare units in Greece. Although technically this part of his work cannot be categorized as a full research study (no research data or methodology, but rather the results of the best on-site and *ad hoc* research available to date were shared with us), this has obviously been extremely helpful, providing a real-life benchmark to our research results. Unfortunately, our research results were far scarcer than the data behind Mr. Nomikos' conclusions, while the other way round would be methodologically more beneficial in connection with the research subject matter.

F. Findings *ad hoc*

The findings of Mr. Nomikos' work are divided in 80 major categories, with sub-categories for some of them. They cover the full spectrum of audit areas and most of them provide detailed examples. There is no need to note that his work provides recommendations for immediate application should competent people wish to do so.

With regards to regulatory issues, there is a major note on the total lack of Internal Charter (or By-laws) in some hospitals, an issue of cardinal importance, since little may be said regarding internal audit in an organisation without even an Internal Charter. This standalone finding is astonishing, in view of the fact that Mr. Nomikos' observations are based on his hands-on experience after the drafting of public hospitals' Internal Charters has been imposed by relevant legislation.

Moreover, strange enough and despite the fact that the subject matter is all in the context of public healthcare units, still there is a formal requirement for state-provided Operating Permits on various sub-units of a public hospital, e.g. the pharmacy. Oddly enough, there have been many occasions where such Operating Permits have never been obtained or their term has expired and not renewed.

In terms of computer systems, serious deficiencies have been observed. Not taking into account the fact that there is no single electronic Patient File per patient (since this issue is still mostly of a regulatory nature – the Ministry of Health has both the authority and the responsibility to act on this and clear any legal impediments), in most cases the various systems of the very same hospital don't "talk" to each other, in the sense that there is no interoperability. A major area where this is

illustrative is the sensitive accounting/payments processing functions, where the public sector as a whole is subject to special public spending protocol (which is operated on one IT system), while the general accounting system of each healthcare unit is operating on another system.

Another major area of concern relates with the accounting *per se* of said healthcare units. The fact that said hospitals are public has two major adverse consequences to this end: 1) being a public institution funded by government funds, it has no "income" from its operations (with the exception of a nominal "reception fee" in place for a limited period of time in the past); 2) being part of the public sector, their payment process is subject to the rigorous and bureaucratic procedures and requirements of public spending protocol and the surveillance of the Court of Auditors. This has resulted in an astonishing lack or accounting procedures to be followed, often rendering said public hospitals' accounting data totally unreliable. In addition, with regards to payments to suppliers, if the prescribed steps are not followed properly and in due time, the corresponding payment cannot be made, otherwise the hospital officer responsible for the payment will be held personally accountable and the corresponding amount will be charged to him/her personally. Thus, an example not attributable to the work of Mr Nomikos but common in public spending protocol disorders is as follows, in case something (even immaterial) is missing from the due process or a step has not been duly completed, for any possible reason, said payment is not executed and is "abandoned", hanging without purpose in the hospital accounting system and permanently marked as "due to suppliers" - however, no one ever claims it for the following reason: to make up for this, another "supplier contract" is invented, usually for services rendered, describing a fictitious supply of services, the payment for which is intended to cover the real payment due. Accounting-wise, this creates lots of inaccuracies resulting in a total mess and gives a false depiction of the hospital's financial situation.

Inventory monitoring of medicines and consumables is another area of weakness, where a lot has to be rectified. Due to both inefficiency and corruption, there is widespread indifference as per instituting and following procedures regarding accurate stock-taking, monitoring of the expiration dates of medicines and consumables, mapping and tracking the movement of such materials from department to department (e.g. from the hospital pharmacy to the surgical room – if something is not used, nobody looks after its return to the pharmacy!). There have also been many cases where it is common practice to have unauthorized personnel access the safekeeping premises of supplies, medicines and medical consumables; in addition, the places used for storage of medicines and consumables is unsuitable, resulting in contamination, degradation or destruction of said supplies.

When it comes to personnel, either doctors or nurses, crisis has added its toll to the situation: due to irregular and insufficient funding, there is lack of staff to adequately cover all shifts and positions;

this obviously creates lots of problems and gives rise to even more, since it is also used as an excuse for poor performance by the employees. In addition, the means and method of monitoring the personnel working hours leaves ample margins so that the working hours are in fact not followed by the hospital employees; this is so, because there is no assessment mechanism of the working hours violations, hence no punishment as a result of such violations.

Another note by Mr. Nomikos on personnel-related issues has to do with personnel training. There are no specific and comprehensive training programs or seminars to choose from per employee level and/or specialty, as there should be, despite the fact that the existence of a comprehensive personnel training program is included in the competencies/obligations of the Finance and Administration Department of the hospital. As a result, each employee is left alone to choose from any seminars available anywhere and conducted by any kind of institution, giving space to distortions ranging from no training at all (a very common situation, since there is no mandatory annual minimum hours of training per level and specialty) to spending much time away from daily work duties in scattered seminars, of which little use may be made to improve one's professional skill set and the quality of daily work.

Finally, another area of weakness noted is the defective financial utilization of each hospital's real estate. Usually left to each hospital many years before as a bequest from wealthy citizens or former nobility, a public hospital's real estate possessions are often substantial. In all cases, however, such real estate is either totally left idle or is very poorly utilized (leased way under its market value, rental payments not paid but also not collected or pursued etc.). It is obvious that there is lack of motive to utilize such hospital assets, since no one particularly cares for any kind income of a public hospital, the government pays for all its costs anyway; at most times such real estate is not even properly insured as per current market practice.

G. Research and Findings

Survey methodology

The research was largely based on a questionnaire approach. Lots of other information gathered during the present research process was channelled into the theoretical discussion on the notions and best practices around internal audit, leaving the questionnaire results as "pure" as possible from any theory "contamination".

The basic research hypothesis behind the structure of the specific questionnaire was whether internal controls, as specifically (should have been) implemented in a healthcare context, were indeed in place or not.

In preparing such questionnaire, three main pillars were considered: i) the procedural/regulatory aspects in general (indirectly aiming at assessing quality of healthcare services provided); ii) functions associated with available means and resources and their management; iii) procedural/control functions directly affecting the basic financials in specific.

Once drafted, the questionnaire was put under the critical eye of an experienced internal auditor having consulted for at least 5 public hospitals. His comments were taken into consideration and incorporated into the final, "live" version of the questionnaire.

Once the survey was completed and based on the fact that the research results showed a surprisingly low level of internal audit integration in the public healthcare units, the questionnaire was again given to an experienced compliance expert in the banking and medical sectors to review and assess the questionnaire from a methodological point of view, aiming at having an "outside expert" opinion, looking into whether or not something was missed or whether the research should be expanded in relevant compliance fields. His opinion was clearly to keep the research focused, in the sense that only internal control functions *stricto sensu* should be the subject of the questionnaire, no matter what the end results were; it is exactly these end results, i.e. the reality of the current situation, the research aims at revealing, even if many of the items in question were found to be close to non-existing.

The response rate to the questionnaire was also not heart-warming. The initial disappointment on this fact was soon succeeded by the satisfactory realisation that, when correlated with the results of the survey itself, it could not be otherwise. It would be absurd to have an enthusiastic response rate and such survey results. Thus, also by juxtaposition, both our research hypothesis and the research itself were proven methodologically sound.

Survey results

Question 1: Is there a clearly stated Internal Charter?

Question 1

Don't know   0%

No   50%

Yes   50%
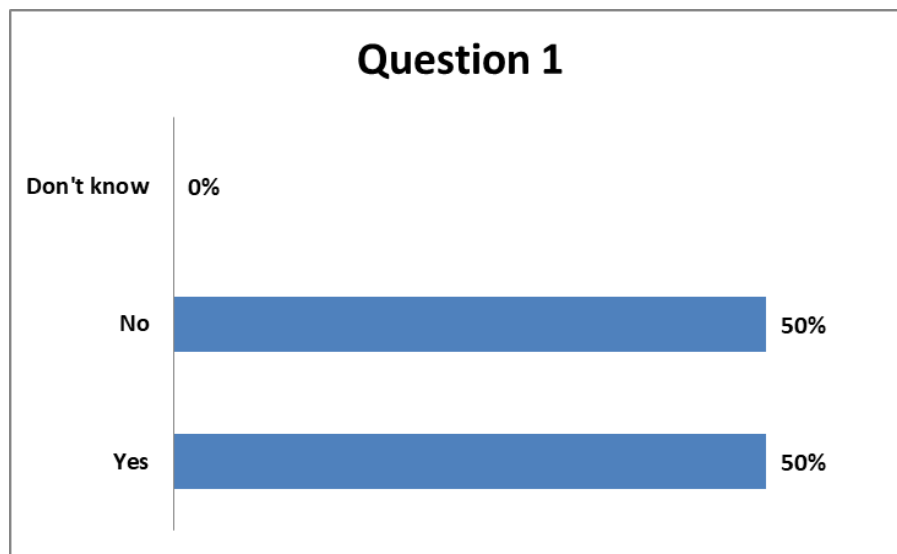
The 50% "No" response may indicate either pure absence of a specific Internal Charter (or By-laws) of the organisation or zero knowledge of an existing one (but hardly implemented). Since we know from before that it is a legal requirement all public hospitals to have (and do have) Internal Charters, the "No" response clearly indicates that said Charter has not been clearly and timely communicated to hospital officers and employees. Sufficient knowledge by the employees leads to better compliance with the rules, so that control and audit become easier and more efficient in a self-proclaimed way. Controls may only be imposed once a clear process is chartered; and audit may only be made possible against predetermined criteria and processes.

Question 2: To what extent do the IT systems of the hospital operate properly?

Question 2

Completely   0%

Sufficiently   50%

Neutral   33%

Insufficiently   17%

Not at all   0%
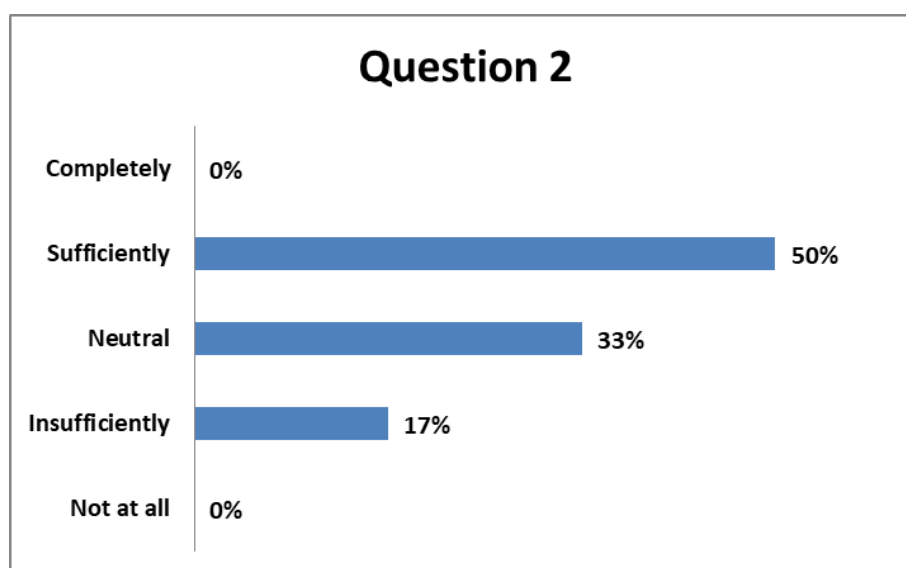
The aforementioned results clearly indicate that the term used "operate properly" was narrowly viewed, in the sense that the response signals whether the systems are functioning or break down regularly; although the installation cost of IT systems is usually high, the hospitals are hindered to fully benefit from it, as there are issues around proper maintenance, training of the particular users, regular system updates to keep up with technological progress etc. In addition, the fact that in most hospitals the computer systems do not "talk" to each other was obviously not taken into account in such response; the lack of inter-connectivity of the computer systems in the same hospital is widely known, but not really recognised as an actual problem.

Question 3: *How efficient do you think the system of programming work schedule is for:*

a) doctors? and b) nurses?
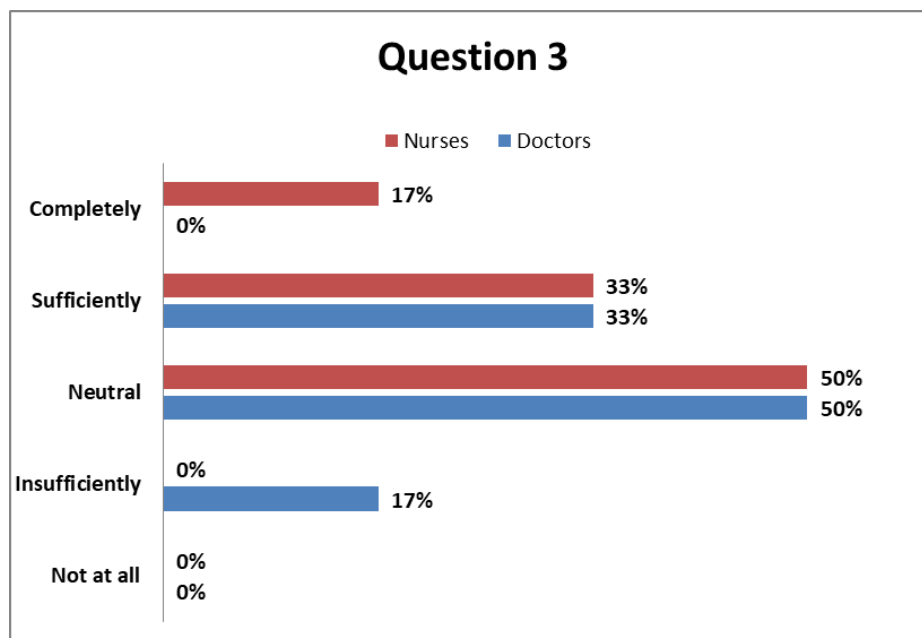
A combined quality/resources management question with a peculiar outcome. Most responses took a rather "defensive" stand on the issue, some stating that the nurses' work schedule is very efficient, while the doctors' isn't quite as such. The issue of "sleepless doctors" working extremely long hours that may compromise the quality of the healthcare services provided is not observed only in Greece. The overall issue here, though, is a reality check: limited resources by reasons of crisis ramifications emphatically increase the importance of efficiency planning on available resources.

Question 4: Would it be possible to increase the efficiency and effectiveness of doctors' and nurses' work, if they worked less hours or underwent less on-call time?
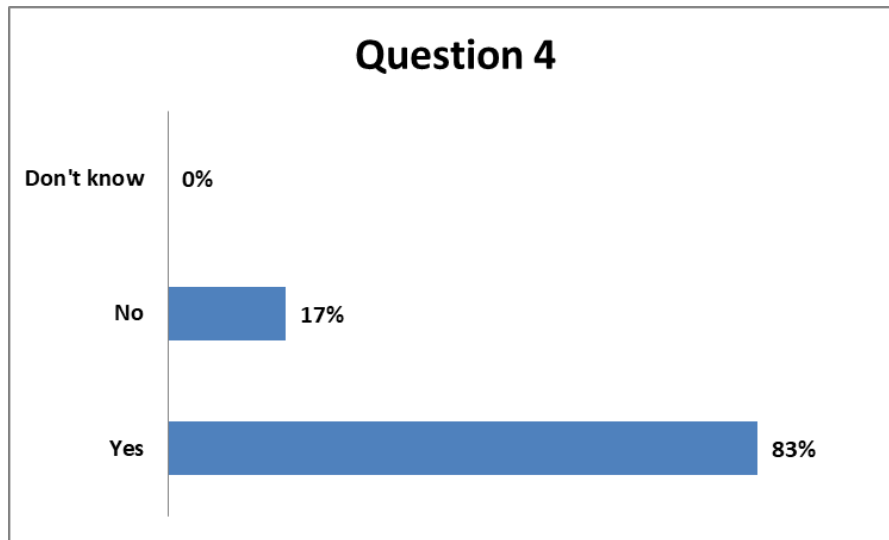
This response viewed in connection with the preceding one makes perfect sense: everybody acknowledges the need for amelioration on the schedule efficiency, except the percentage concluding on already having great efficiency – however, the truth is that, remarkable though it may seem to be, the population assessing great efficiency is different from the ones believing that no amelioration is conceivable.

Question 5: How often do employees attend training programs on their field of expertise?
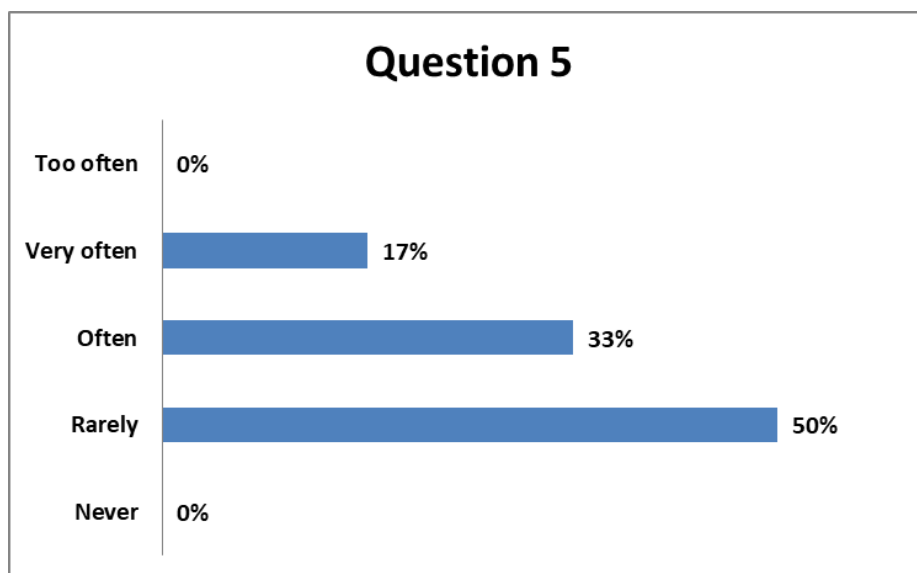
The "million-dollar question" on personnel training reveals the fact that limited resources and inability to hire new, dictate continuous education. The healthcare sector is an ever-changing one
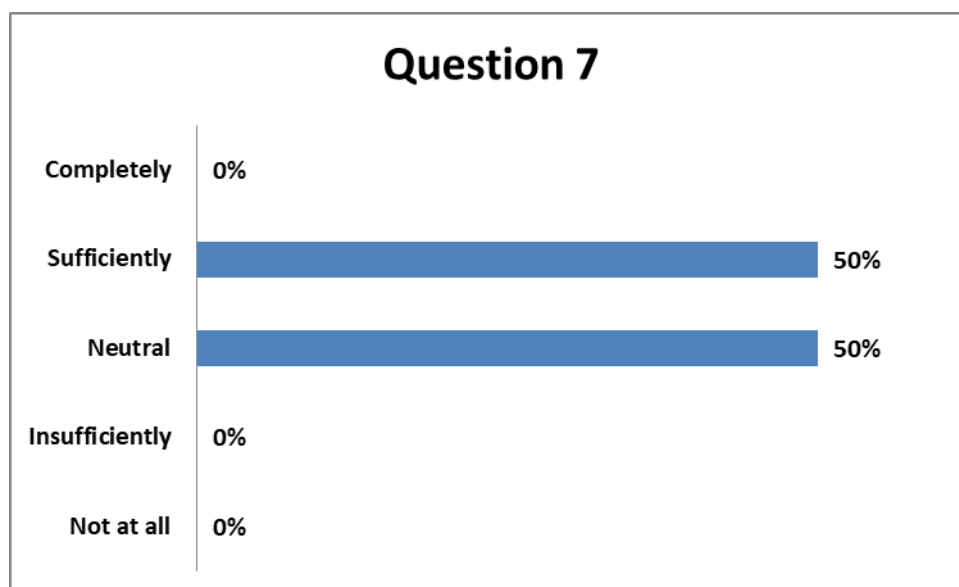
and the medical practices evolve fast; it is no secret that hospital employees need be trained accordingly.

Question 6: Is there an operating Intensive Care Unit in your hospital?

Question 6

| Category	Value
Don't know	0%
No	20%
Yes	80%
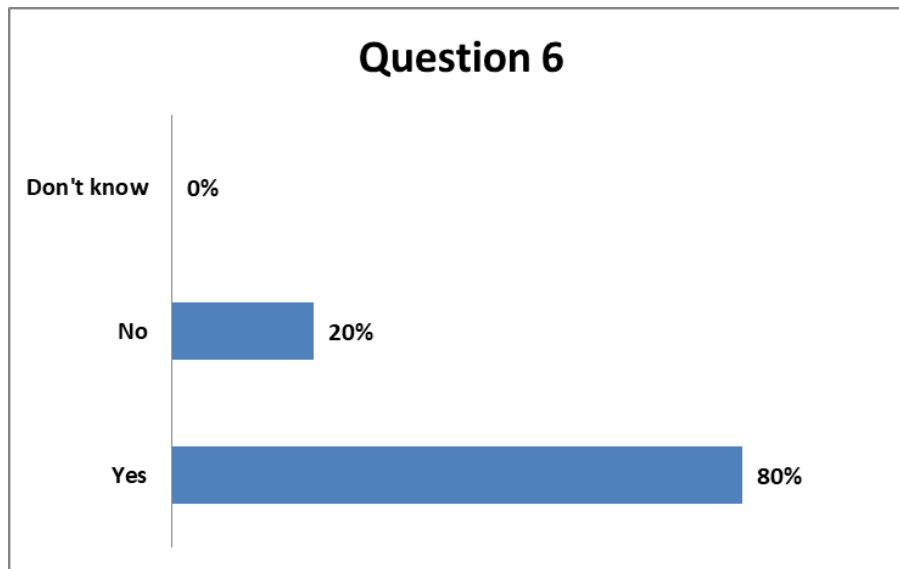
A pure "yes/no" question on a resources management issue (that was mainly included in the questionnaire in order to pave the way for the next one) revealed an unexpected (in terms of international medical practices) shortage, even on small scale.

Question 7: In case there is an operating Intensive Care Unit, is it fully equipped in order to provide all necessary healthcare services?

Question 7

Category	Value
Completely	0%
Sufficiently	50%
Neutral	50%
Insufficiently	0%
Not at all	0%

Half the responses indicate that the ICUs are not considered as equipped sufficiently to serve their mere purpose of existence. This may be due either to poor equipment maintenance or inadequate personnel available. If this response is common knowledge, it signals a serious cause of mistrust in the public health system, leading to a continuous downwards push in healthcare quality and personnel morale. Combined with the preceding question, it demonstrates an embarrassing situation far below first-world medical standards.

Question 8: How often are there deficiencies in medicines or other consumable products?
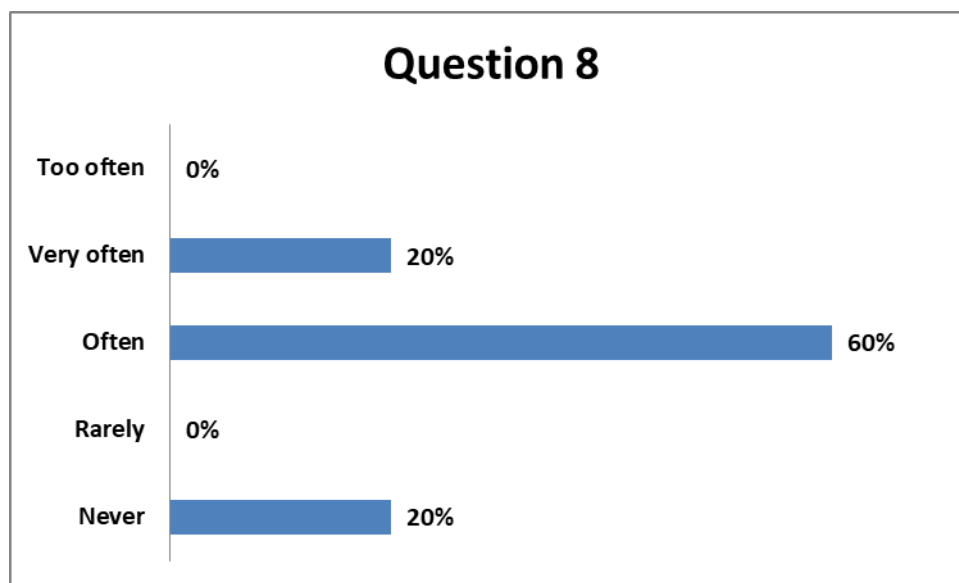
A detailed look at the causes of such response points at the bureaucracy and inability of the competent central public authority responsible to procure and pay for medicine. Public hospitals are often pushed to utilise an "emergency procedure", which results in much higher purchase prices, which in turn the hospitals are unable to pay in due course, a fact that is widely known etc. Corruption allegations arise around these issues.

Question 9: What is the percentage of use of generic drugs versus patented drugs?

A fact-finding question revealing a mosaic ranging from 30% to 70%, due to the "decentralised procurement" occurring in practice, which is to be seen in combination with the preceding question.

Question 10: How fast is the use of generics increasing?

Question 10

|	
Very quickly	0%
Quickly	0%
Normaly	80%
Slowly	20%
Not at all	0%
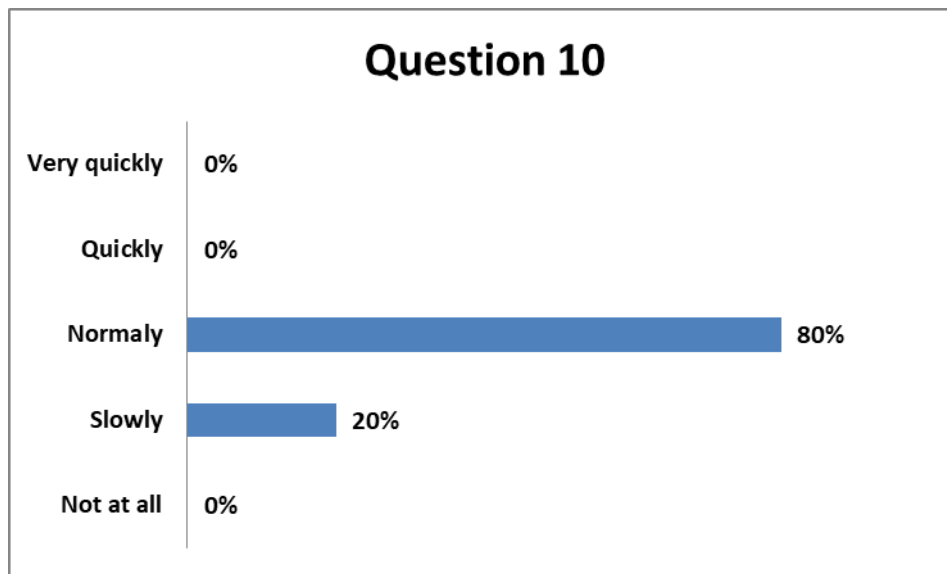
Responses in this question have been rendered practically indifferent because of the responses in the two preceding questions.

Question 11: Do you think that the procedures for admission and discharge of a patient could become more efficient?

Question 11

|	
Completely agree	0%
Agree	60%
Neutral	20%
Disagree	20%
Completely disagree	0%
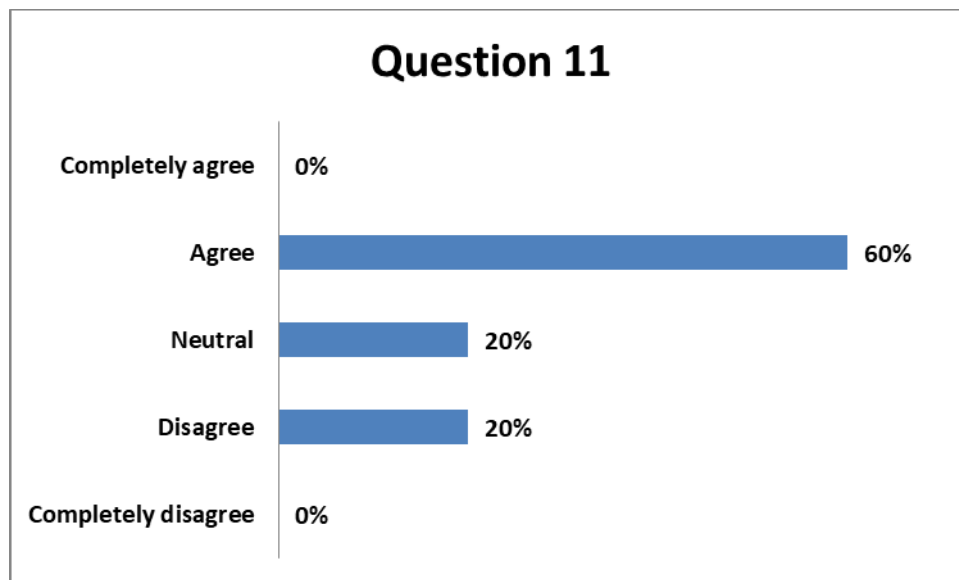
A pure control/audit question, aiming at unveiling the extent of the need for the advisory role of internal auditors. 60% responses assess a lot of margin available for amelioration on the current situation, equally large margins for meaningful services by internal auditors, who need to work on improving the efficiency and quality of these core sets of processes.

Question 12: Is there a questionnaire, for patient satisfaction of services provided in the hospital, being requested from every patient before hospital discharge?

Question 12

| Category	Percentage
Don't know	33%
No	50%
Yes	17%
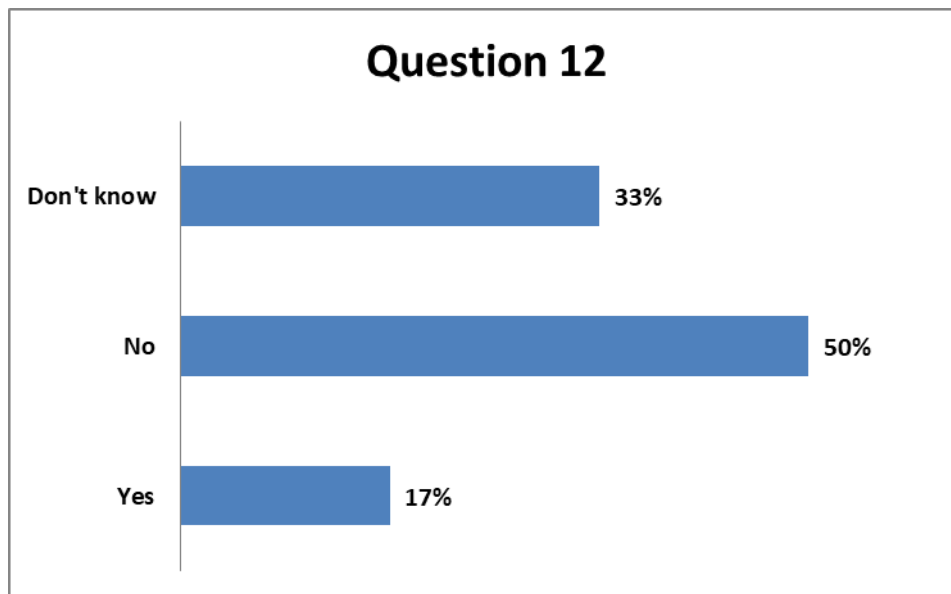
The public hospitals' Internal Charter does not expressly provide for a comprehensive procedure of citizen/patient evaluation assessment. Scarcely completed evaluation questionnaires often reveal important deficiencies in the hospitals' operation. This could represent crucial feedback to the internal auditor so as to proceed to targeted corrective actions.

Question 13: a) Are patient files archived for future reference? b) Is there a way to share patient files among public hospitals?

Question 13

■ b) ■ a)

| Category	b)	a)
Don't know	0%	0%
No	100%	17%
Yes	0%	83%
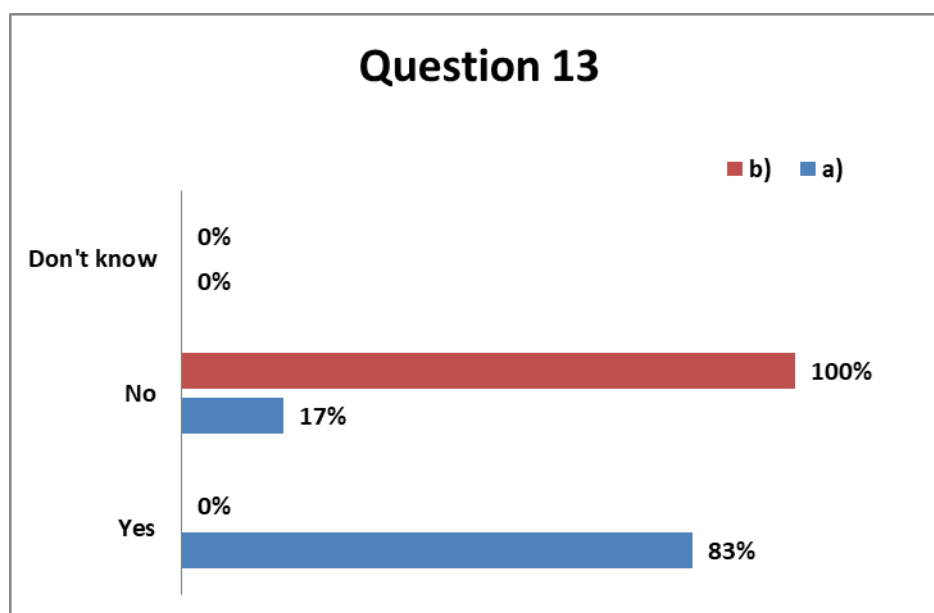
Sadly, the repeatedly proclaimed "uniform and unique electronic file" per patient still remains a proclamation at large. The inter-connectivity between hospitals is still sought after; each hospital keeps its own patient file per patient, not automatically shared with other hospitals or uploaded in a central platform.

Question 14: How often do patients hire private nurses?

Question 14

| Category	Percentage
Too often	0%
Very often	40%
Often	60%
Rarely	0%
Never	0%
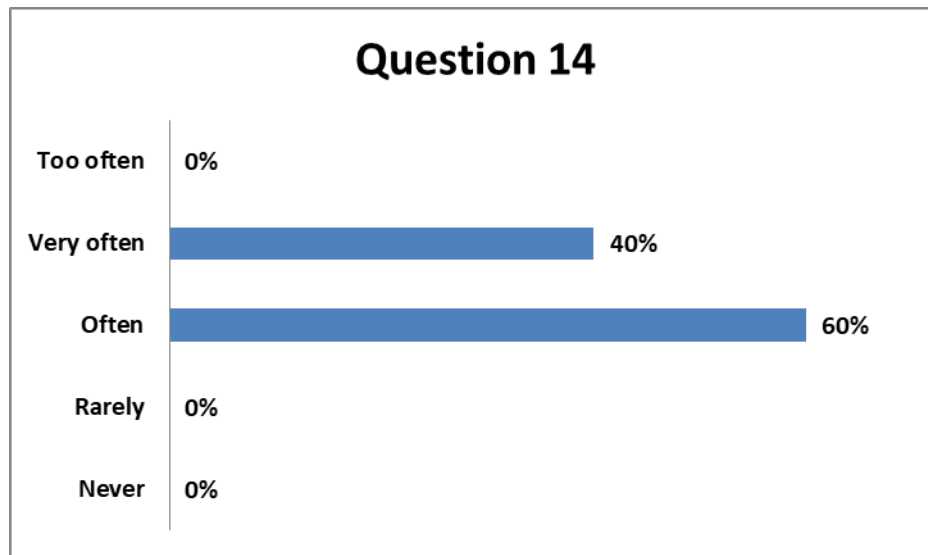
A clear determination of a need for more nurses, especially during the night shift. A fully private service in which no formal hospital procedure is involved, oddly happening in the operational framework of a public hospital.

Question 15: Is there an IT system for appointments schedule, which could be updated in real-time?

Question 15

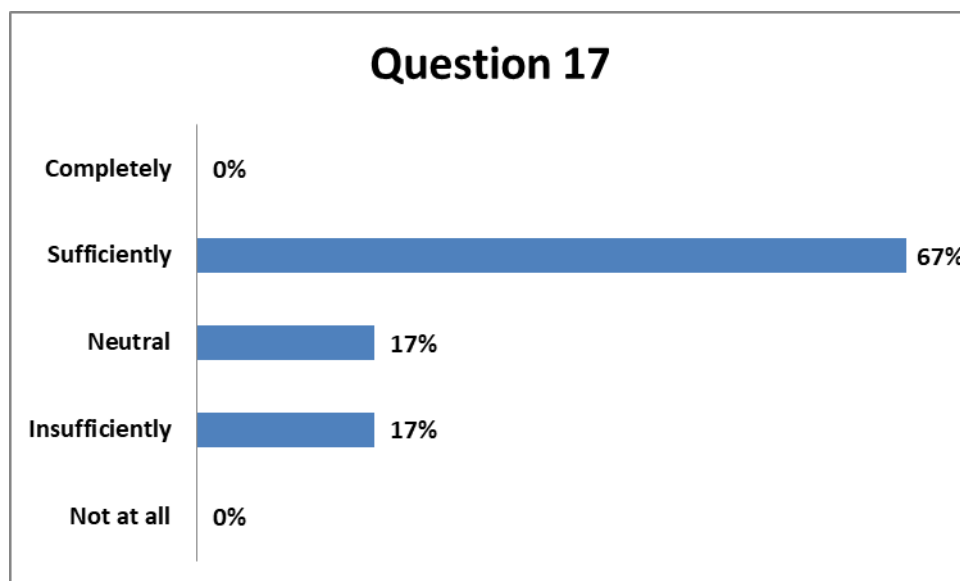| Category	Percentage
Don't know	0%
No	17%
Yes	83%
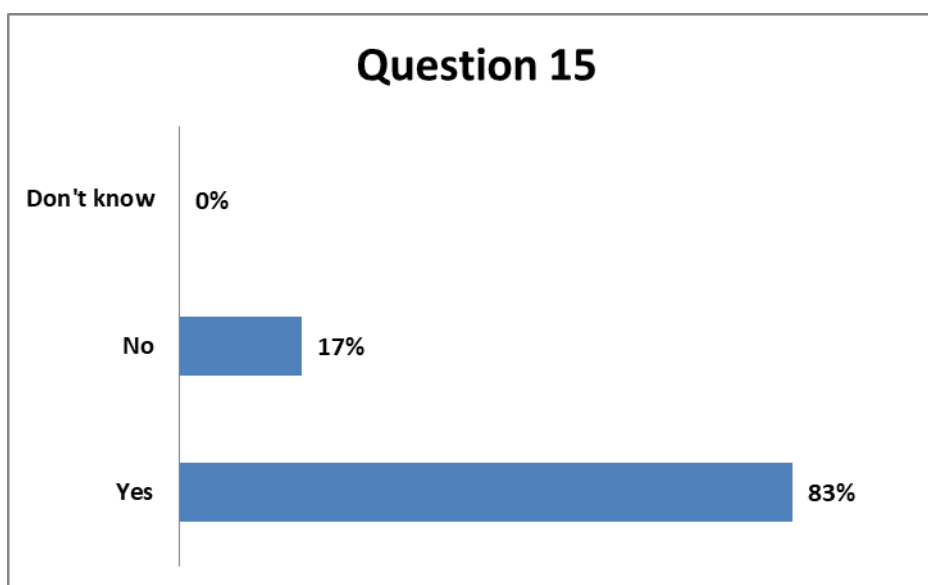
The existence of an electronic platform for scheduling appointments is noted, however it is common knowledge that the information is *not* entered in real time. The proper use of an IT system would facilitate the easier and more accurate monitoring of information, mitigate errors and overlaps and give way for statistical results and data analytics proven extremely capable of improving healthcare quality and minimising costs and deficiencies.

Question 16: To what extend is there a possibility for an employee to change the order of scheduled appointments in favour of others?

Question 16

|	
Completely	0%
Sufficiently	60%
Neutral	20%
Insufficiently	20%
Not at all	0%
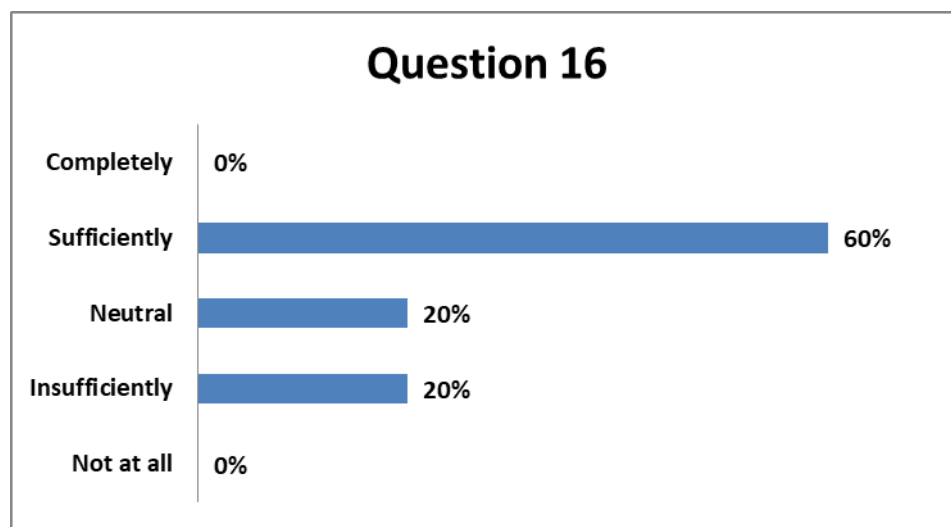
This is the proof that the information is not entered in real time, or may well be tampered; there are examples of scheduling entered into the system at the end of the shift (i.e. after all has already happened) or after repeated "rescheduling" by pen and paper. Significant lack of controls results to patients having unequal access to healthcare.

Question 17: Are there suitable premises for stocking drugs, health products and other consumable products?

Question 17

Response	Percentage
Completely	0%
Sufficiently	67%
Neutral	17%
Insufficiently	17%
Not at all	0%

The issue encompassed in this question is so highly sensitive that there should be zero tolerance to any response below "sufficiently", if not "completely". Sensitive products should be stored under specific conditions. Viewed together with previous questions on drug availability, it reveals a reality where there is a clear waste of resources, allegedly involving corruption.

Question 18: Are there internal controls in place for access of employees to medicines' or other products' stocks?

Question 18

Response	Percentage
Completely	0%
Sufficiently	20%
Neutral	60%
Insufficiently	20%
Not at all	0%
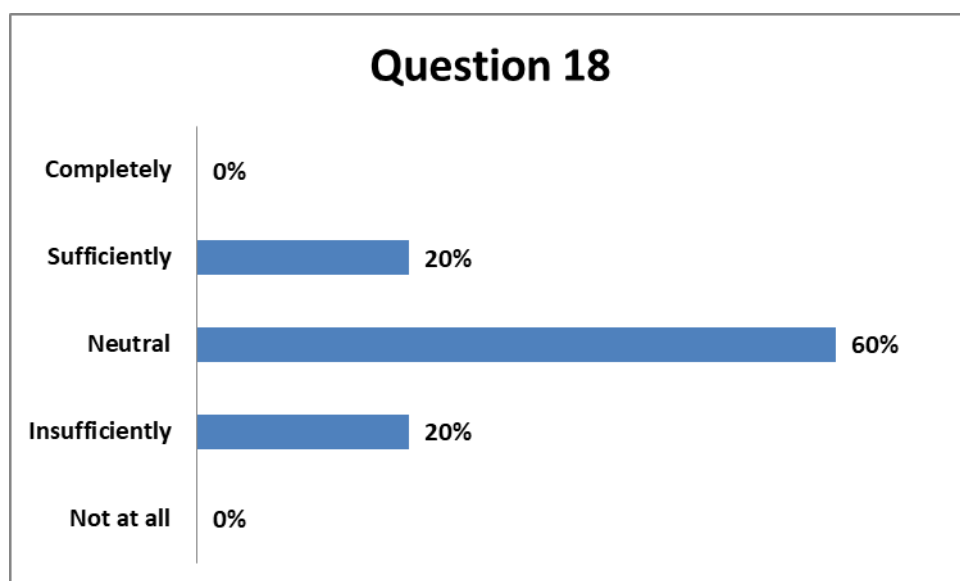
Neutral responses to a question in fact targeting a situation of many scandals involving "lost" medicine in public hospitals. A clear demonstration of unwillingness to shake the stagnant waters,

although there is perfect cognisance of the fact. Many incidents of stolen medicine and other health products and material appear in published audit reports by the Health Services Inspectors Body (SEYYP). Medical supplies rest in places where there is no restricted access possibility, or personnel whose job description is not related to handling such material have unlimited access to it etc., creating an opportunity for fraud. Clear margin for internal audit work.

Question 19: In case of theft, are there adequate internal controls in place in order to detect such an event?

Question 19

|	
Don't know	0%
No	40%
Yes	60%
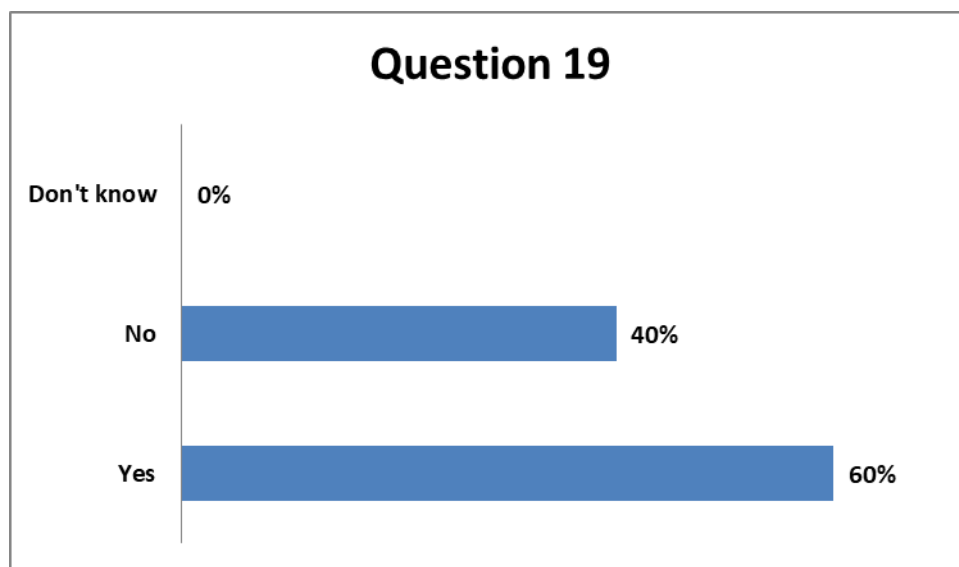
Almost balanced responses indicating the existence of an often rigid control process formality, which is seldom triggered. If proper electronic control mechanisms were in place, such issues would be eliminated. In combination with the two preceding questions, the need for internal controls minimising the consequent theft of medical supplies is clearly demonstrated.

Question 20: Is there a predetermined minimum and maximum level of inventories?

Question 20

Completely	0%
Sufficiently	0%
Neutral	80%
Insufficiently	20%
Not at all	0%
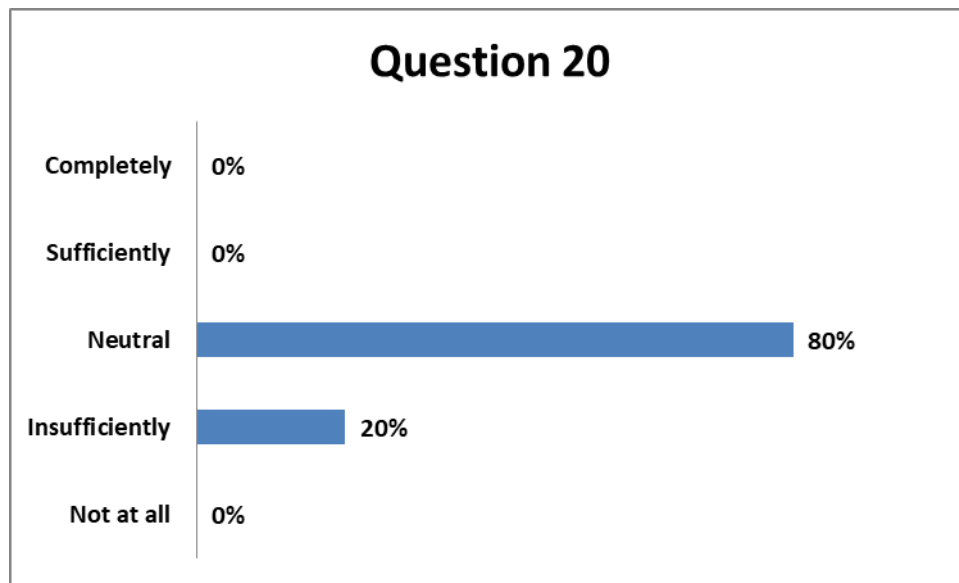
A "luxury" question following the preceding ones, getting understandably "neutral" responses, aimed both as a check of truth regarding the above questions and as a sense of measurement for a self-evident need: setting an upper limit for each product would prevent excessive orders and expiration of medicines, a waste of resources; setting a lower limit for inventory ensures no deficiencies, which would seriously compromise the quality of healthcare services delivered in the framework of a public hospital.

Question 21: Is there an independent budgeting department?

Question 21

Don't know	0%
No	40%
Yes	60%
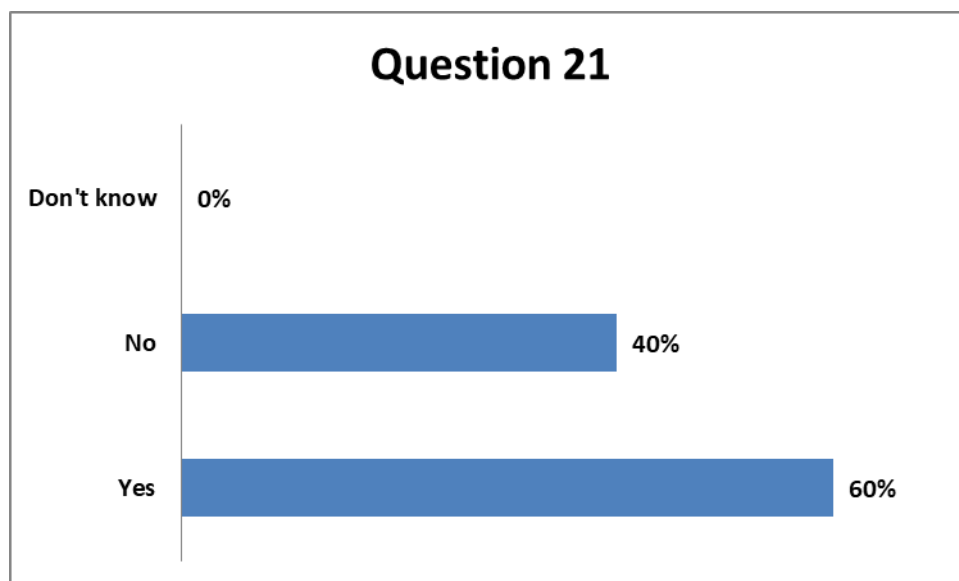
The almost balanced responses indicate the notional confusion around the term "independent", as well as on the mere existence of a department drafting a budget according to professional standards.

It is common knowledge that the usual process involves each individual department making its own budget based on prior usage/needs and adding "a little bit" so that there is a comfort cushion in case of budget cuts in the next round. The hospital budget is usually the grotesque aggregate of such individual department budgets. Viewed together with the issues raised by the questions addressing medical supplies adequacy, one has the full picture of resources misappropriation often occurring.

Question 22: With regard to the Revenue recognition, does a review and characterisation of revenue documents take place on a daily basis?
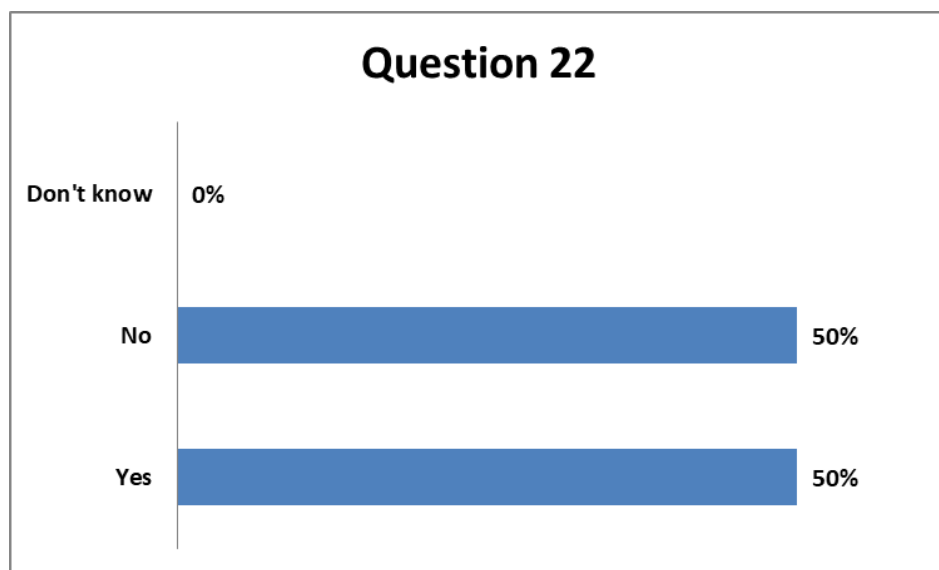

A good assumption would be that half of the responses addressed the first part of the question and the other half the second part. The confusion in responding mirrors the confusion in what would constitute income for a public healthcare unit.

Question 23: *Are there internal controls in place for the process of monitoring and managing expenses until the stage of payments?*
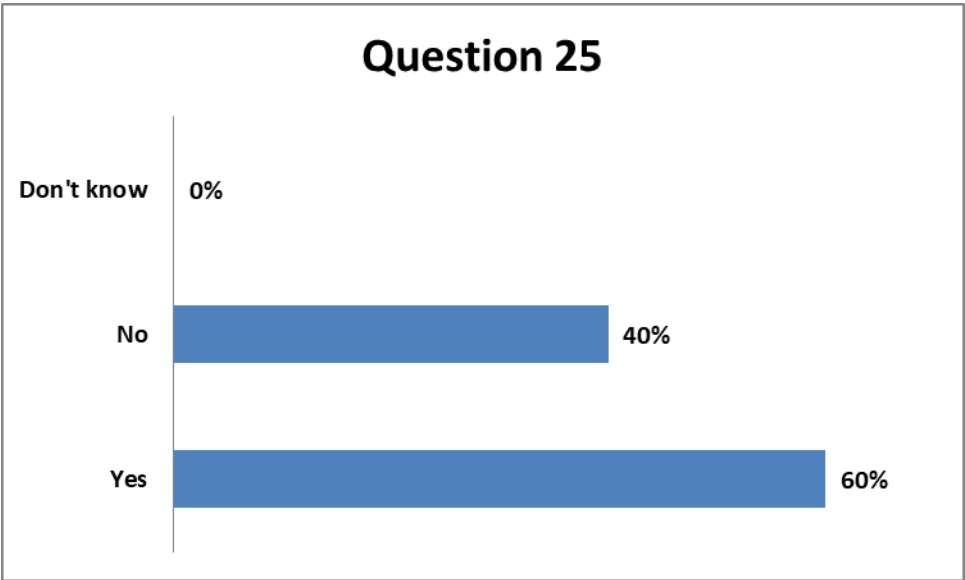
Question 23

Response	Percentage
Don't know	20%
No	20%
Yes	60%
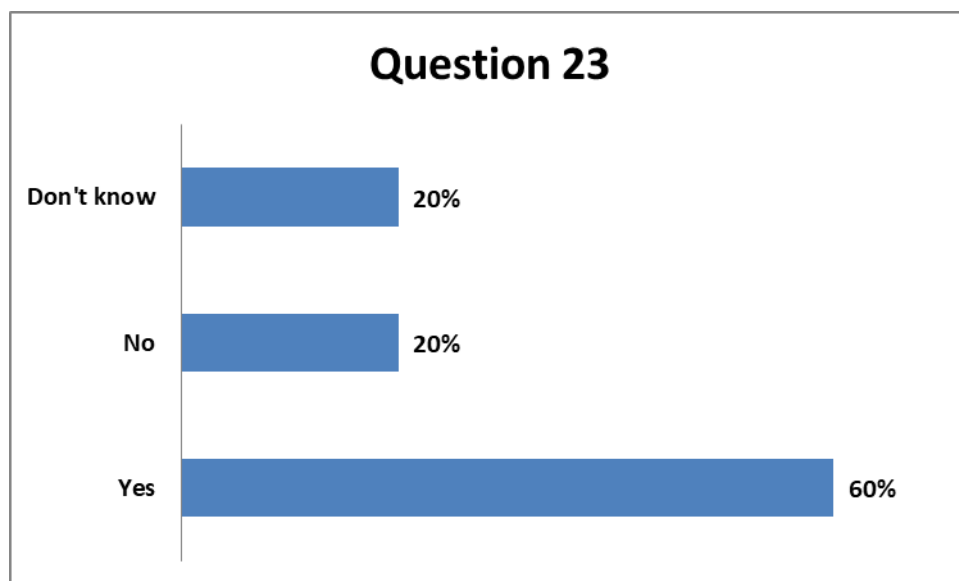
Peculiarly, some of the population responded "Don't know" of this particularly sensitive step in the expenses approval and payment process in the context of a public healthcare unit. Individual comments noted in the space provided tend to minimise the emphasis of the "Yes" response given, clarifying that the adequacy of the controls is not always for granted.

Question 24: *In regard to the payment of expenditures, how often does a check take place for the existence of all the necessary supporting documentation of each transaction?*

Question 24

Response	Percentage
Too often	20%
Very often	0%
Often	80%
Rarely	0%
Never	0%
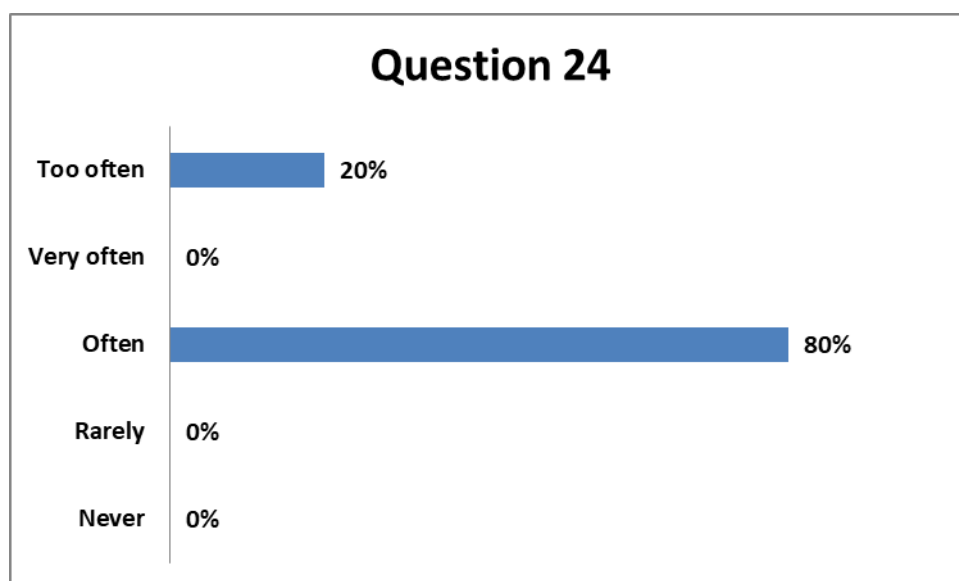
This clearly demonstrates the "form over substance" of the bureaucracy around the payment of expenses procedures. Ample space for internal audit work, by empowering the competent employees while at the same time noting the responsibility such position is accompanied with.

Question 25: Does an audit of the payment schedule for the obligations take place, based on the order in which they are planned to be settled?

Question 25

|	
Don't know	0%
No	40%
Yes	60%

There are instances of deviating from due payment order and acting in favour of specific suppliers. Proper controls put in place would prevent any favouritism distorting equality among business competitors.

Question 26: *Is there a structured management of the Hospital's assets, which will provide ways for exploiting them and ways for reducing risks (eg. insurance policies) as well?*

Question 26

Completely	0%
Sufficiently	0%
Neutral	40%
Insufficiently	40%
Not at all	20%
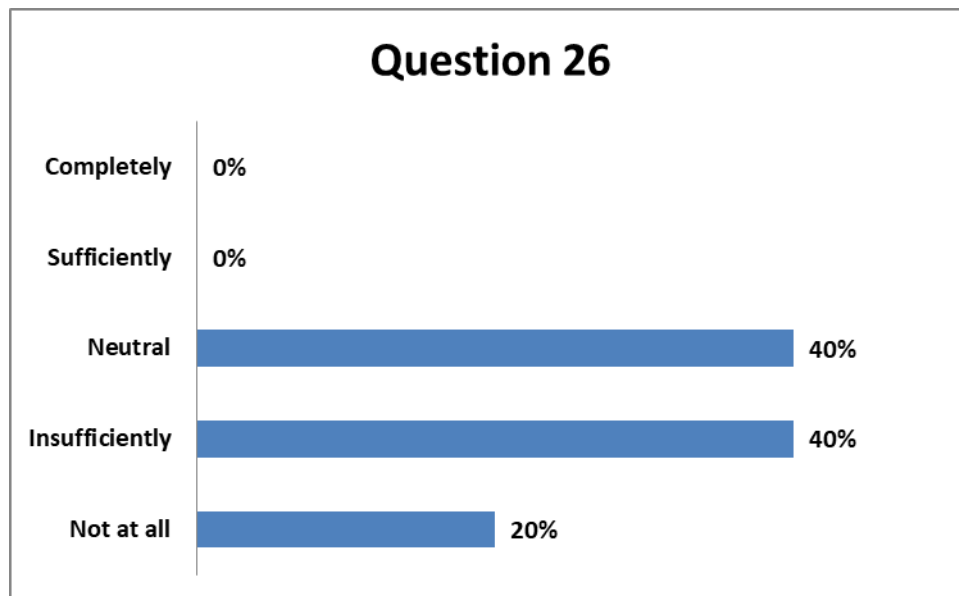
A clear demonstration of the poor management of a public institution's assets. To state a usual real-life example, a building donated to a public hospital creates costs, but may well be an income source if properly managed following an efficient plan to this end.

Question 27: *How often is Management being debriefed about the hospital's financial position?*

Question 27

Too often	0%
Very often	60%
Often	40%
Rarely	0%
Never	0%
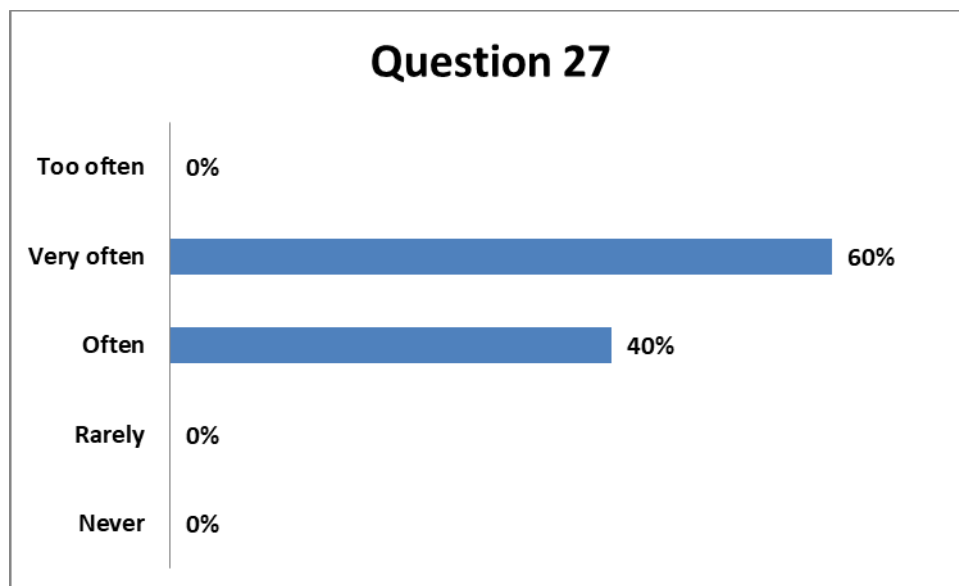
Surprisingly, the public hospital management seems to be in full knowledge of the situation or at least the information needed is available at their request. Further to the rest of the data available

through the questionnaire, the quality of the information provided should be questionable, if the rest of the responses are deemed accurate.

Question 28: *Are administrative employees and, in particular the accountants, clearly informed of the procedures which need to be implemented, as well as for the objectives of their department? Is there a clear allocation of responsibilities?*
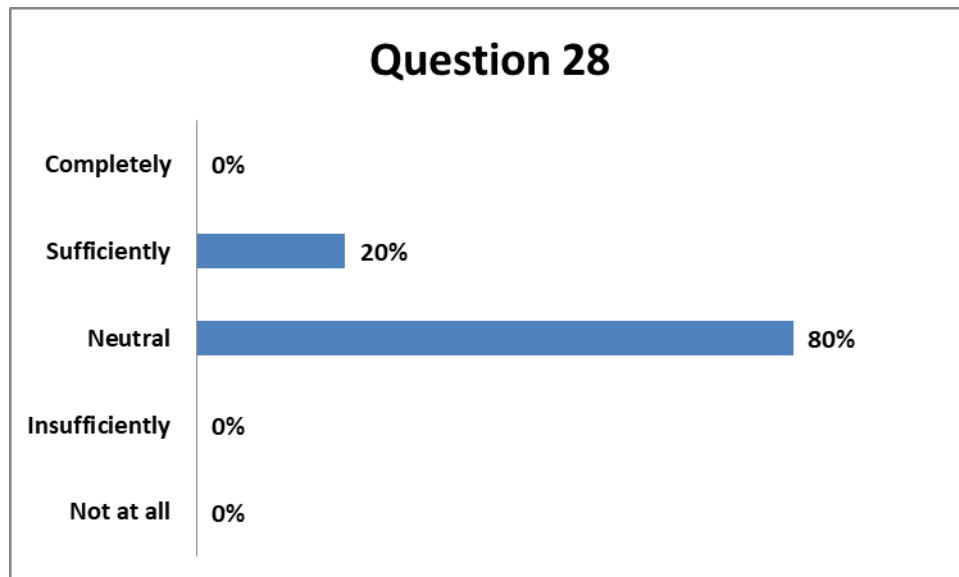

The fact that the employees of a pivotal department have not been clearly informed of their roles and responsibilities is alarming by itself. Sufficient knowledge by the employees leads to better compliance with the rules, so that control and audit become easier and more efficient. Once again, controls may only be imposed once a clear process is chartered; and audit may only be made possible against predetermined criteria and processes.

Question 29: *Are there positions for internal auditors according to the hospital's organisational charter?*

Question 29

Don't know	0%
No	83%
Yes	17%
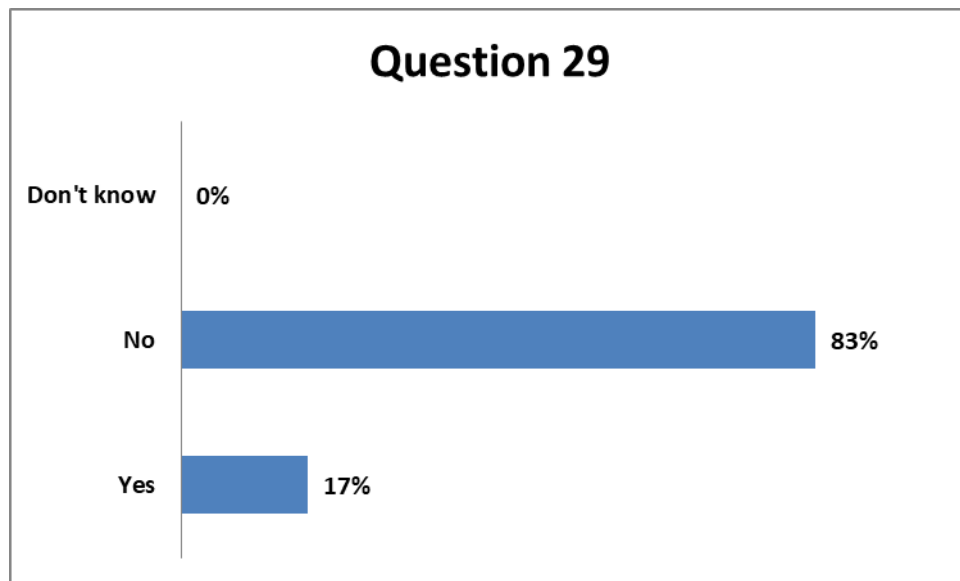
A trap-question. The law does not provide for such positions. The question aimed at assessing the knowledge of the population on the subject.

Question 30: *Is there a provision about hiring internal auditors or creating new positions for internal auditors?*

Question 30

Don't know	17%
No	33%
Yes	50%
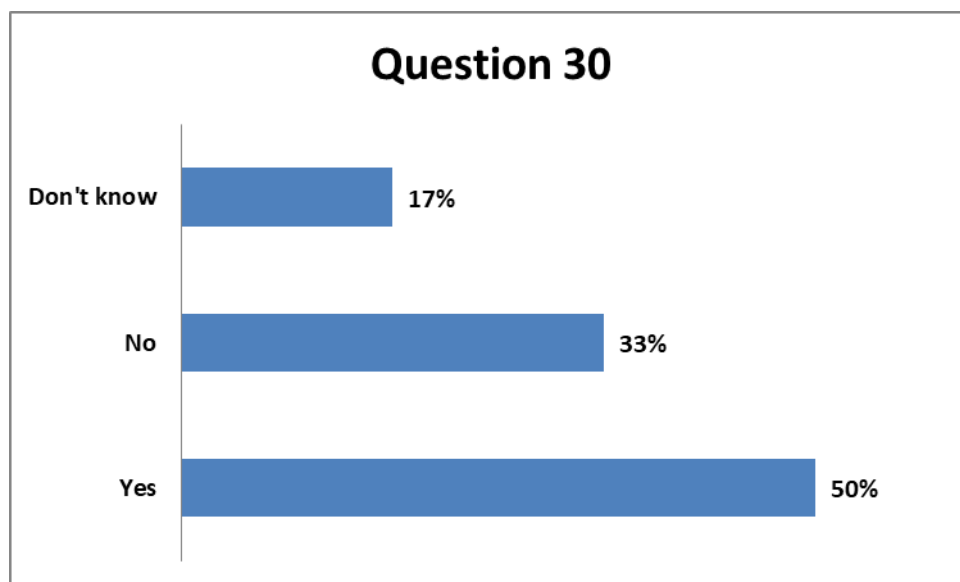
A question aiming at covertly assessing the aspirations of the population on the subject of internal audit.

H. Concluding remarks – suggestions – forward looking steps

An overview of the present stage situation in the Greek public administration with regards to internal control and audit clearly demonstrates that there is a long distance between the point where it finds itself today and the point it should desirably reach. Not surprisingly, this is also evident when juxtaposing the relevant Greek legislative provisions currently in effect with the internationally accepted standards.

Everyday practice in the public healthcare units shows that there are significant shortcomings in, or total absence of controls in key risk areas. Such absence or deficiencies give space for irregularities, wrongful actions and human mistakes; moreover, even when such actions and/or mistakes occur, they may not be detected in a timely manner, in order to be corrected, for exactly the same reason. All of this results in ineffective processes and, finally, to inefficient (or even inadequate) delivery of healthcare services to patients.

Furthermore, a fact initially viewed as a paradox considering that all public hospitals operate under the same applicable laws and regulations, there are remarkable differences on internal control and audit issues noted between different hospitals. This finding is an indicator of two factors, first that the applicable legislation itself is quite vague, leaving ample space to hospital governors to apply things very differently, and second that the mere enforceability of such legislation cannot be taken for granted.

Last but not least of the overarching findings, later-stage internal audits show that issues revealed by previous internal audit reports had not been addressed, and suggestions/points for corrective action previously assessed had not been adopted. This follows and re-confirms the pattern of questionable enforceability of the whole internal control and audit system on public healthcare units in Greece.

To move decisively out of the maze, the global norm is to follow established best practices and lean towards the paradigm created by other countries found in a similar stage of development in the recent past. However, there is no guarantee that what may work in other places is the perfect solution for this country.

Instead of urging the Greek public healthcare units to raise themselves to an acceptable level of compliance with the international internal audit standards, the case may be that the Greek legislator should rather be called upon to "adjust" the international internal audit standards to the present-stage needs of the Greek public administration. This could create the necessary conditions for an integrated internal audit framework tailored to serve such particular needs at the given time and would also foster the development on such issues *to the extent possible*.

As a first step, action should be taken at the central level of competence: the Ministry of Health could assess the high risk areas of public healthcare units, as well as the extent of said risks. Said risks should then be prioritised, given the scarcity or available resources; at commencement, one should accept the fact that everything cannot be audited at this initial stage.

The next notional step should involve management decisions on risk appetite, meaning that it is expected they decide which risks they are willing to take, which ones they would try to control or eliminate and to what extent.

Then, an initial-stage audit plan should be developed, focusing on placing the necessary controls in order to address the highest risks. This could, in a timely manner, reduce the likelihood of fraud or errors occurring, or at least reduce the risk of such acts not be duly detected. Towards this direction, the role of the internal auditors would be rather advisory at this initial stage (considering the status of the Greek public administration on the issues); the auditing nature of their work would have little substance to address.

At a later stage, when the internal control and audit culture would be deeper embedded in the public healthcare units, a more methodical and effective approach would be conceivable, including internal audits planned on an annual basis. An annual audit plan, designed according to international standards, would be feasible at such later stage in time. Emphasis should be given in the execution element of said annual audit plan, rather than in its perfect design, since the poor execution is a known weakness in the Greek public administration that should be tackled first and foremost, giving a clear signal of minimal to zero tolerance to non-compliance. At this stage, it would probably still be too early and too ambitious to vouch for a full-fledged audit (as per international standards).

Next stage in the effort should target the continuity element, in the sense that the annual audit plan should be followed by the next annual audit plan, such plans executed on a continuous basis. Every year, the observations made during the past audit period would be considered towards ameliorating the design of the next audit plan, updating it to address the current needs and increasing its efficiency. As a result, the internal control and audit-friendly culture would be continuously re-confirmed, the public healthcare unit operations would be gradually rationalised, better cost-efficiency would be achieved and the quality of healthcare services rendered to patients would consequently increase.

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