

-RESEARCH PAPER-

EVALUATION OF THE EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEM IN HOSPITAL BUSINESSES: A CASE STUDY

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Abstract

Internal control is a system aimed at acquiring reliability of financial reporting, evaluating the compliance of operations applied for achieving the operational and strategic objectives of the business, and securing the compliance of the business with the laws and regulations. Hospital businesses should establish an effective internal control system and test the adequacy of it in order to adapt to the changing market conditions and achieve their goals. In this study, it is aimed at examining the processes of a private hospital according to the components of the COSO (The Committee of Sponsoring Organizations of the Treadway Commission) internal control model and evaluating the effectiveness of these processes. The secondary data is obtained by field observations and interviews for the case study. Finally, the data obtained from interview and observation methods were grouped according to COSO internal control components, analyzed and interpreted. In this study, it was determined that the hospital does not have an effective internal control system. The hospital does not have control procedures covering all processes. Since there is no internal audit unit in the hospital, it prevents monitoring the effectiveness of these processes.

Keywords: *Internal Control, COSO, Private Hospital.*

JEL Codes: *M10, M40, M42.*

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HASTANE İŞLETMELERİNDE İÇ KONTROL SİSTEMİNİN ETKİNLİĞİNİN DEĞERLENDİRİLMESİ: BİR VAKA ÇALIŞMASI²

Öz

İç kontrol, finansal raporlamanın güvenilirliğini, işletmenin operasyonel ve stratejik amaçlarına ulaşmak için uygulanan işlemlerin değerlendirmesini, işletmenin yasa ve yönetmeliklere uyumunu amaçlayan bir sistemdir. Hastane işletmeleri değişen piyasa koşullarına uyum sağlamak, hedeflerine ulaşabilmek için etkin iç kontrol sistemi kurmalı ve bu sistemin yeterliliğini test etmelidir. Bu çalışmada, özel bir hastanenin süreçlerinin COSO (The Committee of Sponsoring Organizations of the Treadway Commission) iç kontrol modelinin bileşenlerine göre incelenmesi ve bu süreçlerin etkinliğinin değerlendirilmesi amaçlanmıştır. Vaka çalışması için görüşme ve gözlem yöntemlerinden elde edilen ikincil veriler kullanılmıştır. Bu veriler, COSO iç kontrol modelinin bileşenlerine göre gruplandırılmış, analiz edilmiş ve yorumlanmıştır. Araştırmada hastanenin etkin bir iç kontrol sistemine sahip olmadığı belirlenmiştir. Hastanenin tüm süreçlerini kapsayan kontrol prosedürleri yoktur. Hastanede iç denetim birimi olmadığı için, süreçlerin etkinliğinin kontrolü sağlanamamaktadır.

Anahtar Kelimeler: İç Kontrol, COSO, Özel Hastane.

JEL Codes: M10, M40, M42.

“This study has been prepared in accordance with Research and Publication Ethics.”

1. INTRODUCTION

Nowadays, the employment of health services, which is one of the important indicators of socio-economic development, has become increasingly important. Technological developments in the health sector and the increment in demand for health services have brought this sector to the forefront in the economic field by making the sector to which the most resource is allocated (Özgülbaş et al., 2008: 120). Private hospitals in the health system are complex structures where services such as hotel services, polyclinic services, inpatient services, laboratory, visualization services, operating room services, cleaning services are provided (Karagöz and Yıldız, 2015: 377). In order to successfully manage this complex structure, the basic principles and fundamentals of the internal control system must be established and the adequacy of this system must be tested.

² Genişletilmiş Türkçe Özet, İngilizce makalenin aşağısında yer almaktadır.

The globally accepted COSO internal control model provides guidance on the effectiveness and efficiency of business operations, reliability of reporting, and compliance with existing laws and regulations. The five interrelated components and seventeen principles in this model set the principles for the establishment and effectiveness of the system (COSO Framework 2013).

The purpose of this study is to examine the processes of a private hospital according to the components of the COSO internal control model and to evaluate the effectiveness of these processes. With the case included in the study, medical and non-medical service processes of a private hospital enterprise operating in the Thrace region were discussed. The hospital's processes were evaluated according to the control environment, risk assessment, control activities, information and communication, and monitoring components included in the COSO internal control model. When the literature is examined, there are studies using the COSO internal control model to determine the effectiveness of the internal control system of hospital enterprises, but in this study, the case study method focused on how and why the control procedures related to hospital processes are affected, and in this context, the laws and regulations affecting the sector were included in the study.

1.1. Conceptual Framework

There are three globally recognized internal control frameworks adopted by independent auditors, internal auditors and management to assess the appropriateness and effectiveness of the internal control structure of organizations. These are: COSO in USA, COCO in Canada, Turnbull in England (Rahim et al., 2018: 139). The common feature of these models is that they provide guidance for evaluating the effectiveness of internal control.

The COCO model was published by the Canadian Institute of Certified Public Accountants. In this model, there are various criteria to measure the effectiveness of the internal control system of the institution (Bakkal and Kasımoğlu, 2012: 5). The model has accepted management activities such as goal setting, strategic management and corrective measures as a part of the control concept (Köse and Bekçi, 2017: 18). In the Turnbull model developed in the UK, the existence of independent boards and principles of an effective internal control structure come to the forefront. This model explains the philosophy of internal control instead of providing guidance for establishing an effective internal control system (Türedi et al., 2015: 117).

Among these models, COSO is the focus of the study since the "Internal Control - Integrated Framework" model is the predominantly and generally accepted model (Topçu, 2013: 10; Can and Şakrak, 2018: 47).

COSO was founded in 1985 to improve corporate governance, design corporate risk management to reduce fraud in organizations, and provide a comprehensive framework and guidance for internal control and fraud prevention. The "integrated framework for internal control"

guide prepared by the internal control working group established within the Commission was published in 1992 and this guide was updated in 2013 (COSO Framework 2013: 1-2). COSO has made the internationally accepted definition of “internal control”. According to the Commission, “internal control is a process designed by the company’s board of directors, senior management and other personnel to provide reasonable assurance on the effectiveness and efficiency of business operations, reliability of reporting and compliance with relevant laws”. In order to establish the internal control process and ensure its effectiveness, there must be components in the integrated framework. Components in the COSO model include control environment, risk assessment, control activities, information & communication and monitoring (COSO Framework 2013: 3).

The control environment is the first step that affects the overall quality of internal control, ensures the internal control discipline and forms the basis of the system. The control environment is affected by the business ethics and philosophy of the top management, personnel policies, distribution of authority and responsibilities, control methods, and the care shown in activities. Therefore, an effective control environment strengthens or weakens other factors (Türedi et al., 2014: 144; Öndeş and Çiftçi, 2020: 64).

Risk assessment refers to the definition of all possible events that may be encountered in achieving the goals and objectives of the businesses. Risk management covers the stages of determining the risk strategy, identifying and evaluating the risks, determining the answers to the risks, reviewing, monitoring and reporting the risks (Türedi and Koban, 2016: 160).

Control activities are policies and procedures put into practice to manage risks and achieve the goals of the enterprise. Control activities constitute of elements such as delegation of authority and approval procedures, separation of duties principle, controls regarding the effective use of assets and resources, confirmations, reconciliations, performance criteria, processes related to activities and surveillance (Akyel, 2010: 87).

Information and communication is an indispensable element for the control processes of businesses. Because businesses need to transform the data they obtain from their internal and external environments into information and transfer this information to their stakeholders accurately, reliably and on time (Köse and Bekçi, 2017: 17). For this, it is important to ensure the uninterrupted flow of information between the internal and external information network that supports the internal control system (AICPA, 2017: 127).

Monitoring is the continuous review and evaluation of the internal control system by the management in order to determine whether it works for the purpose and to make the necessary corrections and changes. In the evaluations, the opinions of the managers, the requests and complaints of the person and / or the institution, and the reports prepared as a result of the internal audit and independent audit are taken into consideration (Bozkurt, 2010: 135).

For the COSO model to be successful, all actors involved in internal control processes must fully fulfill their responsibilities. Although the main responsibility for the operation of the system is assigned to the top and middle management, financial affairs and accounting personnel, department managers, internal auditors, board of directors and independent auditors are also responsible (Adiloğlu, 2011: 108). Internal auditors in particular have an important role in monitoring the effectiveness of the internal control system. In order to take corrective actions in the system, they identify weaknesses of internal control and report them to senior management in a timely manner. Internal audit assists the senior management in developing internal control procedures regarding the efficiency of operations, reporting reliability and compliance with the legislation (Mazza and Azzali, 2015: 160; Chang et al., 2019: 17).

The person who will objectively evaluate the effectiveness of the internal control system is the independent auditor. The independent auditor determines the effectiveness of the system by taking into account the control environment, accounting system, control procedures, risk assessment processes and internal control perception of management and personnel. As a result of this evaluation, it both determines the audit risk it will encounter and offers solutions to the deficiencies of the system (Aytaç and Çabuk, 2020: 359). Performing the independent audit by four major companies (Deloitte, PwC, E&Y, KPMG) may affect the quality of internal control. As these companies have greater independence due to their large client portfolio, they can put more pressure on the company they are auditing. In a study conducted in the health sector on this subject, it was determined that companies audited by the supervisors of the big four have higher internal control quality. Wealth with high goodwill and auditors' visions are effective in quality auditing (Chalmers et al. 2019: 88).

The COSO model ensures that the internal control system of the enterprise focuses on three different goals. The first is about operational goals. This goal refers to ensuring efficiency and productivity in the activities of the enterprise, reaching its financial performance targets and protecting it from asset losses. The second concerns the reliability of reporting. It means the reliable production of financial and non-financial information of the company and their usage in the decision-making mechanism. The third is to ensure the ability of the enterprise to comply with existing laws and regulations (Koutoupis and Pappa, 2018: 92).

In order for the business to achieve the above-mentioned goals, it must perform management and accounting controls. Managerial controls are the methods and tools used to help the business achieve its goals on a continuous basis. These controls include statistical evaluations, time and motion studies, activity reports, personnel training programs and quality controls. Accounting control refers to all procedures and methods that will ensure the protection of assets and the reliability of financial information. These controls include authorization and approval, physical controls on assets, and a clear definition of the powers and responsibilities of accounting and internal audit (Sabuncu, 2017: 168; Yeşil, 2019: 6).

1.2. Literature

There are studies on the COSO internal control model in the international and national literature. Some of the studies on this subject are summarized below.

Karagiorgos et al. (2010) examined the internal control system of Greek banks and stated that the effectiveness of internal audit has a vital role in the success of businesses. Akbulut (2012) examined the effectiveness of the internal control system of sunflower oil enterprises operating in the Thrace region and it was determined that the enterprises do not have an effective system because they do not give the necessary importance to the internal control system.

Bakkal and Kasımoğlu (2012) discussed the COSO and COCO internal control models comparatively. In the study, it was stated that the COCO model looks at the control system with a more comprehensive and forward-looking perspective than the COSO model, and the COCO model focuses on behavioral values. Frazer (2012) examined the internal control system of small-scale restaurant businesses in New York and stated that the effectiveness of the internal control system has a positive effect on the sustainability and profitability of the businesses.

Elmas and Kurnaz (2013) examined the effectiveness of the internal control system of factoring companies that have an operating license by the Banking Regulation and Supervision Board and as a result found that the current practices were not at the desired level. Topçu (2013) examined the applicability of the COSO internal control system in the public provincial organization. In the study, it was determined that the control environment was not at a sufficient level, the central organization did not monitor the provincial organization adequately, the risk could not be managed effectively, and as a result, it was stated that the internal control philosophy in public administration was not comprehend.

Ceyhan and Apan (2014) examined the level of the relationship between COSO internal control dimensions using a hospital survey method. In the study, a positive relationship was determined among all the factors of “control activities, monitoring, risk assessment, organizational structure and communication efficiency”.

Kızıltuğ (2015) used a case study method to determine the strengths and weaknesses of the internal control system of a private hospital. In the research, the existence of an effective internal control system of the hospital was determined. Doğan and Burgazlıoğlu (2015) examined the internal control system of a private hospital according to the case study method. In the research, although there are some deficiencies in the internal control system of the hospital, it has been determined that the control of the processes is effective.

Türedi et al. (2015) compared the COSO internal control model with the COCO and Turnbull models. In the study, it was stated that the COSO model differs from other models due to its rich content, continuous updating according to the requirements of the age, and its application guide feature. In addition, it was stated that the COCO model in Canada is not updated and the Turnbull model in England does not have sufficient detailed information for

the applications of the enterprises, so the COSO model is also used as a source model by the enterprises in this country.

Xu et al., (2017) theoretically investigated the effect of internal control procedures on the success of financial management in hospitals. In the study, the role of operating budgets in the success of financial management, the importance of controls to prevent mistakes and frauds, and the benefits of intensive use of information technologies are emphasized. Using the COSO internal control framework, Dhillon and Alfi (2018) analyzed the impact of internal control on employees' performance at a public hospital in Indonesia. In the study, it was determined that control activities and risk assessment, which are among the components of COSO internal control, have a significant effect on the performance of public hospital employees. In the study, it was stated that the rules and regulations well-designed by the hospital management facilitate the understanding of the employees, so that the control activities are effective, reduce the risks arising from the employees and increase the performance of the employees due to the successful management of the risk management.

Erdoğan and Mengi (2018) used a case study method to determine the control procedures applied in measuring, evaluating and eliminating the risks of error and fraud in the hospital. In the study, it was stated that the inventory control procedures of the hospital were insufficient, they did not measure the efficiency of the personnel, and compliance with the laws and regulations could not be fully controlled due to the absence of an internal audit unit.

Akçay and Uysal (2019) theoretically examined the role of internal control and internal audit in preventing fraud and corruption in hospital enterprises. In the study, it was stated that having internal control procedures in risky areas such as cash management and tenders in hospitals will increase the effect of internal audit and these will be effective in preventing fraud and corruption. Kurnaz (2019) made an assessment of the hospital's internal control system within the framework of COSO internal control components using a hospital survey method and examined the degree of compliance with the components. In the study, it was determined that the hospital does not have an internal control system compatible with the COSO internal control model components.

2. METHOD

2.1. Purpose and Method of the Research

The aim of the research is to examine the processes of a private hospital operating in the Thrace Region according to the COSO internal control components and to evaluate the effectiveness of these processes. In line with the purpose of the study, one of the qualitative research methods, the case study method was used. A case study is an empirical research method that works on a current phenomenon within its own real-life framework, is used

when the boundaries between the phenomenon and its content are not clear and when there are more than one evidence or data source (Yıldırım and Şimşek, 2016: 289-300).

In the study focusing on a single case, observation and interview tools were selected to collect data. First of all, the processes were examined by direct observation in the hospital. Afterwards, face-to-face interviews were held with the company's general manager, hospital director and accounting manager, and the questions prepared in accordance with COSO internal control components were asked and the answers to these questions were noted. The data obtained from the interview method were transformed into a written text, analyzed, and the findings were grouped according to the COSO internal control components.

The following unstructured questions were asked to the participants in the study:

S1- Control Environment

Have the duty areas of the staff working in the hospital been determined according to the organizational chart?

What are the ethical rules of the hospital? Are these rules given to the staff in black and white?

What are the policies and procedures you have determined to establish the internal control structure of the hospital?

Does an internal auditor work in the hospital?

Who controls the processes (medical and non-medical field) in the hospital?

Have signature and approval authorities been determined in work flow processes?

S2- Risk assessment:

How do you analyze and manage risks in the hospital?

Do you have an organ for early detection of risks in the hospital?

S3- Control activities:

How do you apply the separation of duties principle in the hospital?

What are the methods you use to ensure the efficiency of the processes in the hospital?

What measures have you taken to reduce errors and frauds in the documentation and accounting process?

What kind of system did you set up to control the hospital's assets and resources?

What kind of a system did you set up to control income / expense / cost items?

What kind of system did you set up to ensure the reliability of the information system?

What kind of system did you set up to protect patient rights?

With what parameters do you measure the performance of the hospital? (industry averages, budgets, competitors, past year data, etc.)

S4- Information & Communication:

How do you transfer information to senior management?

Does the hospital use an integrated information system?

How is the communication process with external stakeholders ensured?

S5-Monitoring:

How do you evaluate the internal control processes? Is this assessment made by independent persons or institutions?

How often and how is the feedback given as a result of the evaluation?

2.2. Scope of the Research

A private hospital operating in the health sector in the Thrace Region constitutes the scope of the study as application. It offers hospital medical service units and emergency aid, birth, operating room, outpatient and inpatient intervention, examination and treatment services by integrating them with preventive health services.

2.3. Strengths and Limitations of the Research

In the light of the aim of the study and the literature, questions to be asked to the participants were prepared. The reliability of these questions was ensured by applying them to a specialist working as a manager in another hospital. The data obtained in the observation and interview methods used as data collection tools were aimed to verify each other.

The most important limitation of the study is that it examines the processes of a private hospital according to COSO internal control components. For this reason, it cannot be generalized that the research results provide information about the internal control processes of all private hospitals.

Observations and interviews to provide research data were held between the days of 5 and 8 of February 2020. Since there were no corona virus cases in our country at these times, the effect of this risk on hospital processes was not included in the study.

3. FINDINGS

3.1. Findings Regarding the Component of Control Environment

Private hospital enterprises are obliged to comply with the laws and regulations issued by the Ministry of Health. In these legal regulations, the number and expertise of the personnel to provide services, infrastructure features, qualifications of service and non-service units, control of medical waste and garbage, medical record, archive, invoicing process, rules regarding occupational health and safety, quality standards development process are explained.

The findings regarding the evaluation of the control environment of the researched hospital are summarized below:

The hospital has an organizational chart. The hospital has defined the job descriptions and authorization areas in writing in order to ensure the coordinated work of personnel with different training and experience periods in order to achieve the goals of the hospital and communicated these to the personnel in writing.

The hospital has written ethical rules. The principles of honesty, avoidance of conflicts of interest, and protection of commercial & patient information, confidentiality and responsibility are emphasized in the ethical rules. The ethical rules of the hospital are communicated in writing to the newly recruited personnel by the Human Resources department and information is given on the sanctions to be applied in case the personnel exhibit unethical behavior.

There are no written procedures applied in the hospital, apart from the procedures established within the framework of the laws (such as stock tracking, quality standards, occupational safety, and medical waste). For example, the purchasing department manages the purchasing process of the goods and services to be purchased according to written procedures, while the accounting department processes the invoicing process of the patient being treated according to laws and regulations since it does not have a written procedure. There is no written procedure established by the hospital in this regard.

There is no internal auditor in the hospital. The medical service and non-medical service parts of the hospital are controlled according to the work flow specified in the organizational chart. While the responsible manager controls polyclinics, pharmacy and nursing services and provides information to the board of directors, the hospital director controls the administrative and financial transactions and provides information to the board of directors.

Work flow processes have been defined in the hospital and the steps of these processes have been determined. Authorities of signature and approval have been given to those responsible in the medical and non-medical service departments of the hospital.

3.2. Findings Regarding the Component of Risk Assessment

According to the article 378 of the Turkish Commercial Code numbered 6102, public companies have to establish an early risk detection committee. The hospital within the scope of the research belongs to a company that has a legal structure and the shares of the company are not traded on the stock exchange. For this reason, the company does not have to establish a committee for early detection of risks. The company's board of directors did not need to establish this committee. The risks of the hospital are managed by the board of directors.

Hospitals must prepare a "Hospital Disaster and Emergency Plan" in order to minimize their damage in disasters and emergencies and to provide uninterrupted health services. For this reason, the hospital has created an action plan by defining the risks that may arise from human and nature. The hospital has defined financial risks (exchange rate, inflation, interest, liquidity), but did not offer a holistic approach to these risks. For example, a currency fixing agreement was signed with the supplier company in order to reduce the cost caused by the increase in drug prices due to the increase in the exchange rate, on the other hand, an action plan was not prepared to protect the assets of the hospital against inflation risk. As a result, the hospital does not define and manage the risks created by disasters and emergencies and the risks outside the financial risks group.

3.3. Findings Regarding the Component of Control Activities

Segregation of Duties

The officers who do, approve and control a financial job in order to prevent error, fraud and corruption are different persons. For example; the patient admission department carries out the registration of the patient, the teller department collects the fee for the service provided to the patient, the officer in the accounting department performs the accounting records of these transactions, and the accounting manager controls this process.

Management of Hospital Processes

Hospital enterprises have to carry out many processes together in order to provide diagnosis and treatment services for the patient. It uses the Health Services Quality Management System in order to plan and control the hospital activities within the scope of the research. With this system, it is aimed to reduce the risk in clinical services by ensuring the management of the processes.

Error and Fraud Prevention Tools in Accounting Process

In the hospital, in order to prevent mistakes and frauds, authorization restriction, employee monitoring and evaluation tools are used. Job descriptions and areas of authority are notified

in black and white to every staff member who starts working at the hospital, and the staff execute the procedures in these areas of authority. In addition, department managers observe the staff and evaluate their attitudes in protecting the hospital's assets and resources.

The accounting documents, records and financial statements of the hospital are checked by the Certified Public Accountant to determine whether they are accurate and reliable. However, there is no internal auditor to audit the hospital's processes and no independent auditor to audit financial information.

A member of the board of directors and the general manager have been given representation authority to carry out all kinds of operations within the field of activity of the hospital on behalf of the company. In other words, it is possible to make transactions related to the hospital (medical medicine payments, personnel wage payments, etc.) by fulfilling the two signature conditions. This process is applied in accordance with article 370 of the Turkish Commercial Code numbered 6102.

Supervision of Receivables

70% of the receivables are receivables from SSI (Social Security Institution) and the average collection period of these receivables is 80 days. The risk of non-collection is the most important risk for the health sector, as the receivables arising from the service provided to patients within the scope of the SSI depend on the approval of the institution. The hospital arranges the invoices issued to the institution within the framework of the rules in order to minimize this risk. However, there is no separate department as invoice review unit in the hospital, these transactions are carried out by the personnel working in the accounting department.

29% of hospital receivables are receivables from private insurance companies and the average collection period of these receivables is 30 days. Services provided to patients under private insurance are notified to private insurance companies by issuing invoices, however items not covered by the insurance companies are collected from patients.

Receivables from uninsured patients, who have a low share in the total receivables of the hospital, consist of notes receivables. Patients who are not covered by public or private insurance pay the cost of the service they receive in cash or by credit card. However, if the service fee is high, patients prefer to pay these debts with a bill of certain terms. The process to be carried out when the collection of the receivables with bonds becomes bad debt or uncollectible receivables is followed by the accounting department.

The amount of bad debt and uncollectible receivables of the hospital is low compared to the total receivables. These receivables arise from the receivables with promissory notes issued to patients not covered by any insurance.

Stock Supervision

The stocks of the hospital are in two groups as medical (medicine, orthopedic supplies, cotton, syringe, gauze, etc.) and non-medical supplies (stationery, cleaning supplies, etc.). Since the prices, quantities and storage conditions of these stocks are different, the policies implemented by the hospital are also different.

The medical drug materials of the hospital are monitored through the hospital information system. The required stock is determined in line with the warning amount entered in this system (maximum stock amount, minimum stock amount, optimal stock amount) and the opinions of the relevant departments and sent to the purchasing department. The purchasing department starts the procurement process according to the order form and the orders are received by the warehouse officer. The warehouse clerk checks the quality, price, brand and quantity of the order through the delivery note and invoice and sends the documents to the accounting department after entering the pharmaceutical warehouse. The accounting department records the stocks in line with the invoice and warehouse receipt. If there are stocks that are not suitable for the order, this situation is conveyed to the purchasing department. In the meeting with the supplier company of the purchasing department, if it is agreed on the inappropriateness of this material, it is returned with a return invoice and deducted from the stocks.

The hospital uses intermediate warehouses in the operating room, intensive care, emergency room, service floors and polyclinics in order not to disrupt the service. Medical supplies are shipped from the drug warehouse to the intermediate warehouses by controlling the daily consumption amount from the stock system. Medical materials used in the treatment of the patient are written in the patient's file to be invoiced. However, if the amount of medical equipment used for the patient cannot be measured exactly (gauze, cotton, etc.), these materials are written as consumables to be invoiced to the patient. In both cases, the invoiced medical supplies are deducted from the stocks.

The Ministry of Health has made hospitals obliged to use the Product Tracking System since 2018. With this system, it will be possible to control the transportation, storage, inventory, maintenance, repair, calibration and warranty processes of devices and materials purchased by hospitals. The information about the medical devices and medicines purchased, stored, used in the hospital within the scope of the research is entered into the Product Tracking System and followed up on this system.

The non-medical supplies of the hospital are purchased by the purchasing department depending on the monthly consumption and the availability period. After the order is checked by the warehouse officer, the documents of the materials are forwarded to the accounting department. The stocks that are shipped from the warehouse to the departments weekly are entered into the department warehouse. The stocks used in the relevant departments are deducted from both the departmental warehouse and the main warehouse.

Supervision of Non-current Assets

Non-current assets are predominant in the asset structure of the hospital. Since the overhead capital investments (buildings, vehicles, medical devices and other fixtures) of the hospital are intense, the policies and procedures created to control them gain importance. The procedures for the purchase, effective use and renewal of non-current assets have been determined at the hospital under investigation. The information of the device needed by the physician in the hospital is written on the pre-request form and forwarded to the purchasing department. If this request is deemed appropriate by the purchasing department, a proposal is received from the supplier companies considering the features of the device. These offers are evaluated by considering criteria such as price, warranty and maintenance-repair, a contract is made with the company that offers the most convenient offer and the order for the device is given. The invoices and documents of the orders are checked by the purchasing department and these documents are sent to the accounting department for the payment process. The devices are delivered to the relevant department officials after signing a debit form.

In the hospital, both physical checks and determination of unusable fixtures are made by counting the fixtures every year. For the fixtures that are unusable, they are deducted from the assets with an unusable report from the department supervisor and the technical service company.

Computer software and hospital licenses purchased are included in the intangible assets of the hospital. The effectiveness of computer software is evaluated by the hospital administration.

Income Supervision

The main income source of the hospital is the revenue it generates from outpatient and inpatient services. In terms of the collection of incomes, patients are sorted out in three groups as subject to Social Security Institution (SGK), privately insured and uninsured.

A patient registration process has been established in order to accurately determine the earned income for the services provided and to record this income in the correct period at the hospital where the research was conducted. A protocol number is given for each patient who comes for outpatient diagnosis and treatment, and all procedures performed on behalf of the patient are followed in the patient file created with this protocol number. Every patient who comes to the hospital for examination goes to the relevant polyclinic after having the entrance procedures done and paying the examination fee. If additional procedures (blood analysis, chest x-ray, MRI, etc.) are requested by the doctor to determine the diagnosis of the patient, the patient will have these procedures done after paying the charge to the pay-desk. A cash register or invoice is given in return for the fees charged from the patient for outpatient diagnosis and treatment.

After entering the data of the patient, the details of the transactions made and the type of collection (cash, credit card, etc.) into the hospital information system, these transactions are recorded by the accounting department. In these transactions, the accounting department takes into account the separation of the contribution fee and examination difference fee to be paid to the state if the patient is subject to SGK, or the amount of receivable from the private insurance company with which it is contracted if the patient is privately insured, or the amount collected if the patient is uninsured.

Registration is done for each inpatient, as explained above. Bed, dressing, surgical procedures and laboratory procedures are recorded in the patient file of this patient group. At the discharge stage of the patient, the invoice is prepared as a service fee and sent to the institutions. The patient is informed about the items that are not covered by SSI or private insurance companies, and their costs are collected from the patient.

The most important factor in the control of incomes is the determination of the examination, diagnosis and treatment fees offered to patients according to the Health Implementation Communiqué (SUT) published by the SSI. In other words, the price of the service is determined by the institution without providing the service. In order for the hospital to receive the service fee from the patients within the scope of SSI, which constitutes the most important source of income, the invoicing process should be carried out by taking into account the items specified in the SUT. For this reason, the hospital within the scope of the research pays utmost attention to the invoices drawn up as a service fee to the institution.

Supervision of Expenses and Costs

The accounting department of the hospital not only fulfills the obligations of financial accounting, but also reports costs to the management. The problems encountered in the hospital due to the calculation of costs with traditional methods are summarized below:

When the service production costs of the hospital are examined, the highest shares are respectively worker wage expenses, medical pharmaceutical equipment usage expenses and general production expenses (depreciation, electricity, insurance, fuel and heating, maintenance and repair expenses). In the calculation of service costs in the enterprise, instead of calculating the cost of the service provided for each patient, the costs are calculated on the basis of department. For example, when calculating the cost of a patient receiving outpatient health service from the cardiology department, the cost of a patient is determined first by dividing the cost of this polyclinic by the number of patients. Then the share of personnel, other materials (cleaning, consumables) and general production costs and laboratory expenses is added to this cost (Table 1). However, even if it is assumed that the same diagnosis is made in patients receiving health services in the cardiology polyclinic, the same treatment methods will not be applied depending on the age, gender and hereditary diseases of the patients, so it is not possible to determine the cost in this calculation method correctly. In this method, costs

cannot be controlled since it cannot be determined which patient costs are high. In addition, due to the inaccurate calculation of the cost, it makes it difficult to compare it with the patient incomes, and this situation prevents profitability analysis on patient basis.

Table 1: Patient (Outpatient) Cost Card

Patient Cost Card	
<i>Types of Expenses</i>	<i>Amount (TL)</i>
Cardiology: Total Expenses / number of patients	X
Total share to be received from polyclinics	X
Share from the laboratory	X
Share of Personnel Wages	X
Share of other materials	X
Share of general production expenses	X
<i>Grand Total</i>	XXXX

Source: It was prepared by the author according to the information provided by the hospital administrators.

In charging the expenses such as water and electricity which are included in the general production expenses of the hospital to the expenditures (emergency service, polyclinics, operating room, laboratory, blood center, etc.), these expenses are distributed with the estimated distribution key (kws, cubic meter) due to the lack of meters on the basis of the cost place. Since the expenses are not classified as fixed and variable, the breakeven point of the hospital is not calculated correctly. The hospital prepares a budget neither on the basis of department nor business. This situation prevents the hospital management from making sound decisions on issues such as profit, sales, price and investment.

In order for the hospital to carry out its activities, there are general administrative expenses resulting from management, audit and office services, marketing and sales distribution expenses due to marketing activities and financing expenses mainly due to the use of bank loans in its financing. The hospital acts with traditional approaches in the control of these expenditures, and cannot manage the expenses arising from the changing conditions since departmental budgets are not prepared.

Information System Reliability

The management information system of the hospital helps the management make decisions by keeping and recording administrative, financial and medical records and converting these data into information. The security of the information system is provided in three steps. The first step is to secure the hardware and the network, using power supplies and a firewall

system to ensure this. The second step is to ensure software security, anti-virus programs are used to ensure this and the information on the computer is backed up at certain time intervals. The third step is to prevent web-based attacks, a web security system has been established to reduce this risk.

Protection of Patient Rights

In the hospital where the research is conducted, obligations regarding patient rights are fulfilled according to the Private Hospital Regulation and Patient Rights Regulation. Within the framework of these regulations, it is ensured that the patient receives information about his health status and benefits from the rights such as respecting his privacy.

According to the Personal Data Protection Law numbered 6698, which entered into force in 2016, the personal and private information of the patient is kept in the hospital and this information is shared only with the persons and institutions specified in the law. In addition, some regulations have been made in the hospital in order to improve the processes within the scope of this law. For example, a system has been established in which patients who do not have an appointment from the phone and internet can take their order number from the queue system created in the registration department. With this system, the information of the patient who has registered is prevented from being learned by another patient.

Performance Measurement of the Hospital

Financial and non-financial indicators produced by the accounting information system are used to measure the success and continuity of the hospital. The board of directors evaluates the level of achievement of the goals of the hospital by comparing the income, expenditure, cost items of the current period, the number of patients with examination, diagnosis and treatment, and the bed occupancy rate with the same period of the previous fiscal year. However, in this evaluation, since no budget is prepared in the enterprise, the current period's data are compared only with the data of the previous year. This situation prevents the hospital from making financial planning and controlling its expenses. In addition, since the performance criteria of the hospital such as efficiency and effectiveness are not determined, it cannot be determined which activities bring a financial burden to the hospital and which activities create economic added value.

3.4. Findings Regarding the Component of Information and Communication

The hospital management information system is used in the hospital, which transforms the data obtained from internal processes into meaningful information. This system records the daily operations of the hospital, such as patient's application, admission, referral and dis-

charge records, applications for diagnosis and treatment of the patient, administrative information such as personnel status information, financial transactions such as stock, collection, payments, income, expenses, and taxes in order to ensure fast and high quality reporting. Reports on the processes are regularly presented to middle and senior managers.

There is a process through which the complaints of the hospital workers, patients and patient relatives can be conveyed. However, there is no written recommendation and complaint mechanism to manage this process. In addition, the institution communicates with the external environment through the web page. Corporate information is updated on the website of the hospital and feedback is received via it. Communication with public institutions, one of the most important stakeholders of the hospital, is provided through meetings and official correspondence. In addition, regular communication is established with domestic and foreign suppliers.

3.5. Findings Regarding the Component of Monitoring

Issues such as quality, occupational health and safety, waste management and medical services of the hospital are subject to the supervision of public institutions. Management and control of other administrative and financial processes are carried out by middle managers and reported to senior management. For example, while patient complaints are evaluated by the hospital manager, the purchasing process from the supplier in the risk group is evaluated by the purchasing manager. The opinions and suggestions of middle-level managers, requests and complaints of individuals and institutions are evaluated by the board of directors, and the decisions taken as a result of this evaluation are implemented. There is no independent person or organization that examines the medical and non-medical processes of the hospital with a holistic approach.

4. DISCUSSION

According to the findings obtained from the study, it was determined that the hospital did not have an effective internal control system. Evaluation of the findings is summarized in Table 2.

In order for hospital enterprises to adapt to changing market conditions and achieve their goals, they must establish and test control procedures for each process. It can be said that laws are very effective in the management of their processes, as private hospitals have to comply with the laws published by the public and face serious penalties and risks when they do not manage their processes according to these laws. It was determined that these laws were effective in the control procedures created by the hospital under investigation, such as purchasing, stock management, management of revenues and receivables, patient rights, and disposal of medical waste.

Table 2: Evaluation of Hospital X's Processes According to COSO Internal Control Components

INTERNAL CONTROL COMPONENTS	STRENGTHS	WEAKNESSES
Control Environment	Organization chart and job descriptions have been created.	Internal control procedures have not been established in black and white.
	There are written codes of ethics.	There is no internal audit unit, no internal auditor has been appointed.
	Business processes have been defined, signature and approval authorities have been determined.	
Risk assessment	Risks created by disasters and emergencies are managed. Financial risks are managed.	There is no committee established for early detection of risk.
	Financial risks are managed.	Corporate level risks are not managed.
Control Activities	The principle of segregation of duties is applied.	There is no independent audit. There is no billing unit other than the accounting department.
	Current laws and regulations are effective in the management of the hospital's processes.	There is no billing unit other than the accounting department.
	Authority restriction, employee monitoring and evaluation tools are used.	There is no effective cost control.
	Financial transactions are carried out in accordance with two signature rules.	Profitability analysis on patient basis is not calculated correctly.
	Receivables are controlled.	No budget is prepared.
	Stock product tracking system is used.	Productivity and efficiency are not measured.
	There are procedures for the purchase, effectiveness evaluation and renewal of noncurrent assets.	
	Revenues are controlled.	
	The security of the information system is ensured	
Patient rights are protected within the framework of laws and regulations.		
Information and Communication	Reporting is made with the hospital management information system.	There is no procedure for complaint and suggestion mechanism.
	Communication with stakeholders is provided.	
Monitoring	Processes are monitored by middle and top management and evaluations are communicated to the relevant departments.	There is no independent audit mechanism.

However, there are no internal control procedures in the hospital that cover all medical and non-medical processes. Since there is no internal audit unit in the hospital, internal audit is not carried out and this situation prevents the evaluation of the effectiveness, efficiency, management and control structures of the processes.

Since the diagnosis and treatment fees of patients covered by the SSI in hospital enterprises are determined according to SUT, the collection of these fees depends on the approval of the SSI. In addition, treatment and surgery fees for some diseases are determined by the institution over the package price. For this reason, the policies to be implemented by the hospital to increase the income to be obtained from the patients covered by the SSI, which has a significant share in the group it serves, are limited. At this point, it is important that the hospital determines the earned income correctly and manages the billing process well for the collection of this income. Hospital X tracks its income with the patient registration number it creates for each patient receiving examination, diagnosis and treatment services, and carries out the invoicing process accordingly. However, since a separate unit is not created as a billing unit in the hospital, this process is carried out by the accounting department.

Hospital X does not have a committee for early detection of risk. The hospital does not define and manage the risks arising from disasters and emergencies and the risks outside the financial risk group. These risks are solved by middle-level and senior managers with traditional understanding.

X Hospital calculates its costs according to the traditional cost system. Instead of calculating the cost per patient in the hospital, department-based costs are calculated. The reason for choosing this method is that the expenses per patient cannot be determined since the expenses are not classified as fixed and variable. As this situation makes it difficult to compare income and cost on patient basis, it prevents the profitability analysis to be performed accurately.

To measure the performance of Hospital X, it compares financial and non-financial data for the current period with the same period of the previous fiscal year and evaluates the level of achievement of the hospital's objectives. However, this evaluation refers to the comparison of last year with today, as the hospital has not prepared budgets covering twelve months. Therefore, it is not possible to measure the hospital's achievement of its goals, its future financial performance and the effectiveness of its processes. In addition, since efficiency and effectiveness measurements are not carried out in the hospital, it is not possible to determine which operations bring financial burden to the hospital and which operations create economic added-value.

X Hospital is subject to public scrutiny on quality, occupational health and safety, waste management and medical services. Management and control of other administrative and financial processes are carried out by middle and senior managers. Although the hospital has a complex structure where many services are provided, it does not receive services from

independent individuals and organizations that control all processes of the hospital with a holistic approach.

5. CONCLUSION AND RECOMMENDATIONS

In this study, it is aimed to determine the efficiency of the processes of a private hospital with the COSO internal control model by the case study method. It was found in the study that the hospital did not have an effective internal control system. It has been determined that the control environment in the hospital is partially created in some processes, the risks are not managed institutionally except for some issues, and it is partially compatible with the COSO component with the effect of existing laws in the establishment of control activities. In addition, it has been determined that the information and communication processes of the hospital are partially compatible with the COSO component and the monitoring processes are not compatible with the COSO component. Especially, the lack of internal control procedures in the hospital and therefore not conducting internal audit stands out. The lack of independent audit in the hospital other than public inspection prevents the evaluation of the internal control system objectively.

Hospital management should establish internal control procedures by integrating the internationally accepted internal control model into the hospital. Internal audit and independent audit activities should be initiated in the hospital and an objective assessment should be made about the effectiveness and efficiency of the processes. In addition, in order for the hospital to manage and control its costs for financial purposes, it should revise the cost system according to the activity-based costing method, which is one of the strategic costing methods.

Conducting the research in a hospital and basing the findings on the data obtained through observation and interview method should be considered as an important constraint. In the next studies, the level of compliance with the internal control components of a large-scale hospital and a medium-scale hospital can be compared, or the role of the internal control system in ensuring the efficiency of the processes in a high risk period (natural disaster, pandemic, economic crisis, etc.) can be researched and studied.

HASTANE İŞLETMELERİNDE İÇ KONTROL SİSTEMİNİN ETKİNLİĞİNİN DEĞERLENDİRİLMESİ: BİR VAKA ÇALIŞMASI

1. GİRİŞ

Sağlık sistemi içinde yer alan özel hastaneler otelcilik hizmetleri, poliklinik hizmetleri, yatan hasta hizmetleri, laboratuvar, görüntüleme hizmetleri, ameliyathane hizmetleri, temizlik

hizmetleri gibi hizmetlerin verildiği karmaşık yapılardır (Karagöz ve Yıldız, 2015: 377). Bu karmaşık yapıyı başarılı bir şekilde yönetmek için, temel ilke ve esasları belirlenmiş olan iç kontrol sisteminin kurulması ve bu sisteminin yeterliliğinin test edilmesi gerekmektedir. Küresel düzeyde kabul gören COSO iç kontrol modeli, işletme faaliyetlerinin etkinliği ve verimliliği, raporlamanın güvenilirliği ve mevcut yasa ve yönetmeliklere uyum konusunda rehberlik sunmaktadır. Bu modeldeki birbiriyle ilişkili beş bileşen ve on yedi ilke, sistemin kurulması ve etkinliği için ilkeleri ortaya koymaktadır (COSO Framework 2013).

COSO modelinin başarılı olabilmesi için, iç kontrol süreçlerinde yer alan tüm aktörlerin sorumluluklarını tam olarak yerine getirmeleri gerekmektedir. Sistemin işleyişinin ana sorumluluğu üst ve orta yönetime verilmiş olmakla birlikte, mali işler ve muhasebe personeli, bölüm yöneticileri, iç denetçiler, yönetim kurulu ve bağımsız denetçiler de sorumludur (Adiloğlu, 2011:108). Özellikle iç denetçilerin, iç kontrol sisteminin etkinliğinin izlenmesinde önemli bir rolü vardır. Sistemde düzeltici önlemler alınması için, iç kontrolün zayıf yönlerini tespit ederler ve bunları üst yönetime zamanında raporlama yaparlar. İç denetim, operasyonların etkinliği, raporlama güvenilirliği ve mevzuata uyum konularında iç kontrol prosedürlerinin geliştirmede üst yönetime yardımcı olmaktadır (Mazza ve Azzali, 2015:160; Chang vd., 2019 :17).

Bu çalışmanın amacı, özel bir hastanenin süreçlerini COSO iç kontrol modelinin bileşenlerine göre incelemek ve bu süreçlerin etkinliğini değerlendirmektir. Bu amaç doğrultusunda çalışmada Trakya bölgesinde faaliyet gösteren bir özel hastane işletmesinin süreçleri COSO iç kontrol modelinde yer alan kontrol ortamı, risk değerlendirme, kontrol faaliyetleri, bilgi ve iletişim, izleme bileşenlerine göre etkinliği değerlendirilmiştir.

1.1. Kavramsal Çerçeve

Kurumların iç kontrol yapısının uygunluğunu ve etkinliğini değerlendirmek için bağımsız denetçiler, iç denetçiler ve yönetim tarafından kabul edilen, küresel olarak tanınan üç iç kontrol çerçevesi vardır. Bunlar: ABD’de COSO, Kanada’da COCO, İngiltere’de Turnbull modelleridir (Rahim vd., 2018:139). Bu modellerin ortak özelliği, iç kontrolün etkinliğini değerlendirmeye yönelik rehberlik sağlamalarıdır.

COSO “ İç Kontrol –Bütünleşik Çerçeve” modelinin ağırlıklı genel kabul gören modeldir (Topçu, 2013: 10; Can ve Şakrak, 2018: 47). COSO, kurumsal yönetimi iyileştirmek, organizasyonlarda hileyi azaltmak için kurumsal risk yönetimini tasarlamak, iç kontrol ve hilenin önlenmesine yönelik kapsamlı çerçeve ve rehberlik etmek amacıyla 1985 yılında kurulmuştur. Komisyonun bünyesinde kurulan iç kontrol çalışma grubu tarafından hazırlanan “iç kontrol bütünleşik çerçeve” rehberi 1992 yılında yayınlanmış ve bu rehber 2013 yılında güncellenmiştir (COSO Framework 2013:1-2). COSO uluslararası düzeyde kabul gören “iç kontrol” tanımını yapmıştır. Komisyona göre, “iç kontrol, şirketin yönetim kurulu, üst yöne-

tim ve diğer personel tarafından işletme faaliyetlerinin etkinliği ve verimliliği, raporlamanın güvenilirliği ve ilgili yasalara uyum konusunda makul güvence sağlamak üzere tasarlanmış bir süreçtir". İç kontrol sürecini oluşturmak ve etkinliğini sağlamak için, entegre çerçevede yer alan bileşenlerin olması gerekir. COSO modelinde bileşenler; kontrol ortamı, risk değerlendirme, kontrol faaliyetleri, bilgi & iletişim ve izleme olarak sıralanmıştır (COSO Framework 2013: 3).

2. YÖNTEM

Bu çalışmada nitel araştırma yöntemlerinden vaka çalışması yöntemi kullanılmıştır. Tek bir vakaya odaklanan çalışmada, veri toplamak amacıyla gözlem ve görüşme araçları seçilmiştir. Öncelikle hastanede yapılan doğrudan gözlemler süreçler incelenmiştir. Daha sonra şirketin genel müdürü, hastane müdürü ve muhasebe müdürü ile yüz yüze görüşmeler yapılarak, COSO iç kontrol bileşenlerine uygun olarak hazırlanan sorular sorulmuş ve bu soruların yanıtları not alınmıştır. Görüşme yönteminden elde edilen veriler yazılı metin haline dönüştürülmüş, analiz edilmiş ve elde edilen bulgular COSO iç kontrol bileşenlerine göre gruplandırılarak yazılmıştır.

3. BULGULAR

Araştırma verilerinden elde edilen bulgular COSO iç kontrol bileşenlerine göre gruplandırılarak aşağıda özetlenmiştir.

Kontrol Ortamı: Hastanenin organizasyon şeması ve görev tanımları oluşturulmuş, süreçler tanımlanmış ve etik kurallar oluşturulmuştur. Ancak, hastanede yasalar çerçevesinde oluşturulan prosedürler (stok takibi, kalite standartları, iş güvenliği, tıbbi atıklar gibi) dışında uygulanan yazılı prosedürler bulunmamaktadır.

Risk Değerlendirme: Hastane, afet ve acil durumlardan kaynaklanan riskler ile finansal risk grubu dışındaki riskleri tanımlamamakta ve yönetmemektedir. Bu risklerde orta düzey ve üst düzey yöneticiler tarafından geleneksel anlayışla çözülmektedir. Riskin erken tespitini sağlayan bir komite yoktur.

Kontrol Faaliyetleri: Kamunun çıkardığı yasalar hastanenin risklerle başa çıkmak için uygulamaya koyduğu politika ve prosedürlerde etkilidir. Hastanede bütçe hazırlanmadığı ve verimlilik, etkinlik gibi performans ölçütleri belirlenmediği için hangi faaliyetlerin hastaneye mali bir yük getirdiği, hangi faaliyetlerin ekonomik katma değer yarattığı tespit edilememektedir.

Bilgi ve İletişim: Hastanede iç süreçlerinden aldığı verileri anlamlı bir bilgiye dönüştüren hastane yönetim bilgi sistemi kullanılmaktadır. Hastanede çalışanların, hasta ve hasta ya-

kınlarının şikâyetlerini iletilebilecek bir süreç vardır. Ancak hastanede şikâyet ve önerilerin değerlendirilmesine yönelik yazılı bir prosedür bulunmamaktadır. Ayrıca kurum dış çevreyle iletişimi web sayfası kanalı ile kurmaktadır.

İzleme: Hastanenin kalite, iş sağlığı ve güvenliği, atık yönetimi, tıbbi hizmetleri gibi konuları kamu kurumlarının denetimine tabidir. Bunların dışındaki idari ve mali süreçlerin yönetimi, kontrolü orta kademe yöneticiler tarafından yürütülmekte ve üst yönetime raporlanmaktadır. Hastanede iç denetçi çalışmadığı için süreçlerin etkinliği, verimliliği, yönetimi ve kontrol yapılarının değerlendirilmesi bağımsız ve nesnel yapılamamaktadır. Bağımsız denetim yapılmadığı için hastanenin yönetsel ve mali performansı objektif olarak değerlendirilmemektedir.

4. TARTIŞMA ve SONUÇ

Çalışmada, hastanenin etkin bir iç kontrol sistemine sahip olmadığı tespit edilmiştir. Hastanede kontrol ortamının bazı süreçlerde kısmen yaratıldığı, risklerin bazı konular dışında kurumsal olarak yönetilmediği, kontrol faaliyetlerinin oluşturulmasında mevcut yasaların etkisi ile COSO bileşeni ile kısmen uyumlu olduğu tespit edilmiştir. Hastanenin bilgi ve iletişim süreçlerinin COSO bileşeni ile kısmen uyumlu olduğu, izleme süreçlerinin COSO bileşeni ile uyumlu olmadığı belirlenmiştir. Özellikle hastanede iç kontrol prosedürlerinin olmaması ve buna bağlı olarak iç denetimin yapılmaması ön plana çıkmaktadır. Hastanede kamu denetimi dışında bağımsız denetimin yapılmaması sistemin objektif olarak değerlendirilmesini engellemektedir.

Hastane yönetimi, uluslararası kabul görmüş iç kontrol modelini hastaneye entegre ederek, iç kontrol prosedürlerini oluşturmalıdır. Hastanede iç denetim ve bağımsız denetim faaliyetlerine başlanmalı ve süreçlerinin etkinliği ve verimliliği konusunda objektif bir değerlendirme yapılmalıdır. Ayrıca, hastanenin maliyetlerini finansal amaçlarla yönetmesi ve kontrol etmesi için, maliyet sistemini stratejik maliyet yöntemlerinden biri olan faaliyete dayalı maliyetleme yöntemine göre revize etmelidir.

REFERENCES

- AICPA. (2017). Accounting Guide: Brokers and Dealers in Securities, New York: American Institute of Certified Public Accountants.
- Adiloğlu, B. (2011). İç Denetim Süreci ve Kontrol Prosedürleri, İstanbul: Türkmen Kitabevi.
- Akbulut, E. (2012). “İşletmelerde İç Kontrol Sisteminin Etkinliğinin İncelenmesi ve Trakya Bölgesindeki Ayçiçek Yağı Sektöründe Bir Araştırma”, *Electronic Journal of Vocational Colleges*, 2 (1), 174-187.

- Akçay, S., ve Uysal, M. (2019).”Hastane İşletmelerinde İç Denetim ve Hile Denetimi İlişkisi Üzerine Bir Değerlendirme, *AÇÜ Uluslararası Sosyal Bilimler Dergisi*, 5 (2), 205-225.
- Akyel, R. (2010). “Türkiye’de İç Kontrol Kavramı, Unsurları ve Etkinliğinin Değerlendirilmesi”, *Yönetim ve Ekonomi*, 17 (1), 87.
- Aytaç, A., ve Çabuk, A. (2020).” Assessment of the Effectiveness of Internal Control System and a Case Study”, *Muhasebe ve Vergi Uygulamaları Dergisi*, 13 (2), 359.
- Bakkal, H., ve Kasımoğlu, A. (2012). “ İç Kontrol Sistemine Karşılaştırmalı Bir Bakış – COSO ve COCO Modeli-“, *Mevzuat Dergisi*, 15, 1-14.
- Bozkurt, M. (2010). “ İyi Mali Yönetimin Gerçekleştirilmesinde İç Kontrol ve Denetim”, *Dış Denetim*, 135.
- Can, N., ve Şakrak, M. (2018). “ İç Kontrol Sistemindeki Zayıflıkların Ortaya Çıkarabileceği Hukuki Sorunlar ve Muhasebe Bilgi Sisteminin Rolü”, *Mali Çözüm Dergisi*, Kasım-Aralık, 47.
- Ceyhan, İ., ve Apan, M. (2014).”COSO İç kontrol Modeli’nin Yapısal Eşitlik Modeli ile İncelenmesi: Bir Hastane Uygulaması”, *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6 (10), 176-198.
- Chalmers, K., Hay, D., ve Khelif, H. (2019). “Internal Control in Accounting Research: A Review”, *Journal of Accounting Literature*, 42, 88.
- Chang, Y., Chen, H., K.Cehneg, R., ve Chi, W. (2019).” The Impact of Internal Audit Attributes on the Effectiveness of Internal Control over Operations and Compliance”, *Journal of Contemporary Accounting & Economics*, 15(1), 17.
- COSO (2013). COSO Internal Control- Integrated Framework: <https://www.coso.org/Documents/COSO-CROWE-COSO-Internal-Control-Integrated-Framework.pdf> (Erişim: 05.02.2020)
- Dhillon, S., ve Alfi, A. (2018).” The Effect of Internal Control by using COSO Framework on Revenue toward Employee Performance: A Case Study in Public Hospital of South of Tangerang”, *The International of Journal of Business Management and Technology*, 2 (4), 4-11.
- Doğan, S., ve Burgazlıoğlu, E. (2015). “İç Kontrol Sistemi ve Özel Bir Hastanede Uygulaması”, *Kırklareli Üniversitesi İİBF Dergisi*, 4 (1), 18-33.
- Elmas, B ve Kurnaz, E. (2013). “ Türkiye’deki Factoring Şirketlerinin İç Kontrol Sistemlerinde Etkinlik Araştırması”, *Kocaeli Üniversitesi Sosyal Bilimler Dergisi*, 26, 61-76.
- Erdoğan, B., ve Mengi, B. (2018). “Hata ve Hilelerin Önlenmesine Yönelik Kontroller ve Sağlık Sektörü Üzerine Bir Uygulama”, *Giresun Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 4 (8), 85-106.
- Frazer, L. (2012). “The Effect of Internal Control on the Operating Activities of Small Restaurants”, *Journal of Business & Economics Research*, 10 (6), 361-373.

- Karagiorgos, T., Drogalas, G., ve Dimou, A. (2010). “ Effectiveness of Internal Control System in The Greek Bank Sector”, *The South European Review of Business Finance & Accounting*, 6 (2), 1-11.
- Karagöz, F., ve Yıldız, S. (2015). “ Hastane İşletmelerinde Stok Yönetimi İçin ABC ve VED Analizlerinin Uygulanması”, *Yönetim ve Ekonomi Araştırmaları Dergisi*, 13 (2),377.
- Kızıltuğ, P. (2015). Hastane İşletmelerinde İç Kontrol Sistemi ve Özel Hastanede İç Kontrol Sistemi Uygulanması. (Yayınlanmamış Yüksek Lisans Tezi) Okan Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Kurnaz, E. (2019).” Sağlık Sektöründe İç Kontrol Sisteminin COSO İç Kontrol Modeli Bileşenleri Açısından İncelenmesi: Bir Hastane Uygulanması, *Mali Çözüm Dergisi*, Ocak-Şubat, 163-184.
- Koutoupis, A., ve Pappa, E. (2018). “Corporate Governance and Internal Controls: A Case Study from Greece”, *Journal of Governance and Regulation*, 7 (2), 92.
- Köse, E., ve Bekçi, İ. (2017). “ 1992-2013 COSO Modeli: İç Kontrol- Entegre Çerçevesi”, *Uluslararası İşletme, Ekonomi ve Yönetim Perspektifleri Dergisi*, 2 (7), 17-18.
- Mazza, T., ve Azzali, S. (2015). “Effects of Internal Audit Quality on Severity and Persistence of Controls Deficiencies”, *Internal Journal of Auditing*, 19,160.
- Öndeş, T., ve Çiftçi, Ş.(2020). “ İşletmelerde İç Kontrol Sistemi ve Stok Yönetimi: TRA1 Düzey 2 Bölge Uygulanması”, *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 34 (1), 64.
- Özgülbaş, N., Koyuncugil, A., Duman, R., ve Hatipoğlu, B. (2008).” Özel Hastane Sektörünün Finansal Değerlendirmesi”, *Muhasebe ve Finansman Dergisi*, 40, 120.
- Rahim, N., Ahmed, E., ve Faeq, M. (2018).“Internal Control System and Perceived Operational Risk Management in Malaysian Conventional Banking Industry”, *Global Business and Research : An International Journal*, 10 (1), 139.
- Sabuncu, B. (2017). “ İşletmelerde İç Denetim ve İç Kontrol İlişkisi”, *C.Ü. İktisadi ve İdari Bilimler Dergisi*, 18 (2), 168.
- Topçu, M. (2013). “Kamuda İç Kontrol Sisteminin COSO Modeli Bağlamında Taşrada Uygulanabilirliği: İhalelerde Uygulanmasına Yönelik İki Vaka Analizi”, *Sayıştay Dergisi*, 91, 5-31.
- Türedi, H., Gürbüz, F. ve Alıcı, Ü. (2014).“COSO Modeli: İç Kontrol Yapısı”, *Marmara Üniversitesi Öneri Dergisi*, 11 (42), 144.
- Türedi, H., Koban, A., ve Karakaya, G. (2015).“COSO İç Kontrol (ABD) Modeli ile İngiliz (Turnbull) ve Kanada (COCO) Modellerinin Karşılaştırılması”, *Sayıştay Dergisi*, 99,95-119.
- Türedi, H., ve Koban, A. (2016). “COSO İç Kontrol Modelinde Risk Değerlendirme Faaliyetleri”, *Marmara Üniversitesi Öneri Dergisi*, 12 (46), 160.

- Yıldırım, A., ve Şimşek, H. (2016). Sosyal Bilimlerde Nitel Araştırma Yöntemleri, Ankara : Seçkin Yayınevi.
- Yeşil, A.(2019).“Finansal Yönetimde Hesap Verilebilirliğin ve İç Kontrolün Önemi”, *Uluslararası Akademik Yönetim Bilimleri Dergisi*, 5 (6), 6.
- Xu, P., Hou, W., ve Chen, Z. (2017). “Study on the Strengthening of Hospital Internal Control and Externalization Regulating of Hospital Financial Management”, *Advances in Social Science, Education and Humanities Research*, 101, 863-866.
- 6102 sayılı Türk Ticaret Kanunu, T.C. Resmi Gazete (27846 sayı 14.02.2011 tarih). 6698 sayılı Kişisel Verilerin Korunması Kanunu, T.C. Resmi Gazete (29677 sayı 07.04.2016 tarih).
- Özel Hastane Yönetmeliği, T.C. Resmi Gazete (24708 sayı 27.03.2002 tarih).
- Hasta Hakları Yönetmeliği, T.C. Resmi Gazete (23420 sayı 01.08.1998 tarih).
- Sağlık Uygulama Tebliği:<https://www.resmigazete.gov.tr/2013-3.pdf> (Erişim: 05.03.2020)
- Tıbbi Cihazların Ürün Takip Sistemi: <https://titck.gov.tr/2019.pdf> (Erişim: 05.03.2020)

KATKI ORANI/ CONTRIBUTION RATE	AÇIKLAMA/ EXPLANATION	KATKIDA BULUNANLAR/ CONTRIBUTORS
Fikir veya Kavram/ İdea <i>or Notion</i>	Araştırma hipotezini veya fikrini oluşturmak/ <i>Form the research hypothesis or idea</i>	İlknur ESKİN
Tasarım/ <i>Design</i>	Yöntemi ve deseni tasarlamak/ <i>Designing method and pattern</i>	İlknur ESKİN
Veri Toplama ve İşleme/ <i>Data Collecting and Processing</i>	Verileri toplamak, düzenlemek ve raporlamak/ <i>Collecting, organizing and reporting data</i>	İlknur ESKİN
Tartışma ve Yorum/ <i>Discussion and Interpretation</i>	Bulguların değerlendirilmesinde ve sonuçlandırılmasında sorumluluk almak/ <i>Taking responsibility in evaluating and finalizing the findings</i>	İlknur ESKİN
Literatür Taraması/ <i>Literature Review</i>	Çalışma için gerekli literatürü taramak/ <i>Review the literature required for the study</i>	İlknur ESKİN

