

**EFFECT OF INTERNAL CONTROL ELEMENTS ON ORGANIZATIONAL
PERFORMANCE OF LEVEL-5 PUBLIC HOSPITALS IN NAIROBI COUNTY**

BY

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DECLARATION

I declare that this project is my original work and has not been previously published or submitted elsewhere for the award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged

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ABSTRACT

Several companies around the world have recently collapsed, despite the presence of internal controls. This has raised questions about the significance and power of internal control, especially when it comes to an organization's organizational performance. The general objective of this research study was to look into the effects of internal control elements on the organizational performance of level-5 hospitals in Nairobi County, Kenya. The study was guided by specific objectives. A descriptive research design was used in this survey. The population of this study was 68 staff in the accounts/finance, administration, ICT and operations departments at the 3 level-5 public hospitals in Nairobi County (Mama Lucy Kibaki, Pumwani Maternity and Mbagathi District Hospital). The research used census method where all 68 respondents were involved in the study. Data was collected using questionnaire. The statistical package for social sciences (SPSS) was used to analyze the data. Descriptive statistics of percentages, means, and frequency tables were used. The study concludes that control environment has a positive and statistically significant effect on the performance of level 5 public hospitals. Risk management has a positive and significant effect on performance of a level 5 public hospitals in Nairobi county. Control activities have a negative and an insignificant effect on performance of a level 5 public hospitals. Information communication has a positive and significant effect on performance of a level 5 public hospitals in Nairobi County. Finally, the study concludes that monitoring activities has a positive and significant effect on performance of a level 5 public hospitals in Nairobi County. The study recommends that strategic direction and priorities of the organization should be established, and this should serve as the foundation for the development of methods for assessing risks and operating effectiveness. Risks must be addressed at all levels of the organization, and the necessary actions must be taken to mitigate them. Internal and external factors can both pose and mitigate risks. It is necessary to put in place control activities such as policies and procedures that will aid in the implementation of management directives. Top management must send a clear message to all employees that their control responsibilities must be taken seriously in order for them to carry out their responsibilities effectively. At the end of the study, it is recommended that internal control systems be monitored, which is defined as a process that assesses the overall quality of the system's performance over an extended period of time.

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DEDICATION

I dedicate this research project to my family and friends for the inspiration and support I got from them during my period of study.

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ABBREVIATION AND ACRONYMS

AFDB	African Development Bank Group
ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
COSO	Committee of Standard Organization
DPC	Document Processing Center
ICT	Information Communication Technology
IFRS	International Financial Reporting Standards
KRA	Kenya Revenue Authority
MFI s	Micro Finance Institutions
NSE	Nairobi's Security Exchange
RM	Risk Management
RMC s	Regional Member Countries
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
SACCO s	Savings and Credit Cooperative Society
SCM	Supply Chain Management
SPSS	Statistical Package for Social Science
VFM	Value for Money

OPERATIONAL DEFINITION OF VARIABLES

- Control activities** : These are policies developed by a company to guide how workers carry out duties assigned by executive management and the board of directors (Umar & Dikko, 2018).
- Control environment** : Internal control is a collection of rules, processes, and frameworks that serve as the basis for enforcing internal control in an organization. (Kumuthinidevi, 2016).
- Information and communication**: This is the technology that records and transmits stakeholder correspondence, as well as providing data for staff, management, and the board of directors to carry out their duties (Bukonya & Kinatta, 2012).
- Monitoring activities** : This is a continuous test, or a mixture of the two, to determine whether any of the five internal control elements, as well as controls to influence the values within each component, are present and functional (Kumuthinidevi, 2016).
- Organizational performance**: Actual outputs or results of an organization compared to planned outputs or goals and objectives (Buluma, Kung'u, & Mungai, 2017).
- Risk assessment** : These are the methods that companies use to recognize and assess threats that impede the achievement of strategic goals, such as risk assessment, risk analysis, and risk management procedures (Mutange & Datche, 2017).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A majority part of an organization's success is the initiatives it has put in place to sustain its activities and make achieving its goals easier. Establishing operational standards that regulate the actions of organizational members, establishing security measures to ensure asset safety, establishing proper record-keeping procedures, defining reporting relationships among organizational members, and establishing authentication procedures are just a few examples of such measures (Sahabi, Diibuzie & Abubakari, 2017). Internal control in an organization consists of these and other steps that it can take to achieve its goals, such as internal auditing, budgeting, performance evaluation, and so on.

In order to reach the intended output, every company notably public hospital requires internal control, because internal control is created to organize the operations of its members through its leaders. Ambarriani (2012) suggested that in-hospital internal control ensures that people or employees operate according to the plans. Healthcare is a service that provides a patient with medical treatments. It allows a specific country to improve the quality of human health and to raise life productivity in return (Chillimuntha, 2018). Hospital is an association with a complicated environment involving many layers of responsibility center, responsible for the job to be undertaken in accordance with the defined process (Hani, 2017). Bastian, (2018) said the public hospital source earns both from local government and national budget subsidies. The public hospital also earns the revenue from the medical services supplied. Although a government-owned public hospital, hospital management is private and sometimes susceptible to irregularities.

Negligence of duty in the provision of health services is likely to lead to damage or perhaps death. On the other side, fraud and corruption might be the result of the irrelevance of financial procedures and assets (Yuliani, 2017). Hospital has an aim to provide patients with a high-quality medical care and to make it affordable for them to enhance their Community health and standard of living. Therefore, to reach a high grade of quality medical treatment to the patient, it needs a sufficient standard of service to the patient and good internal inspection. Internal controls are crucial because they protect the assets of the institution and lead to business performance. Practically, hospital management is occasionally prone to inconsistencies, especially the financial mechanism for execution. Furthermore, the absence of application of internal control effects leads to fraud and irrelevance of the utilization of hospital assets. As a result, the employee works with his own conduct and disrupts the operation of the hospital.

Every business, whether for-profit or not-for-profit, will have some objectives that it believes are attainable. Profit-seeking organizations' primary objective is to maximize shareholder value, whereas non-profit organizations' primary objective is to meet the social needs of their constituents. To accomplish these goals, supervision typically plays a significant role in the organization. Verschoor (2009) reports that approximately three-quarters of the 500 largest publicly held corporations in the United States voluntarily make a public assertion of management's responsibility for properly reporting financial results and also for maintaining an effective system of internal control. These internal control management statements are included in the company's annual report to shareholders. He asserts that virtually all of these firms' report employing similar strategies to carry out management's internal control responsibilities. These include references to

function segregation, personnel selection and training programs, the results of an internal auditing function, oversight by the board of directors' audit committee, and the work of the company's external auditors. Verschoor (2009) believes that management commitments to internal controls are more than just promotional statements.

Internal control evolved in a manner consistent with the models of auditing history presented by Dirsmith and McAllister (1982) and Lee (1988). External activities such as economic developments and the McKesson and Robbins case in the United States, as well as other auditing-related cases in the United Kingdom and Australia, predated the adoption of auditing standards requiring examination of internal control. Internal pressures, partly as a result of an external influence, the growing legal liability of auditors, resulted in a narrowing of the definition in the United States and a rephrasing of the proposed standard for internal control evaluation in the United Kingdom. Subsequent external events in the United States (such as corporate corruption scandals) resulted in a broader definition of internal control. By and large, the evolution of internal control demonstrates the influence of a number of historical trends in auditing. These include the internationalization of auditing and the extent to which developments in the United States have become significant; external pressure to expand the scope of auditors' responsibilities; and auditors' resistance to such an expansion of their responsibilities. Each of the four countries has seen a general trend toward a "broader" view of internal control, which is consistent with other control literature.

In terms of the Ghanaian health sector, the continued delay in reimbursement of health facilities at all levels by the national health insurance scheme continues to have a detrimental effect on service delivery, particularly public health promotion and prevention

activities throughout the country (Ghana Health Service, 2014). Following this, multiple attempts to collaborate with the National Health Insurance Authority have resulted in little improvement in the late reimbursement of all facilities. The Ministry of Health (MOH) has resorted to some ad hoc financial sustainability measures in order to ensure adequate health delivery. Among these measures is the validation and consolidation of quarterly regional financial data in all ten regions of Ghana. Again, the MOH established an internal audit division that is responsible for the financial control and compliance departments in various health institutions throughout the country.

According to a financial report published by the Institute of Certified Public Accountants of Kenya ICPAK (2007), many organizations have advanced technological platforms, but internal control, which is an institution system defined and implemented under its jurisdiction, aims to ensure compliance with applicable laws and regulations, as well as the instructions and directional guidelines established by Executive Management or the Board of Management. Internal control systems play a critical role in conducting and monitoring various activities by assisting in anticipating and controlling the risks associated with achieving the institution's objectives. Internal control, on the other hand, cannot provide an absolute guarantee that the institution's objectives are met; this is because managers frequently fail to implement these strategies, resulting in many organizations being caught in a cutthroat environment that creates significant problems in service delivery.

1.1.1 Internal Controls Elements

Internal controls are safeguards that a company implements to ensure that its priorities, goals, and missions are met (Cheruiyot, 2018). Standard policies and procedures that have

been approved by a corporation are in place to ensure that the transactions of an organization are handled correctly in order to prevent waste, theft, and mismanagement of resources. Internal controls provide reasonable assurance that an entity's financial reporting, operational effectiveness and performance, as well as compliance with applicable laws and regulations, will be carried out in accordance with established standards (Abdusalomova, 2020). When internal controls are implemented, they can give management and the board of directors of a company a reasonable but not absolute assurance that the organization's goals will be met. It is possible to prevent and detect errors and fraud using internal control elements (Abdusalomova, 2020). The COSO framework (2013) proposes five primary internal control system aspects against which the review should be undertaken. Control environment, risk assessment, control activities, information and communication, and monitoring are some of them.

The control environment, according to COSO (2013), creates the tone of a company through affecting the control consciousness of its personnel. It acts as the foundation for all other internal control components, giving discipline and structure. Control environment factors include the entity's people's integrity, ethical principles, and competence; management's philosophy and operational style; how management distributes authority and responsibility, organizes, and develops its people; and the board of directors' attention and direction. The control environment, as decided by the organization's administration, sets the tone and shapes the control consciousness of its people. Management's attitude should be one of dedication to ethical business operations and adherence to established control processes. This foundation, which provides discipline and structure, serves as the foundation for all other parts of internal control. The control environment includes factors

like as integrity and ethical principles, commitment to competency, leadership philosophy and operational style, and how management distributes power and responsibility, organizes, and develops its personnel (Thornton et al., 2004).

The fundamental concepts of internal controls state that management must establish and maintain the entity's controls through risk management efficiency, provide a high level of compliance for all employees with the potential for intra-organizational communication, and be effective through continuous monitoring adequacy (Reid & Ashelby, 2002). Internal control's role here is to manage risk rather than to eliminate it. Risk management and control must not be viewed as a burden on the company, but rather as a means of maximizing business opportunities and reducing the potential losses associated with unfavourable events. The reward for successful risk taking is increased shareholder value, and the role of internal control practices is to manage risk appropriately rather than eliminate it.

Policies, methods, and mechanisms that assure the appropriate implementation of management instructions are referred to as control activities (Aikins, 2011; Rezaee, Elam & Sharbatoghlie, 2001). When policies and procedures are properly documented, auditors can analyze the overall sufficiency of control design over financial management processes by determining how control activities are to be carried out (Aikins, 2011). All required steps are made to minimize risks and fulfill the organization's goals through these control operations. Control operations include, for example, the separation of duties, the daily deposit of cash receipts, bank reconciliations, and the restriction of access to check stock.

Firms are being compelled to rethink how they communicate financial information to stakeholders. As mandated by the King III Report, integrated reporting aims to integrate financial and non-financial performance measures in a way that advances corporate strategy. Internal control practices place a premium on the quality of information and the effectiveness of communication. An Integrated Report is a succinct explanation of how an organization's strategy, governance, performance, and prospects all contribute to the creation of value in the short, medium, and long term (IIRC, 2013). Integrated Reporting is intended to benefit a broad range of stakeholders, most notably those who make financial capital allocation or investment decisions (IIRC, 2013).

Monitoring of internal control systems is commonly accepted as a necessity for assessing the system's performance over time. Monitoring ensures that audits and other evaluations are completed as quickly as feasible and that their results are recorded. Monitoring activities ensures the effectiveness of the internal control system, as well (Theofanis et al., 2011). (Amudo & Inanga, 2009). Monitors determine whether or not rules and procedures put in place by managers are properly applied by employees. The most efficient way to improve financial performance is to modernize the company's internal financial control systems. In order to deliver the best service at the lowest possible cost, shareholders want to know their money is being spent properly and efficiently.

1.1.2 Organization Performance

The sum of all job processes and activities constitutes the organization's performance (Gerrit & Abdolmohammadi, 2010). Good internal control leads to good business, and as a result, organizations have spent a lot of money in the last decade on improving their internal control structures (Buluma, Kung'u, & Mungai 2017). It is mandatory for many

companies to report on internal control over financial reporting, and this necessitated the development of relevant evidence to back up their assertions. Five objectives that assist management in developing efficient internal controls are: protecting assets, maximizing resource utilization, preventing and detecting error and fraud.

Customer satisfaction is measured by the number of customer complaints that are filed against the organization. Businesses must take a close look at their customers and other stakeholders in order to determine the most effective way to meet their requirements. Controls built into an organization's infrastructure are most effective when they are integrated into the organization's operating activities, as they are part of the very essence of the organization's success in terms of providing high-quality services while also being adaptable to changing circumstances (Donald & Delno, 2019). Internal control systems interfere with an organization's operating activities and are most effective when controls are built into the organization's infrastructure, becoming a part of the very essence of the organization's success in terms of providing high-quality services while remaining flexible. Achieving long-term strategic goals, according to Donald and Delno (2019), necessitates the use of appropriate performance measures to guide organizations' actions in the direction of those objectives.

Brenan and Soloman (2018) argue that the performance of a business can be measured using either subjective or objective criteria. According to the authors, arguments in favour of subjective measures include the difficulty of collecting qualitative performance information from small businesses and concerns about the reliability of such information arising from differences in accounting methods used by different businesses. According to (Brian, 2017), the increased interest in internal controls is, in part, a result of the significant

losses suffered by many organizations in recent years. He went on to say that an investigation into the issues surrounding the losses revealed that they could have been avoided if the organizations had maintained effective internal controls. Systemic failures that led to losses in the banking industry could have been avoided or detected earlier, reducing the amount of damage done to the organization.

Reducing the degree of irregularity and fraud in a company's internal financial control structures by making changes to the firm's internal financial control structures is the most effective method of increasing net income in a corporation (Wainaina, 2014). Regular reviews of all aspects of a company's operations should be conducted by management, who should also ensure that internal controls are in place to improve the company's performance and increase profitability (Kamau, 2014). An internal audit department is expected for any corporation that wishes to adhere to internal rules and procedures. The majority of companies make this attempt in the hopes of achieving positive results. Despite these efforts, businesses continue to struggle with liquidity, late financial reporting, inefficiency in accounting for the organization's income, fraud and misappropriation of capital, and bad decisions that result in unexpected outcomes. Because of this finding, the current study will look at how internal control mechanisms impact the organizational performance of Kenyan public hospitals.

1.1.3 Level Five Hospitals in Nairobi County

The provision of health care is one of the most important social foundations in achieving Kenya's Vision 2030 growth blueprint. To accomplish this, the country's healthcare system was devolved following the promulgation of the 2010 constitution, which defined different healthcare levels across various healthcare systems across the country. Level-5 hospitals

are one of the most important types of hospitals in the Kenya, with many of them spread across the country and treating and handling all but the most complicated diseases and procedures. These hospitals often function as referral centres for all but the most complex service needs, high-risk patients do not need to be moved or referred to a Level-6 hospital.

Nairobi Level Five Hospitals fall under the category of County hospitals. They are located within Nairobi County, that is, Mama Lucy Kibaki, Pumwani and Mbagathi hospitals. The level five hospitals are receiving 1600 to 2500 patients every day, a number of them being from outside the County (Maichuhie, 2018). In 2018 the county bought drugs valued at Sh134 million.

With the county's rapid population growth, the number of level-5 medical facilities has increased significantly, indicating a rise in the number of patients seeking specialized healthcare services. Administration in level 5 hospitals are responsible for ensuring that the facility is able to deliver effective healthcare facilities by ensuring that there are qualified internal control elements in place for the hospital efficient operations. The administrative wing of the facility is also in charge of exchanging different expectations and delegating administrative elements in order to achieve an efficient internal control environment. To ensure that all internal controls are adhered to, facility management is responsible for ensuring that the essential aspects of internal control are clearly identified and interpreted in a manner that is unique to the understanding of the various departments. Also required is that all facility employees perform and comply with all internal control acts as defined by the administrative management.

1.2 Statement of the Problem

Implementing sound internal control elements like division of duties has proven to be one of the most successful ways to prevent fraud (Njagi, 2018). A variety of businesses claim that they have sufficient internal controls in place to prevent or even eliminate fraudulent engagements. However, due to the fact that companies change and more people are recruited for old and new roles, certain internal controls introduced by organizations might not be as successful (Njagi, 2018). Internal control has acquired prominence in a growing number of organizations in Kenya today, spanning all sectors, including the public sector and the health sector.

Internal controls, in particular, are essential to guarantee that public health facilities are effectively designed and executed and that they meet their objectives by reducing their losses. Despite the fact that Kenya's county governments have worked hard to improve internal control systems in public hospitals since the health system became a devolved unit, a slew of problems linked to inadequate internal control systems have wracked the country's public healthcare. Nairobi's public hospitals are among the best in the country (Cheruiyot, 2018). Nairobi county, for example, is said to have lost about 500 million in county revenue raised from public hospitals in the county in 2019 (Nairobi County Report, 2019).

Internal control and financial results have been the focus of a variety of studies conducted both globally and locally. Simangunsong (2014) looked into the impact of effective internal controls and the role of internal audit in local government. The impact of internal structures on the organizational performance of small and medium-sized

businesses in Kisumu was investigated by Nyakundi and Tinega (2014). Internal controls and organizational performance of Kenyan manufacturing firms were studied by Kamau (2014). Previous empirical studies have shown that there are few studies that focus on internal controls and performance of public hospitals. As a result, the current study aimed to investigate effects of internal control systems on performance of Nairobi County's level-5 public hospitals.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to examine the effect of internal control elements on performance of level-5 public hospitals in Nairobi county.

1.3.2 Specific Objectives

This study was guided by the following specific objectives:

- i. To determine the effect of control environment on performance of level-5 public hospitals in Nairobi county.
- ii. To establish the effect of risk assessment on performance of level-5 public hospitals in Nairobi county.
- iii. To examine the effects of control activities on performance of level-5 public hospitals in Nairobi county.
- iv. To establish the effect of information and communication on performance of level-5 public hospitals in Nairobi County, Kenya.
- v. To examine the effect of monitoring activities on performance of level-5 public hospitals in Nairobi County, Kenya.

1.4 Research Questions

This study sought to answers to the following research questions:

- i. What is the effect of control environment on performance of level-5 public hospitals in Nairobi county?
- ii. To what extend does risk assessment affect performance of level-5 public hospitals in Nairobi county?
- iii. How does control activities affect performance of level-5 public hospitals in Nairobi county?
- iv. How does information and communication affect performance of level-5 public hospitals in Nairobi county.
- vi. To what extent does monitoring activities affect performance of Level-5 public hospitals in Nairobi County, Kenya.

1.5 Significant of the Study

The study would be useful to public hospital executives who want to learn how internal controls impact their operations and organizational performance. Future researchers on the subject will benefit from the results. It will provide details on the organizational performance of Kenyan public hospitals as a result of internal controls, as well as build on previous research. This research will serve as a foundation for future studies on internal controls and organizational performance.

1.6 Scope of the study

The scope of this study was limited to evaluating the organizational performance of Nairobi County's level-5 public hospitals as a result of internal controls. The study's target population was employees in level-5 public hospitals in Nairobi County in

accounts/finance, administration, CT and operations departments. The research took place between March and September 2021.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a summary of relevant literature on the topic under investigation provided by different academics, scholars, critics, and writers with the aim of identifying literature gaps. This chapter focuses on the theoretical and empirical literature in terms of previous academic works and what other scholars have written about internal controls and organizational performance. Risk evaluation, information and communication, control operations, and monitoring activities are, according to the literature, the key components of internal control. The chapter begins with a theoretical examination of theories that support this thesis, followed by a review of empirical literature, a conceptual context and variable operationalization

2.2 Theoretical review

The framework consists of the Agency theory, contingency theory and institutional theories which will support the research study.

2.2.1 Agency Theory

Jensen and Meckling created the agency theory (1976). The principal and the agent are assumed to have an existing relationship based on a contract in which the agent performs the principal's duties. According to the terms of a contract between an agent and the principal (investors), the agent (manager) will perform specific tasks on the principal's behalf in exchange for compensation. According to this theory, a firm is made up of contracts between the owners of economic resources (principals) and the managers who are in charge of utilizing and controlling those economic resources. In accordance with the theory, agents possess greater expertise than principals, making it difficult for principals to

keep track of whether agents are effectively serving their interests (Gerrit& Mohammad, 2010).

The theory emphasizes the importance of having a contract to ensure that each party fulfills their contractual obligations, as well as the importance of controlling the behavior of agents under such contracts (Mwangi, 2012). Based on this theory, to meet the interests of both agents and principal, the parties sign a comprehensive contract. It is even more beneficial for the agent-principal relationship when the principal employs an expert and processes (such as auditors and control systems) to oversee the agent's performance (Panda &Leepsa, 2017). According to the theory, any missing information about the agent's relationship with the client, his or her interests, or the outcome of the job could be dangerous and result in a moral hazard for the client. In the case of an agent, moral hazard and adverse selection have two consequences for the agent's output: the agent does not have the necessary knowledge of what should be done and the agent does not complete the task.

According to agency theory, internal auditing, like other intervention mechanisms such as financial reporting and external audit, helps to maintain cost efficient contracting between owners and managers. Agency theory also serves as a useful theoretical framework for this investigation. The agency theory not only serves to explain and anticipate the existence of internal audit, but it also helps to explain the role and responsibilities allocated to internal auditors by the organization, and it predicts how organizational change will affect the internal audit function.

2.2.2 Contingency Theory

Fiedler coined the phrase "contingency theory" (1964). Contingency Theory is based on Fiedler's groundbreaking paper on the Contingency Model of Leadership Effectiveness, which was published in 1964. Contingency Theory suggests that a leader's personality and the situation in which he or she works are both important. The foundation of this theory is sociological functionalist organizational structure studies, which are systematic approaches to organizational research (Woods, 2009). Contingency theory focuses on the interpersonal dynamics of organizational leaders when addressing how external factors such as society, technology, and the external environment affect the structure and function of organizations. The context in which leadership styles and behaviors are used, according to the theory, has an impact on them (Armstrong, 2014).

According to the contingency theory, no single organizational structure applies to all organizations equally. Rather, the type of technology, the company's complexity, environmental uncertainty, the structure of the organization, and the information system it employs all contribute to its effectiveness (Armstrong, 2014). In effect, the contingency theory describes the relationship between the effectiveness of an organization's internal control system and its success in a variety of contexts, including financial stability and profitability. The type and implementation of control systems are determined by the nature of the organizational environment in which they operate.

Mullins (2010) pointed that contingency theory emphasizes the importance of the principal's character as well as the situation or situations in which the leaders work. According to this theory, organizational leaders must be successful in a variety of situations that they may encounter while performing their duties, a virtue that can be easily attained

if they work in ideal conditions that complement their leadership abilities (Armstrong, 2014). Contingency Theory would be useful in this study because it emphasizes the use of the appropriate leadership skills by organizational leaders in order to meet the various leadership needs within their organizations, especially those relating to internal controls. Fielder Contingency Theory supporters, on the other hand, believe the theory lacks flexibility because it implies that leadership styles can be determined, leading to the conclusion that the only way to mitigate certain situations is to change the leaders, which may not always be the case because leaders can be versatile. The theory supports the risk assessment variable because it is one of the most important leadership styles that a good leader must embrace in order to be successful.

2.2.3 Institutional Theory

Meyer and Rowan first proposed Institutional Theory in 1970, and Friedland and Alford later elaborated on it (1991). The institutional context in which organizations work, according to Institutional Theory, may have a greater impact on the implementation of structured structures in an organization than market forces. Creative mechanisms that improve technological performance in early-adopter organizations are legitimized in the current climate. Even if the structural type does not improve performance, it will be implemented at this stage by new and existing organization (Lammers & Garcia, 2017).

According to institutional scholars, companies' operations are determined by observable internal mechanisms and procedures, while other external structures play a minor role. In this regard, it's important to remember that if an organization has the right processes in place, external scrutiny can be avoided (Lammers & Garcia, 2017). To put it another way, loose coupling of technology can help an organization deal with external

issues while also allowing for some flexibility in its operational processes. The institutional climate, according to institutional theorists, may have a significant impact on how organizations construct structured structures.

As a result, Institutional Theory will be extremely useful in this research because it describes the various creative methods that organizations use to improve their organizational performance, including leadership styles, and failure to implement these measures is considered negligence (Aksom, Zhylynska & Gaidai, 2020). Furthermore, the application of institutional theory to the current study may be based on the assumption that the institutional environment may be forced to accept an organization's order in order to maintain and gain credibility within the corporate environment, which is easily accomplished through the establishment of strong and efficient internal control elements. Opponents of institutional theory argue that it relies too heavily on organizational passivity expectations, as well as a reluctance to discuss strategic actions and power in institutionalization conceptions, all of which are likely to elicit internal resistance. As a result, this principle encourages the use of communication and technology.

The institutional theory contributes to emphasizing the function of internal audit in the corporation and its significance for effective and efficient business operations and activities. The role of the internal audit department in protecting the company's funds on behalf of the owners and management could be examined using agency theory. The role theory could view the new developments in internal audit's responsibilities and functions in terms of providing value for money services and consulting to the business.

2.3. Empirical Literature Review

This section reviews past studies on internal control elements and organizational performance in terms of control activities, risk assessment, control environment, information and communication and monitoring elements.

2.3.1 Control Activities and Organizational performance

Regulations and procedures that help to ensure that management directives are followed are referred to as control activities. They assist in ensuring that the appropriate steps are taken to resolve risks in order to achieve the objectives of the company. A policy that determines what should be done and procedures that must be followed to influence the policy are the two parts of control operations (Etengu & Amony, 2016). All policies must be adhered to with care, diligence, and consistency.

Kurniawan (2020) investigated the effects of internal audit on local government performance as well as the efficacy of internal control efforts in Indonesia. The effect of partially controlled environment variables, monitoring activities, and the function of internal audit on the performance of Surakarta's local governments was investigated as part of the internal control process, employing both management and internal audit procedures. The sample consisted of 126 people from 33 Surakarta regional organizations, including a head and staff. Descriptive statistics and linear regressions were used in the investigation. The findings revealed that the Surakarta local government's control and monitoring activities were effectively carried out.

In another report, Sibanda, Zindi and Maramura (2020) looked at supply chain management control practices and transparency in a South African metropolitan municipality. The purpose of this research was to identify and minimize accountability

risks in a typical South African Metropolitan Municipality. For this descriptive and explanatory qualitative case study, 14 (n=14) information-rich participants were interviewed. Secondary data was frequently acquired from government papers and literature. Internal audit controls and regulations were discovered to be ineffective, making it impossible for internal audit and oversight committees to spot unethical, unfair, inequitable, opaque, uncompetitive, and cost-inefficient SCM activities rapidly. As a result, systematic noncompliance with SCM regulations, procurement and tendering procedures, favoritism, and corruptible tendencies are on the rise. Risks in the SCM process must be mitigated as quickly as possible in order to address risks that limit municipal financial transparency.

Olanrawaju (2019) analyzed the internal governance control activities and efficiency of Nigerian public sector agencies in a study conducted in Nigeria. 203 standardized questionnaires were used to collect data, as well as a semi-structured interview with six participants. The data from the questionnaire was analyzed using PLS-SEM, whereas the data from the interviews was analyzed using descriptive analysis. The findings on standards of behavior found that, at a 5% level of significance, leadership efficiency and code of ethics had a positive significant link with public sector performance, however honesty has no significant relationship with public sector performance. Internal monitoring ($\beta = 0.139$, $t = 1.97$, $p = 0.054$) and transparency ($\beta = 0.218$, $t = 5.34$, $p = 0.036$) have both been found to have a significant positive link with public sector efficiency. Risk management is inextricably linked to public sector success in terms of operational processes and stakeholder contact. According to external governance findings, the auditor

general and public account committee's oversight roles have a positive and significant impact on public sector efficiency.

A study by Njeri (2014) examined the impact of internal controls on the financial output of Kenyan manufacturing firms. Sixty-five manufacturing companies registered with the Kenyan Ministry of Industrialization took part in this survey. From a total of 65 manufacturing companies, the survey selected 20. A stratified random selection approach was used to choose the participants for the study. Data from primary and secondary sources were combined in this study. Secondary data was acquired through financial statements and other publicly available information, while primary data was gathered through structured questionnaires depending on the availability and accessibility of the relevant information. For the majority of manufacturers, the monitoring environment was one of the internal controls that had a substantial impact on the company's financial output. It was also determined that management has put processes in place to minimize the key risks that could occur from fraud.

Bett and Memba (2017) focused on Menengai to examine the effect of internal control on the organizational performance of Kenyan processing firms. A survey study design was used in this report. For the report, a total of 189 people were polled. The data was tabulated first, and then descriptive and inferential statistics were used to interpret it. Charts, tables, and graphs were used to display the results. The control climate, risk evaluation, and knowledge all have a direct impact on Menengai Company's financial results, according to ANOVA tests. This research will shed light on the various internal control activities that public hospital administrators in Kenya should implement.

2.3.2 Risk Assessment and Organizational performance

An organization risk evaluation is a critical component of an efficient internal control system since it deals with the process of assessing and evaluating risk as a continuous process (Mustafa, 2019). Risk assessment entails, for example, how management determines which risks are relevant to the company by scrutinizing financial statements that provide an accurate and fair picture of the firm's results in a given fiscal year to ensure that the reports were prepared in accordance with international financial reporting regulations and other relevant requirements. Risks must be managed with caution at all levels, and appropriate steps must be taken to mitigate them. Risks must be assessed after they have been detected. Routine risk assessments and an understanding of the impact on internal controls are required for change management. As a result, changes in the economic, business, and regulatory environments must be recognized and responded to by the firm's operations (Mustafa, 2019).

In Uganda, Kabuye et al. (2019) looked at supermarket internal control mechanisms, working capital management and financial efficiency in a study. This study was cross-sectional and correlational, and it used firm-level data from 110 Ugandan supermarkets obtained through a questionnaire survey. Working capital management is frequently cited as a key metric of financial success. Contrary to popular belief, internal control mechanisms have no direct impact on financial outcomes. As a result, companies that effectively manage their working capital are more likely to have effective internal control mechanisms, which increases financial efficiency.

Ayimposa et al. (2020) conducted a study in Ghana on the impact of risk assessment, control environment, and control activities on the output of listed banks in

Ghana. This study focused on three aspects of internal control systems: environment monitoring, risk assessment, and control operations. The field data was subjected to descriptive and regression analysis. The research findings indicate that risk management has a significant impact on organizational performance, but that the monitoring environment and control activities have only a weak impact on organizational performance. The study's practical implications are that when evaluating bank performance, risk areas must be thoroughly investigated in order to reduce or eliminate their negative impact on bank performance.

Charity and Newman (2018)) investigated the impact of risk management frameworks on financial results in the Zimbabwean public sector. Financial instability experienced by some developing-world institutions between 2014 and 2016 as a result of fraud threats prompted the study. This study used a quantitative research methodology. The sample size was 50 people from the ministry's Harare departments, with a target population of 65 people. A questionnaire was used to gather information. The data was analyzed using percentages and mode, with the results displayed in tables, graphs, and charts. According to the researchers, the ministry's risk management (RM) system effectiveness was harmed by major challenges such as a shortage of qualified staff, which resulted in an expertise gap in adopting a structured framework, the lack of an audit committee, and a lack of management engagement and collaboration.

Lagat (2017) investigated how risk evaluation strategies affect financial institutions' overall organizational performance on a local level. Explanatory analysis was used in this research. A total of 239 people were chosen using stratified random sampling from a target population of 46 commercial banks, 52 Micro Finance Institutions (MFIs),

and 200 SACCOs. Questionnaires were used to collect information. Pearson product moment correlation was used to conduct inferential statistics, while descriptive statistics were provided. The research found that the ownership structure is an important corporate governance mechanism that moderates the relationship between risk management activities and financial institution efficiency. Various risk management practices, such as recognition, review, assessment, and monitoring, should be strengthened to increase financial institution results.

Mutuku (2016) investigated the impact of risk management on Kenyan commercial banks' organizational performance. A questionnaire was used to investigate risk management activities, which were then related to commercial banks' financial results, which was calculated using ROE. The key goal was to see what effect these risk management activities had on commercial banks' financial results. To conduct this analysis, the researcher used a structured survey to collect primary data. The survey was conducted using a standardized questionnaire that was distributed to each of the country's 42 commercial banks. Primary data was also gathered from individual bank websites and publicly available financial statements. Using the SPSS program, both sets of data were analyzed, and a multiple regression equation was created. According to the study, risk management activities had a positive impact on commercial bank organizational performance, with the exception of capital adequacy and risk control, which had a negative impact.

2.3.3 Control Environment and Organizational performance

The control climate sets the tone of an organization and has an effect on its people's control consciousness. Each unit's leaders build a local control environment. It serves as the

bedrock for all other internal control elements that include discipline and order. Integrity and ethical concerns such as adherence to competence, working style, and how management assign authority are examples of environmental control factors (Qiu, Shaukat & Tharyan, 2016).

Mwakimasinde (2014) discovered that communication and enforcement of honesty and ethical standards is an aspect of control environment while conducting research on how control environment affects productivity among quoted financial firms in Sweden. Integrity and ethical principles are essential aspects of the control environment that affect the efficacy of other internal control components' administration and monitoring. They involve management's efforts to eliminate temptations that could lead to employees engaging in criminal behavior.

In Jordan, Al-Zwyalif (2015) investigated the impact of internal control environments on corporate governance. Primary data was gathered using a questionnaire. The results of statistical analysis showed that devoting any element of internal control leads to a greater degree of reinforcement of the corporate foundations of governance. Furthermore, the findings showed that internal management plays an important role in reinforcing the corporate governance foundations in Jordanian insurance companies. The study concluded that good corporate governance necessitates strict adherence to all aspects of internal control.

Kumuthinidevi (2016) investigated the effectiveness of internal control environments in private banks in Trincomalee, Sri Lanka. To collect primary data, questionnaires were created and distributed to all permanent staff at ten banks. The data

was analyzed using univariate and bivariate methods. The univariate study's data was analyzed using standard deviation, mean, and percentages. According to the findings of the data analysis, risk evaluation, control climate and practices, correspondence, accounting, and self-assessment are all beneficial to the effectiveness of internal control practices.

Internal controls, according to Kamau (2014), had an impact on the organizational performance of Kenyan manufacturing firms. According to the findings, in the majority of manufacturing firms, the monitoring environment was one of the internal monitors of the organization's functionalities that had a direct effect on the firm's organizational performance. The staff was also prepared to implement accounting and financial management systems, and the security structure identified and secured organizational assets, according to the findings. According to the statistical findings of regression analysis Internal control and organizational performance of Kenyan manufacturing firms have a positive relationship. According to the study, internal and external auditors should be kept up to date on international financial reporting standards (IFRS) and principles on a regular basis in order to develop their knowledge and skills in applying accounting practices and stay current on current issues.

Irene and Bunyasi (2017) investigated the financial results of Kenya's ministry of labor, social and security services on the information system and control environment. The research paper was written in a descriptive style. A population goal of 160 employees from a state-owned company was established. Because the population was so small, the study relied on a census. Structured questionnaires were used to collect primary data, which was then quantitatively analyzed using SPSS. The report discovered that information systems and control environments were both positively and negatively related to the success of

state-owned enterprises. Internal control systems, as well as information systems and control environments, had a positive impact on the financial results of Kenyan state-owned companies, according to the report.

Kinyua et al. (2015) investigated the impact of the internal control environment on the organizational performance of Nairobi Stock Exchange-listed companies. The report was created using a survey study approach. The study included all 62 NSE-listed companies. A total of 38 companies were chosen for the study from a target population of 62 NSE-listed companies. A stratified random sampling technique was used to select the sample. Primary and secondary data were used in the study. Structured questionnaires were used to collect primary data, and secondary data was obtained from audited annual reports, publications, and record analysis. Descriptive and inferential statistics were used to analyze the data. According to the findings, there was a significant correlation between the internal control environment and financial results. According to the study, internal control environments for companies listed on the Nairobi Securities Exchange should be strengthened in order to improve financial efficiency.

2.3.4 Information and Communication and Organizational performance

To enable employees to complete their tasks, critical data must be detected, collected, and shared at the appropriate time and in the appropriate format. Effective communication must take place across the organization, flowing down, around, and up. It has to happen to all of the people involved (Luo & Bu, 2016). Top management needs to send a clear message to employees that their control responsibilities must be taken seriously. They must be aware of their own role in internal control, as well as how their actions interact with the work of

others. They have to come up with a way to get critical information upstream. The information system includes company processes such as financial statements and correspondence. An information system is made up of tools, people, procedures, and data (Luo & Bu, 2016).

Ngantchou (2016) conducted an experimental study in France to determine the effects of ICT on worker activity. Since survey data made it difficult to collect individual and team production, the study used an experimental methodology. Employees favor information technology, according to the findings, and those who use it are more efficient than those who do not. It was also decided that organization that drive decision-making down to the employee level could result in significant costs for the company. Technology-based control, on the other hand, has been very effective in lowering those costs. Indeed, when the sanction is available, technology monitoring has a disciplining effect, but this effect fades over time.

In Egypt, Oussii and Taktak (2018) investigated the impact of internal audit function characteristics on the quality of internal controls. A questionnaire was used to collect data on the perceptions of external and internal auditors about the impact of the internal control system on audit report quality. A number of interviews were conducted with two target groups to support and confirm the questionnaire results. After being reviewed by statistics professors at Egyptian universities, the questionnaire was distributed to 55 external and internal auditors practicing in Egypt. The statistical analysis revealed a statistically significant effect of information and communication on the audit report quality.

In Ethiopia, Hailu (2017) conducted a survey to look into the impact of information systems on organizational efficiency in Hawassa, Ethiopia's southern telecom region. A questionnaire was used to gather both qualitative and quantitative data from 45 administrative staff members during the study. The staff were selected at random and divided into three strata, such as top, center, and lower lever management, using a disproportionate stratified methodology. SPSS was used to evaluate the information gathered. As a result, employees' attitudes toward knowledge as a valuable asset are unfavorable, undermining the value of information systems in corporate endeavors, and the organizations' key challenges are a lack of top management to develop the method. Internal systems, on the other hand, help organizations become more productive and efficient.

Muhunyo and Jagongo (2018) investigated the organizational performance of public higher education institutions in Nairobi City County, Kenya, using internal control mechanisms. The thesis examined the theories of agency, stewardship, positive accounting, and attribution. In this analysis, a descriptive research design was used. The report drew on the knowledge of 96 employees from Nairobi City County's various public institutions of higher learning. Open-ended and closed-ended questionnaires were used to collect primary data from the sample population. Following the use of descriptive statistics to interpret the data, the data was presented in statistical formats. The study's findings show that the control environment, risk assessment, control procedures, and information and communication as internal control system measures all have a direct impact on the organizational performance of higher education institutions in Nairobi City County.

Muchoki (2020) studied the impact of internal control systems on revenue collection at the National Transportation and Safety Authority. A descriptive research

approach was employed by the researcher to examine the association between internal control systems and revenue collection efficiency. Three senior managers from each of the NTSA's 18 stations were included in the study's target group of 54 people. Data was gathered through digitally given questionnaires because of the impact of Covid-19 Findings from this study show a considerable impact on revenue collection at NTSA from the combination of internal control systems, risk assessment, control actions and information communication and monitoring.

In his research on organizations, Kamau (2014) stated that management recognizes individuals in charge of managing various internal operations in order to ensure that all employees understand the concept and value of internal controls, including the division of duties, assesses how well the organization's guidelines and policies are working and being enforced, and reports on organizational structures spell out. According to the study, most manufacturing organizations have identified employees who are in charge of overseeing various activities within the organization; staff understand the concept and importance of internal controls, including the division of responsibility; and this understanding aids in determining how well the organization's guidelines and policies are working.

Mongare and Nasidai (2016) investigated the impact of communication techniques on the Kenya Ports Authority's organizational efficiency. The relationship between communication techniques and organizational efficiency was explored by the researcher. The key aim of the study was to look into the influence of communication techniques on organizational success at Kenya Ports Authority. It also wanted to know how an open-door communication policy affects organizational efficiency, how collective effort affects organizational performance, how organizational structure affects organizational

performance, and how structured communication networks affect organizational performance. The study's key finding was that communication techniques play a critical role in high-performance teams.

2.3.5 Monitoring Element and Organizational performance

Monitoring is a technique for evaluating the system's output over time. Separate assessments' scope and frequency are solely determined by a risk assessment and the efficacy of ongoing monitoring procedures. Monitoring includes safeguarding facilities over access to assets and documents, granting access to computer programs and data files, and conducting periodic audits of records. The efficient operation of the inward control system is ensured by task observation. Observation is how an organization determines whether its strategy and methodology, which were planned and implemented by the board, are being carried out successfully by representatives (Abbasi& Hollman,2010).

Ronald, (2016) used the case of Wakiso District in Uganda to conduct a case study review that looked at the effects of project monitoring and assessment elements on the success of the Electrification Programme in Uganda. A correlational analysis design was used in this study. The study included 113 individuals, including 10 executives, 25 technocrats, and 78 members of the project committee. Questionnaires were used to collect data from project committee representatives in the Rural Electrification project. According to the findings, there was a major connection between project monitoring and the overall success of the Wakiso District Electrification Program.

In Indonesia, Simangunsong (2014) investigated the effects of internal control and internal audit effectiveness on local government efficiency. A census method was used to

conduct the research. The analysis relied on primary data collected via questionnaires. The data analysis methodology used to test the hypothesis was regression analysis using SPSS. Prior to testing the hypothesis, the study performed a validity and reliability test. Internal control and internal audit had a positive effect on local government performance both concurrently and to some extent, according to the findings.

Amudo and Inanga (2009) evaluated internal control systems in African Development Bank Group (AfDB) Regional Member Countries (RMCs), with an emphasis on Uganda in East Africa. Monitoring, control practices, risk management, knowledge and communication, and the control environment were among the variables. According to the findings, certain control elements of efficient internal control systems are missing in these programs, rendering the existing control mechanisms ineffective. The study proposed that the projects' current internal control systems be strengthened.

A study by Mwakimasinde, Odhiambo, and Byaruhanga (2017) looked at the financial performance of Kenyan sugarcane out grower companies in relation to their internal control systems. Sugarcane out-grower companies' financial performance was the study's primary goal in conducting this research. For financial results, internal control systems were defined in terms of their control environment (risk management mechanism), information system (information system), and control activities. Out-growing sugarcane companies benefit from internal control systems, according to regression results. The study's findings and conclusions led to the following recommendations: Outgrower companies' production has been found to increase significantly as a result of monitoring activities, allowing them to improve their internal control systems.

Barra (2016) looked into the effect of fines and other internal controls on the possibility of workers committing fraud. The results showed that having a simple separation of duties and control activities increases the cost of fraud. As a result, in a split-task setting, the advantage of committing fraud for an employee must outweigh the cost of committing fraud. Furthermore, while division of duties is the "lowest-cost" fraud deterrent for non-managerial workers, maximum penalties are the "lowest-cost" fraud disincentives for managers, it was discovered. The findings indicate that monitoring controls are essential for the efficacy of internal controls such as responsibilities division.

Brian (2017) investigated the impact of internal controls at the Kenya Revenue Authority (KRA). Both qualitative and quantitative methods were used in the study. Primary data was obtained using structured questionnaires for the study. The study enlisted the help of 38 individuals. The analysis of the data revealed that in order for internal controls to function, all five elements of regulation must be in place: environment, risk assessment, control operations, communication and information, and assessment. According to the study, ineffective internal controls have also aided fraud, asset loss, and misappropriation of revenue earned. Internal controls do have drawbacks, according to the report, and KRA revenue collection and internal controls have a direct relationship.

2.4 Conceptual Framework

A conceptual framework is a diagrammatic representation that illustrates the existing relationship between dependent and independent variables within a given study. In this case, the independent variables are control environment, risk assessment, control activities, monitoring elements and information and communication. The dependent variable on the other hand is performance of level-5 hospitals in Nairobi County.

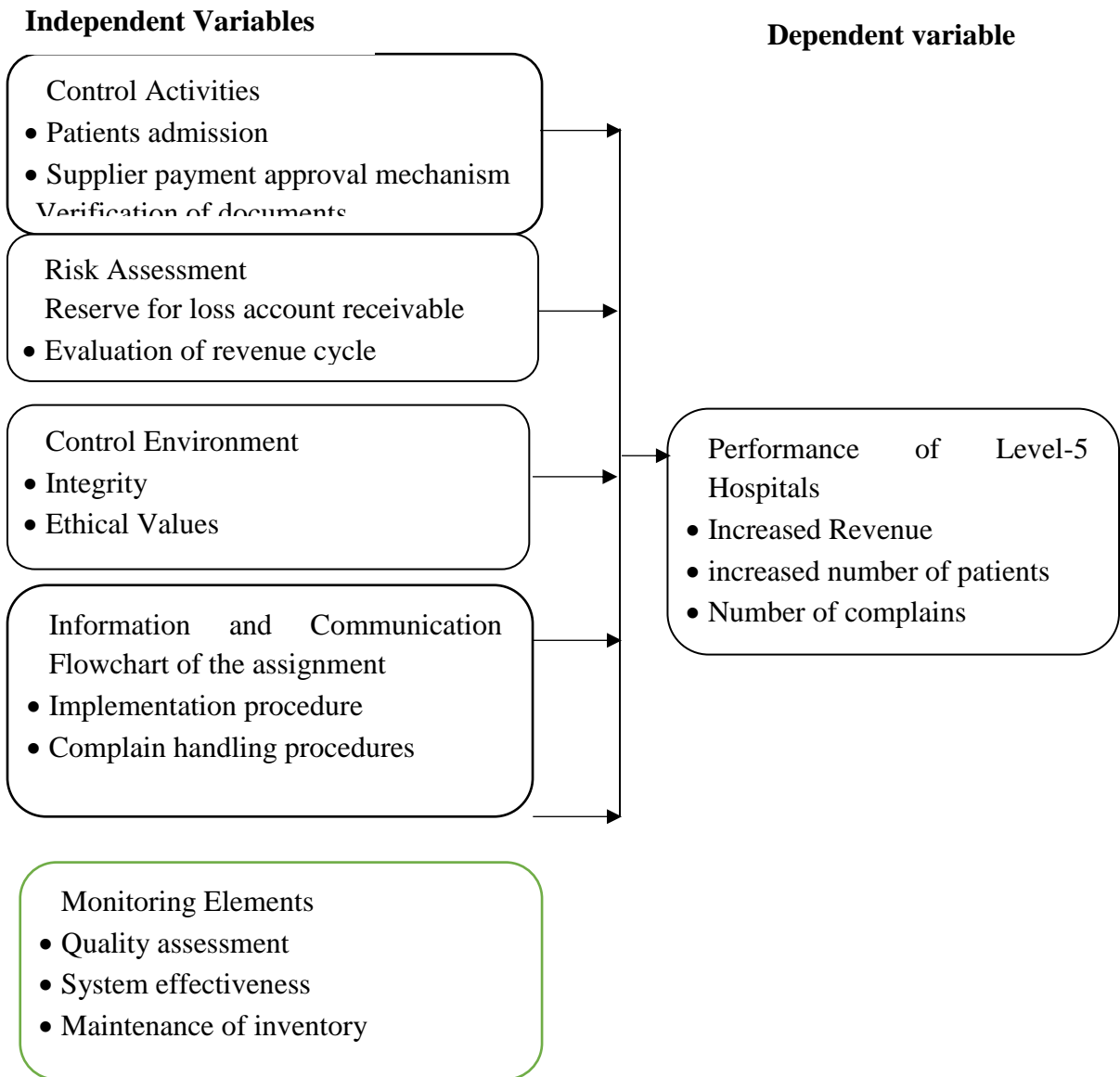


Figure 2.1 Conceptual Framework

2.5 Operationalization of Variables

This covers dependent variable, independent variables and parameters which are used for measurement purposes. This shown in Table 2.1 below

Table 2. 1
Operationalization Framework

Variable	Indicators	Measurement Scale	Method of Data Collection	Data Analysis
Control Activities Independent Variable	<ul style="list-style-type: none"> • Patients admission • Supplier payment approval mechanism • Verification of documents 	Likert/ordinal	Primary data Questionnaire	Frequencies and percentages
Risk Assessment Independent Variable	<ul style="list-style-type: none"> • Reserve for loss account receivable • Evaluation of revenue cycle • Clear procedure on cash management (forms and documents) 	Likert/ordinal	Primary data Questionnaire	Frequencies and percentages
Control Environment Independent Variable	<ul style="list-style-type: none"> • Integrity • Ethical Values • Independent of audit committee 	Likert/ordinal	Primary data Questionnaire	Frequencies and percentages

<p>Information and Communication</p> <p>Independent Variable</p>	<ul style="list-style-type: none"> • Flowchart of the assignment • Implementation procedure • Complain handling procedures 	<p>Likert/ordinal</p>	<p>Primary data</p> <p>Questionnaire</p>	<p>Frequencies and percentages</p>
<p>Monitoring Element</p> <p>Independent Variable</p>	<ul style="list-style-type: none"> • Quality assessment • System effectiveness • Maintenance of inventory 	<p>Likert/ordinal</p>	<p>Primary data</p> <p>Questionnaire</p>	<p>Frequencies and percentages</p>
<p>Organizational performance</p> <p>Dependent Variable</p>	<ul style="list-style-type: none"> • Increased Revenue • increased number of patients • Number of complains • Improved services 	<p>Ordinal</p>	<p>Primary data</p> <p>Questionnaire</p>	<p>Frequencies and percentages</p>

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the methods for conducting the research that was used to complete the study. It's a technique used by researchers to answer to research questions in a factual, analytical, and accurate manner. It's a thorough summary of the processes and methods to collect data, analyse it, and present the results. These include the research architecture, target population, data collection methods, and data analysis techniques.

3.2. Research Design

A research design is a step-by-step process that outlines how the problems in the study will be solved. The research design for this study was a descriptive sample research design. Using a descriptive survey study design, you can obtain a straightforward result as well as the characteristics associated with it at a specific time (Kothari, 2014). A descriptive survey is used to describe a population in terms of key variables, with the primary goal of establishing a relationship between them. This research design has the advantage of being simple to comprehend. The advantage of using descriptive design is that it can be used to describe the basic features of a large population, it has a high level of accuracy, which reduces observer bias, and it is simple to implement by giving all subjects the same inducement (Kothari, 2014).

3.3 Target Population

A population, according to Cooper and Schindler (2016), is a group of people, objects, or things from which measurements are taken. The term "population" also refers to a group of activities or individuals as well as a set of resources or elements, families, or other

artifacts that are being investigated by a researcher. A population can also be defined as a group of people, events, or artifacts that share a common observable characteristic (Creswell & Creswell, 2017). The study's target population was 68 employees working at the 3 level-5 public hospitals in Nairobi County from accounts/finance, administration, ICT and operations departments (Nairobi County Employment Report, 2020).

3.4 Sampling Technique and Sample Size

3.4.1 Sampling Technique

Taherdoost (2016) defines sampling technique as a method of selecting a sample of items to represent all cases under consideration as part of the study. It specifies the total target population from which the surveyor will select the sample for analysis. Cooper and Schindler (2016) define a sample frame as a set of details used to identify a sample population for statistical care. To aid in data processing and frame division, sample frames provide identifying information on individual characteristics. This study employed a census since the number of the respondents is small and manageable, thus, all 68 staff were involved in the study.

3.4.2 Sample Size

The method of assessing the number of observations or replicates to include in a statistical study is known as sample size determination (Boddy, 2016). Any empirical study that uses a survey to draw conclusions about a population must take the sample size into account. The sample size for this analysis was 68 employees working in the three (3) level-5 public hospitals in Nairobi County within accounts/finance, administration, and operations departments.

3.5 Research Instrument

Questionnaires were used to obtain primary data. Since the information obtained is not immediately measurable, questionnaires are sufficient for this analysis. It's a common technique, particularly for large inquiries. The semi-structured questionnaire was distributed to the sampled population through drop-and-pick. The information gathered by questionnaires was free of bias. The questionnaires were given to a total of 68 people, and those fully filled was chosen for data analysis and tabulation using frequency tables and figures.

3.6 Pilot Study

Pre-testing was carried out to identify defects in the design and instrumentation, as well as to provide alternative data for sample collection (Cooper & Schindler, 2014). The pilot test was conducted on a total of 10% of the sample population (7 respondents), from Thika level 5 hospital. It has been suggested that an effective pilot study uses 1 percent to 10 percent of the total sample size by Mugenda & Mugenda (2013). The findings of the pilot study were left out of the final report. The findings of the pilot study assisted in identifying and correcting instrument errors, ensuring that the instruments collect the information that is necessary for this study.

3.6.1 Reliability Test

The degree to which research instruments produce reliable results is measured by reliability (Mugenda & Mugenda, 2013). When a survey/questionnaire contains several rating scale questions that form a scale, the researcher used the widely used internal consistency measure known as the alpha coefficient (α). Internal consistency Cronbach's Alpha (1997) is a reliability coefficient that ranges from zero to one and indicates how strongly the

measured items are related. Only constructs with a cutoff of 0.7 or higher was considered for further analysis. For any researchable analysis, a reliability test of 0.7 is recommended (Kothari, 2014).

3.6.2 Validity Test

This applies to how well a test tests what the researcher really needs to assess. The accuracy and significance of inferences drawn from research findings are referred to as the validity of the findings (Kothari, 2014). If the results of the study measurement procedure are correct, the test data may be assumed to be reliable. A measuring instrument is only useful if it calculates the data it is intended to collect. The importance of data obtained by pre-testing the instrument is referred to as validity. A total of 7 people were given the test instruments to validate the validity of the data collection instruments. The respondents were asked to verify whether questionnaires are useful in gathering information about the internal control elements' effects on the performance of Kenya's level-5 public hospitals. The quality of the respondents' answers was compared to the study objectives and scored on a scale of 1-(strongly disagree) to 5-(strongly agree). The study's findings would be used to measure the study's reliability and validity.

3.8 Data Processing and Analysis

The three stages of data processing are data cleaning, editing, and coding. The data was analyzed using descriptive statistics (means and standard deviation) as well as inferential statistics (regression). After that, the data was coded and reviewed for any errors or omissions (Kothari, 2014). The frequency tables, percentages, and means were used to present the data. To evaluate the findings, I tabulated, coded, and analyzed the responses to the questionnaires using the Statistical Package for Social Science (SPSS). As illustrated

below, multiple linear regression models were used to determine the relationship between the dependent variable (Y) and the independent variable (X).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

Y = Organizational performance

X1 = Control environment

X2 = Risk assessment

X3 = Control Activities

X4 = Monitoring

X5 = Information and Communication

α = Constant

ε = Error term

3.9 Diagnostic Tests

Pre-analysis diagnostic measures like heteroscedasticity, multicollinearity, and normality checks was used to ensure that the regression model to be fitted does not breach the classical linear model assumptions, i.e. that the results are not biased.

3.9.1 Multicollinearity

Multicollinearity is a condition in which the independent variables in a sample have a clear association (Kumari, 2008). If there is sufficiently multicollinearity, one predictor variable should be dropped to prevent difficulties in regression due to forecasting error. To search for multicollinearity, the Variance Inflation Factor (VIF) was used. A VIF of 1 indicates that two independent variables are not collinear. Collinearity rises as the variance of an estimator rises. $VIF > 10$ denotes a high level of multicollinearity, while VIF 5 denotes a lack of multicollinearity (Gujarati, 2003).

3.9.2 Heteroscedasticity

The condition of heteroscedasticity is when the error variance is not constant. Heteroscedasticity is caused by the presence of outliers in the data and the removal of a variable from the model. This indicates that the sample includes results that are excessively large or insignificant in contrast to the research observation. The Breusch-Pagan is used to bring it to the test. The test notes that there is a constant difference if the p-value is less than 0.05 ($p > 0.05$), and then the null hypothesis is accepted.

3.9.3 Normality Test

The term "normality" refers to both the distribution of data and the distribution of a random variable underlying the data set. To check for normality, histograms and skewness distributions are used. A standard distribution curve's skewness ranges from -3 to +3, and all of the variables' kurtosis is positive (Gujarati, 2003). In this analysis, the Kolmogorov-Smirnov normality test was used. If $Asymp.Sig > 0.05$, the data in that sample are normally distributed; if $Asymp.Sig < 0.05$, the data are not normally distributed.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter summarizes the findings and interpretations of the study, using the research objectives as a guide. Statistical, descriptive, and regression analyses were used to analyze the data collected in the study. Respondents response were analyzed using descriptive statistics to describe effect of internal control elements on performance of level-5 public hospitals in Nairobi county. ANOVA was employed to determine if there was a relationship between independent variables and the dependent variable.

4.2. Response Rate

Sixty-eight (68) questionnaires were delivered to the various staff members working at the three Nairobi County level-5 public hospitals. Fifty-eight (58) of the sixty-eight (68) questionnaires provided were properly completed. The aggregate response rate was 85percent, which is a sufficient number this conforms to Garg and Kothari's (2014) assertion that a response rate of more than 70% is excellent. This high response rate can be attributed to the data collection technique used in the survey, which involved briefing all respondents on the study's purpose and the information sought by the questionnaire.

Table 4.1

Response Rate

	Frequency	Percentage
Response	58	85
Non-Response	10	15
Total	68	100

4.3 Demographic Information

Gender, level of education and duration of working in health sector are the demographic characteristics that this study sought. Objective characteristics such as demographics can be used to assess the strength of responses to a particular topic.

4.3.1 Gender of the Respondents

The study sought to determine the effect of internal control elements on performance of level-5 public hospitals in Nairobi County. Participants were asked to identify their gender before taking part in the survey. The findings are summarized in Table 4.2.

Table 4.2
Gender of the Respondents

	Frequency	Percentage
Male	34	59
Female	24	41
Total	58	100

Table 4.2 clearly shows that the male gender accounts for 59 percent of participation, while the female gender accounts for 41 percent. This implies that top positions in public hospitals are dominated by men. However, most public hospitals have a fair gender representation and has exceeded 30 percent required by the Kenyan Constitution of 2010. This requirement considers not only the numbers but also the portfolio balance of how gender is distributed among positions in public hospitals.

4.3.2 Education Level of the Respondents

The study aims to assess the respondent's level of formal education. The aims of investigating the education level of the respondents is to access whether they will be in a position to provide reliable information that this study sought. Participants were asked to specify their educational level, and the results are presented in the table below.

Table 4.3
Education Level of the Respondents

Education	Frequency	Percentage
College	11	19
Undergraduate	21	36
Professional Qualification	18	31
Masters	8	14
Total	58	100

The questionnaire also assessed the respondents' level of education. As seen in the table above, the degree level was the most common at 36%, followed by a professional qualification at 31%, college certificates at 19%, and master's degrees at 14%. The study's findings indicate that respondents have knowledge of the questions, understand how to fill out the questionnaire, and provided effective answers because they understand the organizations, as evidenced by their education level. This could also imply that the ministry of health considers education level of the employees hired. There is hope that with proper education among public servants, not only will good services be delivered, but there may also be an increase in employee accountability.

4.3.3 Experience of the Respondent

The study aimed to ascertain the length of time the respondents had spent in public hospitals. This assists to determining respondents level of experience in the management of public hospitals; it also assists in determining the strength and reliability of the data collected.

Table 4.4
Experience of the Respondent

	Frequency	Percentage
1-5 years	5	8
6-10 years	10	17
11-15 years	21	36
16-20 years	14	24
21 years and above	9	15
Total	58	100

According to the findings, 36 percent of respondents had worked in public hospitals for 11-15 years, 24 percent had worked in public hospitals for 16 to 20 years. It is also clear that 17% have worked or served in public hospitals for 6-10 years, while 15% have worked in public hospitals for more than 21 years. Similarly, 8% have working at public hospitals between 1-5 years. This suggests that the majority of respondents have been in the service for a reasonable amount of time and are thus experienced, as shown in Table 4.4. This also suggests that there is low employee turnover in the public sector, which could be a good indicator of desirable retention levels that helps in implementing both long-term and short-term plans to achieve their respective missions and objectives.

4.4 Descriptive Statistics

4.4.1 Control Environment and Performance of Level 5 Hospitals

The study used mean and standard deviation descriptive statistics to capture the responses based on the various indicators of study variables on a Likert scale of 1-5, where 5= Very great extent, 4= Great extent, 3 = Moderate extent, 2= Little extent and 1= No extent. As a result, the average responses on each variable are presented in this section where standard deviation illustrates the extent of variation in the replies.

The findings indicated that a majority of respondents agreed that the hospital conducts auditing and audit-related activities in accordance with established standards (Mean = 4.41), The hospital's board and management committee are self-contained (Mean = 4.14), and agreed that to a great extent employees and management alike are dedicated to excellence and honesty (Mean=4.09) and that to direct behaviour, operations, and decision-making, the hospital has an organizational philosophy (Mean=4.07). The findings also showed that respondents agreed that to a great extent the hospital management is dedicated to upholding ethical standards in the healthcare industry (Mean=3.81).

The findings imply that in regard to control environment, hospitals are keen on control environment measures such as integrity, ethical Values and independent of audit committee (Average Mean=4.104). The findings are also supported by a low standard Deviation which implies low variation in the opinions (STDev =0.626). According to Kinyua, Gakure, Gekara, and Orwa (2015), control environment factors include integrity and ethical values; commitment to competence; leadership philosophy and operating style; and the manner in which management assigns authority and responsibility, organizes, and

develops its people. According to Mawanda (2018), there is a positive relationship between control environment and financial performance of institutions of higher learning in Uganda, as demonstrated by his case study of Uganda Martyrs University.

Table 4.5
Control Environment

Aspects of Control Environment	Mean	STDev
To direct behaviour, operations, and decision-making, the hospital has an organizational philosophy.	4.07	0.672
The hospital's management is dedicated to upholding ethical standards in the healthcare industry.	3.81	0.606
The hospital has auditing and audit-related activities that are driven by standards.	4.41	0.563
Employees and management alike are dedicated to excellence and honesty.	4.09	0.657
The hospital's board and management committee are self-contained.	4.14	0.634
Average	4.104	0.626

4.3.2 Risk Management and Performance of Level 5 Hospitals

The second objective of the study was to ascertain the effect of risk assessment on the performance of Nairobi county's level-5 public hospitals. Respondents were asked to rate their level of agreement with various risk assessment statements on a scale of 1-5, with 5 indicating very effective, 4 indicating effective, 3 indicating moderately effective, 2 indicating slightly effective, and 1 indicating less effective. The results are presented in Table 4.6. The findings presented indicate that the respondents agreed to a very great extent that management has a set of guidelines for determining the fraud-related threats to the company are the most severe (Mean=4.26), management has placed in place measures to

reduce the vital risks that may arise as a result of fraud (Mean=4.21). Respondent also indicated that to a very great extent management provides confidence that risks are being handled properly (Mean=4.19), Management recognizes risks that may jeopardize the accomplishment of the goals (Mean=4.16). Other areas of concern, such as excessive levels of risk, are subject to unplanned and informal assessments (Mean=4.02).

The findings imply that the constructs of risk management in the hospitals such as reserve for loss account receivable, evaluation of revenue cycle and clear procedure on cash management (forms and documents) influence performance of level 5 hospitals in Kenya as shown by average mean of 4.168. The findings are also supported by a low standard deviation which implies low variation in the opinions (STDev=0.654). According to a study by Muhunyo and Jagongo (2018) strong risk management systems have resulted in strong internal control mechanisms, which have resulted in high institution revenue, low operating costs, and high fees income, whereas weak and porous ones have resulted in poor performance of the institutions.

Table 4.6
Risk management

Aspects of Risk management	Mean	STDev
Management recognizes risks that may jeopardize the accomplishment of the goals.	4.16	0.644
Management has a set of guidelines for determining the fraud-related threats to the company are the most severe.	4.26	0.637
Management has placed in place measures to reduce the vital risks that may arise as a result of fraud.	4.21	0.642

Management provides confidence that risks are being handled properly.	4.19	0.712
Other areas of concern, such as excessive levels of risk, are subject to unplanned and informal assessments.	4.02	0.635
Average	4.168	0.654

4.3.3 Control Activities and Performance of Level 5 Hospitals

The third objective of the study was to ascertain the effect of control activities on the performance of Nairobi county's level-5 public hospitals. Respondents were asked to rate their level of agreement with various statements about the regulatory framework on a scale of 1-5 (5 indicating Very Large Extent, 4 indicating Large Extent, 3 indicating Moderate Extent, 2 indicating Low Extent, and 1 indicating Very Low Extent). The results are presented in Table 4.7. The results indicated that respondents agreed to a great extent that only staff with specific responsibilities have access to documents in the hospital accounting system (Mean=4.29), making entries, reviewing paperwork, and confirming records all have monitoring mechanisms in place at the hospital (Mean=4.10) as well as that different levels of risk in different groups have different limits (Mean=4.05). Respondents also agreed that to great extent the hospital has procedures in place for regular bank account reconciliation to ensure that there are no unpaid things that could result in losses (Mean=4.02) and that only approved staff with access to the hospital system are allowed to check on it (Mean=3.91).

The findings imply that control activities such as patient's admission, records of patients, supplier payment approval mechanism and verification of documents is effective

in level 5 hospital within Nairobi County as indicated by average mean of 4.074. The findings are also supported by a low standard deviation which implies low variation in the opinions (Std Dev=0.6626). The study findings conform a study by Ejoh and Ejom (2017) on impact of internal control activities on financial performance of tertiary institutions in Nigeria. The study revealed that there is clear separation of role where individuals are supposed to adhere to laid procedure of the operation to ensure smooth flow of the activities. In hospitals, individuals are given clear procedure to follow in their line of duties to ensure there is no confusion caused and that the performance of the facility is proceeding effectively.

Table 4.7
Control Activities

Aspects of Control activities	Mean	STDev
Only approved staff with access to the hospital system are allowed to check on it.	3.91	0.629
Only staff with specific responsibilities have access to documents in the hospital accounting system.	4.29	0.593
Making entries, reviewing paperwork, and confirming records all have monitoring mechanisms in place at the hospital.	4.10	0.718
Different levels of risk in different groups have different limits.	4.05	0.711
The hospital has procedures in place for regular bank account reconciliation to ensure that there are no unpaid things that could result in losses.	4.02	0.662
Average	4.074	0.6626

4.3.4 Information and Communication and Performance of Level 5 Hospitals

The third objective of the study was to ascertain the effect of information and communication on the performance of Nairobi County's level-5 public hospitals. Respondents were asked to rate their level of agreement with various statements about the regulatory framework on a scale of 1-5 (5 indicating Very Large Extent, 4 indicating Large Extent, 3 indicating Moderate Extent, 2 indicating Low Extent, and 1 indicating Very Low Extent). The results are presented in Table 4.5. The results revealed that the respondents agreed to employees at the hospital are mindful of the value of internal controls (Mean=4.10), every section/unit in the hospital has a simple reporting structure that spells out who is responsible for what (Mean=4.05) as well as that The hospital has efficient communication networks that aid in the execution of various hospital activities (Mean=4.03).

The findings imply that majority of public hospitals complies with information and communication aspect such as flowchart of the assignment, implementation procedure and complain handling procedures in order to enhance their performance as indicated by average mean score of 3.97. A standard deviation of 0.639 indicated a small variation in the responses regarding performance of level 5 hospitals in relations to the aspects of information communication. According to Cristina and Cristina (2019), information communication is a critical component of an internal control system because it aids in the efficient and timely distribution of information. External and internal communication are both included. According to Abu Naser, Al Shobaki, and Ammar (2017) a good internal control system requires the availability of information as well as a clear and visible plan for communicating responsibilities and expectations. An essential component of these

internal controls is the promise of confidentiality of information shared and obtained. Employees should feel free to express their concerns, discuss potential issues, and notify management of suspected infractions, thus, IC is key in internal control systems.

Table 4.8**Information and communication**

Aspects of Information and Communication	Mean	STDev
Individuals tasked with overseeing operations to ensure proper coordination on internal controls have been established at the hospital.	3.83	0.625
Employees at the hospital are mindful of the value of internal controls.	4.10	0.640
The hospital has efficient communication networks that aid in the execution of various hospital activities.	4.03	0.748
Every section/unit in the hospital has a simple reporting structure that spells out who is responsible for what.	4.05	0.605
Anti-fraud policies and practices are well-communicated at the hospitals.	3.86	0.576
Average	3.97	0.639

4.3.5 Monitoring Activities and Performance of Level 5 Hospitals

The study also endeavored to find out influence of monitoring activities on performance of level 5 hospitals in Kenya. Majority of the respondent agreed that in their institutions employees are responsible for security of all assets assigned to them (Mean=4.33), communication between departments is documented for follow up and that management in our organization appreciates the need for individual departments to work together to achieve overall organization objectives (Mean=4.17) in each case. Respondents also agreed

that to a great extent institution carries out periodic counting of assets (Mean=4.12) and that organization has ensured all computers have pass words for log in by respective assigned officers (Mean=4.00).

The findings imply that most of public hospitals complies with monitoring activities aspect such as quality assessment, system effectiveness and maintenance of inventory in order to enhance their performance as indicated by average mean score of 4.15. A standard deviation of 0.618 indicated a small variation in the responses regarding performance of level 5 hospitals in relations to the aspects of monitoring activities. Dhaliwal, Hogan, Trezevant and Wilkins (2016) internal control is monitored through the use of both ongoing and separate evaluations. These monitoring process determine whether other internal control components continue to function as designed and intended. Furthermore, Masli, Peters, Richardson and Sanchez (2010) pointed that monitoring activities aid in the identification of internal control deficiencies and their communication to the appropriate officials responsible for corrective action.

Table 4.8 Monitoring Activities

Monitoring Activities	Mean	STDev
In our institution, employees are responsible for security of all assets assigned to them	4.33	0.54251
Our organization has ensured all computers have pass words for log in by respective assigned officers	4.00	0.67538
Our institution carries out periodic counting of assets	4.12	0.65098

In our organization, communication between departments is documented for follow up	4.17	0.62514
The management in our organization appreciates the need for individual departments to work together to achieve overall organization objectives	4.17	0.59642
Average	4.158	0.618

4.5 Performance of Level 5 Public Hospitals

The research sought to establish how performance of the level 5 hospitals has been affected by application of internal control elements in their operations. The study's findings indicate that hospital service delivery has improved (Mean=4.21), patient complaints have decreased, and hospitals have increased revenue collection, as indicated by a mean score of 4.10 in each case. Respondent also agreed that there are minimal cases of errors of operations reported and that there is increased number of patients seeking services in the hospital as shown by mean score of 4.05 and 4.00 respectively. In average respondent it is clear that there is increased revenue collection, effective cash management and clear cash reconciliation in the public hospitals due to internal control elements adopted.

Table 4.9
Performance of Level 5 Public Hospitals

	Mean	STDev
There is increased revenue collection in our hospital	4.10	0.667
There is improved service delivery in our hospital	4.21	0.642
There is increased number of patients seeking services in the hospital	4.00	0.675

Number of complaints from the patients has decreased	4.10	0.612
There is minimal cases of errors of operations reported	4.05	0.660
Average	4.09	0.651

4.6 Correlation Analysis

A correlation analysis was done to determine the relationship between the study variables. The Pearson correlation coefficient was employed in this investigation to determine the relationship between the variables included in the study. Correlation analysis, according to Kumar (2011), displays the direction and degree of the link between variables and runs from -1 to +1. Table 4.11 displays the findings of the correlation analysis.

According to the findings in Table 4.11, the control environment has a positive and significant effect on the performance of Nairobi County's level-5 public hospitals ($r = 0.288$, $\text{Sig} = 0.028 < 0.05$). This means that a unit increase in the control environment results in a significant improvement in the performance of Nairobi County's level-5 public hospitals. The findings also show that risk management has a positive and significant effect on the performance of Nairobi County's level-5 public hospitals ($r = 0.460$, $\text{Sig} = 0.000$, < 0.05). This suggests that risk management improves the performance of Nairobi County's level-5 public hospitals. It was also discovered that control activities have a positive and significant effect on the performance of Nairobi County's level-5 public hospitals ($r = 0.115$, $\text{Sig} = 0.039$, < 0.05). This means that increasing control activities leads to an increase in the performance of Nairobi County's level-5 public hospitals. The performance of Nairobi County's level-5 public hospitals was found to have a positive and significant effect on information communication ($r = 0.140$, $\text{Sig} = 0.024$, < 0.05). This implies that improved

information sharing leads to improved performance at Nairobi County's level-5 public hospitals. Monitoring activities have a favorable and statistically significant impact on the performance of Nairobi County's level-5 public hospitals ($r = .360$, $\text{Sig} = 0.006$, <0.05). This implies that a unit increase in monitoring efforts results in a significant improvement in the performance of Nairobi County's level-5 public hospitals.

Table 4.10
Correlation Analysis

		PER	CE	RM	CA	IC	MA
PER	Pearson Correlation	1					
	Sig. (2-tailed)						
CE	Pearson Correlation	.288*	1				
	Sig. (2-tailed)	0.028					
RM	Pearson Correlation	.460**	0.254	1			
	Sig. (2-tailed)	0.000	0.054				
CA	Pearson Correlation	0.115	0.137	0.098	1		
	Sig. (2-tailed)	0.039	0.304	0.463			
IC	Pearson Correlation	0.140	-0.17	0.109	-0.022	1	
	Sig. (2-tailed)	0.024	0.202	0.415	0.871		
MA	Pearson Correlation	.360**	-0.084	.298*	.313*	0.129	1
	Sig. (2-tailed)	0.006	0.532	0.023	0.017	0.333	

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

4.7 Diagnostic Tests

The study performed diagnostic tests before employing an ordinary least square regression model to assess the study hypotheses. The tests include multicollinearity, heteroskedasticity, and normality tests. The test findings are presented in the subsections that follow.

4.7.1 Multicollinearity

A situation in which the correlation between the independent variables is more than 0.8 is referred to as multicollinearity. In such a circumstance, the regression model's standard errors are inflated, resulting in incorrect coefficients for the regression model variables. These values are not predictive of the relationship between the independent and dependent variables. The study used the Variance Inflation Factor (VIF) approach to test for multicollinearity, with VIF values less than 10 being acceptable. Table 4.... shows the results for the VIF values. Control environment has a VIF value of 2.043, risk management has a VIF value of 3.701, control activities has a VIF value of 3.815, information and communication has a VIF value of 2.31, and monitoring Activities has a VIF value of 2.365, according to the results. The numbers are less than 10, indicating that they fall below the criterion for lack of multicollinearity.

Table 4.11
Multicollinearity

	Collinearity Statistics	
	Tolerance	VIF
Control Environment	0.491	2.043

Risk management	0.273	3.701
Control activities	0.262	3.815
Information and Communication	0.435	2.3
Monitoring Activities	0.423	2.365

4.7.2 Heteroskedasticity

One of OLS's assumptions is that the error terms in the regression should be constant. As a result, this study looked for deviations from this premise (Heteroskedasticity). The Breusch Pagan method was utilized in this test, with a significance value of the probability chi square larger than 0.05 indicating the lack of heteroskedasticity. Table 4.13 summarizes the findings. The results showed that the Prob> Chi² value was (0.06 > 0.05), indicating that the constant variance null hypothesis was not rejected. As a result, the data was suitable for running an OLS regression.

Table 4.12
Heteroskedasticity

Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity	
Ho: Constant variance	
Variables: Fitted values of public hospital performance	
Chi ² (1)	6.50
Prob> Chi ²	0.061

4.7.3 Normality Test

The assumption of a classical linear regression model requires that the data assume a normal curve (Normal distribution). The Kolmogorov-Smirnova (K-S) test was used to determine the normality of the dependent variable. The null hypothesis in the Kolmogorov-Smirnova (K-S) test is that the data is normally distributed, while the alternative hypothesis is that the data is not normally distributed. Since the null hypothesis was not to be rejected, a significance value larger than 0.05 showed that the data was normally distributed.

Table 4.7 displays the results of the Kolmogorov-Smirnova (K-S) test. The results show that the statistic's significance was not significant ($\text{Sig} = 0.152 > 0.05$). The null hypothesis of normally distributed data was not rejected. As a result, the data for the dependent variable was regularly distributed.

Table 4.13
Normality Test

Tests of Normality	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Performance of public hospitals	0.176	58	0.052	0.951	58	0.061
Lilliefors Significance Correction						

4.8 Regression Analysis

To establish the effect of the factors (control environment, risk assessment, control activities, information and communication and monitoring activities) on performance of level 5 hospitals in Nairobi County, Kenya, a multivariate regression model was adopted.

The regression model was of the form below:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \varepsilon$$

The estimation of the regression model has model summary, ANOVA and model coefficients. The results are presented and explained in the sub sections that follow.

4.8.1 Model Summary

The model summary results as presented in Table 4.15

Table 4.14
Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.573	0.329	0.264	0.16744

a Predictors: (Constant), MA, CE, IC, CA, RM

Table 4.15 revealed that the three components of control environment, risk assessment, control activities, information and communication, and monitoring activities had a good link with the performance of public hospitals in Nairobi County, Kenya ($R=0.573$). This implies that the five elements have a significant impact on the functioning of public hospitals. The R-square displays how well the independent variables explain the change in the dependent variable (performance of public hospitals) (control environment, risk assessment, control activities, information and communication and monitoring activities). In this investigation, the R-square value, also known as the coefficient of determination, was 0.329. This means that the five factors account for up to 32.9 percent of the difference in performance of public hospitals (control environment, risk assessment, control activities, information and communication and monitoring activities). Other than the five components, the remaining amount, 67.1 percent, is explained by other factors. The model, on the other hand, was a good fit.

4.8.2 ANOVA

Analysis of Variance (ANOVA) was done to determine the significance of the regression model used. ANOVA shows the difference between the anticipated and real regression models. Table 4.16 displays the ANOVA results. The F statistic value was significant ($F = 5.092$, $P\text{-Value} = 0.001 < 0.05$), indicating that the overall regression model to determine the effect of the factors (control environment, risk assessment, control activities, information and communication, and monitoring activities) on level 5 public hospital performance was fit. The regression model verifies the five factors' applicability as major internal control elements in influencing public hospital performance.

Table 4.15
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.714	5	0.143	5.092	.001
	Residual	1.458	52	0.028		
	Total	2.172	57			

a Dependent Variable: LogPER

b Predictors: (Constant), LogMA, LogCE, LogIC, LogCA, LogRM

4.8.3 Regression Model Coefficients

Table 4.17 shows the regression findings that were used to determine the beta coefficients, constants, and their significance. The study determined the model's relevance by employing both P values and critical t values. A variable had a significant effect on level 5 public hospital performance if the p-value was less than 0.05 and the critical t value was

more than absolute 1.96. The null hypothesis was rejected in this situation. Table 4.17 displays the regression model coefficients.

Table 4.16
Coefficients

Model		Unstandardized		Standardized		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.04	.698		.057	.955
	CE	.295	.139	.261	2.117	.039
	RM	.326	.137	.299	2.379	.021
	CA	-.032	.102	-.038	-.316	.753
	IC	.127	.131	.114	.970	.337
	MA	.266	.117	.290	2.264	.028

a. Dependent Variable: PER

$$Y = 1.04 + 0.295X_1 + 0.326 X_2 - 0.032 X_3 + 0.127 X_4 + 0.266 X_5$$

Y = Organizational performance, X₁ = Control environment, X₂ = Risk assessment, X₃ = Control Activities, X₄ = Information and Communication, X₅ = Monitoring activities

Other components (control environment, risk assessment, control activities, information and communication, and monitoring activities) are held constant at zero in the regression model, indicating that the performance of a level 5 public hospital is positive at 1.040. However, the performance of a level 5 public hospital improves with the introduction of a

control environment, risk assessment, information and communication, and monitoring activities, whereas the introduction of information and communication affects the performance of a level 5 public hospital.

The results also show that the control environment has a positive and statistically significant effect on the performance of a level 5 public hospital ($B = 0.295$; $t = 2.117$, > 1.96 , $= P\text{-Value} = 0.020 < 0.05$). According to the findings, the control environment has a considerable impact on the performance of a level 5 public hospital. This means that when integrity, ethical standards, and an independent audit committee are integrated into the operations of public hospitals, their performance will dramatically increase. The findings are consistent with the findings of a study by Kamau (2014) conducted on effect control environment on the organizational performance of Kenyan manufacturing firms. The study established that control environment and organizational performance of manufacturing firms in Kenya have a positive relationship. According to the research, internal and external auditors should be kept up to date on international financial reporting standards (IFRS) and principles on a regular basis to develop their knowledge and skills in applying accounting practices, as well as keep updated on current issues. The findings are also consistent with the findings of a study by Irene and Bunyasi (2017) investigated the impact of information system and control environment on financial performance of ministry of labor, social and security services. According to the study report, internal control systems, as well as information systems and control environments had a positive effect on Kenyan state-owned companies' financial results.

The results indicate that risk management has a positive and significant effect on performance of a level 5 public hospital ($B = 0.326$; $t = 2.379$, > 1.96 , $= P\text{-Value} = 0.210$,

>0.05). This results mean that risk management has a significant effect on performance of a level 5 public hospital. This implies that when reserve for loss account receivable, evaluation of revenue cycle and clear procedure on cash management (forms and documents) are adopted in the health facilities there is improved performance of a level 5 public hospital. The findings of this study are consistent with that of Ayimposa *et al.* (2020) did a study on the effect of risk assessment, control environment, and control activities on listed bank output in Ghana. According to the results of the study, risk management has a strong significant effect on organizational performance. The study practical implications are that risk areas must be closely studied when assessing bank performance in order to reduce or remove their negative impact on bank performance. The study finding also conforms to Mutuku (2016) investigated the impact of risk management on Kenyan commercial banks' organizational performance. According to the study, risk management activities had a positive impact on commercial bank organizational performance.

The findings also indicate that control activities have a negative and an insignificant effect on performance of a level 5 public hospital ($B=-0.032$; $t=-0.316$, <1.96 , $P\text{-Value } 0.753$, >0.05). This implies that patients' admission, supplier payment approval mechanism and verification of documents plays an insignificant role in enhancing performance of a level 5 public hospital in Nairobi County. Thus there are other aspects of control activities that influence health facilities performance. These findings contradict the findings of Bett and Memba (2017) focused on Menengai to examine the effect of internal control on the organizational performance of Kenyan processing firms. The control climate, risk evaluation, and knowledge all have a direct impact on Menengai Company's financial results, according to ANOVA tests. However, in a study carried out by Kurniawan (2020)

on effects of internal control activities on local government performance demonstrated that control activities have a partial effect on local government performance

The results reveals that information communication has a positive and significant effect on performance of a level 5 public hospital in Nairobi County ($B = 0.127$; $t = 0.970$, < 1.96 , $= P\text{-Value} = 0.337$, > 0.05). The results mean that information communication has a significant effect on the on performance of a level 5 public hospital in Nairobi County. The findings imply that when flowchart of the assignment, implementation procedure, and complain handling procedures are incorporated in operations of health facilities the performance of a level 5 public hospital in Nairobi County improves. According to Oussii and Taktak (2018) did a study on the impact of internal audit function features on internal control quality. Monitoring of information and communication had a statistically significant impact on the quality of audit reports. A study by Muhunyo and Jagongo (2018) revealed that information and communication methods have a significant impact on the revenue, operational costs, and fees income of institutions of higher learning, according to the report. According to Muchoki (2020), information communication has a positive and significant effect on the amount of revenue collection at NTSA.

Finally, the study established that that monitoring activities has a positive and significant effect on performance of a level 5 public hospital in Nairobi County ($B = 0.266$; $t = 2.264$, < 1.96 , $= P\text{-Value} = 0.028$, < 0.05). This means that monitoring activities has a significant effect on performance of a level 5 public hospital in Nairobi County. The findings illustrate that when quality assessment, system effectiveness and maintenance of inventory are enhanced in operations of health facilities the performance of a level 5 public hospital in Nairobi County improves. The findings conform to Simangunsong (2014) study

that was conducted on effects of monitoring activities on effectiveness on local government efficiency. The study revealed that monitoring activities had a positive effect on local government performance both concurrently and to some extent, according to the findings. Additionally, Mwakimasinde, Odhiambo, and Byaruhanga (2017) examined the financial output of Kenyan sugarcane out-grower companies in relation to monitoring activities. The findings reveal that there was positive and statistically significant relationship between monitoring activities and the performance of Kenyan sugarcane companies.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study determined the internal control elements on organizational performance of level-5 public hospitals in Nairobi County. The specific focus of the study was to determine the effect of control environment on performance of level-5 public hospitals in Nairobi county, to establish the effect of risk assessment on performance of level-5 public hospitals in Nairobi county, to examine the effects of control activities on performance of level-5 public hospitals in Nairobi county, to establish the effect of information and communication on performance of level-5 public hospitals in Nairobi County and examine the effect of monitoring activities on performance of level-5 public hospitals in Nairobi County. A summary of the study findings, conclusions, recommendations as well as areas for further research are all covered in this chapter.

5.2 Summary of the Findings

5.2.1 Control Environment

The first objective was to determine effect of control environment on performance of level-5 public hospitals in Nairobi county. Descriptive findings indicated that auditing and audit-related activities are driven by standards in public hospitals, the hospital has an organizational philosophy that direct behaviour, operations, and decision-making, and that hospital's board and management committee are self-contained. The regression findings indicated that control environment has a positive and statistically significant effect on the performance of a level 5 public hospital. This means that when integrity, ethical standards,

and an independent audit committee are integrated into the operations of public hospitals, their performance will dramatically increase.

5.2.2 Risk Management

The second objective of the study was to determine the effect of risk assessment on performance of level-5 public hospitals in Nairobi county. Descriptive findings indicated that hospital management has a set of guidelines for determining the fraud-related threats to the company are the most severe, management has placed in place measures to reduce the vital risks that may arise as a result of fraud and that management provides confidence that risks are being handled properly. Regression findings indicated that risk management has a positive and significant effect on performance of a level 5 public hospital. This implies that when reserve for loss account receivable, evaluation of revenue cycle and clear procedure on cash management (forms and documents) are adopted in the health facilities there is improved performance of a level 5 public hospital.

5.2.3 Control Activities

The third objective of the study was to determine the effect of control activities on performance of level-5 public hospitals in Nairobi county. Descriptive findings indicated that the hospitals have control mechanisms in place such as making entries, reviewing paperwork, and confirming records, different levels of risk in different groups have different limits and that hospital has procedures in place for regular bank account reconciliation to ensure that there are no unpaid things that could result in losses. Regression findings revealed that control activities have a negative and an insignificant effect on performance of a level 5 public hospital. This implies that patients' admission,

supplier payment approval mechanism and verification of documents plays an insignificant role in enhancing performance of a level 5 public hospital in Nairobi County. Thus there are other constructs of control activities that influence performance public hospitals more than those discussed in this study.

5.2.4 Information and Communication

The fourth objective was to investigate the influence of information and communication on performance of level-5 public hospitals in Nairobi County. Descriptive findings indicated that the only staff with specific responsibilities have access to documents in the hospital accounting system, making entries, reviewing paperwork, and confirming records all have monitoring mechanisms in place at the hospital. This reveals that flowchart of the assignment, implementation procedure and complain handling procedures influence performance of a level 5 public hospital in Nairobi County. The regression findings reveal that information communication has a positive and significant effect on performance of a level 5 public hospital in Nairobi County. The findings imply that when flowchart of the assignment, implementation procedure, and complain handling procedures are incorporated in operations of health facilities the performance of a level 5 public hospital in Nairobi County improves.

5.2.5 Monitoring Activities

The fifth objective was to investigate effect of monitoring activities on performance of public hospitals in Nairobi County, Kenya. Descriptive findings indicated that institutions employees are responsible for security of all assets assigned to them, communication between departments is documented for follow up and that management in our organization

appreciates the need for individual departments to work together to achieve overall organization objectives. This reveals that quality assessment, system effectiveness and maintenance of inventory influence performance of a level 5 public hospital in Nairobi County. The regression findings indicated that monitoring activities has a positive and significant effect on performance of a level 5 public hospital in Nairobi County. The findings illustrate that when quality assessment, system effectiveness and maintenance of inventory are enhanced in operations of health facilities, the performance of a level 5 public hospital in Nairobi County improves.

5.3 Conclusions

Based on the findings, the study concludes that control environment influence performance of a level 5 public hospital. It can be concluded that when integrity, ethical standards, and an independent audit committee are integrated into the operations of public hospitals, their performance will dramatically increase. These are better realized in public hospitals when auditing and audit-related activities are driven by standards in public hospitals, the hospital has an organizational philosophy that direct behaviour, operations, and decision-making, and that hospital's board and management committee are self-contained.

To the effect of risk assessment, the study concludes that risk management affects performance of a level 5 public hospital. Thus, it can be concluded that when reserve for loss account receivable, evaluation of revenue cycle and clear procedure on cash management (forms and documents) are adopted in the health facilities there is improved performance of a level 5 public hospital. In public hospitals, management has a set of guidelines for determining the fraud-related threats to the company are the most severe,

management has placed in place measures to reduce the vital risks that may arise as a result of fraud and that management provides confidence that risks are being handled properly.

On the effect of control activities, the study concludes that control activities have an effect on performance of level-5 public hospitals in Nairobi county. This implies that patients' admission, supplier payment approval mechanism and verification of documents plays an insignificant role in enhancing performance of a level 5 public hospital in Nairobi County. Public hospital ensures that they have control mechanisms in place such as making entries, reviewing paperwork, and confirming records, different levels of risk in different groups have different limits and that hospital has procedures in place for regular bank account reconciliation to ensure that there are no unpaid things that could result in losses.

To the effect of information and communication, the study concludes that information communication has a positive and significant effect on performance of a level 5 public hospital in Nairobi County. Thus, flowchart of the assignment, implementation procedure and complain handling procedures influence performance of a level 5 public hospital in Nairobi County. To ensure effective performance in public hospitals, only staff with specific responsibilities have access to documents in the hospital accounting system, making entries, reviewing paperwork, and confirming records all have monitoring mechanisms in place at the hospital and that that different levels of risk in different groups have different limits.

On effect of monitoring activities, the study established that monitoring activities has a positive and significant effect on performance of a level 5 public hospital in Nairobi County. The findings mean that when quality assessment, system effectiveness and maintenance of inventory are enhanced in operations of health facilities the performance

of a level 5 public hospital in Nairobi County improves. In most public hospital institutions employees are responsible for security of all assets assigned to them, communication between departments is documented for follow up and that management in level 5 public hospital appreciates the need for individual departments to work together to achieve overall organization objectives.

5.4 Recommendations

Based on the study findings, the following recommendations are made: -

The organization's strategic direction and priorities should be established, as they will serve as the foundation for the development of risk assessment and operational effectiveness. Thus, administrators must establish objectives before identifying and addressing risks. Operations objectives are concerned with the effectiveness and efficiency of operations, including meeting performance and financial targets and safeguarding assets against loss. Financial reporting objectives are concerned with the preparation of reliable published financial statements, as well as the prevention of financial reporting fraud. Compliance objectives are concerned with laws and regulations that establish minimum standards of conduct.

Risk identification and analysis is a continuous process that is critical to the effectiveness of an internal control system. At all levels, attention must be paid to risks and necessary measures taken to manage them. Risks can arise as a result of both internal and external factors. After identifying risks, they must be evaluated. Change management necessitates a continuous assessment of risk and its impact on internal controls. As a result, mechanisms are required to detect and respond to changing conditions.

Control activities such as policies and procedures are necessary to ensure that management directives are followed. This ensures that necessary actions are taken to address risks to the entity's objectives being attained. Control activities occur at all levels and in all functions of the organization. They encompass a broad range of activities, including approvals, authorizations, verifications, reconciliations, operational performance reviews, asset security, and segregation of duties. All policies must be implemented with care, diligence, and consistency.

Relevant information must be identified, captured, and communicated in a manner and time frame that enables individuals to fulfil their responsibilities. Effective communication must be distributed throughout the organization, flowing down, across, and up. Top management must send a strong message to all employees that control responsibilities must be taken seriously. They must comprehend their own role within the internal control system, as well as the relationship between their own activities and the work of others. They must be able to communicate vital information upstream.

Internal control systems must be monitored - a process that determines the system's overall performance quality over time. Continuous monitoring occurs in the normal course of business and includes routine management and supervisory activities, as well as other actions taken by employees in the performance of their duties that evaluate the quality of internal control system performance. Internal control deficiencies should be reported upstream, with serious issues being brought to the attention of top administration and governing boards immediately. Due to changing circumstances, management must assess whether the internal control system remains relevant and capable of addressing new risks.

5.5 Areas for further Study

The study aimed to examine the effect of internal control elements on performance of level-5 public hospitals in Nairobi county. The specific focus of the study was to establish the effect of control environment, risk assessment, control activities, information and communication and monitoring activities. The five aspects discussed in this study were account for up to 32.9 percent of the difference in performance of public hospitals meaning that 67.1 percent, is explained by other factors. Thus, there is need to carry out the study on the other internal control element that influence performance of level-5 public hospitals in Kenya.

The study did not test for moderating effects which may affect the relationship between internal control element and performance of level-5 public hospitals in Kenya. When other factors such as political interference, employee turnover, inadequate finance, resources available and technology change are controlled or moderated, then the findings can change. There is a need to find out whether those factors can moderate the relationship between those variables.

There is also a need to determine whether similar findings can be achieved when mixed methods of research are adopted because this study made use of quantitative primary data only. Other methods such as qualitative analysis through interviews can also be adopted by other studies in order to give more in depth analysis and findings.

This study was carried out in Nairobi county only whereas we have other level-5 public hospitals across the country. Therefore, there is need to carry out a study focusing on all level five hospitals across the country in order to give a clear picture of the real situation.

5.6 Limitation of the Study

Several limitations encountered during the research included respondents' unwillingness to share information critical to the study out of fear of victimization or exposure of personal information. This is demonstrated by the hospital staff's failure to return questionnaires. They were informed, however, that their information would be kept confidential and their names would not be recorded in order to maintain their privacy. Additionally, the data collected is self-reported, making it somewhat difficult to independently verify the data. Such data may be skewed slightly depending on the respondent. Because the study was conducted in Nairobi Level 5 hospitals, generalizing the findings may result in an accurate result that does not reflect the reality in other counties.

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APPENDICES

Appendix 1: Questionnaire

This project will gather data on the impact of internal control elements on the organizational performance of Nairobi County's level-5 public hospitals. It will take you 5-10 minutes to complete the survey. The survey is completely optional, and you are not obligated to complete it. It is also not necessary for you to include your name. Your knowledge will be used solely for academic purposes. Put a check mark in the box next to the correct answer.

Part One: Background Information

1. Please indicate your gender

Male Female

2. State your highest level of education

Primary Secondary

College University

Postgraduate Professional Qualification

3. Length of service in this organization

0-5 years 6-10 years

11-15 years 16-20 years

21 years and above

Section B: Effect of Internal Control Elements on Organizational performance of Level-5 Public Hospitals in Nairobi County

Control Environment

4. Kindly rate the extent to which the following aspects of control environment practices enhance organizational performance in your organization? Use a scale of 1-5 where 5= Very great extent, 4= Great extent, 3 = Moderate extent, 2= Little extent and 1= No extent

Control Environment	1	2	3	4	5
To direct behaviour, operations, and decision-making, the hospital has an organizational philosophy.					
The hospital's management is dedicated to upholding ethical standards in the healthcare industry.					
The hospital has auditing and audit-related activities that are driven by standards.					
Employees and management alike are dedicated to excellence and honesty.					
The hospital's board and management committee are self-contained.					

Risk management

5. How effective are the following functions of internal audit through risk management, enhance organization organizational performance? Use a scale of 1-5 where 5= very effective, 4= effective, 3 = moderately effective, 2= slightly effective and 1= less ineffective

Risk management	1	2	3	4	5
The organization's goals have been established by management.					
Management recognizes risks that may jeopardize the accomplishment of the goals.					
Management has a set of guidelines for determining the fraud-related threats to the company are the most severe.					
Management has placed in place measures to reduce the vital risks that may arise as a result of fraud.					
Management provides confidence that risks are being handled properly.					
Management evaluate the organization's ethics and values.					
Other areas of concern, such as excessive levels of risk, are subject to unplanned and informal assessments.					

Control activities

6. How effective are the following functions of internal audit through control activities enhance organization performance? Use a scale of 1-5 where 5= very effective, 4= effective, 3 = moderately effective, 2= slightly effective and 1= ineffective

Control activities	1	2	3	4	5
Only approved staff with access to the hospital system are allowed to check on it.					
Only staff with specific responsibilities have access to documents in the hospital accounting system.					
Making entries, reviewing paperwork, and confirming records all have monitoring mechanisms in place at the hospital.					
Different levels of risk in different groups have different limits.					
The hospital has procedures in place for regular bank account reconciliation to ensure that there are no unpaid things that could result in losses.					

Information and Communication

7. How effective are the following functions of information and communication through control activities enhance organization performance? Use a scale of 1-5 where 5= very effective, 4= effective, 3 = moderately effective, 2= slightly effective and 1= ineffective

Information and Communication	1	2	3	4	5
Individuals tasked with overseeing operations to ensure proper coordination on internal controls have been established at the hospital.					
Employees at the hospital are mindful of the value of internal controls.					
The hospital has efficient communication networks that aid in the execution of various hospital activities.					
Every section/unit in the hospital has a simple reporting structure that spells out who is responsible for what.					
Anti-fraud policies and practices are well-communicated at the hospitals.					

Monitoring Activities

8. Please indicate your level of agreement in respect to the following statement as they relate to monitoring activities in your institution. Please tick (√) strongly agree (SA) = 5, Agree (A) = 4, undecided (NS) = 3, Disagree (D) =2 and strongly disagree (SD)= 1

Monitoring Activities	1	2	3	4	5
In our institution, employees are responsible for security of all assets assigned to them					
Our organization has ensured all computers have pass words for log in by respective assigned officers					
Our institution carries out periodic counting of assets					
In our organization, communication between departments is documented for follow up					
The management in our organization appreciates the need for individual departments to work together to achieve overall organization objectives					

Organizational Performance

9. How would you rate the following attributes of organization performance in the last 3 years? Please tick (√) strongly agree (SA) = 5, Agree (A) = 4, undecided (NS) = 3, Disagree (D) =2 and strongly disagree (SD)= 1

	1	2	3	4	5
There is increased revenue collection in our hospital					
There is improved service delivery in our hospital					
There is increased number of patients seeking services in the hospital					
Number of complaints from the patients has decreased					

Thank you for your participation