TOTAL QUALITY MANAGEMENT ON PERFORMANCE OF ELECTRONIC CLAIMS SYSTEMS IN MEDICAL INSURANCE FIRMS IN KENYA: A CASE OF NATIONAL HEALTH INSURANCE FUND, KENYA

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An Applied Research Project Submitted in Partial Fulfillment Of The Requirements For The Award Of Master Of Business Administration In The Business School Of Africa Nazarene University

JUNE 2023

DECLARATION

STUDENT'S DECLARATION

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I hereby declare that this project is my original work and has not been submitted for a degree in any other University.

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DEDICATION

This project was dedicated to my sister Paula and my classmate Fredrick for their support and motivation throughout the period of the study. May God bless them.

ACKNOWLEDGEMENT

This study would not have come to fruition without the impactful support from the business department staff at Africa Nazarene University. I would like to appreciate Dr. Kirima and Dr. Owino most heartedly for their encouragement and insightful teaching, time and advice that has helped me shape my knowledge base in business department. To the NHIF staff in the Claims, Quality Assurance and ICT departments, thank you for sharing information that has helped shaped this research. I would also like to appreciate my colleagues in Administration Services department and Corporate Communications for providing pertinent information that aided in my research. To my parents who offered support and encouragement during this period, I am entirely grateful. Lastly, I want to thank God for the strength and resilience accorded to me while undertaking this journey of my academic research.

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ABSTRACT

The long-term success of organizations in a rapidly changing global economy is dependent on organizational systems that are pegged at improving quality services which in turn translate to customer satisfaction, continuous improvement and competitive advantage. Total quality management impacts the creation of systems in an organization to help in learning and improving business performance and productivity. TQM as a management principle ensures that quality practices are inculcated in all areas of a business through inclusion of all levels of staff to achieve customer satisfaction. To improve efficiency, NHIF is implementing TQM which include leadership practices, training interventions and teamwork activities that play an important role in the improvement of the electronic claims system. NHIF adopted the electronic claims systems to increase efficiencies in payments of claims to HCPs and approval of LOUs for its members. However, some challenges are being experienced in the day-to-day workings of the system hampering quality service to customers. The main objective of the study was to establish the effect of TQM on performance of E-Claims Systems in medical insurance firms in Kenya; a case of NHIF, Kenya. The specific objectives were to establish the effect of leadership on performance of E-Claims systems in medical insurance firms in Kenya; to assess the effect of training on performance of E-Claims system in medical insurance firms in Kenya and to examine the effect of teamwork on performance of E-Claims Systems in medical insurance in Kenya. The specific objectives of the study were guided by three variables: leadership practices, training interventions and teamwork activities. The study was guided by Public Value Theory and Stakeholders Theory which will inform the study variables. The study adopted descriptive research design because the study was intended to gather quantitative and qualitative data, which described the effect of TQM and performance of E-Claims System in medical insurance firms in Kenya. The target population consisted of 300 employees drawn from NHIF. The study sample size relied on primary data collection. Data was analyzed using quantitative technique, descriptive statistics (mean and standard deviation), inferential statistics (Pearson correlation and regression analysis) as well as statistical package of social sciences (SPSS version 21.0) to develop regression model for the study. The study findings established that there is a significant positive relationship between leadership practices, training interventions, teamwork activities and performance of E-Claims Systems. The study recommended that government should help in formulating policies and laws that govern public sector organizations whose main mandate is service delivery to ensure quality of service to customers. The study further indicated that further studies should be undertaken to determine the extent of how other total quality management practices can influence performance of the e claims systems in medical insurance. Further studies should also be done in the private insurance firms for comparative analysis.

DEFINITION OF TERMS

Total Quality Management: management approach that seeks to provide long-term success in an organization by inculcating quality management practices to achieve customer satisfaction.

E-claims: an automated formal request from a Health care provider to an insurance company asking for payment or reimbursement of a subscriber who has accessed services in a facility based on agreed terms of a contract.

Training interventions: actual acquisition of skills and knowledge offered by the organization to an employee to improve the performance of the e claim system.

Leadership practices: actions and strategies management takes to consistently help the employees perform better and improve performance of the e claims system.

Teamwork activities: actions of collaboration and combined effort by members of a group or system users to achieve a common goal or to complete a task in the most effective and efficient way.

E claim system performance: a high performing system that allows prompt payment of claims and timely reimbursement of monies to Health care providers.

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LIST OF ABBREVIATIONS

ANOVA: Analysis of Variances

CEO: Chief Executive Officers

DV: Dependent Variable

E-Claims: Electronic Claims

ERA: Ethiopian Road Authority

IV: Independent Variable

LDLG: Lira District Local Government

NGOs: Non-Governmental Organization

NHIS: National Health Insurance Fund

NHS: National Health Service

NWSC: National Water and Sewerage Corporation

PIHI: Private Indemnity Health Insurance

PLS-SEM: Partial Least Square Structural Modelling

PMBOK: Project Management Body of Knowledge

ROI: Return on Investment

SDGs: Sustainable Development Goals

SHI: Social Health Insurance

SMEs: Small Medium Enterprises

SPSS: Statistical Package for Social Sciences

TQM: Total Quality Management

UHC: Universal Health Coverage

UNEP: United Nations Environmental Program

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study sought to establish the effect of total quality management on performance of the electronic claims system in medical insurance, a case of NHIF Kenya. This chapter therefore provided a foundation of the study by addressing study background, statement of the problem, research objectives (general and specific), research hypothesis, introduction of topic variables (independent and dependent) significance of the study, purpose of the study, scope, limitations and delimitations of the study, conceptual framework and theoretical framework.

1.2 Background of the Study

Organizations are continuously seeking ways on how to improve quality of services, products and processes to meet customer requirements and expectations. Quality in a company is typically associated with reliability, durability, delivery and usability of a product, service or processes. When a company builds on its quality capacity, it makes the organization stand out from other industry players and possibly increase its market share (Merhi, 2018). Total Quality Management (TQM) is a process that is critical in determining a project's operational, financial, and innovative performance (Al Idrisi & Ozutler, 2021). According to PMBOK (2022), total quality management is a project management practice that is enforced to verify the use of quality and to ascertain that quality requirements are entrenched in all cycles of the project from the initial phase to the close out phase. In addition, total quality management as a management principle is applied to improve the quality of products or services in an organization to meet customers' requirements, continuous improvement of quality and ultimately gain competitive advantage. Heyns &

Boikanyo (2019) stated that consumers are becoming increasingly conscious of rising cost of living within the market thus leading to the creation of a broad range of products and services to select from. This development has also generated demand for quality within the market forcing organizations to invest substantial resources in adopting and implementing total quality management strategies in company goods and services. Darkazanali (2019) noted that the introduction of TQM strategies in organizational processes has improved the quality level of deliverables which is desirable to stakeholders.

Companies universally are undergoing shifts in the business environment due to growing consumer awareness of quality, technological advancement, innovation, globalization and intense competition. To address these challenges and to ensure business continuity, many organizations have implemented mixed quality improvement drives for total quality management to improve on competitiveness and organizational performance (Nyaga and Gakobo, 2020).

1.2.1 Electronic Claim System in Medical Insurance

According to Kanmani (2021), access to quality medical healthcare through claims processing is key both to the patient, insurance company and the health care provider. An automated claims management system allows for efficiency since processes such as claim verification, patient referrals, treatment authorization, data entry editing, claim status determination and electronic remittance processing is done online saving time and cost. Additionally, a web based claims system unlike manual remittance allows for a payment tracking system that allows facilities to monitor disbursements during admission or at the point of discharge of a patient.

In the context of NHIF, a claim is a formal request to a purchaser of health care services (insurance company, government, or employer) asking for payment or reimbursement based on agreed terms of a contract. NHIF has a hospital claim and a general

claim. A hospital claim refers to a formal request for reimbursements made by a HCP for payments of benefit covered. A general claim is one made by an active NHIF member after having accessed in-patient care individually or through a declared beneficiary in a HCP recognized by the Fund. Both the hospital claim and general claim follow the following steps of claims application and submission, claim capturing, verification and approval process, then payment of claims (NHIF Research and Policy Division, 2021).

1.2.2 Total Quality Management

Total Quality Management (TQM) is a variety of practices that are adopted in a company that provides gains for increasing company profits and will upgrade the quality of resources in the company. TQM is said to be an approach to consumers regarding changes that occur in management in a systematic way and these improvements are made from various aspects such as products, or services in the organization. The main goal of TQM is continuous improvement to get results, namely getting good performance (Mardikaningsih, 2020).

Total Quality Management has become an important aspect for performance due to increased competition among companies and quality issues associated with the company operations. The survival of a business mainly depends upon the quality associated with the product (Ibrahim & Daniel, 2019). However, competition has become more challenging today than ever before while customer expectations of service quality are higher than ever. To deliver superior quality of service to the customers, organizations are re-engineering systems, operations, culture and adopting strategies in order to be customer focused. TQM ensures that goods and services achieve the metrics defined at the start of the project, expecially, in the planning phase. The metrics of the project are the deliverables included in the project goals, and the subsequent strategies to attain the outlined goals (Njang'iru, Muhoho, & Abayo, 2020). Some companies experience failure when implementing TQM in

their companies. The failure to apply the TQM concept is influenced by several factors. These factors for instance include unsuitable leadership and prioritizing seniority; team creation that is not accompanied by knowledge of the team's expectations, lack of HR involvement when implementing the strategy, inappropriate approach to quality management and expectations that are not in accordance with the company's circumstances (Samsul Arifin, 2022).

In implementation of TQM, a number of key indices have been listed: Involvement of the top management, customer focus, continuous improvement, improvement of communications, training of employees, valuing teamwork and organizational culture and behavioral patterns of employees (Jalali, 2020)

1.2.2.1 Leadership Practices

Samsul and Arifin (2022) assert that leadership in TQM involves management having a vision of propelling employees towards a desired goal. Establishment of a clear vision by leaders of a company and taking into consideration TQM will allow for employee commitment to quality by focusing all organizational efforts on satisfying customer needs, nurturing a sense of team in work life, fostering standards of merit, and bridging the current and future state of the company.

Misztal (2019) states that attaining realization in quality management is reliant on only in about 10% on technical equipment, in 40% on technology, and in as many as 50% on people and their way of leadership. Leadership entails that the management team should articulately cooperate together by assessing strategies, aims, and organization management policy and to rally employees towards this practice. Its goal is also to create and maintain internal conditions in which employees may completely participate in advancing the organization's objectives. Proper leadership in an organization also will be able to empower the human resources within a company being the most important aspect in a company that

directly links with employees. Present and functional HR makes Employees feel valued and supported to do a better job. In addition, leadership with the TQM concept will make employees with self-awareness to develop their abilities and always explore the potential that exists in themselves (Samsul and Arifin, 2022).

1.2.2.2 Training Interventions

According to Cooney(2020), employees require training in order to manage the expansion of their work role following the delegation of responsibilities. They also require some training in non-technical skills to be able to participate in quality improvement activities and they need a broader range of skills in order to flexibly respond to changing consumer and market requirements. Training for quality management requires the development of specific skill sets that support quality management practices. Such training is important, not only to ensure the successful adoption of quality practice, but also to ensure the achievement of the broader quality mission of improved firm competitiveness (Misztal,2019). The success of the quality strategies adopted by the firm and the effectiveness of the quality management system employed within the firm are dependent upon the supply of appropriately skilled labour (Cooney, 2020). Training also increases the concern for creativity, innovation and teamwork. The role of training is critical as it directly enhances firm performance by raising the general level of skills. As employees become more highly motivated and more highly skilled, their task performance improves and organizational effectiveness is directly enhanced (Jalali, 2020).

1.2.2.3 Teamwork Activities

According to Cooney (2020), a well-structured team is important in effective provision of services through the integration of activities involved in an organization. Teamwork allows the employees to be committed to the company goals, objectives and quality improvement leading to customer satisfaction. The composition of individuals in a

team should comprise of people with the right attitude towards working in groups with a shared common vision of meeting company goals. Teamwork is essential in an organization because firstly, it allows for the effectual solving of complex tasks that are beyond the capability of a single individual. Secondly, there is also access to a wealth of knowledge amongst people working in teams as opposed to individuals working alone. Ideas and suggestions can be shared to improve a task leading to quality output in a department. Thirdly, teamwork has the ability to boost staff morale and ownership through involvement in decision and problem solving (Jalali,2020). Samsul and Arifin (2022) state that a good team creates an environment where each member can contribute to the achievement of a company objective thus increasing employee confidence. Collaboration is necessary for tasks that require creativity, problem solving, and innovation. Collaboration is a competitive method for achieving difficult goals and tasks. As globalization keeps forcing organizations to face more challenges, more tasks are assigned to and performed by work teams.

1.2.3 Overview of the Medical Insurance sector in Kenya

According to Korir (2020), medical insurance in Kenya is divided into two, public insurance and private insurance. The government administered NHIF is the only public insurance company and is mandatory to all salaried Kenyans while on the other hand, it is on a voluntary basis for self-employed individuals. NHIF relies on the NHIF Act 1998 that requires all employed persons to be deducted medical insurance based on the salary bracket. IRA (2019) states that there are 22 private medical insurance companies in Kenya which provide health insurance plans such as inpatient services, outpatient services, hospitalization costs, consultation costs, medicine costs and the protection of family finances in case of sudden illnesses. Justus (2018) argues that medical claims management by insurance companies involves billing, filing, updating and possessing of medical claims related to

patient diagnosis, treatment and medications. The medical claims management process has to strike a balance between customer expectations and maintaining cost efficiency.

Barasa et al (2020) stated that NHIF, the government insurer, covers 16% of Kenyans whereas the 22 private medical insurance companies only claim 1% of the population. Majority of Kenyans are not subscribed to any medical insurance cover and only rely on out-of-pocket expenditure to cater for any medical emergencies. Health insurance in Kenya was first transacted by the National Health Insurance Fund (NHIF) which was established in the year 1967 by an act of parliament. However, due to increased competition and pursuit of quality health care, the private companies joined the industry. Opening of the insurance sector led to the emergence of inventive health insurance products and aided in a widespread of insurance (Korir, 2020).

1.2.4 Profile of the National Health Insurance Fund

In Kenya there exists the National Health Insurance Fund (NHIF) which is a parastatal created by an Act of parliament in 1966. The NHIF has an autonomous network in all the 77 branches around the country, 32 satellite offices and Huduma centers across all counties. Each branch is independently capable of providing all the services offered by NHIF including registering members, collecting contributions and payment of claims to HCPs. The Government of Kenya through the presidency singled out quality health care as a key contributor to vision 2030. The president in 2017 announced a new plan which was coined 'the Big 4 agenda' which is premised on guiding the development agenda of the country for the period 2018-2023. Amongst the 4 agendas is the Universal Health Coverage (UHC) which is a global development agenda as detailed in the sustainable development goals (SDGs). NHIF was identified as the main vehicle in the achievement of UHC through issuance of financial risk protection to members and access to quality essential health care services (NHIF, 2018).

1.3 Statement of the Problem

According to Deloitte (2020), there are a total of 30 million medical claims that are processed in Kenya annually. The biggest challenge in a defective claims management system is the high expenses, time consumed and increased cases of medical fraud. Automation of health claims and adoption of an advanced claims management system is important in ensuring quality patient health care (Thomson, Sagan and Massialos, 2020). Luhach, et.al assert that claims processing is the most important function for any insurance firm. The speed and convenience with which claims are settled has a bearing on the general reputation of the insurance company. Langlois (2022) stated that a huge challenge faced by most medical insurance firms in Kenya is the lengthy turnaround time for processing of insurance claims. HCPs on the other hand have become aggrieved due to the delays in disbursement of funds to them by insurance companies affecting their quality of service to members. Thus, this situation has led to a lot of frustration witnessed by the insured party whenever accessing health care in a facility.

According to research done on value chain and gap analysis of the NHIF electronic claims process (2021), findings of the study highlighted concerns of the respondents that include incessant system downtime was affecting operations, periodical system updates without staff training was hampering system use and interaction, poor system integration between NHIF and HCPs was leading to delayed payments of claims. Notably, amnesty International (2023) states that one of the key challenges facing NHIF is inadequate funding which has led to delays in provider payments and a shortage of funds for critical operations. Additionally, NHIF has faced challenges in curbing fraud and abuse, which has led to the loss of resources.

To comply with the Fund's service delivery charter, stakeholder obligation and quality statement, there is a need for the e claims process to be streamlined/improved. This can be done by adopting key performance indicators in the system such as average time to settle claims, claims in litigation, claims settlement cycle time, cost per claim and most importantly claims fraud detection rate. It is against this background that this study seeks to determine the effect of total of quality management on performance of the e claims system in medical insurance firms in Kenya; a case of NHIF, Kenya.

1.4 Purpose of the Study

The purpose of the study is to find out the how TQM affects the performance of the e claims system in medical insurance a case of NHIF.

1.5 Objectives of the Study

1.5.1 General Objective

The general objective of the study determined the effect of TQM on performance of E-Claim system in medical insurance, a case of NHIF.

1.5.2 Specific Objectives

- To establish the effect of leadership practices on performance of E-Claims Systems in Medical Insurance in Kenya.
- ii. To assess the effect of training interventions on performance of E-Claims Systems in Medical Insurance in Kenya.
- iii. To examine the effect of teamwork activities on performance of E-Claims Systems in Medical Insurance in Kenya.

1.6 Research Hypothesis

i. H_{01} There is no significant relationship between Leadership Practices and performance of the E claims system in medical insurance firms in Kenya.

- ii. H_{02} There is no significant relationship between Training Interventions and the performance of the E claims system in medical insurance firms in Training Interventions Kenya.
- iii. H_{03} There is no significant relationship between Teamwork Activities and the performance of the E claims system in medical insurance firms in Kenya.

1.7 Significance of the Study

This study will be of benefit to the government, ministry of health, both internal and external stakeholders as well as the academic institutions who have significant interest and influence on TQM. The government uses NHIF as the main driver for social health insurance to provide accessible and affordable medical insurance. The government is keen on ensuring that the business environment for corporations is well taken care of in a cost-effective way of issuing service, increased transparency and accountability and performance.

The Ministry of Health will find the research findings useful for the improvements of the E-Claim systems in insurance companies and Health care providers. This research gave a clear picture of how TQM was implemented practically and it may therefore inspire the Ministry of Health to adhere to TQM which brought about credibility, accountability and transparency in the implementation process.

To the internal stakeholders at NHIF (Quality Assurance officers, Benefits and Claims officers, Accountants and ICT officers) will the research findings to evaluate TQM and the extent to which they contribute to effective implementation of E-Claims programs with the aim of improving performance. NHIF management has invested resources (manpower and financial) on organizational projects (e claims systems) to improve efficiencies. Management has also signed a performance contract with the Ministry of Health to ensure that customers get quality and accessible health care.

For researchers and academicians, this research helped in building knowledge and facilitating learning on how TQM can improve performance of the e claims system in medical insurance.

1.8 Scope of the Study

According to Easterby-Smith et al., (2014) noted that scope of the study clearly outlines all the things that the research study covered in relation to subject, geographical area, methodology and population. This study's geographical scope was NHIF, Head Office. It mainly focused on different departments and employees distributed within NHIF headquarters. On the subject scope, the study focused on leadership practices, training and teamwork and the effect they may have on project performance at NHIF. The study adopted a questionnaire survey. Moreover, the study was retrospective and focused on the period for the past five years.

1.9 Delimitations of the Study

Delimitations, according to Robson (2017), are the limits that the researcher establishes for the sample, specifying what the study can and did not cover. This study was delimited to NHIF employees both management and staff in the headquarters who have been in the organization for a minimum of 5 years. The sample consisted of staff members at the branch level. This study understands that there are other practices of total quality management that affects project performance, but for purposes of this study, the researcher was only focused on leadership practices, training and teamwork.

1.10 Limitations of the Study

One limitation of this study was engaging with respondents and the timeliness of the response from the respondents. Another limitation anticipated in this study was engaging the respondents because of busy schedules refusal of some respondents to participate in the study because of fear of victimization and cost implication of printing the questionnaires. To

control these limitations, the researcher sought permission from the management to carry out the academic research. The research also included only willing respondents through a consent form and anonymity of these respondents was protected. The researcher also sought appointments from respondents who have busy schedules to ensure questionnaires are filled on time.

1.11 Assumptions

The assumption of this study was that respondents answered truthfully and give unbiased opinions when filling the questionnaires and that the sample study was a representative of the whole population.

1.12 Theoretical Framework

This study anchored only two theories namely Public Value Theory and Stakeholder Theory.

1.12.1 Public Value Theory

This theory was created by Mark Moore in 1995. According to Moore (1995) the basis of this theory was to provide a framework that guides the management of public sector organizations. The theory states that it is the work of the government to ensure that investment made through public offices should deliver what is valuable to its citizens. Just as it is the work of private entities to maximize shareholder value through profit maximization, similarly, it is the work of public entities (ministries, state corporations and parastatals) to create public value through developmental projects.

White (1998) states that desirable and impactful government projects are developed first as policies in government parastatals, then programmes and thereafter culminate to targeted projects that provide valuable goods or exemplary services to the citizens. Notably, Moore (1995) asserts that the Public Value Theory describes the role of a government in a society, using a public office as a vehicle to provide a service or a social need. Benington (2003) also states that this theory insists on the importance of public offices managers as the

stewards of public assets entrusted to them by the government or through their own revenue and have the mandate to help the government provide a service to its citizens.

This theory is relevant to this study because it elaborates the mandate of a government which is the creation of public value to its citizens. This is carried out through the creation of critical developmental projects by a public office to create valuable services such as health care or infrastructure, in this case it is the E- claims system.

1.12.2 Stakeholder Theory

This theory was developed by Freeman in 1984. According to Freedman (1984), a stakeholder is anyone who has an interest in the running of an organization and will be affected if the organization achieves or fails to achieve its objectives. In other words, a stakeholder can also be defined as any person, group or organization that can place a claim on an organization's attention, resources or output, or is affected by that output. Freedman (1984) advises that this theory is also applicable to public sector management in government organizations to assist in decision making. Stakeholder theory explains how different factors of an environment that is micro, and macro affect each other and how the company conducts its activities around this matter (Filippone, 2012).

This theory is relevant to this study because it exhibits how the success of a project in a state corporation has an impact to the society at large. The key stakeholders of the E claims system include health care providers, NHIF customers, NHIF staff (Benefits, Claims and Quality Assurance officers), the government and top management who are responsible for decision making. A project engineered by the government, or a government affiliate has many stakeholders and thus it is important to ensure their expectations and needs are met.

1.12 Conceptual Framework

A conceptual framework explains, either graphically or diagrammatically or even in narratives form, the main things to be studied, the key factors, constructs or variables and the

presumed relationship among them (Murphy, Shaw and Casey, 2015). The below conceptual framework depicts the link between leadership practices, training interventions and teamwork and how they can improve the performance of the e claims system through ensuring client retention, customer satisfaction and profitability.

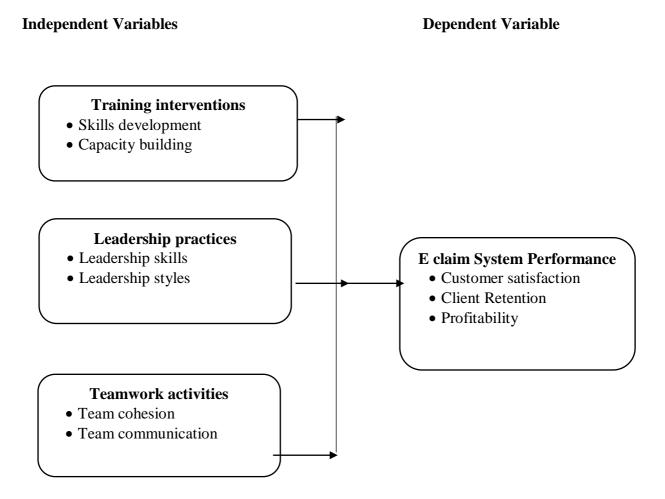


Figure 1.1: Conceptual Framework

Source: Author (2022)

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented the existing literature review whose main focus revolved around training of employees, leadership practices and teamwork on project performance of E-Claims Systems in Medical Insurance Firms in Kenya. This was followed by the empirical review and a summary of the literature review and knowledge gap.

2.2 Empirical Review

This section involved the process of evaluation of the previous studies that were done, basing emphasis on the study variables, TQM and how it affects performance. The variables included leadership practices, training interventions and teamwork activities.

2.2.1 Leadership and Electronic System Performance on Medical claims

Khwae and Amoozegar, (2021) analyzed a study on the importance of culture, employee commitments and leadership on project performance of organizations in Malaysia. It is evident from their study that there are additional factors aside from leadership practices that determine project performance. The focus was on project performance of organizations, which has proven to be an important aspect in terms of ensuring that the projects remain profitable and that there are no hindrances for the success of the project. The study aims to examine the project performance of private organizations in Malaysia particularly in Kuala Lumpur and Cyberjaya, basing it on organizational culture, employee commitment and leadership. A survey was carried out using questionnaires and valid data collected from 121 respondents. The research findings reveal that organizational culture, employee commitment leadership influence the project performance. In conclusion, meaningful and recommendations are made based on the results to successfully implement, manage and promote better project performances.

Oyetunji, Adebiyi, and Olatunde, (2019) did a study on leadership attributes in enhancing the performance of Nigerian Construction Industry. Moreover, the study noted that Leadership is a dynamic process in which an individual influence can contribute to the achievement of an assigned task. This study investigates leadership behavior and its impact on construction workers' performance in Lagos, Nigeria. Purposive sampling technique was adopted to select 50 site-supervisors and 250 construction-workers involved in simple construction works. An investigation was carried out using a questionnaire survey method. The leadership variables investigated were ranked, regressed and correlated to workers' performance. From the primary data analysis, leadership behavior exhibited by supervisors was found to influence the site workers' commitment to achieving the goal of the construction projects. The most exhibited leadership behavior on the studied construction site is transformational leadership behavior with an overall mean score of 4.09. There also exists a positive linear correlation of transactional leadership behavior with construction workers' performance. Findings revealed that the adoption of laissez-faire leadership behavior results in negative correlation with construction workers' performance. The study concludes that the success of construction projects depends on the project manager and its employees, therefore leadership qualities is an important skill that everyone in the construction industry should possess as it enhances the timely delivery of construction works. However, it is well noted that indeed leadership practice was a critical tool that was adopted by the firm in enhancing both employee and project performance.

Kassahun (2021) conducted a study on the effect of leadership styles on project performance; a case of Ethiopian Road Authority (ERA). Moreover, the main purpose of the study was to examine the effect of leadership styles on project performance. The study adopted explanatory research design along with quantitative research approach to address the research questions. Due to the target population being a small number, the researcher opted

for census survey. Data collection was done through administration of questionnaires. Data was analyzed using SPSS-version 20. Descriptive and inferential statistics were used for the data analysis. Descriptive statistics such as frequency, percent, mean and standard deviation were used for describing the demographic characteristics of respondents and the whole perception of respondents on relationship of dependent and independent variables. Inferential statistics like Pearson correlation and simple linear regression were used to show the relationship between independent and dependent variables and to determine the effect of independent variables (IV) on the dependent variable (DV). The findings of the study indicated that transformational and laisse-faire leadership styles positively and significantly affect the performance of Mojo-Hawassa Road project. The result of Pearson correlation coefficient also indicated that, leadership styles were positively correlated with project performance but leadership skills, leadership experience & transactional leadership styles were not significantly affecting project performance. Finally, the study recommended that Project leaders should use transformational and laissez-faire leadership styles since it involves the employees taking part in the decision-making process. Findings of the study also established that employees perform better when management provides information and feedback that is key in ensuring project success. In addition, laissez faire leadership style enabled the employees to be creative and take initiative when performing the project programs which ultimately resulted in project completion. The findings of the study indicated that the constructs have a positive and substantial association. This suggests that the more adaptive leadership is practiced, the higher the goal attainment and organizational effectiveness will be.

Mutole, (2019) examined a study on the significance of strategic leadership practices on the performance of projects by Non-Governmental Organizations listed in the environmental campaign by United Nations Environmental Programme (UNEP) in Kenya.

The study aimed at identifying the extent in which strategic leadership practices drive project sustainability and create sustainable enterprises, which has become an important quest for both practitioners and academics. It was noted that there is need to shape and maintain effective governance, which is devoted to be a new genre of leadership that embraces strategic leadership practices. The study adopted cross sectional survey design was used in this study. The study target population was 26 non-governmental organizations listed in environment campaign by the United Nations in Kenya. The questionnaires were administered to the targeted respondents through drop and pick method. There after the researcher conducted a pilot study of 12 respondents. The pilot study sufficiently addressed the reliability and validity of the study tools. The researcher embarked on a full study by use of purposeful sampling of the target population. The study used questionnaires to collect data. The study used statistical package for social sciences (SPSS) for data analysis. The results were presented using tables, charts and graphs. The study concluded that shareholder' accountability, strategic direction, and delegation influence the performance of NGOs. The study recommends that shareholders' accountability should be encouraged and maintained since it influences organizational performance. The study also recommends that strategic leadership practices promote the performance of non-governmental organizations listed in the environmental campaign by the United Nations Environmental programmes (UNEP) in Kenya. The study established that board governance, shareholders, accountability, strategic direction, and delegation influence NGOs' performance at a combined effect of 60.8%, an indication that 39.2% is due to other factors. The study recommends that further research be conducted to establish these other factors that influence NGOs' performance in Kenya. It is worth noting that improvement such practices improve the performance of NGOs.

Based on the above research, it can be noted that research on how leadership practices affect system performance has not been addressed by any of the researchers and thus creates a gap for this study

2.2.2 Training Interventions and Electronic System Performance on Medical claims

Kanapathipillali (2021) did a study on the impact of training of employees in enhancing project performance in the Hospitality Industry in Malaysia. The study established that job satisfaction partially mediates the impact of training and innovation on organizational performance. Therefore, to achieve the objective of this research, the single-stage cluster sampling method was used to develop an in-depth profile, which is gathered from 653 out of 800 formal standardized questionnaires sent to employees who are in the managerial level and above from 400 hotels in West Malaysia. The researcher adopted two types of questionnaires which were distributed to the managers of each hotel. This research employed quantitative methods to produce empirical results and shreds of evidence that fulfil the research questions. The literature scrutinized training, innovation, job satisfaction, and project performance to fill the gap and to uncover the significance of training programs and innovation on project performance with job satisfaction as the mediator. The analysis shows that training and innovation are statistically significant and has a strong relationship with job satisfaction and project performance. Conclusively, the hypothesis depicted that job satisfaction mediates the relationship between training and innovation on project performance in the hospitality industry. Thus, the findings of this study could aid as an example to other hoteliers in Malaysia to not presume the impact of training and innovativeness on project performance. By embarking on training and being innovative, hotels could rise against all odds, remain productive, and maintain competitiveness. The significance of training is a continuous process and is designed for the maximum utilization of human resources to help achieve project objectives.

Olufayo and Akinbo (2021) examined a study on the significance of training of employees' in enhancing project performance in Gas and Energy Company in Delta State, Nigeria. The main goal of the study was to establish how organizations can attain comparative achievements and be ahead of its competitors. The eventual goal of every organization is to attain competitive achievement and be ahead of its competitors while maintaining sustainable productivity through a competent workforce. The crucial attributes of the business and its terrains at recent times are such that any organization that will continue to be in existence and thrive amidst the dynamism in the environment must keep upskilling and reskilling its employees. The study examines effect of selection procedure of employees for training for organizational performance in gas and energy company in Delta State, Nigeria. This study uses a sample of 254 employees selected representing the entire population of 694. A validated and reliable questionnaire instrument was employed to gather data. Two hypotheses were tested. One-sample test was used to test the hypotheses formulated in the study. Findings from the study reveal that the extent to which unsystematic approach to employee training affected organizational productivity was high. The study concluded that deserving employees should be trained through systematic training procedures to make them more effective and efficient in achieving organizations goals such as project performance.

Samwel (2020) examined a study on employee training in enhancing project performance of Drilling Companies in Geita, Shinyanga and Mara Regions in Tanzania. Results of the study showed that effective performance of any organization depends on the performance of its employees; therefore, employee training is something unavoidable in the organization and should not be overlooked or undermined. Drilling companies need well trained, competent and experienced employees to meet their goals and objectives. The purpose of the study was to analyze the impact of employee training on project performance

of drilling companies in Geita, Shinyanga and Mara Regions in Tanzania and to provide concrete evidence on the contribution of employee training on performance of drilling companies. The study comprised a sample size of 219 respondents selected using purposive and simple random sampling techniques. Data collection was done through the questionnaire administered to the respondents. Data was analyzed using descriptive statistics and results presented using tables. The study results found that employee training has a significant effect on the performance of drilling companies. The study recommended that there is a need for drilling companies to develop proper and effective training and development policies which will guide their training procedures to help in the implementation of training strategies. The main emphasis brought about by the study is that the objective of training and development is to improve the individual performance of employees as well as the company performance by way of managing changes.

Angole, Akello and Abal (2022) conducted a study on the significance of training and project performance, involving a case of education service sector in Lira District Local Government in Uganda. The study was conducted to examine the effect of training on project performance in the education sector of Lira District Local Government (LDLG). Specifically, the study investigated the effect of on-job training on employee performance, examined the effect of off-job training on employee performance and assessed the effect of induction on employee performance in the health sector of Lira DLG that enhanced the overall performance. The study used cross-sectional research design where both quantitative and qualitative approaches were used; the sample size of the study population was 108 and was sampled using Simple random sampling and purposive sampling techniques. Questionnaires and interview methods were used to collect data while mean and standard deviation were used to measure the performance of the construct in Lira DLG. Correlation coefficient was used to test the strength and the direction of the relationship between training

and project performance. All the constructs were positively correlated to organizational performance. The findings of the study revealed a positive significant effect of on-job training on employee performance in Lira DLG (Coef. 0.315, p < 0.01). Secondly, the results on the effect of the off-job training on employee performance in Lira DLG further revealed a positive insignificant effect (Coef. 0.153, p > 0.01). Thirdly, the effect of the induction on employee performance of health sector employees in Lira DLG was found to be positive and significant (Coef. 0.430, p < 0.01). Finally, the results of multiple regressions yielded an adjusted R Square value of 0.372, which meant that training contribute about 37.2% to the performance of education sector employees in Lira DLG. It is worth noting that training embraces an understanding of the complex process by which various factors in a situation interact.

2.2.3 Teamwork Activities and electronic System Performance on Medical claims

Yap, Leong, and Skitmore, (2020) conducted a study on capitalizing teamwork for enhancing project performance and management in construction firms in Malaysia. Improving team effectiveness will increase the likelihood of successful project delivery. Recognizing the factors influencing team dynamics is important for enhanced team performance. Based on a detailed literature review, a survey questionnaire containing 10 aspects and 25 attributes of teamwork relevant to construction was used to collect feedback from Malaysian construction companies. This comprised of clients, consultants and contractor organizations to prioritize these hypothesized variables. The data was then subjected to reliability analysis, descriptive statistics (means, standard deviations, and frequencies), a one-sample t-test, the Kruskal–Wallis ANOVA and exploratory factor analysis. The findings of the study noted that team effectiveness provides rigorous basis for formulating useful team-building strategies for integrating a collaborative environment among project stakeholders and consequently improving project performance. It should be

highlighted that indeed, the aspect of teamwork is important in project performance considering the fact that it enhances employees' productivity. Additionally, the core value of teamwork is the reduction of workload which helps employees to perform better without any kind of work pressure because the tasks were distributed equally that positively impacts project completion.

Berber, Slavic, and Aleksic (2020) conducted a study on the effectiveness of team performance in the banking sector of Serbia. It was determined that teamwork is one of the most important factors for business success in the modern economy. In almost every area of business, teams' cohesion, it has been found that teamwork leads to greater individual, group, and even organizational performance. The aim of this research was to investigate the effectiveness of teamwork and its relationship with team performances. Specifically, the researcher noted that teamwork effectiveness has a positive relationship with teamwork performance and the sustainability of teams in the future. The subject of the research is the effectiveness of teamwork as a construct that is widely presented in the scientific field of organizational behavior and human resource management, but is still underexplored in empirical research, especially in the banking sector. An investigation with a self-audit questionnaire on teamwork effectiveness was conducted on a sample of 401 employees in the banking sector in Serbia. The researcher used Smarts software to test the questionnaire (indicator loadings, internal consistency reliability, convergent validity, and discriminant validity) and proposed research question (PLS-SEM). The results showed that factors such as innovative behavior of the team members, the quality of teamwork, and teamwork synergy have positive relations to teamwork performance. The findings noted that understanding of the factors of teamwork effectiveness that contribute to team performances, with respect to the banking industry in Serbia. In conclusion, successful project will greatly be influenced by synergism existing between all team members between all the team members thus creating

an environment where they are all willing to contribute and participate in order to promote and nurture a positive, effective team environment.

Ejike and Nelson, (2021) examined a study on teamwork and project performance in Nigeria, a case of Nigeria Bottling Company. The study examined the effect of team work on organizational performance in Nigeria using Nigeria Bottling Company Owerri, Imo State as the study unit. The study was carried out to determine the importance of teamwork on project growth. In line with the above, three research hypotheses guided the study. The researchers employed descriptive survey research design and questionnaire was used as the instrument of data collection. The population of the study was 213 permanent staff of Nigeria Bottling Company Owerri from where the sample size of 139 was derived. Data analysis was done using SPSS version 21.0, with the help of Pearson correlation at 0.05 level of significance. The study revealed that there is significant relationship between definition of teamwork roles and customer acquisition. Small team size enhances customer retention and there is significant impact of team norms on customer patronage. It was then recommended that companies should have a good teamwork structure for effective accessing information on employee's job commitment. More so, companies should encourage self-expectation among team members so that they will have high expectations for group performance.

Adong (2021) carried out a study on the effect of leadership style and teamwork on the performance of National Water and Sewerage Corporations (NWSC) projects. It was evident that as much as National Water and Sewerage Corporation has put in efforts such as resource mobilizations, internal controls and employee building capacity to equip them with the requisite skills, their performance has on several occasions remained below the expected standards. It clearly contributed to delayed project completion and failure to achieve set targets and inefficiency in service delivery. The study relied on descriptive research design. The study sought to establish the existing relationship between team work and project

performance of NWSC projects in Kampala. The study used the quantitative approach aimed at describing and drawing inferences from the study findings. The study sample size was 44 projects that were considered as partake in the study. Data collection was done through the administration of structured questionnaires which were used to collect data, which was sorted, edited, coded and analyzed using SPSS Software. The researcher also adopted descriptive frequency, pearson correlation co-efficiency, and regression analysis statistics which were ised to examine the study variables. Evidently, the correlational analysis revealed an existing positive relationship between teamwork and project performance.

Njeri and Ngufi (2021) examined the significance of teamwork and its role in conflict resolution on the performance of a project team in Kiambu County, Kenya. The study established that the essential need of implementing project team performance has been a major concern for organizations. Team motivation was indicated as one of the deciding factors in work performance and success of construction projects in Kiambu County-Kenya. The aim of the study was to establish the impact of team management and performance of construction projects in Kiambu County-Kenya. The study was guided by the following theories; Tuckman's Teamwork theory, Star Team Model and Amabile and Kramer's Progress Theory. The study adopted descriptive research design. The study majorly focused on completed projects from each of the 12 sub-counties in Kiambu County. The study target population was 473. The researcher noted that existence of a useful tool for influencing project team member's performance, in which the study revealed that managers can apply in order to achieve organization success and employee satisfaction. The findings revealed that there is a positive relationship between project team work and performance of projects. It well highlighted that it enhances the accomplishment of tasks

2.3 Summary and Research Gap

A research gap is a question or a problem that has not been answered by any of the existing studies or research within your field. Sometimes, a research gap exists when there is a concept or new idea that hasn't been studied at all. Sometimes you'll find a research gap if all the existing research is outdated and in need of new/updated research. Or, perhaps a specific population has not been well studied.

Study by Khwae and Amoosegar (2021) based much emphasis on leadership practices and project performance of organizations in Malaysia. Notably, Oyetunji, Adebiyi and Olatude (2019) anchored on the significance of leadership practices and performance of Nigeria Construction Firms. Kassahum (2021) clearly pointed out leadership practices and performance in Ethiopia, a case of Ethiopian Road Authority (ERA). Mutole (2019) conducted a study on the significance of strategic leadership practices on the NGOs listed in the environmental campaign by UNEP in Kenya. Though the studies carried out mainly dealt with critical aspects of leadership, few of the studies have focused on leadership in a greater detail. None of the studies have clearly pointed out at an existing link between leadership practices and performance of the electronic claims system. This is the first gap that this study will seek to address.

Kanapathipillali (2021) examined on the impact of training in enhancing performance within the Hospitality sector in Malaysia. Olufayo and Akinbo (2021) emphasized on the significance of employee training in enhancing performance in Gas and Energy Company in Delta State, Nigeria. Angole and Akello Abal (2022) established the significance of training of some project in Lira District Local Government in Uganda. Moreover, in this case there is inadequate research on the influence of training on project performance. This has not been addressed in research carried out. This is another gap that the study will seek to address.

Yap, Leong and Skitmore (2020) noted that teamwork enhances project performance in the construction firms in Malaysia. Berber, Slavic and Alexksic (2020) established the

effectiveness of team performance in the banking sector. Ejike and Nelson (2020) pointed out on the significance of team work on project performance in Nigeria involving the Bottling Company. Adong (2021) noted that teamwork determines project performance in Kiambu County. In general, the existence of enough information from several scholars has indicated that there is an existing relationship between leadership practices, training and teamwork in enhancing project performance.

Notably, a research gap exists when analyzing these empirical studies because researchers in these studies have concentrated on how TQM affects the hospitality sector, banking sector, the food industry, projects in counties, oil industry and construction industry. Earlier literature is lacking in research of how TQM affects the performance of medical insurance firms, most importantly the claims management system in these organizations. The literature also lacks a model that can be adopted for selecting TQM practices in medical insurance and how these practices can enhance performance of the e claims system. This study therefore aims fill this gap by researching on the effect of TQM and performance of the e claims system in medical insurance, a case of NHIF Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter clearly outlined how the research was conducted. It focused on the research design, research site and rationale, target population, study sample size, sampling procedures, data collection, instruments of validity, instruments of reliability, data processing and consideration and legal and ethical consideration.

3.2 Research Design

The study adopted descriptive research design that was of importance in gaining deeper insights in regards to TQM. Moreover, it enabled the researcher to be in a position of understanding the issues that constituted to effective TQM on performance of the e claims system in NHIF. The descriptive design helped in gaining deeper insights as regards the issues on the effect of TQM practices.

3.3 Research Site and Rationale

The study was conducted at the NHIF Headquarters in Nairobi. This is the organizational headquarters where all levels of management as well as staff are located. Additionally, the head office has representation of staff from all departments in the company and lastly it has the highest number of senior management positions.

3.4 Target Population

The target population for this study was 300 employees based at the headquarters of the National Hospital Insurance Fund which consisted of top management, middle Management and operational staff.

Table 3.1: Target Population

Categories	Target Population	Percentage (%)	
Managers	9	1.7%	
Assistant Managers and Senior Officers	26	5%	
Officers I,II and III	280	93.3%	
Total	300	100%	

Source: NHIF Human Resource Management (2023)

3.5 Study Sample

3.5.1 Study Sample Size

The study population consist of 300 probable respondents. The sample size was calculated by use of the Yamane (1967) formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

N =population size

e = Tolerance (Desired level of confidence, (0.05 at 95% confidence level)

n =sample size.

Thus:

$$n = 300 \over 1 + 300 (0.05)^{2}$$

$$n = 300 \over 1 + 300 (0.0025)$$

$$\frac{n = 300}{1 + 0.75}$$

$$n = 171$$

3.5.2 Sampling Procedures

Ngala (2018) noted that a sampling procedure refers to a series of methods and systematic process aimed at collecting data from a smaller group out of a larger one.

Moreover, the sampling method offered simplicity in the collection of data and extensively allow the use of study findings for generalization. Therefore, the sampling procedure that was employed in the study was stratified random sampling technique that was used to divide the population into Senior Management; Middle Management; and finally Operational Staff.

Table 3.2: Sample Size

Percentage	Actual Sample Size
5	1.7%
15	5%
280	93.3%
300	171
	5 15 280

Source: Author (2023)

3.6 Data Collection

3.6.1 Data Collection Instruments

Canals (2017) defined data collection instruments as a method that is used to gather data in social research. Data for this research was collected through the use of as closed questionnaires. Questionnaires were distributed to the staff giving them an opportunity to provide anonymous feedback on the significance of TQM on performance of E-Claim systems in medical insurance firms in Kenya, a case of NHIF.

3.6.2 Piloting of Research Instruments

Piloting of research instruments is the testing of the instruments to identify errors and correct them before the actual implementation (Mugenda & Mugenda, 2013). Piloting helps to ensure that the instrument is reliable. To ascertain the validity level of the questionnaire, the researcher sought opinions of professionals in the field of research. This was significant in enhancing necessary revision and amendments of the research tool thereby enhancing

validity and reliability. Moreover, the reliability constituted to the existence of consistency of measurements and which was frequently be assessed using the test-retest reliability method. Reliability is increased by including many similar items on a measure, be testing a diverse sample of individuals and by using uniform testing procedures. Piloting of the study was done in NHIF Upper Hill branch which has similarities with the head office in terms of population and levels of staffing.

3.6.3 Instruments of Reliability

Reliability of a research instrument refers to the instrument's ability to provide stable and consistent results under constant conditions (Bryman & Bell, 2015). It is the degree of consistency of a measuring procedure in giving similar results repeatedly. The reliability of the questionnaire was assessed in the pilot test using a test-retest reliability method, where the test was administered twice in a two-week period to selected respondents at NHIF. Cronbach's alpha reliability test was utilized to decide the consistency of the study questionnaire. A reliable study instrument ought to have a coefficient of 0.7 or more. While those with less than 0.7 was viewed as inconsistent in estimating the study questions and delivering consistency outcomes.

3.6.4 Instruments of Validity

Validity refers to the accuracy of the research instrument in measuring research objectives without deviation. Content validity was used. This involved assessing the questions in the questionnaire to ensure that each question truly measures what they are supposed to measure (Simon, 2011). The study sought opinion of experts such as the supervisor in assessing the questions in the data collection tool. Where changes were recommended, the researcher adjusted the areas as per the recommendations of the supervisor and the panel during proposal defences.

3.6.5 Data Collection Procedures

Data collection procedure refers to the process of gathering or collection of information to prove some facts regarding the research questions. For this study, questionnaires were used as the data collection tool. Data was collected using a Likert questionnaire with close-ended questions. The questionnaire was used to collect primary data because of its potential to reach participants in a short time, and it also allows participants to respond at their convenience (Garg & Kothari, 2014).

3.7 Data Processing and Analysis

Data analysis started by examining the collected questionnaires to ensure they are accurately and comprehensively filled. Data cleaning was done to ascertain that analysis only include questionnaires that were sorted and found out to be accurately filled. After examination of questionnaires, coding was carried out as well as entering the responses into a software application. Statistical Package for Social Sciences (SPSS) software version 24 assisted in the analysis of data.

The study was conducted using Pearson correlation analysis to predict the relationship between TQM and performance of E-Claims systems in medical insurance firms in Kenya. Correlation analyses was performed to determine if any variables will be correlated. The Pearson correlation coefficient (r) was used to identify the magnitude and the direction of the relationships between the variables. For example, the value can range from -1 to +1, with a +1 indicating a perfect positive relationship, 0 indicating no relationship, and -1 indicating a perfect negative or reverse relationship. Further analysis of variance (ANOVA), and multiple linear regressions analysis was applied. The regression equation was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y is the dependent variable (performance of e claims system).

X1 is Training interventions

X2 is Leadership practices

X3 is Teamwork activities

Results of the regression analysis will be used to test the hypotheses of this study.

3.8 Legal and Ethical Consideration

A letter was obtained from the MBA Department, Africa Nazarene University, addressing the National Health Insurance Fund, seeking approval for the research to be conducted. The nature and purpose of the study was explained to all participants to ensure informed consent, and confidentiality was assured. Participation in the survey was voluntary, and the data was handled anonymously.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter reports the findings and interpretations of the study. The study starts with a brief description on the response rate of the study. It presents a descriptive analysis that covers background information of the respondents and a comprehensive descriptive data analysis of the study variables- including independent and dependent variables. Moreover, the chapter also reports inferential analysis including both correlation and regression analysis. The regression analysis was conducted for each independent variable to test the hypothesis of the study. The chapter concludes by providing an overall regression model of the study.

Generally, the study expected a total of 171 responses using an online survey. However, a total of 152 questionnaires were filled out and returned online using Google forms. From the returned online questionnaires, there was no missing data. According to Mugenda and Mugenda (2008), a response rate of 70% and above is convenient for computing statistical inferences. Therefore, the 89 % response rate was sufficient to carry out the data analysis.

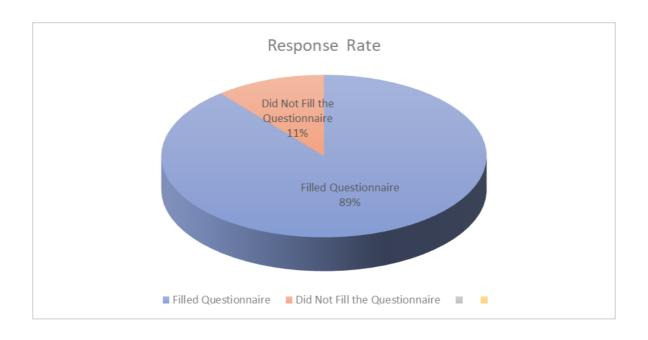


Figure 4.1: Response Rate

The response rate was at 89%. 152 questionnaires were filled while there was no response from 19 respondents. Reason for this is that some respondents had taken their annual leave at the time of the research while some had been assigned field work and were therefore not in the office. This made it difficult to follow up on their responses in the questionnaire with no face to face interaction with the respondents.

4.2 Demographic of the Respondents

This study determined the respondents' demographic information to obtain gender and ages distribution, year of experience at NHIF and level of education

4.2.1 Gender of the Participants

The study sought to establish the gender of the respondents to ensure that views reflected both male and female's opinion. From the results in Table 4.1, evidence that majority of the participants were male 90 (59.2%) while females 62 (40.8%). The findings depicted in Table 4.1 implies that more males than females have been designated to the head office. Additionally, the high number of males was also attributed to the fact that more men are in top leadership and middle management positions which was part of the respondents of this study. Notably, upon inquiry, some respondents stated that women do not prefer the head office due to increased work load and prefer to work in the branches so as to have time for family.

Table 4.1 Gender of the Respondents

Category	Frequency	Percentage	
Males	90	59.2%	
Females	62	40.8%	
Total	152	100%	

Source: Author (2023)

4.2.2 Age of the Respondents

The study established the age of the respondents who participated in the study. These findings are illustrated below in Figure 4.2. Generally, the majority 61(40%) of the participants were in the age brackets of 21-30 years, followed by 42(28%) of the respondents were between the age of 31-40 years, 29(19%) of the respondents were between the age of 41-50 years. Finally, 20(13%) are above 50 years. Analysis of the findings depicted that a significant chunk of the employees in NHIF Head office are in the youth bracket. This indicates that a large percentage of duties are undertaken by the young and youthful employees who fall under Officers I, II and III. The responses of some respondents stated that older staff prefer to move to branches of the fast paced activity in the head office. Younger staff were said to have the zeal and momentum that is required in the Head office.

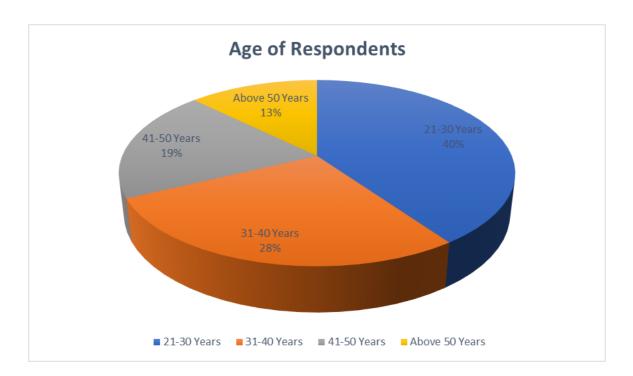


Figure 4.2 Age of the Respondents

4.2.3 Years of Experience at NHIF

The study also sought to understand the respondent's year of experience at NHIF. Majority of the respondents 72(47.1%) year of experience was 5-10 years. 37(24.1%) of the

respondents' years of experience was 10-15 years. Moreover, 28(18.4%) of the respondents' years of experience was 16-20 years. Finally, 15(10.3%) of the respondents' years of experience was over 21 years. The findings imply that work experience is an important aspect of success in the organization. Similarly, majority of the young employees are in process of building competencies from working with their experienced seniors and advancing their studies in an effort to improve the overall organizational productivity. This is shown in Figure 4.3 below.

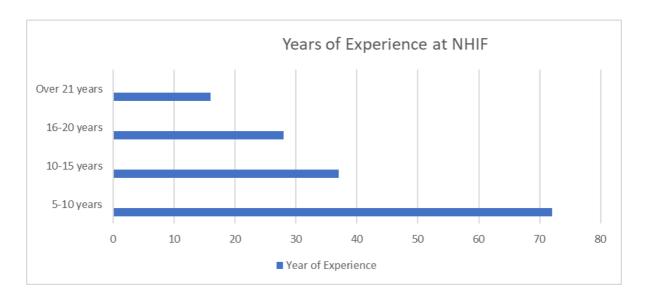


Figure 4.3: Years of Experience at NHIF

4.2.4 Level of Education

About education of the respondents, evidence showed that 31(19.54%) of the respondents have a Master's degree level of education, while 102(66.66%) of the respondents are degree holders, 19(12.64%) respondents were diploma holder and 1(1.15%) of the respondents was secondary level holder. The findings imply that academic attainment is an important component of success for NHIF staff in the Head office with a majority having a degree certification (67%) followed by Masters certification at 19.5%. Some respondents stated that due to the increased competition in Head office for leadership or senior positions, most staff are obliged to progress with their studies. This is shown in Figure 4.4 below.

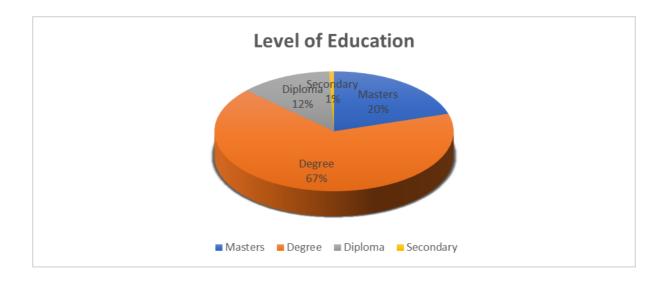


Figure 4.4 Level of Education

4.3 Presentation of Research Analysis, Findings, and Interpretation

4.3.1 Effect of Leadership Practices on Performance of E-Claims System

In reporting the effects of leadership practices on performance of electronic claims systems in medical insurance firms in Kenya, this study sought to find out participant's level of agreement with various statements related to how leadership practices on performance of e-claims systems in medical insurance firms in Kenya. Agree, neutral, and disagree Likert scale findings together with mean and standard deviation were used to demonstrate the results.

According to the findings, in the first statement: Management has the requisite skills to oversee and ensure performance of the electronic claims systems had a mean of 4.08 and Standard deviation of 0.686. The second statement: Management has exhibited creativity and innovation that has helped to improve performance of the e-claims systems had a mean of 4.15 and standard deviation of 0.638. The third statement: Management periodically communicates to employees on the e-claims systems upgrades to keep them informed had a mean of 3.90 and standard deviation of 0.716. The fourth statement: Management make all the decisions and dominates team members when seeking ways to improve system

performance had a mean of 3.83 and a standard deviation of 0.686. The fifth statement: Management allows participation of employees when seeking ways of improving the electronic claims system had a mean of 3.94 and standard deviation of 0.798. Finally, the sixth statement: Managers have constantly been identifying and exploiting new ideas to enhance performance of the electronic claims system had a mean of 3.89 and a standard deviation of 0.813. The computed average mean for the respondents' views on the effect of leadership practices on performance of the e claims system is 3.97 (SD = 0.72), indicating that respondents agree that leadership practices wield an influence on the performance of insurance companies the e claim system.

1-Strongly Disagree, 2-Disgree, 3- Neutral, 4- Agree, 5- Strongly Agree

Statement			Outcome ((F, %)		Mean	Std.
		2	3	4	5	iviean	Dev
Management has the requisite skills to oversee and ensure performance of the electronic claims systems	-	2(1.1)	24(16.1)	86(56.3)	40(26.4)	4.08	0.686
Management has exhibited creativity and innovation that has helped to improve performance of the e-claims systems	-	-	21(13.8)	87(57.5)	44(28.7)	4.15	0.638
Management periodically communicates to employees on the e-claims systems upgrades to keep them informed	-	3(2.3)	37(24.1)	84(55.2)	28(18.4)	3.90	0.716
Management makes all the decisions and dominates team members when seeking ways to improve system performance	-	3(2.3)	40(26.4)	87(57.5)	22(13.8)	3.83	0.686
Management allows participation of employees when seeking ways of improving the electronic claims system	=	4(2.4)	37(24.1)	72(47.1)	39(25.3)	3.94	0.798
Managers have constantly been identifying and exploiting new ideas to enhance performance of the electronic claims system.	-	12(8.0)	23(14.9)	87(57.5)	30(19.5)	3.89	0.813
Composite Mean and Standard Deviation						3.97	0.72

Table 4.2 Effect of Leadership Practices on Performance of E-Claims Descriptive Results

4.3.2 Effect of Training Intervention on Performance of E-Claims Systems

Similarly, this study reports the results participants' level of agreement with various statements related to training interventions on performance of E-Claims Systems in medical insurance firms in Kenya. Again, Agree, Neutral, and Disagree Likert scale results together with mean and standard deviation were used to indicate participants' level of agreement (Table 4.3). According to the findings, in the first statement: Employees who interact with the electronic claims system are routinely trained on new system updates and modules had a mean of 4.20 and Standard deviation of 0.729. The second statement: Management considers training of employees as important in the improvement of the performance of the electronic claims system had a mean of 3.72 and standard deviation of 0.742. The third statement: Training of system users is key in improving performance of the electronic claims systems had a mean of 3.85 and standard deviation of 0.815. The fourth statement: Conducting a training needs assessment of the system users is key in enhancing performance of the electronic claims system had a mean of 3.80 a standard deviation of 0.83. The fifth statement: Management should ensure system users have the requisite qualification of the position e.g., Quality Assurance Officers, ICT Officers, Accountants and Claims Officers had a mean of 3.75 and standard deviation of 0.918. Finally, the sixth statement: The current number of employees interacting with the system is enough for workload of processing claims had a mean of 3.72 and a standard deviation of 0.907. The computed average mean for the respondents' views on the effect of training interventions on performance of the e claims system is 3.84 (SD = 0.824), indicating that respondents agree that training interventions wield an influence on the performance of insurance companies the e claim system.

1-Strongly Disagree, 2-Disgree, 3- Neutral, 4- Agree, 5- Strongly Agree

Table 4.3 Effect of Training Intervention on Performance of E-Claims Descriptive Results

Statement			Outcome (F, %)		Mea	Std.
Statement	1	2	3	4	5	n	Dev
Employees who interact with the electronic claims system are routinely trained on new system updates and modules.	-	77(50.6)	18(11.5)	3(2.3)	54(35.6)	4.20	0.729
Management considers training of employees as important in the improvement of the performance of the electronic claims system	-	7(4.6)	79(51.7)	47(31.0)	19(12.6)	3.72	0.742
Training of system users is key in improving performance of the electronic claims systems	-	9(5.7)	37(24.1)	75(49.4)	31(20.7)	3.85	0.815
Conducting a training needs assessment of the system users is key in enhancing performance of the electronic claims system	-	12(8.0)	33(21.8)	79(51.7)	28(18.4)	3.80	0.833
Management should ensure system users have the requisite qualification of the position e.g., Quality Assurance Officers, ICT Officers, Accountants and Claims Officers.	-	19(12.6)	30(19.5)	73(48.3)	30(19.5)	3.75	0.918
The current number of employees interacting with the system is enough for workload of processing claims.	-	10(6.9)	45(29.9)	72(47.1)	24(16.1)	3.72	0.907
Composite Mean and Standard Deviation						3.84 0.82	

*Percent are in Brackets; F – Frequency

4.3.2 Effect of Teamwork Activities on Performance of E-Claims Systems

This study also presented participants' level of agreement with various measures on teamwork activities and how it affected performance in the organization. Again, agree, neutral, and disagree Likert analysis together with means and standard deviations were used to indicate to the level of agreement as indicated in Table 4.4. According to the findings, in the first statement: There are clear roles and responsibilities of systems users to ensure good performance of the e-claims systems had a mean of 4.22 and a standard deviation of 0. 689. The second statement: Structures and procedures exist to guide system users on how to interact with the system to ensure performance had a mean of 3.93 and a standard deviation of 0.860. The third statement: There exists a conflict management mechanism to guide members on how to resolve disputes that does not hamper system performance had a mean of 3.57 and a standard deviation of 0.960. The fourth statement: Management frequently organizes open meetings for team members to share their ideas and opinions on system performance had a mean of 3.48 a standard deviation of 0.878. The fifth statement: There exists a two-way feedback between management and team members to update on issues concerning the e-claims systems had a mean of 3.71 and standard deviation of 0.820. Finally, the sixth statement: Proper communication amongst team members creates the basis of unique skills and coordination of members to allow the system to work efficiently had a mean of 3.56 and a standard deviation of 0.788. The computed average mean for the respondents' views on the effect of teamwork activities on performance of the e claims system is 3.75 (SD = 0.833), indicating that respondents agree that teamwork activities wield an influence on the performance of insurance companies the e claim system.

1-Strongly Disagree, 2-Disgree, 3- Neutral, 4- Agree, 5- Strongly Agree

Table 4.4 Effect of Teamwork Activities on Performance of E-Claims Systems

Descriptive Results

Statement	Outcome (F, %)					Mean	Std.	
Statement	1	2	3	4	5	. Wiean	Dev	
There are clear roles and responsibilities of systems users to ensure good performance of the e-claims systems	-	2(1.1)	17(11.5)	79(51.7)	54(35.6)	4.22	0.689	
Structures and procedures exist to guide system users on how to interact with the system to ensure performance	2(1.1)	7(4.6)	30(19.5)	75(49.4)	38(25.3)	3.93	0.860	
There exists a conflict management mechanism to guide members on how to resolve disputes that does not hamper system performance	2(1.1)	68(44.8)	37(24.1)	23(14.9)	23(14.9)	3.57	0.960	
Management frequently organizes open meetings for team members to share their ideas and opinions on system performance	2(1.1)	61(40.2)	54(35.6)	17(11.5)	16(10.3)	3.48	0.878	
There exists a two-way feedback between management and team members to update on issues concerning the e-claims systems Proper communication amongst team members creates the basis of unique skills	-	70(46.0)	47(31.0)	11(6.9)	24(16.1)	3.71	0.820	
	-	14(9.2)	52(34.5)	72(47.1)	14(9.2)	3.56	0.788	
Composite Mean and Standard Deviation						3.75		

^{*}Percent are in Brackets; F – Frequency

4.6 Performance of E-Claims Systems

Finally, this study sought participants' level of agreement with various statements related to performance of electronic claims systems in medical insurance firms in Kenya as the dependent variable. Agree, neutral, and disagree together with means and standard deviation were used to present results. The descriptive results as shown in Table 4.5 According to the findings, in the first statement: A high performing E-Claims system will allow for the retention of existing customers of NHIF had a mean of 4.37 and a standard deviation of 0. 631. The second statement: Currently, the existing E-Claims system is ideal and claims payment and reimbursement to HCPs is fast had a mean of 3.99 and a standard deviation of 0.723. The third statement: NHIF members are contented with the duration of claims approval in the system had a mean of 3.93 and a standard deviation of 0.759. The fourth statement: The existing e-claims systems allow for timely reimbursement of monies to HCPs had a mean of 3.62 a standard deviation of 0.686. The fifth statement: There is increased return on investment with the shift from a manual system to an automated system had a mean of 3.78 and standard deviation of 0.799. The sixth statement: The shift from manual system to electronic system has led to the increase in revenue generation had a mean of 3.75 and a standard deviation of 0.918. Finally, the seventh statement: The Shift from manual system to electronic system has led to the decrease in fraud cases had a mean of 3.87 and a standard deviation of 0.818.

The computed average mean for the respondents' views on performance of the e claims system is 3.90 (SD = 0.762), indicating that respondents are concerned about the performance of the e claims system

1-Strongly Disagree, 2-Disgree, 3- Neutral, 4- Agree, 5- Strongly Agree

Table 4.5 Performance of E-Claims Systems Descriptive Results

Statement		Outcome (F, %)					Std.	
Statement	1	2	3	4	5	Mean	Dev	
A high performing E-Claims system will allow for the retention of existing customers of NHIF	-	-	12(8.0)	72(47.1)	68(44.8)	4.37	0.631	
Currently, the existing E-Claims system is ideal and claims payment and reimbursement to HCPs is fast	-	84(55.2)	30(19.5)	3(2.3)	35(23.0)	3.99	0.723	
NHIF members are contented with the duration of claims approval in the system.	-	75(49.4)	38(25.3)	3(2.3)	35(23.0)	3.93	0.759	
The existing e-claims systems allow for timely reimbursement of monies to HCPs	-	70(46.0)	65(42.5)	2(2.3)	14(9.2)	3.62	0.686	
There is increased return on investment with the shift from a manual system to an automated system.	-	3(2.3)	58(37.9)	59(39.1)	31(20.7)	3.78	0.799	
The shift from manual system to electronic system has led to the increase in revenue generation.	-	19(12.6)	30(19.5)	73(48.3)	30(19.5)	3.75	0.918	
The E-Claim system has promoted productivity and efficiency in the Fund.	2(1.1)	7(4.6)	30(19.5)	75(49.4)	38(25.3)	3.93	0.860	
The Shift from manual system to electronic system has led to the decrease in fraud cases	-	7(4.6)	40(26.4)	70(46.0)	35(23.0)	3.87	0.818	
Composite Mean and Standard Deviation						3.90 0.762		

^{*}Percent are in Brackets; F – Frequency

4.7 Inferential Statistics

4.7.1 Correlation Analysis

The correlation test was performed to test the strength of linear relationship between variables independently. The results in Table 4.6 indicated that all the independent variables had a positive correlation on performance of the dependent variable of the study. Independently, the study indicated a moderate positive correlation between leadership practices on the performance of electronic claims system, r = 87 = 0.462, p < 0.01. The results imply that leadership practices determines the performance of E-Claims systems in medical insurance firms in Kenya. Secondly, the study assessed the correlation between teamwork activities and performance of the e claims system. The evidence presented in Table 4.6 exhibited a positive strong relationship between teamwork activities on performance of E-Claims systems in medical insurance firms in Kenya, r(87) = 0.522, p < 0.01. The results imply that teamwork enhances performance of the E-Claims systems. Third, the study investigated the correlation between training interventions on performance of electronic claims system in medical insurance firms in Kenya. Table 4.6 highlighted the correlation between training interventions output to provide a moderate relationship on performance r(87) = 0.417, o < 0.01. The findings suggest that training interventions is of significance in determining performance of the E-Claims system.

Table 4.6 Correlation Analysis Outcome

	Performance	Leadership	Teamwork	Training
	E-Claims System			
Performance of E-	Pearson	1		
Claims System	Correlation			
	Sig.(2-tailed)	87		
	N			
Leadership	Pearson	.462**	1	
	Correlation	.000		
	Sig.(2-tailed)	87	87	
	N			
Teamwork	Pearson	.522**	.522**	1
	Correlation	.000	.000	
	Sig.(2-tailed)	87	87	87
	N			
Training	Pearson	.639**	.443**	.417**
	Correlation	.000	.000	.000
	Sig.(2-tailed)	87	87	87
	N			

^{**.} Correlation is significant at the 0.01 and 0.05 level (2-tailed)

4.7.2 Regression Analysis

As briefly explained in the inferential analysis introduction section, this study also conducted a regression analysis to examine the relationship between the study variables as well as to test hypotheses of the study independently. However, prior to testing the study hypothesis, the regression analysis provided a model summary output and ANOVA output. Regarding the model summary result, the outcome in Table 4.7 reported a coefficient of determination or R of 0.704 which demonstrated a strong positive correlation between the

independent and dependent variables of the study. Likewise, the table presented an R^2 of 0.494 which indicated that the TQM included in the study (leadership practices, training interventions and teamwork activities) explains approximately 49.4% changes on the performance of electronic claims systems in the medical insurance firms where ($R^2 = .496, F, P < 0.05$)

Table 4.7 Model Summary Output

Model	R	R Square	Adjusted	R	Std. Error of the
			Square		Estimate1
1	.704ª	.496	.477		.3062169

a. Predictors: (Constant), Leadership Practice, Training Interventions, Teamwork Activities

Similarly, the regression analysis further provided ANOVA results which illustrated the overall significance of the model in explaining variances in performance of electronic claims systems as a result of changes in the TQM practices (leadership practices, training interventions and teamwork activities). And so, the ANOVA results demonstrated that the model of the study was significant in explaining positive changes of TQM practices on performance of electronic claims system in medical insurance firms in Kenya $(F(3,83) = 27.177, P < 0.05, R^2 = 0.496$ as shown Table 4.8.

Table 4.8 ANOVA

Sum	of df	Mean Square	F	Sig.
Squares				
7.645	3	2.548	27.177	.000 ^b
7.783	83	.094		
15.428	86			
	7.645 7.783	Squares 7.645 3 7.783 83	Squares 7.645 3 2.548 7.783 83 .094	Squares 7.645 3 2.548 27.177 7.783 83 .094

a. Dependent Variable: Performance of E-Claims Systems

b. Dependent Variable: Performance of E-Claims

b. Predictors: (Constant), leadership practices, training interventions, teamwork activities

Finally, the regression analysis provided a regression analysis coefficient results to demonstrate that combined effects or relationships between independent and dependent variables of the study. Also, the study established regression coefficients results to test the hypothesis of the study individually as shown in Table 4.9.

H₀₁: Leadership practices do not have a significant influence on performance of the E-Claims systems in medical insurance firms in Kenya, the results in Table 4.9 showed a significant positive relationship between leadership practices and performance of E-Claims Systems (B=0.126, p=0.024). The findings, therefore, confirm that the study accepted the stated alternative hypothesis and concluded that there is a significant and positive effect of leadership practices on performance of E-Claims systems.

 \mathbf{H}_{02} : Training interventions do not have significant influence on performance of the E-Claims system in medical insurance firms in Kenya, the findings demonstrated in Table 4.9 showed that there is a positive relationship between training intervention on performance with (B=.247,P=0.006). The study, thus, accepted the alternative hypothesis and rejected the null hypothesis. The conclusion was that there is a significant and positive effect of training intervention on performance.

 H_{03} : There is a significant and positive effect of teamwork activities on performance of E-Claims systems in Kenya. Finally, this study tested the third hypothesis of the study. The regression coefficient results in Table 4.9 demonstrated that there is a strong and significant positive relationship between teamwork activities on performance E-Claims systems in Kenya (B=0.399, P=0.000).

Table 4.9 Regression Coefficients

	Unstandar	dized Coefficients	Standardiz	Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.	
1(Constant)	.986	.375		2.631	.010	
Leadership	.126	.107	.113	1.180	.024	
Practices						
Training	.247	.088	.263	2.795	.006	
Intervention						
Teamwork	.399	.075	.479	5.343	.000	
Orientation						

a. Dependent Variable: Performance of E-Claims

Generally, the study estimated a regression model Y = .986 + 0.126L + 0.247T + 0.638TO. Where L is Leadership practices, T is Training Interventions and TO is Teamwork Orientation. From the model highlighted, the results confirm that when all factors are held constant, performance of electronic claims in the organization like leadership practices, training intervention and teamwork activities would increase on performance of e-claims systems by .126, 0.247 and 0.399 respectively. This suggest that all the TQM practices included in the study have a significant positive effect on performance of e-claims systems in the medical insurance firms in Kenya. Thus, the study accepted all the three-research hypothesis as indicated in Table 4.10.

Table 4.10 Summary of Hypothesis Tests

Hypothesis	p-value	Decision
H_{01} : There is a significant and positive of between leadership on	0.24	Accept
performance of E-Claims System		
H_{02} : There is a significant and positive effect of training intervention on	0.003	Accept
performance of E-Claims Systems		
H_{03} : There is a significant and positive effect teamwork activities on	0.000	Accept
performance of E-Claims Systems		

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter starts by giving a detailed summary of the study as well as the findings followed by detailed discussion of the study findings. The chapter then provides conclusions based on the findings and discussions of the study. The chapter concludes by highlighting further recommendations and areas for further research.

5.2 Summary of the Findings

5.2.1 Leadership Practices on Performance of Electronic Claims Systems in Medical Insurance Firms in Kenya

Statements were developed to measure the extent to which leadership practices affect performance of the e claims system in medical insurance. This section sampled two statements. Statement (1) Management has requisite skills to ensure the performance of the e claims system. Out of 152 respondents who participated in the study, 2(1.1%) Disagreed, 24(16.1%) were neutral, 86(56.3%) Agreed with the statement, while 40(26.4%) Strongly Agreed. This finding shows that 126 (82.9%) respondents Agreed with the statement, 2(1.3%) respondents Disagreed while 24(16%) respondents were Neutral. This item had a mean of 4.08 and a standard deviation of 0.686 implying that the statement positively influences the performance of the e claims system in medical insurance.

Statement (2) Management makes all the decisions and dominates team members when seeking ways to improve system performance. Out of 152 respondents who participated in the study 0(0%) Strongly Disagreed, 3(2.3%) Disagreed, 26.4(40%) were neutral, 87(57.5%) Agreed with the statement, while 22(13.8%) Strongly Agreed. This finding shows that 109(72%) respondents Agreed with the statement, 3(2%) respondents Disagreed while

40(26%) respondents were Neutral. This item had a mean of 3.83 and a standard deviation of 0.686 implying that the statement positively influences the performance of the e claims system in medical insurance.

These statements agreed with Khwae and Amoozegar (2021) who analyzed the importance of leadership on project performance of construction projects in Malaysia. The statement supports the study's gap in the that states organizational culture, employee commitment and leadership have a huge influence in performance in an organization. Additionally, the respondents stated that despite management having the requisite skills, they failed to implement it within the organization to propel the employees towards a common goal of e claim system performance. Additional information from the respondents stated that management in the organization should be innovative and seek new ideas on how the e claims system can be improved. The suggestions given were benchmarking with other private insurance companies within the country and benchmarking with other countries who have been able to implement an effective and efficient e claims system.

This statement also agreed with Kassahun (2021) who conducted a study on the effect of leadership styles on project performance; a case of Ethiopian Road Authority (ERA). This study concluded that leadership styles adopted by management have a way of motivating employees towards achievement of a company goal. The respondents agreed that a democratic and a charismatic leader has an easier time leading a team as opposed to an authoritative leader who demands compliance. Additional information from respondents stated that the leaders in the organization do not adopt democracy since instructions come from above without any consultations from staff and most importantly system users. They stated that key changes and policies were instituted without staff discussion putting the Quality Assurance officers in a difficult situation when explaining abrupt system changes to

NHIF members. Finally, these studies suggest that the more adaptive leadership is practiced, the higher the goal attainment and organizational effectiveness will be.

5.3.2 Training Initiatives on Performance of Electronic Claims Systems in Medical Insurance Firms in Kenya

The second objective of this study was to assess the effect of training interventions on performance of electronic claims systems in medical insurance firms in Kenya. Generally, the results indicated that there is a significant and positive effect of training interventions on performance. Statements were developed to measure the extent to which leadership practices affect performance of the e claims system in medical insurance. This section sampled one statement. Statement (1) Employees who interact with the electronic claims system are routinely trained on new system updates and modules. Out of 152 respondents who participated in the study, 0(0%) Strongly Disagreed, 77(50.6%) Disagreed, 18(11.5%) were neutral, 3(2.3%) Agreed with the statement, while 54(35.6%) Strongly Agreed. This finding shows that 57(37.5%) respondents Agreed with the statement, 77(50.7%) respondents Disagreed while (12%) respondents were Neutral. This item had a mean of 4.20 and a standard deviation of 0.729 implying that the statement positively influences the performance of the e claims system in medical insurance. Interpretation of these findings shows that employees are not routinely trained so as to acquire skills and capacities to interact with the new modules and updates in the system. Respondents who agreed with the statement stated that the management does not take training seriously but only offers on-desk training which has a minute impact. Training with the service provider would be more ideal so as to see the impact in performance since they are the creators of the system. Additionally, the majority of the respondents, 73(43.5%) agreed that management should ensure proper mapping of staff based on their qualifications e.g. an accounts professional should not be placed in the Quality

Assurance section. Finally, 75(49.4%) of the respondents were neutral on the statement that management conducts a training needs assessment. This proves that a gap exists, and management can take up this task to critically itemize the training needs of staff. Additional information from respondents stated that the current workforce for claims processing is not adequate to handle the amount of workload currently experienced in the office. NHIF has a lot of members based on the fact that it is a statutory requirement to remit funds to NHIF. Respondents suggested that more staff need to be employed and proper mapping to be done to ensure Quality Assurance Officers have a medical background. Lack of medical expertise makes it difficult to offer proper judgement on claims forwarded by health care facilities.

This statement agrees with Kanapathipillali (2021) who conducted a study on the impact of training of employees in enhancing project performance in the Hospitality Industry in Malaysia. The findings of this study agreed that training is a key component in an organization that uses the work force to achieve its objectives. By embarking on training and capacity building initiatives, companies remain productive, and maintain competitiveness in the industry. The statement also agrees with Samwel (2020) who examined a study on employee training in enhancing performance of Drilling Companies in Geita, Shinyanga and Mara Regions in Tanzania. Results of the study showed that effective performance of any organization depends on the performance of its employees; therefore, employee training is something unavoidable in the organization and should not be overlooked or undermined.

5.3.3 Teamwork Initiatives on Performance of Electronic Claims Systems in Medical Insurance Firms in Kenya.

The third and final objective of this study was to investigate the effect of teamwork on performance of electronic claims systems in medical insurance firms in Kenya. To be precise, teamwork included team cohesion and team communication. The results reported that significant and positive examine teamwork of electronic claims systems in medical insurance

firms in Kenya. Statements were developed to measure the extent to which leadership practices affect performance of the e claims system in medical insurance. This section sampled one statement. Statement (1) Proper communication amongst team members creates the basis of unique skills and coordination of members to allow the system to work efficiently. Out of 152 respondents who participated in the study, 0(0%) Strongly Disagreed, 14(9.2%) Disagreed, 52(34.5%) were neutral, 72(47.1%) Agreed with the statement, while 14(9.2%) Strongly Agreed. This finding shows that 86(56.6%) respondents Agreed with the statement, 14(9.2%) respondents Disagreed while 52(34.2%) respondents were Neutral. This item had a mean of 3.56 and a standard deviation of 0.788 implying that proper communication amongst team members positively influences the performance of the e claims system in medical insurance.

Interpretation of these findings shows that employees agree that good teamwork fosters coordination and collaboration which heavily impacts on organizational performance. Results of the study also indicated that the organization does not have a conflict management system with 68(44.8%) of the respondents disagreeing on the existence of such a mechanism. A conflict management system is key in ensuring team members work cohesively and issues are resolved so as not to hamper performance of the general group. Additionally, the majority of the respondents 61(40.2%) disagreed on the existence of open meetings held by management so as to allow employees to air their grievances and suggestions. Open meetings ensure that management are updated on the suggestions, failures and recommendations of the system and how the specifications can be improved to be adopted by the next service provider. Finally, majority of the respondents 70(40.6%) disagreed on the existence of a two-way feedback mechanism. Respondents stated that management hoarding information and not communicating to employees interferes with performance since they are unaware of the current issues.

This statement agrees with Yap, Leong, and Skitmore, (2020) who conducted a study on capitalizing teamwork for enhancing project performance and management in construction firms in Malaysia. The findings noted that It should be highlighted that indeed, the aspect of teamwork is important in performance considering the fact that it enhances employees' productivity. Additionally, the core value of teamwork is the reduction of workload which helps employees to perform better without any kind of work pressure because the tasks were distributed equally that positively impacts project completion.

This statement also agrees with Ejike and Nelson, (2021) examined a study on teamwork and performance in Nigeria, a case of Nigeria Bottling Company. The study examined the effect of team work on organizational performance in Nigeria using Nigeria Bottling Company Owerri, Imo State as the study unit. The study revealed that there is a significant relationship between teamwork and customer satisfaction.

5.3.4 Performance of Electronic Claims Systems in Medical Insurance Firms in Kenya

Statements were developed to measure the extent to which staff felt on the performance of the existing e claims system currenltly in use by NHIF. This section sampled two statements. Statement (1) The existing e-claims systems allows for timely reimbursement of monies to Health care providers. Out of 152 respondents who participated in the study, 0(0%) Strongly Disagreed, 70(46%) Disagreed, 65(42.5%) were neutral, 2(2.3%) Agreed with the statement, while 14(9.2%) Strongly Agreed. This finding shows that 16 (10%) respondents Agreed with the statement, 71(47%) respondents Disagreed while 65(43%) respondents were Neutral. This item had a mean of 3.62 and a standard deviation of 0.686 implying that the statement positively influences the performance of the e claims system in medical insurance. Analysis of this finding showed that a majority of staff, 65(42.5%) disagreed with this statement and advised that more needs to be done to improve the systems. Additional information from respondents stated that the current e claim system

has a low response time and frequently lapses affecting the health care facilities. When health care facilities are unable to receive their payments on time, they refuse to issue medical care to NHIF members who visity their hospitals.

Statement (2) NHIF members are contented with the duration of claims approval in the system by Qualiy Assurance officers. Out of 152 respondents who participated in the study, 0(0%) Strongly Disagreed, 75(49.4%) Disagreed, 38(25.3%) were neutral, 3(2.3%) Agreed with the statement, while 35(23%) Strongly Agreed. This finding shows that 38 (25%) respondents Agreed with the statement, 76(50%) respondents Disagreed while 38(25%) respondents were Neutral. This item had a mean of 3.93 and a standard deviation of 0.759 implying that the statement positively influences the performance of the e claims system in medical insurance Analysis of the study results showed that a majority of staff 75(49.4%) Disagreed with this statement. This is out of their own personal experience of vising health care facilities or from complaints received by friends or relatives. They agreed that medical claims approval takes too long to be approved. The respondents exhibited total dissatisfaction when visiting hospitals and claimed that prompt response can only be achieved when one knows a Quality Assurance officer personally and only then can their claim be worked on.

The staff who agreed with this statement claimed that they knew the Quality Assurance officers personally because they had worked with them before and thus it was not difficult to seek assistance. Respondents who were neutral with the stament claimed that they did not receive any difficulty in approval because there was no urgency in the procedure requested. However, they stated that if there was any emergency, they were sure to be disappointed when awaiting approvals.

These statements agreed Kanmani (2021) who analyzed the importance of medicare Claims Management System. The findings noted proper implementation of TQM in medical

insurance companies can be a very effective alternative or solution in improving the health care service issued to patients in health care facilities. Additionally, quality of care is the vital issue for every health care institution and there is an immediate need for health care reforms in order to address and resolve the problems associated with quality of care, as well as patient preferences, safety, and choice.

This statement also agrees with Wambui, (2021) who examined a study on the effects of strategy on the performance of medical insurance firms in Kenya. The study examined that the Government of Kenya through the Insurance Regulatory Authority should institute suitable policies that offer support to medical insurance firms. Part of this is to ensure the medical insurance firms have a functioning claims system preferably an automated system to promte efficiency and quality customer service. Respondents of this study agreed that a high performing e claims system will assist in curbing medical fraud, lead to return in investment and the general profitability of the Fund. A high performing e claims system will also allow for the Fund to attract other voluntary members by providing a comprehensive medical insurance cover apart from the statutory deduction. This will increase the profit margins of NHIF.

5.4 Conclusion

The study concluded that employee training and capacity building is key in enhancing employee skills, knowledge and professional capacity needed in their respective functional areas. Periodical training equips the staff to be adequately prepared on interacting with both system and customers. Further, the study posits that management should anchor training interventions in the organizational work plan every year to ensure it is planned and budgeted for. This research revealed that training interventions are not taken seriously by management and thus more needs to be done to boost the morale of the employees.

Secondly, the study concluded that leadership is one of the key forces that foster organizational performance. The kind of leadership adopted by an organization has an influence on how a company performs overall. The type of leadership style and skills exhibited in my management is vital in a company because it has the ability to inspire employee performance, rally staff around a vision, and shape institutional strategies. The results of this study established that there is need for NHIF management to strive to be innovative and visionary to identify opportunities for growth for the organization. Additionally, improved leadership capabilities is effective in aligning employees' needs to organizational need by giving a sense of direction thus enhancing organizational performance.

Thirdly, the study concluded that teamwork activities also play a critical role in the performance of the electronic claims system. Proper teamwork in an organization amongst colleagues allows for good coordination and collaboration when working on claims. The ultimate goal of good teamwork actualizes customer satisfaction and quality of care to members. This research found out that key departments (Quality Assurance, Accounts and Claims) that work with the e claims system management directly still operate in silos and there is no proper communication and coordination when processing claims.

Finally, the study concludes that organizational culture plays a significant influence on the performance of medical insurance companies. Innovation and creativity is crucial in boosting overall company productivity and overall organizational performance. Focusing on achieving goals and accruing positive results enhances the performance of medical insurance companies. Allocating operational tasks to teams made up of employees results in increased overall organizational performance. NHIF management should work hard to ensure that a positive culture is inculcated within the organization. Finally, recruiting employees with high levels of precision, focus and attention to detail improves the productivity of the company.

5.5 Recommendations

5.5.1 Recommendation for Practice

The study recommends that public offices should commit financial resources towards technology and innovation advancement within the organization to improve organizational performance and customer satisfaction. The study also recommends that insurance companies embrace a future oriented approach towards adoption of strategic approaches through investments on innovation. The investments on innovation should be geared towards improving the overall performance of the organization.

Advancement in the electronic claim system will allow for timely reimbursements of monies to HCPs and also expediting the claims process leading to customer satisfaction. Timely payments of claims to hospitals will improve relationships between NHIF and HCPs.

5.5.2 Recommendation for Policy

The government should help in formulating policies and laws that govern public sector organizations whose main mandate is service delivery to the general public. Policies and laws should relate to customer satisfaction and efficiency in services delivered to the public.

5.6 Areas for Further Research

This study sought to examine the effect of Total Quality Management on performance of the electronic claims systems in medical insurance, a case of NHIF. The study however recommends a need for further research on other aspects of Total Quality Management such as customer focus, continuous improvement and process approach and how they can influence performance of an e claims system.

This study was carried out in NHIF which is a state corporation and a public medical insurance company. Future studies thus should be carried out in the private sector and NGOs in which dynamics and procedures are slightly different from state corporations.

REFERENCES

- Adong, O. (2021). Leadership style, teamwork and performance of national water and sewerage corporation (NWSC) projects (Doctoral dissertation, Makerere University, Business School).
- Aghimien, D., Aigbavboa, C., Thwala, W., & Mothiba, H. (2019). Total Quality Management Practices in Construction Project Delivery in Outh Africa. *In IOP Conference Series: Material Science and Engineering*, 640 (1), 12-104.
- Al Idrisi, A., & Ozutler, H. (2021). The Impact of Quality Management on the Project Performance of SMEs: A Case Study in Tripolibya. *Suleyman Demire Universities Iktisadi be Idari Bilimler Fakuitesi Dergisi*, 26 (4), 391-411.
- Alawode, G., & Adewole, D. (2021). Assessment of the design and implementation challenges of the National Health Insurance Schemes in Nigeria: a qualitative study among sub-national level actors, healthcare and insurance providers. *BMC Public Health*, 21 (1), 1-12.
- Alshrbaji, M., Mohammed, M., & Shamayleh, A. (2022). The Impact of Total Quality Management and Perceived Service Quality on Patient Satisfaction in Healthcare: A Systematic Review. *In 2022 Advances in Science and Engineering Technology International Conference (ASET)*, 1-6.
- Amunga, J., & Musasia, A. (2021). The Gender Stem Gap and its Impact on Sustainable Development goals and the Big Four Agenda in Kenya: A Synthesis of Literature. International Journal of Contemporaru Education, 4 (1), 1-12.
- Angole, J., & Akello Abal, J. (2022). Training and Organizational Performance: A Case of Education Service Sector in Lira District Local Government.
- Berber, N., Slavic, A., & Aleksic, M. (2020). Relationship between perceived teamwork effectiveness and team performance in banking sector of Serbia. *Sustainability*, 12 (20), 8753.
- Bryman, A. (2016). Social Research Methods. Oxford University Press.

- Bryman, A., & Bell, E. (2015). Business research methods. USA: Oxford University Press.
- Cao, N. (2018). Application of project quality management to increase the successful rate of car project: a case study in China. *International Journal of Services Technology and Management*, 24 (3), 246-262.
- Chen, Y., & Chong, O. (2021). Using the Best Value Approach to Improve Construction Project Performance in the Chinese Construction Industry. *Journal for the Advancement of Performance Information and Value*, 13 (1), 47.
- Creswell, J., & Creswell, J. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. USA: Sage publications.
- Ejike, I., & Nelson, U. (2021). Teamwork and Organizational Performance in Nigeria (A Study of Nigeria Bottling Company, Owerri, Imo State).
- Garg, G., & Kothari, C. (2014). *Research Methodology, Methods and Techniques*. New Delhi, India: New Age International Publishers.
- Ibrahim, A., & Daniel, C. (2019). The Effect of Total Quality Management on Project Management. *European Journal of Business and Management*, 222-1905.
- Kabirfar, K., & Mojtahadi, M. (2019). The Impact of Engineering, Procurement and Construction (EFC) phases on project performance: A case of large scale residential construction projects. *Building*, 9 (1), 15.
- Kanapathipillali, K. (2021). The Impact of Training and Innovation on Organizational Performance in the Hospitality Industry in Malaysia: Job Satisfatcion as Mediator. European Journal of Human Resource Management Studies, 5 (2).
- Karimi, A., & Pimplikar, S. (2020). Quality Management System (QMS) at Residential Construction Project.
- Kassahun, E. (2021). The Effect of Leadership Styles on Project Performance: A Case of Ethiopian Road Authority (ERA) (Doctoral dissertation, St. Mary's University).

- Khwae, G., & Amoozegar, A. (2021). Examining the Importance of Organizational Culture,

 Employee Commitment and Leadership on Project Performance of Organizations in

 Malaysia.
- Kwarteng, A., Akazili, J., Welaga, P., Dalinjong, P., Asante, K., & Sarpong, D. (2020). The state of enrollment on the National Health Insurance Scheme in rural Ghana after eight years of implementation. *International journal for equity in health*, 19 (1), 1-14.
- Marshall, A., Witthayapipopsakul, W., Chotchoungchatchai, S., Wangbanjongkun, W., & Tangcharoensathien, V. (2022). Contracting the Private Health Sector in Thailand's Universal Health Coverage. *medRxiv*.
- Mugenda, O., & Mugenda, A. (2013). Research Methods, Quantitative and Qualitative Approaches. Nairobi: Acts Press.
- Mungai, P. (2021). Private Public Partnership and Project Performance of Commercial State Corporations in Kenya.
- Mutole, J. (2019). Influence of strategic leadership practices on the performance of Non-Governmental organizations listed in the environmental campaign by United Nations Environmental Programme (UNEP) in Kenya (Doctoral dissertation, JKUAT-COHRED).
- Mwendwa, C. (2021). Strategic Leadership Practices and Performance of Standard Group Plc (Doctoral dissertation, University of Nairobi).
- Newaz, A., Sikder, A., Rahman, M., & Uluagac, A. (2021). A survey on security and privacy issues in modern healthcare systems: Attacks and defenses. *ACM Transactions on Computing for Healthcare*, 2 (3), 2-44.
- Ngala, F. (2018). Students' Perception of Quality of Lecture Hall Resources Used in Teacher Education Programmes in the Universities in Nakuru County, Kenya. *Kabarak Journal of Research & Innovation*, 5 (2), 115-132.
- Njang'iru, A., Muhoho, J., & Abayo, R. (2020). Influence of quality management on cost performance of construction projects: A case of lifts and escalators companies in Kenya. In M Radujkovic and M Sjekavica 2017 June Project Management Success

- Factors Creative Construction Conference 2017 Primosten Croatia 19- International Academic Journal of Information Sciences and Project Management, 3 (6), 84-99.
- Njeri, N., & Ngufi, P. (2021). Role of Conflict Resolution on the Performance of a Project Team in Kiambu County, Kenya.
- Olufayo, B., & Akinbo, T. (2021). Training gap identification as determinants of employees' job performance in gas and energy company in delta state, nigeria. *Journal of Human Resource Management*, 9 (4), 108-119.
- Oyetunji, A., Adebiyi, J., & Olatunde, N. (2019). Leadership behaviour and worker performance in the Nigerian construction industry. *The Journal of Values-Based Leadership*, 12 (2), 13.
- Park, Y., & Canaway, R. (2019). Integrating traditional and complementary medicines with national healthcare systems for universal health coverage in Asia and the Western Pacific. *Health Systems & Reforms*, 5 (1), 24-31.
- Saints, G. (2018). Characterizing the quality journey of total quality management in relation to the financial performance of SMEs under crisis conditions: the case for Greece.
- Samwel, J. (2018). Impact of employee training on organizational performance-case study of drilling compnaies in geita, shinyanga and mara regions in tanzania. *International Journal of Managerial Studies and Research*, 6 (1), 36-41.
- Sila, J., & Gakobo, J. (2021). Material Management and Project Performance of Construction Companies in Nairobi City County, Kenya. *International Academic Journal of Information Sciences and Project Management*, 3 (6), 368-391.
- Wangui, O. (2018). Effect of total quality management practices on operational performance of food manufacturing firms in Nairobi County, Kenya (Doctoral dissertation, Egerton University).
- Wanjogu, B., & Waithaka, P. (2021). Total Quality Management and Organizational Performance of Deposit Taking Micro Finance Institutions in Nyadarua County, Kenya. *International Journal of Business Management, Entreprenuership and Innovation*, 3 (1), 121-135.

- Yap, J., Leong, W., & Skitmore, M. (2020). Capitalising teamwork for enhancing project delivery and management in construction: Empirical study in Malaysia. *Engineering*, Construction and Architectural Management, 27 (7), 1479-1503.
- Yuniarti, Y. (2022). The Effects of Education and Training Program, Facilities and Infrastracture Completeness, Organizational Support on Employee Performance Through Satisfaction as Variable Mediation. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 5 (2).

APPENDIX I: INTRODUCTION LETTER

13/4/2023

Africa Nazarene University,

P.O Box 53067-00200,

Nairobi.

Dear Respondents,

Laura Echulet

REF: REQUEST FOR QUESTIONNAIRE COMPLETION

I am a student of Master in Business Administration at Africa Nazarene University. I am conducting research on the effects of Total Quality Management on Performance of E-Claims Systems in Medical Insurance Firms in Kenya; A Case of NHIF, Kenya. The study will be conducted in NHIF, Head Office. Your feedback in filling out the questionnaire will be of significance since it is important for my passing the degree requirements. Kindly help me achieve this goal by completing the questionnaire given the best of your knowledge. Your cooperation and assistance in this study is highly appreciated.

Signature:	 Date:	

APPENDIX II: QUESTIONNAIRE FOR BENEFICIARIES

I am a postgraduate student at the University of Africa Nazarene University, pursuing a master's degree in business administration (MBA). I am undertaking the research on the effect of Total Quality Management on Performance of E-Claims Systems in Medical Insurance Firms in Kenya; A Case of NHIF, Kenya. I would be very grateful if you could answer the questions in the questionnaires provided as honestly as possible.

Instructions: Tick where appropriate

Section A: Background Information

1. Gender			Male ()			Female ()
2. Age 21- 30	0 ()	31-40()	41-50	()	Above 50 ()	
3 For how long	g have you	u worked for	NHIF?			
a) 5-10 yea	rs ())				
b) 10- 15 y	ears ()				
c) 16-20 ye	ears ())				
d) Over 21	years ()				
4 Level of educ	cation					
a) Masters	()					
b) Degree	()					
c) Diploma	()					
d) Secondary	()					

Section B: Measurements of Study Variables

Instructions; Tick where appropriate

Measurement of Independent variables

1.	Leadership	Strongly	Agree	Neutral	Disagree	Strongly
		Agree				Disagree
Leade	ership Skills					
✓	Management has exhibited good					
	decision-making skills to					
	oversee and ensure performance					
	of the electronic claims system.					

✓ Management has exhibited					
creativity and innovation that					
has helped to improve the					
performance of the e claims					
system.					
✓ Management has exhibited good					
communication skills when					
updating employees on the e					
claims system upgrades to keep					
them informed.					
Leadership Styles					
✓ Management makes all the					
decisions and dominates team					
members when seeking ways to					
improve system performance.					
✓ Management allows					
participation of employees					
when seeking ways of					
improving the electronic claims					
system.					
✓ Managers have constantly been					
identifying and exploiting new					
ideas to enhance performance of					
the electronic claims system					
2. Teamwork	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
Team Cohesion					
✓ There are clear roles and					
responsibilities of system users					
to ensure good performance of					
<u> </u>					

	the e claims system.			
✓	Structures and procedures exist			
	to guide system users on how to			
	interact with the system to			
	ensure performance.			
✓	There exists a conflict			
	management mechanism to			
	guide members on how to			
	resolve disputes that does not			
	hamper system performance.			
Team	Communication			
✓	Management frequently			
	organizes open meetings for			
	team members to share their			
	ideas and opinions on system			
	performance.			
✓	There exists two-way feedback			
	between management and team			
	members to update on issues			
	concerning the e claim system.			
✓	Proper communication amongst			
	team members creates the basis			
	of unique skills and			
	coordination of members to			
	allow the system to work			
	efficiently.			

3.	Training	Strongly	Agre	Neutral	Disagree	Strongly
		Agree	e			Disagree
Skills	and Development					
✓	Employees who interact with					
	the electronic claims system are					
	routinely trained on new system					
	updates and modules.					
✓	Management considers training					
	of employees as important in					
	the improvement of the					
	performance of the electronic					
	claims systems.					
✓	Training of evetem users is key					
	Training of system users is key in improving performance of					
	the electronic claims system.					
	the electronic claims system.					
Capac	ity Building					
✓	Conducting a training needs					
	assessment of the system users					
	is key in enhancing					
	performance of the electronic					
	claims system.					
✓	Management should ensure					
	system users have the requisite					
	qualifications of the position					
	e.g., Quality Assurance officers,					
	ICT officers, Accountants and					
	Claims officers.					
✓	The current number of					
	employees interacting with the					
	system is enough for the					

workload of claims processing.			

${\bf Measurement\ of\ Dependent\ variable}$

Performance of Electronic claims	Strongly	Agree	Neutral	Disagree	Strongly
system	Agree				Disagree
Customer Retention					
✓ A high performing E-claims					
system will allow for an					
increased customer retention					
rate (CRR) for involuntary					
NHIF customers e.g. enhanced					
schemes such as Civil Servants					
scheme.					
✓ A high performing E-claims					
system will lead to a decrease in					
customer churn rate e.g.					
National Police Service.					
·					

Customer satisfaction			
✓ The e claims systems allow for			
a fast response time of claims			
raised by HCPs reducing delays.			
raised by free s reddenig delays.			
✓ The e claims system has led to			
increased efficiencies in			
operations between the Fund			
and HCPs.			
Profitability			
✓ There is increased return on			
investment with the current e			
claims system.			
(TI			
✓ There is increase in revenue			
generation in the Fund with the			
current e claims system.			
✓ The use of the e claim system			
has led to the decrease in fraud			
cases caused by HCPs.			

End

Thank you for your response

APPENDIX III: RESEARCH AUTHORIZATION



22nd, May, 2023

E-mail: researchwriting.mba.anu@gmail.com

Tel. 0202711213

Our Ref: 18M03EMBA018
The Director.
National Commission for Science,
Technology and Innovation (NACOSTI),
P. O. Box 30623, 00100
Nairobi. Kenya.

Dear Sir/Madam:

RE: RESEARCH AUTHORIZATION FOR: LAURA AKETCH ECHULET

Miss. Laura_is a postgraduate student at Africa Nazarene University in the Master of Business Administration (MBA) program.

In order to complete his program, Miss. Laura_is conducting research entitled: "Effect of Total Quality Management on Performance of Electronic Claims Systems in Medical Insurance Firms in Kenya: A Case of National Hospital Insurance Fund, Kenya"

Any assistance offered to her will be highly appreciated.

Yours Faithfully,

```
DR. Kimani Gichuhi,
MBA, Coordinator,
School of Business,
Africa Nazarene University.
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APPENDIX IV: RESEARCH PERMIT





Ref No: **859702** Date of Issue:**25/Mav/2023**

RESEARCH LICENSE



This is to Certify that Ms.. Laura Aketch Echulet of Africa Nazarene University, has been licensed to conduct research as ner the provision of the Science. Technology and Innovation Act. 2013 (Rev.2014) in Nairobi on the tonic: EFFECT OF TOTAL OUALITY MANAGEMENT ON PERFORMANCE OF ELECTRONIC CLAIMS SYSTEMS IN MEDICAL INSURANCE FIRMS IN KENYA: A CASE OF NATIONAL HOSPITAL INSURANCE FUND. KENYA for the period ending: 25/May/2024.

License No:NACOSTI/P/23/26171

859702

Applicant Identification Number



Director General NATIONAL COMMISSION FOR SCIENCE.TECHNOLOGY & INNOVATION

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Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing)
Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

- 1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of international treaties of which Kenya is a signatory to
- 2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way; i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
- 3. The License is valid for the proposed research, location and specified period.
- 4. The license any rights thereunder are non-transferable
- 5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
- 6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
- 7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
- 8. The License does not give authority to transfer research materials.
- 9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
- 10. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
- 11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.

- 12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
- 13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
- 14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
- 15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
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APPENDIX V: MAP FOR STUDY AREA

