MODERATING INFLUENCE OF COMPETITION ON THE RELATIONSHIP BETWEEN GENERIC STRATEGIES AND PERFORMANCE OF HOSPITALS IN KENYA

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Moderating Influence of Competition on the Relationship between Generic Strategies and Performance of Hospitals in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

Signature……Date……

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This thesis has been submitted for examination with our approval as university supervisor.

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DEDICATION

I dedicate this thesis to my immediate Family for sacrificially dedicating their time and financial resources to support an sustain me during the time of study.

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ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
AVE	Average Variance Extracted
BP-LM	Lagrange multiplier
CFA	Confirmatory factor analysis
CEO	Chief Executive Officer
EFA	Exploratory factor analysis
MAR	Missing at random
MCAR	Missing completely at random
MOH	Ministry of Health
NGO	Non-Governmental Organization
NIH	National Institutes of Health
NHIF	National Health Insurance Fund
NMAR	Not Missing at Random
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Squares
PESTEL	Political Social Technological environmental and legal
RoK	Republic of Kenya
SPSS	Statistical Package for Social Sciences

UNDP	United Nations Development Programmes
USA	United State of America
VRIO	Value Rarity Inevitability of Organisation

PERATIONAL DEFINITIONS OF TERMS

Competition Competition in business is the contest of rivalries among the companies selling similar products and/or targeting the same target audience to get more sales, increase revenue and gain more market share as compared to other (feedough.com/business competition)

Competitive advantage

Competitive strategy Competitive strategy is defined as the long-term plan of a particular company in order to gain competitive advantage over its competitors in the industry. It is aimed at creating definitive position in an industry and generating a superior portion on investment – mbaskool.com/business concepts/and strategy terms/7394-competitve-strategy.hmtl-/2021

Cost leadership strategy cost leadership is one of three generic business strategy discussed in this well-known but competitive strategy 1980 a firm that follows a cost leadership strategy attempt to earn higher returns and competitive advantages through offering products or services at the lowest prices in the industry (2000) cost leadership strategy in(eds) encyclopedia of production and manufacturing management. Springer boston MA https/doi.org/10.007/1-4020-0612-8-183

Competitive advantage Competitive advantage is where one business has an edge over the other. It is when a business stands out from other competitors in the market for example a business may have a competitive advantage due to its brand image, technological expertise, customer service or a distribution network (P. Byce, 2022: boycewre.com/competitive-advantage/what is competitive advantage) Differentiation strategies can be defined as positioning a brand in such a way as to differentiate

it from the competition and establish an image that is unique (Davidson 2011)

Focus Strategy, or niche strategy is the simplest term means focusing or a narrow and specific segment in the market. The idea behind the focus strategy is to develop, market and sell a specific product to a specific group of customers (focus strategy/

Porters' Generic strategies/ competitive strategies Plan formulated and developed with the purpose of assisting a firm in performing various activities differently from its rivals (Zott, 2003).

Firm performance a term which may include organizational performance functioning of a firm and outcome of its operations 2020; Urjava, asknlot.com/what is firm performance

Pestel analysis is an acronym for a tool used to identify the macro (external forces facing an organization https//blog.oxfordcollegeofmarketing.com.

VRIO framework is an internal analysis that helps businesses identity the advantages of resources that give them a competitive edge

ABSTRACT

The purpose of the study was to ascertain the role of competition on the relationship between generic strategies and performance of Hospitals in Kenya. Specifically, the study sought to find out the relationship between cost leadership strategy and performance of Hospitals; to assess the relationship between differentiation strategy and the performance of Hospitals; to evaluate the relationship between focus strategy and performance of Hospitals and to establish the role of competition in moderating the relationship between generic strategies and the performance of Hospitals. The study focused on the NHIF accredited Hospitals with a bed capacity of one Hundred (100) and above. The study was anchored on Porters Typology of competitive strategies, Resource based view theory; competitive advantage theory and the game theory. The study adopted the cross-sectional mixed methods design guided by the pragmatic research philosophy. The target population was the NHIF accredited Hospital with a bed capacity of one Hundred (100) and above which stood at 150 Hospitals as at July 2016. Stratified and convenient sampling Techniques were used to select the sample of 109 Hospitals, obtained from the target population by the use of Israel Fortina (2002). Primary data was collected by the use of semi-structured questionnaires for the 109 administrators and the in-depth interview schedules for the 109 CEOs. These research instruments were successfully subjected to content validity and reliability tests. Quantitative data was analyzed by the help of SPSS for descriptive and statistical modeling of test hypothesis and drew conclusions on the study objectives. The qualitative interviews yielded information that were analyzed using thematic content analysis. The study findings (both quantitative and qualitative) revealed that all generic strategies (cost leadership, differentiation and focus strategies) posted positive and significant relationship with the performance of hospitals with differentiation strategy, posting greater significance as compared to the other strategies. The study further concluded competition significantly influenced the relationship between generic strategies and performance of Hospitals, specifically the differentiation strategy was moderated by competition, by causing a buffering effect. It therefore recommended that Hospitals be encouraged to adopt differentiation strategy in their strategy orientation, with a view to realize competitive advantage at the market place. However, it was also noted that differentiation strategy be used with caution in the face of cut-throat competition in the market, since there was a tendency for the impact of differentiation strategy to be reduced under fierce competition.

CHAPTER ONE

INTRODUCTION

1.1 Background

In all industries competition among businesses has been encouraged as a mechanism to increase value for patients (Rivers & Glover 2008). Competition in business is the contest of rivalry among the companies selling similar products and or targeting the same target audience to get more sales increase in revenue as compared to others. Competition is a fact of life (Chepngetich, &Kimencu 2016) and hence forms a key component of any marketplace. Indeed, competition is the core of the success or failure of firms. Competition determines the appropriateness of a firms' activities that can contribute to its performance such as innovation, cohesive culture or good implementation. Accordingly businesses must find ways to attract clients to their products and services away from their competitors in order to obtain a competitive advantage. According to Gerry Scholes, Kavan & Willigton 2003; - for a business to remain competitive they must come up with strategies and methods in line with these competences and capabilities required by the changes in the market. Old competences become invalid with changes in the internal and external environment. Environmental changes are inevitable and therefore organizations must adjust the way they conduct their business or otherwise they would be irrelevant (Altokalla A.2015) With respect to the external environment the firms may embrace PESTEL to understand the external forces that affect their organizations what customers will be interested in and use VRIO to evaluate their own resources and capabilities as they evaluate the products and services that will match customer interest.

A firms' competitive strategy concerns how to compete; in the business area. As a firm operates, it seeks to search for favorable competitive position in the industry and aims to establish a profitable and sustainable position against the forces that determine industry competition.

To identify and secure a competitive strategy, a firm or business will create its activities around one primary type of product or service line. Business level strategy is a way of business organizes its activities to compete against rivals in its product / service industry.

Michael Porter (1985) developed three generic business level strategies that outlined, the basic methods of organizing to compete in a product/ service market. These strategies are called generic, because these ways of organizing can be used by any firm in any industry. They include cost leadership strategy; differentiation strategy and focus strategy.

Organizations operate in an open environment which constantly change in with new entrants to the market, changing the consumer preferences, technological advances and more. In the light of this, every firm ought to ensure that they are competitive despite the changing environment (Chepngetich & Kimenchu 2018). Firms in respective industries find themselves operating in a competitive environment. Competitive environment relates to how a business is affected by its competition and how its business practices enable it to compete effectively.

1.1.1 Generic Strategies

The term generic strategy refers to the broad scope of use and the ability to create competitive advantage regardless of industry type and size of organization (Hahn & Powers 2010) companies can choose generic strategies for a better competitive position within the industry through the integration of two dimensions: the field (company's decision to extend activities) and the type of competitive advantage (firm decision to develop competitive advantage.) The profitability of each company depends on the ability to choose the strategy that best fits the company (Hahn & Powers 2010)

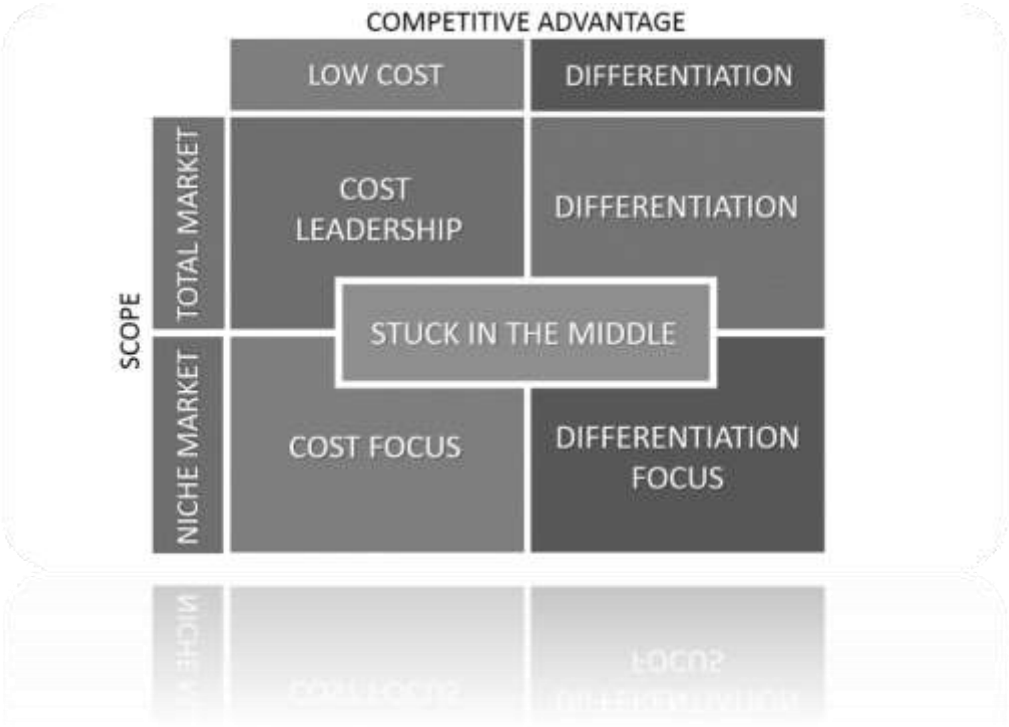

Figure 1.1: Porters Generic Strategies, cost leadership, differentiation, and focus

The Generic Strategy can be used to determine the direction (strategy) of a firm, Michael Porter (1985) proposed four strategies that a firm can choose from. He believed that a firm must choose the four strategies. cost leadership, differentiation and cost focus and differential focus.

Lu Shan & Yam (2008) noted that porter's theory was useful in understanding the competitiveness of the organization indicating that the competitive advantage starts from the competitive strategies adopted to deal with strengths, weakness opportunities and threats facing an organization.

According to Atkiya (2015) a firm's relative position within its industry determines whether firms' profitability is above or below the industry average.

The basis of the above average profitability in the long run is sustainable competitive advantage, The types of competitive advantages an organization can possess, include low cost and differentiation.

When the two basic types of competitive advantage are combined with the scope of activities for which a firm seeks, for achieving above average performance in industry, cost of leadership, differentiation, and focus. The focus strategy has two variants cost focus and differentiation focus. (Porter 1984-85).

1.1.2 Firm Performance

Performance endorses a process perspective where focus is on the intended process of quantifying the effectiveness and the efficiency of action with a set of metrics. The measures and individual acts as surrogates or proxies for organizational phenomena performance measurement represents management and control systems that produce information to be shared with internal and external users (Shapiro 2000) The performance can be based mainly on financial measures and consider a component of the planning and multiple measures where performance measurement acts as an independent process integrated in a broad set of activities. (2014)

Performance considers how well managers seek to understand and appreciate others values and morally to a business god but in terms of delegation or how well managers give assignments and communicates instructs members of the organization. Anuka measure is an execution on well managerial plans come out by members of the organization as well as leadership or how effectively management communicates the vision and strategy of the organization.

Performance at the operated or individual level usually involves process such as statistical quality control as organizational level performance usually invites softer forms of measurements, such as customer satisfaction surveys which are used to obtain qualitative information about performance from a viewpoint of customers (Barney 2011)

This study adopted the perceptual measures of performance by using the Likert scale to measure the indicators of performance.

1.1.3 Global perspectives of healthcare

Globally health care has been recognized as the cornerstone of human development. This is largely due to its impact on population productivity, educational performance as well as its positive impact on social and political stability and link to greater equity and economic return (Kaseje 2006) therefore improving the healthcare system is impactive for economic survival stability and progress (U.N.D.P 2013)

Competition may not always reduce costs in the hospital sector. (Thompson 1994) points out in a review of competition amongst hospitals in the USA that price competitors amongst hospitals form of hospital competitiveness. Instead, it is non price competition that increases hospital market share. (Robinson & Luft 2015) Hospitals in their endeavor to increase market share, invest for example in sophisticated technology and high-cost amenities for clients that may not add clinical improvement. However, in the process costs and prices of service increases, and it is often difficult to justify such investments on economic grounds. Health systems around the world face the same fundamental challenge. How often to deliver broad access to health service while improving the quality of care and controlling costs.

Great competition has been proposed as a solution to the challenge (Dash & Meredith ,2010). whilst expenses from the USA cannot be 'easily' exported to less developed countries this experience has less developed countries this experience has public policy relevance in the sense that the absence of competition in the hospital sector has positive and negative dimensions, and suggests a role for other hospital and quality enhancing policy instruments the issue is not just out of relevance but rather anticipating hinge and optimal implementation paths from developed countries experience (Chernichovsky, 2013).

In Pakistan majority of the public hospitals are in the urban areas especially in major cities and it had been facilitated by a few numbers of urban people (Arooz & Hajira, 2005) but still the facilities are inadequate even to fulfil the needs of the people living in urban areas.

Health care conditions in Pakistan are becoming are worse day and day as the health sector is badly ignored by the government (economic survey Pakistan, 2000).

1.1.4 Health Institutions in Kenya

In Kenya the Ministry of Health, MOH is the government department, that heads the Kenyan health care system. It gives the stipulations of health care and plays a big role in making the rules of the health care personnel. There are three main sectors of health care: the public sector which represents all government owned health care facilities, the private sector which collaborate private individuals, institutions and the non-profit making organizations which include organizations like churches that form health care facilities (MOH, 2014).

This ministry operates more than half of all health facilities in the country. Out of over 4500 health facilities in the country, the MoH controls and runs about 52% while the private sector, the mission organizations and the ministry of local government run the remaining 48%. The public sector controls about 79% of the health centers, 92% of the sub-health centers and 60% of the dispensaries. The NGO sector is dominant in health clinics, maternity and nursing homes (94%) and medical centers (86%). Both the public and the NGO sector have an almost equal representation of hospitals (MOH, 2014).

In Kenya, Health services are provided through a network of over 4,700 health facilities countrywide, with the public sector system accounting for about 51 percent of these facilities. The public health sector consists of the following levels of health facilities: national referral hospitals, provincial general hospitals, district hospitals, health centres and dispensaries. Health services are integrated as one goes down the hierarchy of health

structure from the national level to the provincial and district levels (RoK, 2011). The two national referral hospitals are Kenyatta National Hospital in Nairobi and Mol Referral and Teaching Hospital in Eldoret. Provincial hospitals act as referral hospitals to their district hospitals. The provincial level acts as an intermediary between the national central level and the districts.

They oversee the implementation of health policy at the district level, maintain quality standards, and coordinate and control all district health activities (RoK, 2011).

Generic Strategic in the health sector is crucial for effective service delivery and for the realization of the firms‟ suitability and competitive age, new approaches to management in the health sector are imperative as governments enter the new millennium. Market dynamics have created challenges for public health sector with the emergence of private health institutions, emergence of the global economy, and advances in technology, increased societal demands, and the need to provide more social services with fewer resources.

Response mechanisms have emerged with in the private health care to meet these recent challenges but government organizations have been slower to respond. This is understandable, given fiscal constraints and the bureaucratic process witness the government administration (RoK, 2011). Historically hospitals in Kenya were founded on a very solid resource base through human and material support from the mother churches overseas. Since the hospitals were doing a well-accepted and respected job in the area of health service delivery for the population, the government also recognized their role by also making subsidy to them. It came in various forms including human, equipment, vaccines and drugs. Over the years, the situation has gradually changed (Wilson, 2008).

Delivering service quality has significant relationship with customer satisfaction (Wilson, 2008), However, the poor state of customer service in some public hospitals in Kenya has resulted in high turnover and weak morale among staff, making it difficult to

guarantee 24-hour coverage resulting in, problems with clients care, increased cost of operations due to inefficiencies leading some clients to look for an alternative provider and to spread negative word of mouth which affects potential clients hence growth of the hospital (Demirel, Yoldas & Divanoglu, 2009).

This situation is further worsened by the clients or customers perception of functional issues which they perceive and interact with during the course of seeking treatment such as physical facilities, internal process; interactions with doctors, nurses and other support staff as poor and unresponsive. In their studies, (Demirel, Yoldas and Divanoglu, 2009) found a positive and significant relationship between customers‟ perception of service quality and their willingness to recommend the company.

1.2 Statement of the Problem

A key role of competition in healthcare is the potential to provide mechanisms for reducing health care costs. Competition generally eliminates inefficiencies that could otherwise yield high production costs which are ultimately transferred to patients via high health service and delivery costs (Rivers & Glover 2008). Competition is a fact of business life (Bisungo, 2014)at the market place and indeed according to Scholes et al (2003) for organizations to remain competitive, business must come up its strategies and methods in line with competences required by the changes in the market. Previous studies have been done on the direct effect of competitive strategies on the performance of organizations These include the studies by (Chepngetich &kimenchu , 2018) (Bisungo, 2014) (Moraa, 2016); (Mwangi &Ombui, 2013)It was noted however limited research had been undertaken on the indirect effect of the competitive environment on the firm performance. In their study ‘Moderating influence of industry competition on the relationship between corporate strategy and organization performance’ (Owino &Ogaga, 2017) attempted to address the gap. (Atikiya, 2015)too, sought to establish the moderating effect of competitive intensity on the performance of manufacturing firms in Kenya, in the study ‘Effect of competitive strategies on the performance of manufacturing firms in Kenya’: Ortega 2010) sought to evaluate the role of

technological capabilities in moderating the relationship between competitive strategies and firms' performance. (Abkar Ghasi et al, 2019) sought to address the issues that affect environmental impact on hospital strategy- Financial performance relationship.

(Akbar et al, 2019) sought to underscore how an organization's strategy and environment combine or match together to impact firm performance.

Health has been, a key development agenda as envisioned in the constitution of Kenya 2010 and emphasized in the Kenya Health policy 2014-2030. The country's objective has been that every person has a right to the highest attainable state of health. The hospitals have been classified as public, private ad mission; their operations being guided by their respective corporate strategies with a view to secure and obtain competitive advantage at the marketplace. With the foregoing, this study aimed to investigate the extent to which competition as an environmental force moderated the relationship between generic strategies and performance of hospitals. No such study has been undertaken in the health sector in Kenya. This study attempted to address this gap.

1.3 Objectives of the study

1.3.1 General Objectives

The overall objective of this study is to examine the moderating influence of competition in the relationship between generic strategies and performance of hospitals in Kenya.

1.3.2 Specific Objectives

1. To ascertain the relationships between cost leadership strategy and performance of hospitals in Kenya
2. To assess the relationship between the focus strategy and performance of hospitals in Kenya
3. To evaluate the relationship between differentiation strategy and performance of hospitals in Kenya

4. To establish the moderating influence of competition on the relationship between generic strategies and performance of hospitals in Kenya

1.4 Research Hypothesis

The Hypothesis for the study will be: -

1. There is no significant relationship between cost leadership and the performance of hospitals in Kenya
2. There is no significant relationship between focus strategy and the performance of hospitals in Kenya
3. There is no significant relationship between differentiation strategy and the performance of hospitals in Kenya
4. Competition does not significantly moderate the relationship between generic strategies and the performance of hospitals in Kenya

1.5 Significance of the study.

This study was significant in highlighting **the impact of the environmental forces on the operations of an organization to policy makers in the health sector –** the findings could be useful in setting up polices and structures to strengthen the health institutions associated with public sector and other hospital administrators, through the choice of corporate strategies in the midst of the operating business environment. To **the scholars and academia,** the study provides a basis to understand areas for further research.

1.6 Scope of the study

Hospitals in Kenya are many and are wieldy distributed across the forty-seven 47 counties in the country. This study was limited to NHIF accredited hospitals with bed

capacity of 0ne hundred (100) and more. NHIF is a government agency whose mandate is to ensure everyone in Kenya, accesses quality and affordable healthcare. The said

accredited hospitals cut across the country comprising the hospitals that meet the laid down conditions of the agency including, adequate capacities in the human resource competences and technology The respondents were limited to hospital administrators and C.E. O's of the hospitals under study.

1.7 Limitations of the study

The availability of the target respondents and their willingness to engage in the study posed a challenge more so, for the public sector hospitals as this study was undertaken during the time the government was undertaking of good governance and accountability exercise in public hospitals However, the ability by the researcher to produce Research Permits from NACOSTI and Education offices eased the "tension" and suspicion and the interviews proceeded seamlessly.

The use of **perceptual measurements,** by adopting the Likert scale in measuring the indicators, of the variables may have caused subjectivity.

This was however addressed through careful interviewing and the choice of adequate questions targeted at the respondents; through the instruments of data collection already subjected to validity and reliability tests at the research pilot stage.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents and discusses a brief renew on prior research that is related to this study. The study captures theoretical background on competitive strategies. Competitive advantage theory game theory with a view it provides a basis for appropriate conceptual theoretical framework for the current study. In addition, the chapter highlights the research gap. Justified for the study.

2.2 Theoretical Framework

According to Khan (2010) theoretical framework is an agenda, outline or construct of research approach that preceded the literature review, it is simply an explanation of previous proven theories and how they apply to the new study. This study was anchored on Porter's typology of business strategies, configuration theory, game theory and competitive advantage theories specially the resource view-based theory.

2.2.1 Porters Typology of Competitive strategies

A business strategy demonstrates how a firm centers its activities around a product or service line with a view to compete against rivals in its product or service industry. Michael Porter (1980, 1985) developed three generic business level strategies that outline methods of organizing to compete in the market to outperform the competitors. The Strategies can also be used by any firm in any industry. Porters' generic strategies care all around gaining competitive advantage These strategies of a firm are positioned to beat competition and acquire a dominant competitive position, Porter reasons that to achieve the dominant competitive position a firm must choose among the three generic strategies and failing to choose among one of the three strategies will result in strategic

mediocrity referred to “stuck in the muddle”. The generic strategies include cost leadership strategy; differentiation strategy and focus strategy. While Porter posits that to achieve super performance, a firm must pursue one single strategy.

This notion has however been challenged for instance (Chankim & Hauborgne, 2005)in their blue ocean strategy advice firms to pursue differentiation and low cost simultaneously. They coined a value innovation concept that states that creators of a new market can be more beneficial than competing in an existing market with an established competitor.

2.2.2 Competitive Advantage Theory

Competition is the core to the success or failure of firms. It determines the appropriateness of a firm’s activities that can contribute to its performance such as innovation, cohesive culture, or good implementation. According to (HilllingWerg, 2014) competitive advantage is obtained when an organization develops or acquires a set of attributes (or executes activities) that allow it to outperform its competitors. Two dominant theories of the competitive theory, include the resource-based view (RBV) and the market-based view. The resource-based view shall underpin the study, since the notion of core competences associated with resource-based view, is closely related to the cost leadership and differentiation strategies of Porters business typology. In addition, the view draws attention to the firm’s internal environment as a driver for competitive advantage and emphasizes the resources that have developed to compete in the environment. Contributors to this theory include (Seizmck, 1987) (Penrose, 1959) (Barney, 1991) and more. Resource based view emphasizes that the organization must be seen as a bundle of resources and capabilities to create value and gain competitive advantage. It further suggests if they possess tangible or intangible resources that are valuable, rare immutable and links competitive strategies and capabilities to value creation. He aggresses that not only capabilities need to be considered as the ease to develop competitive advantage, but they also need to be renewed and maintained to understand that value may stem form strategic alignments of resources and competitive

strategies. Accordingly, hospitals in Kenya need to pay attention to their resources with a view to create value for their patients.

2.2.3. Resource Based View (RBV)

(Bmadhani, 2010)notes that ‘’resource based’’ view analyses and interprets internal resources of the organization and emphasizes resources and capabilities in formulating strategies to achieve sustainable competitive advantage.

Resources may be considered as inputs that enable firms to carry out their activities. Internal resources and capabilities determine strategic choices made by firms while competing in their external business environment. Firms’ abilities also allow some firms to add value in Customer value chain.

The resource-based view rose upon the resources and capabilities that reside within the organization in order to develop competitive advantage. However competitive advantage occurs only when there is a situation of resource heterogeneity and resource immobility. The resources that are rare and immutable and non-substitutable make it possible for business to maintain competitive advantage to utilize the resources and competitive advantages for superior performance.

Accordingly, a resource must exhibit the following qualities; valuable(V) Rare® Imperfect immutability(I), Non substitutability (N) Bracket, hence the acronym VRIN. Examples of resources include brand name, technological abilities, efficient producers. These are associated with the cost leadership strategy and differentiation strategy. Contributing researchers associated with this theory include (Wermefelt, 1984) (olavarretic of Ellinger, 1997) (Spenus & Liukus, 2001) (avert, 1991) (Black & Baal, 1994) (Wede & Bual, 1994)

2.2.4 Configuration Theory

Configuration school perceives strategy formulation as a transformation process. Developed in 1960s and 1970s. Major contributors to the theory include (Chandler, 1962) (Mintezerg & Muller, 1970) (Milles & Snow, 1978) .This theory postulates that performance of an organization depends on the fit od environment and organizational design. The basic assumption being that the best performance can be achieved when organization matches external contingency factor, only those organization that align their operations with the current environment achieve maximum output. Accordingly, the general model in configuration theory assumes that for organizations to be effective, there must be on appropriate fit between structure strategy and environmental context (Rhodes, 2008)In the context of this study configuration theory brings out the link between competitive strategies and competition as an aspect of external environmental factor which many influence the hospital in Kenya on to the choice of strategic strategies based on the changes in the environment as well as a basis of explaining to the necessity to have a fit between strategies and performance.

2.2.5 Game Theory

Game theory developed by Jon Von Newman in 1994 helps to analyze dynamic and sequential decision at the tactical level. The main value of game theory is in strategy is to emphasize the importance of thinking ahead, thinks of the alternatives and anticipating the reactions of other players in you game. Key concepts relevant to the strategy are pay off matrix, extensive form games and the___14 use of a game. Application areas in strategy are product introduction, licensing verses production, pricing advertising and regulation (Johnson & Schuals, 2000)Bred because of innovations and differentiation can be considered as a method of signaling quality and other product characteristics to consumers. This allows various models developed in the game theory to be applied such as (Szalkal, 2013)classic market for lemons which price signals quality.

The value that may uncover by applying game theory is the deterrence value of investments in intellectual capital as is well known, patients and copywriters add value by determining competitors from making use of the same work and allow the potent or copyright holder to enjoy exclusive use of the intellectual work for a limited time. However, game theory shows that such a deterrence effect can also occur in the absence of patients and copyrights. The simplest scenario is where the market is limited and there is over capacity in the industry (Ndirangu & Udoto, 2011)

2.3 Conceptual Framework

According to (Bogdan & Bikhan, 2003) a conceptual framework is a basic structure that consist of abstract blocks which represent the observational, the experiential and the analytical synthetical aspects of a process or system being conceived. It's a set of broad ideas and strategies (Miles &Huberman, 1994)define a conceptual framework as a visual or written product, one that explains, either graphically or in narrative form, the main things to be studied – relationships among them the key factors, concepts, variables- and presumed relationships among them. In this study the following conceptual framework was laid.

The Independent variables, include Cost leadership strategy, differentiation strategy and Focus strategy; The dependent variable was Performance while the moderating strategy was Competition:

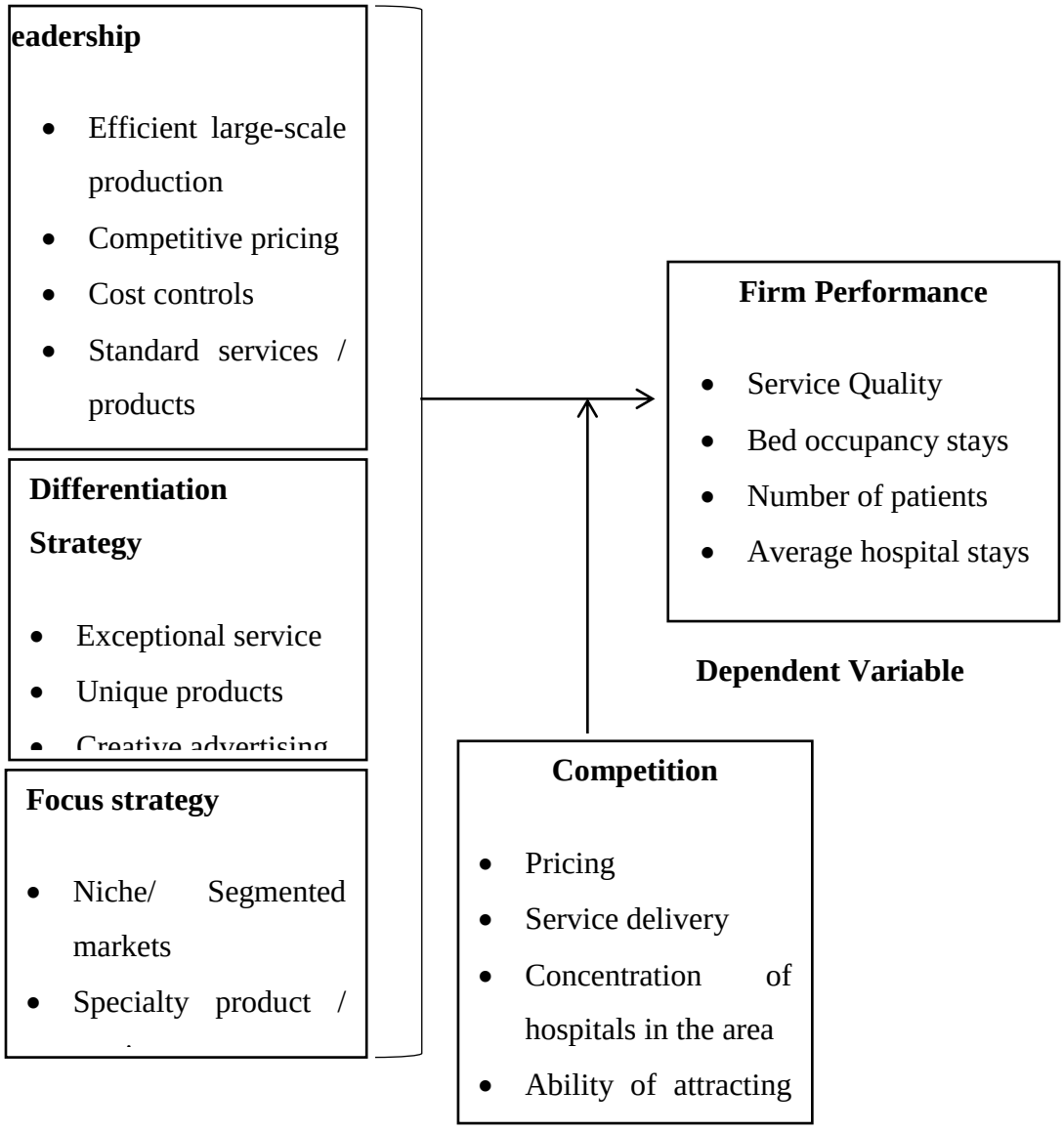

Figure 2.1: Conceptual framework; Moderating influence of competition on the relationship between generic strategies and hospitals in Kenya

2.4 Empirical review

Previous studies have been undertaken demonstrating the effect of competitive strategies on the performance of firms including (Omwoyo, 2016) "assessing the effect of generic strategies on competitive advantage firms in Kenya airlines industry"; (Chepngetich & Kimenchu, 2018)the study sought to determine the effect of competitive strategies on the performance of mobile providers in Nairobi.'(Atikiya, 2015)sought to examine the **'effect of competitive strategies on manufacturing firms in Kenya'.** The studies specific to health sectors included (Mwangi & Ombui, 2013)who demonstrated the positive significance of competitive strategies on the performance of mission hospitals. However, this was a case study on Kijabe Hospitals. (Ogeto et al, 2016)studied the competitive strategies adopted. For performance by private hospitals in Kisii County. (Mwenemeru & Kihara, 2018)conducted a study on competitive strategies adopted by private hospitals in Nairobi County. The aforementioned studies have been able to demonstrate the effect of competitive strategies on the performance of respective institutions. The aforementioned studies have captured adequately the anchoring theoretical framework. Their focus was however on the direct effect that addressed the effect and capabilities of the organization's internal environment. The study by (Atikiya, 2015)was however an exception in that it addressed the external environment factor through the inclusion of the objective that sought to establish the moderating role of competitive intensity in the relationship between competitive strategy and performance of manufacturing firms in Kenya. The objective was anchored by the configuration theory and was able to bring the link between competitive strategies and competitive intensity as an aspect of external environment which could influence the respective industry in the choice of strategic strategies based on the influence of external environment.

Accordingly, studies have also previously attempted to determine the role of external environment on performance and performance of respective institutions. (Ortega, 2009)in the study competitive strategies and firm performance; the role of technological

capabilities in moderating the relationship between competitive strategies and firm performance.

This study confirmed that technological capabilities enhance the relationship between quality orientation and performance. The results of this study suggested that the prescription of resource-based view and competitive strategy be strategically combined within the firm with a view to obtain maximum effect. (Ghasi, 2009)"in the study the 'moderating effect of environmental instability and hospital strategy -financial performance relationship." was a longitudinal study which aimed at examining whether typology of cost leadership differentiation and hybrid are equally viable in different environment of hotel industry. (Oltra & Luisa, 2010)in the study the moderating effect of business strategy on the relationship between operations strategy and firms results; - this study was able to confirm the purpose of the study which was there is an existence of a moderating effect of business strategy and the relationship between operations strategy and firms' performance. Of great significance to this current study was one of (Ogaga & Owino , 2017) 'the moderating influence of industry competition on the relationship between corporate strategy and organizational performance. The study established the indirect effect of competitive environment and performance of the firm. Their study adopted the descriptive cross-sectional survey and research with data collected from companies listed in Nairobi securities exchange. The aforementioned study attempted to address the indirect effect of competitive environment performance of respective firms. However, this study was based on the commercial sector as opposed to the hospital sector. The current study addressed the gap.

2.4.1 Cost Leadership Strategy

Cost leadership is one of the strategies discussed by porter in his book competitive strategy (1980).

A firm that follows cost leadership strategy attempts to earn higher returns and competitive advantages through offering products or services at the lowest price in the industry.

Cost leadership strategy requires the vigorous pursuit of cost minimization techniques, cost may be reduced through improved operating efficiencies employing economies of scale in production, preferential access to raw materials, special relationship in suppliers, distributors or customers.

Cost leaders are often vertically integrated into high value added, proprietary components and services. (2000 cost leadership strategy in swamidassp.m(eds) encyclopedia of production and manufacturing management, springer Boston). The benefits of cost leadership strategy notwithstanding limitations have been associated with the cost leadership strategy. According to Harappa diaries; the limitations associated with cost leadership strategy may include; low cost can often overshadow the quality of products or services provided by organizations; cost leaders may find it difficult to break into high end markets; cost leader may provoke another more resourceful competitor to reduce cost and /all prices creating a repetitive cycle where the lowest cost setter wins.

2.4.2 Differentiation strategy

Is a business strategy that aims to distinguish a product or service from other similar products offered by competitors in the market. This strategy involves a development of products or service that is unique for the customers in terms of product design, features, brand image, quality or customer service. The strategy is key to successful marketing, competing and building competitive advantage.

The strategy offers unique value, brand loyalty and overall, it is associated with communicating differentiated advantages. It provides insulation against competitive rivalry because of brand loyalty by customers and resulting in price insensitivity. It also

provides entry barriers for competitors as a result of customer loyalty, yielding high margins to deal with supplier power, mitigating buyer power because there are no comparable alternatives.

(Clare Garcia, 2022) observes that differentiation strategies may be associated with limitations including that it is inherently costly as it requires high capital investment; that differentiated products with strong value propositions are susceptible to limitations. (stoutjesdijk, 2015)noted that a 'generic differentiation strategy is where hospitals and other providers attempt to distinguish themselves by offering a superior product/service, patients want the best care at a reasonable price'. Irrefutable conclusions is that competition should be at least partly be at the level of patient outcomes. He further notes that skills and resources associated with the differentiation strategies in hospitals include excellent clinical and research capabilities, strong marketing abilities, creativity in process and outcome improvement, strong cooperation from suppliers and insurers.

2.4.3 Focus strategy

According to Business to you.com (2021) focus strategy is a type of competitive strategy that emphasize concentration on a specific original market on buyer group: a niche. The company will either use differentiation or cost leadership strategy but only for a narrow target market rather than offering it industry wide. Companies that use focus strategies concentrate on a particular niche market and by understanding the dynamics and a unique niche of customers within it. Cost focus exploit differences in cost behavior in some segments while differentiation focus exploits special needs of buyers in certain segments (Porter, 1980)this strategy targets a narrow segment of a market not well served by cost leadership strategy, and tailors its products to the needs of that specific segment to the exclusion of others(Johnson, 2011). It is also employed when it is not appropriate to apply a broad cost leadership (Porter, 1985)by offering a limited range of services /products for a specific range of customers (Allen & helms, 2006)(Hahn & Powers, 2010) observed that a firm that adopt focus strategy can easily state loss to customers and monitor their needs. However, the risks included in focus strategy

includes being at the mercies of powerful suppliers, since that firm will buy in small quantities. The small volume also means higher production cost leading to loss of economies of scale, change in consumer taste and technological change will cause such a niche to disappear. A firm using focus strategy often enjoy a high level of customer trust worthiness and estranged loyalties discourage other firms from competing directly. Because of their narrow market niche, organization pursuing focus strategy have lowery volumes and therefore less bargaining power with their suppliers. Businesses pursuing a differentiated focus strategy however may be able to pass premium cost onto customers since substitute goods do not exist (Porter, 1986).Some of the risks of focus strategy includes simulation and changes in target segments (Pearce & Robinson, 2008)

2.4.4 Hospital Performance

According to a world health organization report by (Onyebuchi et al, 2003) a satisfactory level of performance is the maintenance of state of functions that corresponds to societal and patient and professional norms. High hospital performance should be based on professional competencies in application of present knowledge, available technologies and resources, efficiency in the use of resources, minimal risk to the patient centralizations (satisfaction to the patient and optimal contribution to healthy outcomes). Within the healthcare environment high hospital performance should further address their responsiveness to the community needs and commands. The integration of resources and overall delivery system and commitment to health promotion. High hospital performance should be assessed in relation to the availability of hospital services to sale patients irrespective of social, cultural and economic barriers. (Subabhi Bhati, 2019)proposed some of the hospital indicators as; patient wait time, percentage of missing records; bed turnover; bed occupancy frates; average rate of stay; outpatient - inpatient ratio; patient satisfaction score and more.

2.4.5 Hospital Competition

According to marketing, tutor .net. Business competition is the race or rivalry among business competitors that are competing in the same niche. The purpose of competing with one another is to increase revenue of business by increasing the sales and market share (Abigail Tay, 2003)observed that firms compete on the basis of quality in many industries, including the hospital care industry. Hospital care is vertically differentiated and horizontally differentiated according to geographical location.

Hospitals compete on service quality, process execution and service diversification.(Glover, 2010) posat that within the healthcare industry competition impacts several relational perspectives with numerous studies reporting the impact of increased competition for example, studies have examined the relationship between competition and quality, competition and health care cost, competition and patient satisfaction. This study sho2ws that competition is capable of increasing value for customers over time.

Traditional competition in healthcare involves one or more elements ;(price quality convenience and superior product) and competition put vin new technology and innovation.

In health competition relentless improvement and processes drive down cost, product and services rise steadily, innovation leads to new and widely and rapidly and competitive providers are restructure and go out of business (Porter & telsburg, 2004)

2.5 Critique of Existing Literature

Previous studies (omwoyo, 2016) (chepngetich & kimenchu, 2018) (mwangi & ombui, 2013) (ogeto et al, 2016) (mwenemeru & kihara, 2018)have concentrated on the direct effect of competitive environment and the performance of respective institutions.

The scope of their studies was limited to counties and case studies, making generalization of the findings a challenge. With respect to Research methodology, the reviewed studies with exception of one with (Ghasi A. , 2009)have tended to undertake a cross sectional surveys. It is recommended therefore there should be an attempt of undertaking more longitudinal surveys in future studies with a view to achieve conclusive insight in the area of study. Most of the reviewed studies have tended to demonstrate, the impact of internal environment anchored by resource-based view, yet an organization is subjected to the effect of both internal and external environment as confirmed by studies taken by (ogaga et al, 2017) (Atikiya, 2015)

2.6 Research Gap

(Rivers & Glovers, 2010) in their study "healthcare competition, strategic mention and patient satisfaction; (Ghiasi, 2009)in the study titled the 'moderating effect of environmental instability and hospital-financial performance relationship' endeavored to investigate the impact of environment and the performance outcome of health institutions.

The setting was however in developed countries. It is imperative therefore the study be undertaken in Kenya. For this reason, the current study was undertaken.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a systematic discussion on research methodology that was adopted in examining the role of competition in moderating the relationship between generic strategies and performance of hospitals in Kenya. The chapter presents the research philosophy, the research design; target population the sample and data collection procedure, other sub-sections include operationalization of research variables, pilot study and data analysis techniques.

3.2 Research Philosophy/Paradigm

Research philosophy is a belief about the way in which data as a phenomenon should be gathered and used accordingly. Research paradigm refers to the basic set of a belief that guide and define the worldview of the researcher (Lincon et al, 2011).This study is guided by pragmatism research paradigm contributed by (maxcy, 2003). This research paradigm is based on the proposition that researchers should use the philosophical and / or methodological approach that works best for the particular research problem that is being investigated. It is associated with mixed methods or multiple methods (Creswell & Piana Clark , 2011).This study employed mixed methods, associated with both quantitative and qualitative techniques.

3.3 Research design

According to (Nwogu, 2011), the choice of research design adopted in any research or investigation depends on the relevance of the proposed design to the nature and purpose as well as economy of the research in the light of the above, a mixed research design is

adopted for this study, including a cross sectional survey, descriptive and casual approaches. The use of both qualitative and quantitative data is aimed as providing a unified understanding of the research problem.

Qualitative data was used for triangulation. Triangulation method was used by (Tecla et al , 2016), in their study related to top management, demographic diversities, generic strategy and firm performance in marketing and social research associates.

3.4 Target Population

(Mugenda & Mugenda , 2003)define population as a complete set of individuals, cases and objects with some common observable characteristics. The general population of this study was the NHIF accredited hospitals in Kenya with a bed capacity of 100 and above with stock at 150 hospitals as at July 2016.

The choice of the criterion in selecting the population was informed by the presence of characteristics to enable the researcher draw and apply objective conclusion.

3.5 The sampling technique and the sample

3.5.1 The sample Technique

Sampling is a process of selecting a potion r sub-set of population on which research is conducted in order to ensure that conclusion from the study may be generalized to the entire population (Frakel et al, 2008) a sample is drawn from a population of 150 hospitals with a bed capacity of 100 and above stratified and convenient sampling was adopted. The stratified sampling was adopted due to the heterogeneity of the target population of hospitals stratified sampling is used in cases where the target population is heterogeneous with respect to a certain factor that may bias the results if not represented well (Ketanji 2012) the sample size was determined as 109 hospitals using a sampling formula given below for determining the sample size of a finite population, proposed by Israel (2002)

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

where

n = Is the sample size

N is the population size

$$n = \frac{150}{1+150\ x\ 005^2} = 109$$

e is the permissible error

With the population of this study being heterogeneous with respect to NHIF classification, the population is divided to three strata including government, Mission and Private Hospitals.

Table 3:1: Distribution of Population in strata and the sample

Strata	**Population**	**Sample**
Government	71	52
Mission	36	26
Private	43	31
Total	150	**109**

3.6 Data Collection

The study was facilitated through a letter of introduction from JKUAT introducing the researcher as a student at the institution. In addition, research permits were issued by NACOSTI (National Commission for Science Technology and Innovation) and Ministry of Education to enable the student to undertake research at the target institutions.

3.6.1 Data Collection Instruments

The study was generated from primary and secondary sources. The primary data was collected through the use of semi-structured questionnaires administered to the 109 Hospitals Administrators and, interviewing schedules administered to the109CEO's. Secondary data was collected from the reviewed published and unpublished literature and the limited records the CEO's were willing to share with caution including patients satisfaction surveys; latest technology acquisitions; performance reports and more.

3.7 Pilot Testing

A pilot study was undertaken in preparation for the main study, the collected data was used to assess the soundness of the research instruments, by testing for validity and reliability. Ten (10) respondents were selected for the pilot studies who were not part of the main study and they included, experts in strategic management, and hospital administrators, both from private and public sector. According to (Mugenda, 2003)one tenth of the sample size is sufficient for the pilot testing. Then pilot study was conducted with the view to refine the research instruments and anticipate any logistical challenges during the actual study.

3.7.1 Validity

Validity is the extent of which a construct measures what is supposed to measure (Hair et al, 2007)the study established the validity of the instruments by assessing content validity of the qualitative in-depth interview schedule and contact and construct validity for the semi structured questionnaire

Construct validity was checked by assessing convergent and discriminant validity construct. Validity is achieved if the items that are purported to measure the same study construct (latent variable) are found to be at least moderately inter-correlated (convergent Validity) and if a set of observed variables meaning different construct show discriminant validity with low inter connections (Ichne, 2011)to assess construct

validity, confinement factors analyses were adopted to extract factor loadings which formed the basis of assessing existence of required relationships for the factor analysis results average variances extracted (AVE's) above the threshold of 0.5 implied convergent validity and AVE"s less than squared multiple correlations implied discriminant validity.

3.7.2 Reliability of Research Instruments

Reliability is a measure of degree to which a research instruments yields consistent results or data after repeated trials (Mugenda, 2003) reliability in research is influenced by random error. As random error increases, reliability decreases (Mugenda, 2003)reliability of the questionnaire was evolved through admission of the instrument to the pilot group of 10 respondents a construct composite reliability co-efficient is 0.6 and above (seifer, 2002)

3.8 Data Analysis and Presentation

The data collected for this study was adopted, coded and assessed for completeness and accuracy of the information at the end of every field data collection and before storage. Data capturing was done using excel software. The data from completed questionnaires was cleaned coded and entered into the computer for analysis using the statistical package for social sciences (SPSS Version 21) qualitative and quantitative analysis approaches were adopted using descriptive statistics to describe the existing status of the hospitals with respect to the variables studied. Descriptive statistics from the questionnaire data was presented in frequency tables, graphs and with the mean and standard deviations as the measures of central tendency and measures of dispersion respectively. The information from the interview guide was used for triangulation to qualify the results from the quantitative analysis.

To assess the effects of the independent variables on the defendant variable, regression models were filled. Simple linear regression based on ordinary least squares was used to

assess the direct effect of the independent variables on performance. The choice of the linear modeling technique was based on the continuous measure of the latent dependent variable which was measured by a large dimension of indicators which will be reduced by factor analysis the significance of the influence by the independent variables was based on the tests of the estimated coefficient estimates of the independent variable in the model. Model diagnostic tests were carried out on each bivariate model fitted between each independent variable and performance of the hospitals. The regression analyses carried out estimated the models given by the equation below.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_M Z + \beta_{M1} Z * X_1 + \beta_{M2} Z * X_2 + \beta_{M3} Z * X_3 + \varepsilon \ldots\ldots\ldots$$

Y is the performance of Hospitals

X_1 to X_3 are the independent variables (cost leadership strategy, focus strategy and differentiation strategy.

β_1 to β_3 are the coefficient estimates of the independent variables $X_1$to X_3 respectively

ε Is the error term which is assumed to follow a normal distribution with mean zero and constant error variance.

Z is the moderating variable competition.

Z * X_i is the interaction between competition and each of the 3 independent variables X_i{i=1 to 3}

β_M is the coefficient of competition denoting the main direct effect of EO on performance?

β_{M1} to β_{M4} are the coefficient of the interaction terms between Z and each of the four independent variables.

The information from the scheduled interviews was b used for validating the findings from the quantitative analysis. Content analysis was carried out on the transcribed qualitative data from the interviews. Content analysis is a tool used in research used to determine the existence of certain words, concepts or themes within texts or sets of texts from written information or recorded communications.

Such as interviews both conceptual and relational content analysis was used to extract concepts from the interview responses for triangulation with the quantitative data.

CHAPTER FOUR

RESEARCH RESULTS AND DISCUSSION

4.1 Introduction

In this chapter the analysis of data, the findings of the study and the corresponding interpretations are presented guided by the purpose of the study. This study sought is to examine the moderating role of Competition on the relationship between generic strategies and the performance of Hospitals in Kenya, specifically the NHIF accredited hospitals. The analysis, results and findings presented were aligned to the specific objectives and based on meeting certain conditions such as validity and reliability of the research collection instruments which was tested and also presented in this chapter. Analysis of study variables carried out by descriptive statistics is presented in this chapter in frequency tables. Statistical models were fitted to assess objectives, test hypotheses, and draw conclusions from the findings.

4.2 Response rate

The study targeted a sample of 109 NHIF accredited hospitals that have a bed capacity of 100 and above, across the counties in Kenya and managed to collect 74.3% of the targeted (Table 4.1). The 74.3% response rate achieved was considered adequate basing on arguments by (Richardson, 2005) and (Edward et al , 2002).A response rate of below 60% is considered poor while that between 60% and 80% is adequate (Edward et al, 2002).A response rate of below 60% is to be considered poor while that between 60% and 80% is adequate (Edward et al, 2002). (Richardson, 2005), however, regarded a response rate of 50% as adequate in social research.

Table 4.1: Response rate

Category	Sample	Returned	Response rate
G	52	37	71.15%
M	26	21	40.38%
P	31	23	44.23%
Total	**109**	**81**	**155.77%**

4.3 Data preparation and processing

The data was entered and cleaned using MS excel and SPSS. The raw data collected for the study variable indicators as in the questionnaire was based on the coding for each indicator. The coding key for each indicator is shown in Appendix V. The raw data was assessed for missing data and cleaned before further analysis.

Missing data refers to incompleteness of information (data values) for a variable due to non-response (Loukopous et al, 2017); (Young & Johnson, 2015).A general examination of the level of missing data, it was noted that there was an only 1.425% overall missing information on all required values from the respondents. Figure 4.1 displays the overall summary of missing values which also shows that 61.54% of the indicators at least had some missing information while only 22.22% of the respondents at least had some information unanswered.

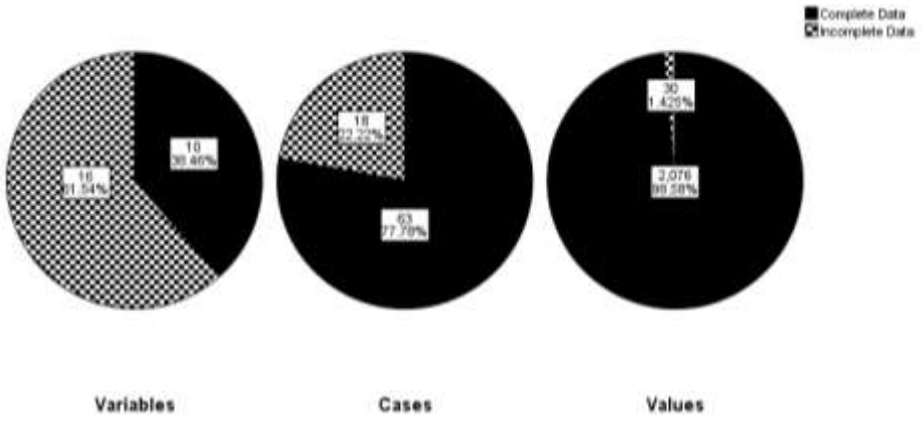

Figure 4.1: Overall Summary of missing values

As much as there were up to 61.54% of the variable indicators reflected at least some missing information, it was noted that the levels of missing information per indicator that had incomplete responses were low as shown in table 4.2 below. It was observed that the indicators with missing responses all had less than 10% missing information with the maximum case of missing information being 6.2%. The level of missing information was thus not considered high enough to delete variables due to missing information. Any case or variable that has less 10% of missing information is not considered a large amount of missing data (Cohen et al, 2003)

Table 4.2: Levels of missing values by indicator

	Number of values missing	Percent missing	Valid Number
Bv4	5	6.2%	76
Biii5	5	6.2%	76
Biv4	3	3.7%	78
Biv3	3	3.7%	78
Bii4	2	2.5%	79
Bii3	2	2.5%	79
Bv5	1	1.2%	80
Bv3	1	1.2%	80
Bv2	1	1.2%	80
Bv1	1	1.2%	80
Biv2	1	1.2%	80
Bii2	1	1.2%	80
Bi6	1	1.2%	80
Bi5	1	1.2%	80
Bi4	1	1.2%	80
Bi2	1	1.2%	80

On assessing the level of missing information case by case from all the 81 respondents, it was also noted that none of the cases constituted excess amount of missing information as proposed by (Cohen et al , 2003).The missing data analysis by case is shown in table 4.3. Out of the 81 data entries, 63 (78%) data cases had no missing data, 12 (15%) data cases had missing data of up to 3.85%, while 6 cases data entries had missing data of 7.69%. None of the 81 cases was found to have missing information above 10%, thus all the entries were retained as shown in Table 4.3.

Missing data can be categorized as missing completely at random, missing at random and not missing at random (Young & Johnson, 2015).Missing completely at random (MCAR) is defined as a situation where missing information is independent of and does not depend observed or other missing information. Missing at random (MAR) in data refers to the scenario where of a systematic dependence of the missing values on the observed data but not on other missing information. When data is not missing at random (NMAR), the missing values are due to other information that would have been observed, but is currently missing (Young & Johnson, 2015). The missing data was

noted to be Missing at random had patterns with either observed values, all the missing data was therefore cleaned by multiple imputation technique.

Table 4.3: Missing data by cases

Missing information	Percent of missing information	Cases	Percentage of cases	Cumulative Percentage	Action
0	0.00%	63	78%	78%	Retained
1	3.85%	12	15%	93%	Retained
2	7.69%	6	7%	100%	Retained

4.4 Validity and reliability of the research instrument

A pilot study was carried out and the data collected used to assess the soundness of the questionnaire by testing for validity and reliability. Pilot data was collected from 10 pilot study respondents which showed acceptance of the questions. Validity and reliability assessment based on the pilot data collected are presented in this section.

4.4.1 Validity of the study instrument

Content validity was addressed by basing construct measurements on empirically proven item measurements and experts' opinions on the data collection instrument. Experts in the field of healthcare and management were given the questionnaire and the interview guide and instrument adjusted to the recommendations yielding acceptably valid data collection instruments relative to the content in the items measuring the constructs.

Further to content validity, construct validity was assessed for the quantitative pilot data collected from the questionnaire. Construct validity was assessed by testing for convergent and discriminant validity of the items used to measure the study constructs. Factor analysis was carried out and results used to draw conclusions on construct validity of the questionnaire. Factor analysis is used in dimension reduction of where the number of variables form a large dimension of observed items which can be reduced to a smaller dimension of related latent (unobserved) variables a dimension reduction technique for.

Exploratory factor analysis is factor analysis technique for an unrestricted model that is used for exploratory dimension reduction and assessing multi-dimensionality of the items and the relative latent variables. EFA is a simple structure where all the latent factors are set to explain the variation form as many items as possible from the set of observed variables/ indicators (Kaplan, 2009). When all the items in the questionnaire were used in the unrestricted EFA assuming no hypothesised measurement model, the analysis showed possible reduction to 8 latent factors with Eigen values greater than 1.

The scree plot in figure 4. 2 shows that in the initial factor solution, one component explains the largest variance in the observed items. However, about 8 factors have Eigen values greater than 1.

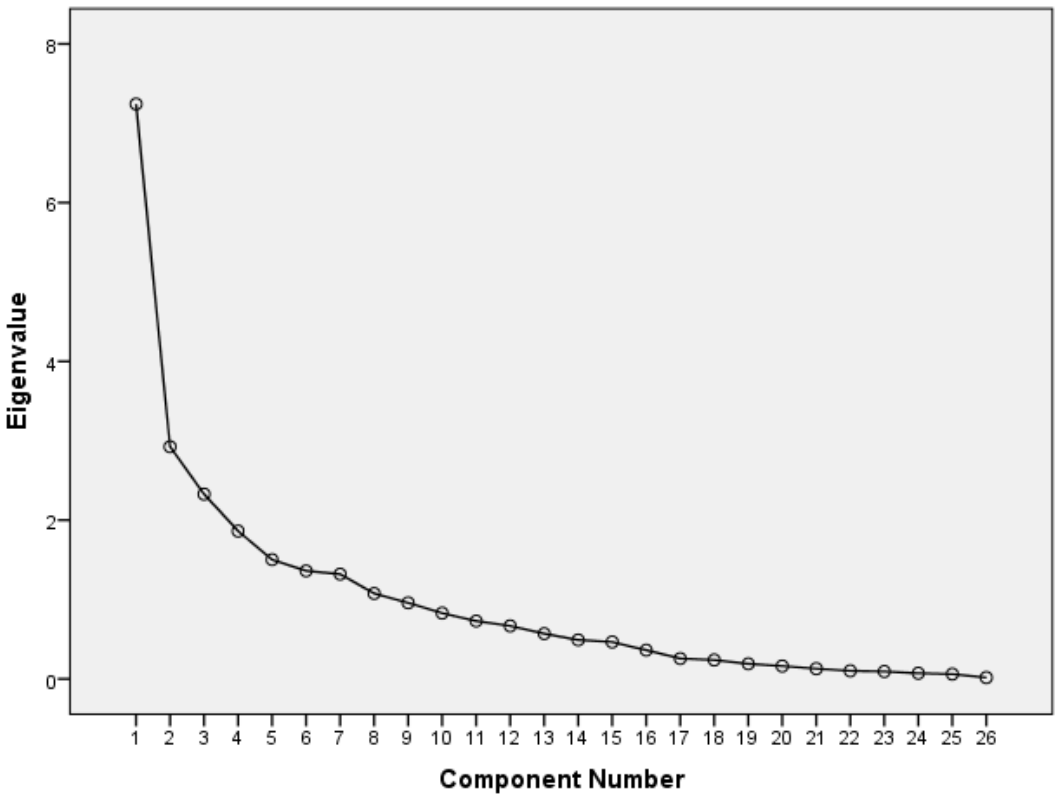

Figure 4.2: Factor analysis scree plot

The results in table 4.4 show that the 8 latent factors possibly reduced from the observed items explain up to 75% of the variation in the in indicators measured. From the initial factor solution, the first factor explained up to 27.9% of the variance in all the indicator measurement while the last of the 8 explain 4.1% of the variance. Upon rotation of the factor loadings there was redistribution where the first factor explained 14.9% of the variance and the last 6.5% of the variance.

Rotation is carried out in EFA to explore other possible sets of estimates as EFA is not restricted to a single unique set of parameter estimates.

Table 4.4: Exploratory factor analysis variance explained

Comp-onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %
1	7.243	27.856	27.856	7.243	27.856	27.856	3.879	14.920	14.920
2	2.926	11.252	39.108	2.926	11.252	39.108	2.981	11.464	26.384
3	2.327	8.951	48.059	2.327	8.951	48.059	2.547	9.795	36.179
4	1.862	7.163	55.222	1.862	7.163	55.222	2.503	9.626	45.805
5	1.502	5.777	60.999	1.502	5.777	60.999	2.246	8.639	54.444
6	1.361	5.235	66.234	1.361	5.235	66.234	1.968	7.570	62.014
7	1.320	5.075	71.309	1.320	5.075	71.309	1.794	6.899	68.914
8	1.076	4.139	75.448	1.076	4.139	75.448	1.699	6.534	75.448
9	.958	3.685	79.133						
10	.829	3.187	82.320						
11	.729	2.802	85.122						
12	.667	2.565	87.687						
13	.570	2.191	89.878						
14	.490	1.886	91.764						
15	.465	1.788	93.552						
16	.362	1.392	94.944						
17	.256	.985	95.929						
18	.238	.914	96.842						
19	.190	.730	97.572						
20	.161	.620	98.192						
21	.129	.496	98.688						
22	.101	.387	99.075						
23	.093	.359	99.434						
24	.071	.272	99.706						
25	.060	.232	99.938						
26	.016	.062	100.000						

The factor loading matrix from the EFA model is shown in appendix VI. The factor loading s how that all the items (indicators) at least loads a construct above 0.4 implying that it is possible to retain all the indicators used to measure the constructs in the questionnaire from an exploratory analysis without considering the hypothesised model. The KMO statistics for the EFA shown in table 4.5 was carried to check that the pilot data is suitable for factor analysis (Laura J. Burton & Stephanie M. Mazerolle, 2011). A

KMO value of 0.5 is considered adequate and a Bartlett's statistic required for significance with a p-value less than 0.05. The KMO statistic is was found to be greater than 0.5 and the p-value of the Bartlett's statistic less than 0.05 implying significant relationships between observed variables and consequently suitability for factor analysis.

Table 4.5: KMO and Bartlett's statistics

Test	**Value**	
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.682
Bartlett's test of sphericity	Approx. Chi-square	620.027
	Df	325
	sig.	0.000

Construct validity in this study was based on results from confirmatory factor analysis (CFA) which unlike EFA is a model restricted to a hypothesised model from theoretical and empirical studies that guided the choice of indicators (observed variable items). CFA was used to assess uni-dimensionality and construct validity of the questionnaire.

Construct validity is achieved if the items that are purported to measure the same study construct (latent variable) are found to be at least moderately inter-correlated (convergent validity) and if a set of observed variables measuring different constructs show discriminant validity with low inter-correlations (Kline, 2011). Convergent validity is said to be exhibited if the average variances extracted (AVEs) for the constructs are above 0.5 and discriminant validity is said to exist if the squared multiple correlations are less than the construct AVEs (Fornell & Larcker, 1981). From the results in table 4.2, all the AVEs for the constructs are above 0.5 implying convergent validity and the square multiple correlations are all less than the AVEs for each construct implying discriminant validity of the study instrument. The results thus show that the questionnaire met construct validity and fit to collect data to be used in the main study. The factor loadings from CFA are shown in appendix VII while the validity statistics are shown in table 4.6. From the CFA factor loadings results, 3 items were found not to load their respective latent constructs adequately above 0.4 and were thus expunged; 1 item on optimal resource capacity from leadership strategy (component1), 1

item on existence of similar health facilities from component 4 and 1 item on outpatient treatment turnaround time from component 4 and 1 item from performance (component 5). As shown in appendix VII, the retained indicators all loaded their constructs above 0.4.

Table 4.6: Validity of the research instrument

	AVE	Squared correlations	Retained Items	KMO	Bartlett's Chi Square	P-value
Cost Leadership strategy	0.730	0.586	5 out of 6	0.789	Chi2(10)=58.509	0.000
Focus strategy	0.667	0.515	6 out of 6	0.745	Chi2(15)= 61.981	0.000
Differentiation strategy	0.684	0.468	5 out of 5	0.739	Chi2(10)= 43.465	0.000
Competition	0.771	0.403	3 out of 4	0.657	Chi2(3)= 19.415	0.000
Performance	0.805	0.594	4 out of 5	0.772	Chi2(6)= 62.224	0.000

4.4.2 Reliability of the study instrument

Reliability of the data collection instrument was also carried as an assessment of the internal consistency of the measurements. Cronbach's alpha statistics were calculated for each latent construct for the retained indicators after expunging the 3 items from CFA results. Reliability is attributed to a Cronbach's alpha statistic greater than 0.6 (Neuman, 2003). All the constructs had Cronbach's alpha statistics greater than 0.7 and accepted to be reliably measured by their indicators.

Table 4.7: Reliability statistics

Variable	Number of Items retained	Cronbach's of all items	Cronbach's Alpha of retained items	Comment
Cost Leadership strategy	5 out of 6	0.735	0.777	Accepted
Focus strategy	6 out of 6	0.748	0.748	Accepted
Differentiation strategy	5 out of 5	0.692	0.692	Accepted
Competition	3 out of 4	0.236	0.624	Accepted
Performance	4 out of 5	0.751	0.789	Accepted

4.5 Demographic analysis

The study was carried out across NHIF accredited hospitals in Kenya where Hospital Administrators and CEOs were considered as respondents. The Hospital Administrators answered the questionnaire used to collect data for quantitative analysis while the CEOs were interviewed for qualitative data used for triangulation. Demographic analysis involved analysis of background information inquired on the hospitals and the characteristics of the respondents. The information was on the classification of the hospitals, length of service of the Hospital Administrators and the length of service of the CEOs.

The classification of the hospitals as responded to by the CEOs is displayed in the following figure 4.3. The results show that majority (49%) were government hospitals while 26% were mission hospitals and 25% private hospitals.

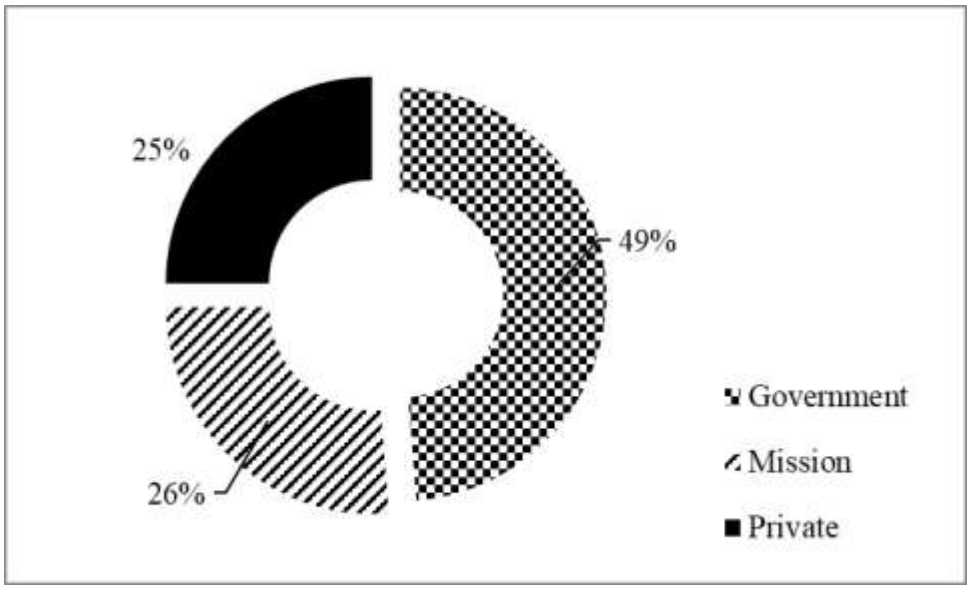

Figure 4.3: Classification of hospitals.

The length of the period of service of the Hospital Administrators to whom the questionnaires were administered was sought.This question was grouped into the categories of those who had been in service for less than 5 years, for a period between 5 to 10 years and for a period of over 10 years. Most of the Hospital Administrators who were studied (45.6%) had been in service for less than 5 years (figure 4.4). 38.27% of them in service for between 5 and 10 years and 16.08% had been in service for over 10 years.

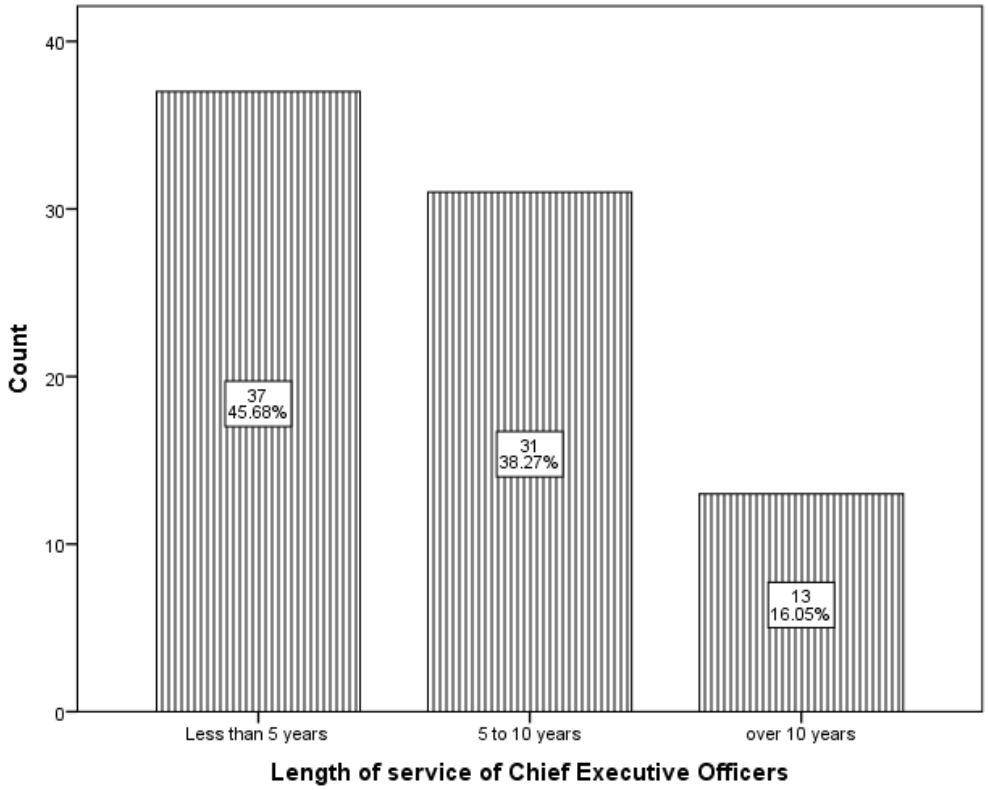

Figure 4.4: Length of service of Chief Executive Officers;

The length of service of the CEOs who were interviewed was also sought. The question was asked and answered on a continuous scale of time in years. Table 4.8 shows the results of the period of service of CEOs in the hospitals. The least period served a month the interviewed CEOs was 3 months while the longest period was 12 years. The mean number of years served as CEO was 4.9515 with a standard deviation of 2.943. On average, the CEOs interviewed had served for 4.9515 years and the standard deviation shows

Table 4.8: Length of service of CEOs

Minimum	Maximum	Mean	Std. Deviation
3 months	12 years	4.9515	2.94258

The findings relating to the length of service for respondents revealed that over 50% of the hospital administrators have served for over five years while the mean years of service fir CEO's above was 4.5 years, the findings indicate that the respondents have solid knowledge of their respective functions hence well positioned to respond to the inquiries adequately.

4.6 Descriptive analysis of study variables

Descriptive analysis was carried out to explore the status of the phenomena of the studied variables. The results of the descriptive analysis carried out were presented as the status of the adoption of generic strategies and the performance of NHIF accredited Hospitals in Kenya. Descriptive analysis was done for each indicator of the study variables.

4.6.1 Performance of Hospitals in Kenya

Performance was the dependent variable of the study which was measured by 5 indicators of which 4 were retained following construct validity assessment carried out on the pilot study. The indicators were measured on an ordinal Likert scale of 5 as categorical representations of the levels of agreement by the respondents on the indicator statements from strong disagreement to strong agreement. In table 4.9, are the descriptive statistics of the data on each indicator of performance.

The first indicator of the construct of performance sought to find out the view of the respondents regarding whether the hospital has an average of 50% bed occupation at any time. Majority (46.9%) of the respondents agreed. None of the respondents strongly disagreed, while 8.6% of the respondents disagreed and 12.4% of the respondents were neutral. Some 46.9% of the respondents agreed and another 32.1% strongly agreed that the hospital has an average of 50% bed occupation at any time.

The mean score of 4.025 which is greater than 4 the standard deviation of 0.894 show that on average the respondents are in agreement to the hospitals having an average of 50% bed occupation at any time.

As per the indicator that the hospital has high rate of in/out patient flow, the distribution was that None of the respondents strongly disagreed, while 1.2% of the respondents disagreed and 6.2% of the respondents were neutral. some 54.3% of the respondents agreed and another 38.3% strongly agreed that the hospital has high rate of in/out patient flow. The mean score of 4.296 which is greater than 4 the standard deviation of 0.641 show that on average the respondents are in agreement to the hospitals having high rates of in/out patient flow.

Majority (34.6%) of the respondents agreed that the average hospital time for patients suffering primary health care conditions is three days. There were 6.2% respondents who strongly disagreed, while 21% of the respondents disagreed and 21% of the respondents were neutral. Some 34.6% of the respondents agreed and another 17.3% strongly agreed that the average hospital time for patients suffering primary health care conditions is three days. The mean score of 3.358 which about 3 the standard deviation of 1.176 show that on average the respondents are neutral to the average hospital time for patients suffering primary health care conditions being three days.

The fourth indicator of the variable sought to find out the view of the respondents regarding whether the hospital undertakes patient follow up twice a month. Majority (37%) of the respondents agreed. There were 2.5% respondents who strongly disagreed, while 7.4% of the respondents disagreed and 21% of the respondents were neutral. Some 37% of the respondents agreed and another 32.1% strongly agreed that the hospital undertakes patient follow up twice a month. The mean score of 3.889 which tends to 4 the standard deviation of 1.025 show that on average the respondents are in agreement to the hospital undertaking patient follow up twice a month.

As per the indicator that the average outpatient treatment turnaround time is less than three hours, the distribution was that there were 1.2% respondents who strongly disagreed, while 3.7% of the respondents disagreed and 16.1% of the respondents were neutral. some 22.2% of the respondents agreed and another 56.8% strongly agreed that the average outpatient treatment turnaround time is less than three hours. The mean score of 4.296 which is greater than 4 the standard deviation of 0.955 show that on average the respondents are in agreement to the average outpatient treatment turnaround time being less than three hours.

Table 4.9: Performance of hospitals in Kenya

		1-SD	2-D	3-N	4-A	5-SA	Mean	Std dev.
The hospital has an average of 50% bed occupation at any time	Freq.	0.00	7.00	10.00	38.00	26.00	4.025	0.894
	Percent	0.00	8.64	12.35	46.91	32.10		
The hospital has high rate of in/out patient flow	Freq.	0.00	1.00	5.00	44.00	31.00	4.296	0.641
	Percent	0.00	1.23	6.17	54.32	38.27		
The average hospital time for patients suffering primary health care conditions is three days	Freq.	5.00	17.00	17.00	28.00	14.00	3.358	1.176
	Percent	6.17	20.99	20.99	34.57	17.28		
The hospital undertakes patient follow up twice a month	Freq.	2.00	6.00	17.00	30.00	26.00	3.889	1.025
	Percent	2.47	7.41	20.99	37.04	32.10		
The average outpatient treatment turnaround time is less than three hours	Freq.	1.00	3.00	13.00	18.00	46.00	4.296	0.955
	Percent	1.23	3.70	16.05	22.22	56.79		

The different indicators of performance were generally noted not to vary across the 3 classifications. Cross tabulations of each indicator and hospital classifications was used as the assessment of the association between them and performance (Table 4.10). Chi-square tests of association was carried out for each contingency table and also presented in the table. The tests showed that all the indicators of performance had no significant association with the differences in classifications of the hospitals except the question on whether the hospital has an average of 50% bed occupation at any time. The chi-square statistics from all the contingency tables showed had p-values greater than 0.05 implying insignificant association between the indicator and classifications. The p-value of the of the indicator Bv1 however had a p-value of 0.023 which is less than 0.05 implying that

the levels bed occupation at any given time vary across hospitals differently based on the classification of the hospital.

Table 4.10: Performance indicators by hospital classification

		Classification				Test of association		
		1	2	3	Total	Chi square	df	P-value
The hospital has an average of 50% bed occupation at any time	2	5	0	2	7	14.629	6	0.023
	3	3	5	2	10			
	4	13	14	10	37			
	5	18	2	6	26			
	Total	39	21	20	80			
The hospital has high rate of in/out patient flow	2	1	0	0	1	10.690	6	0.098
	3	2	3	0	5			
	4	18	15	10	43			
	5	18	3	10	31			
	Total	39	21	20	80			
The average hospital time for patients suffering primary health care conditions is three days	1	2	3	0	5	8.560	8	0.381
	2	9	3	5	17			
	3	5	7	5	17			
	4	16	5	6	27			
	5	7	3	4	14			
	Total	39	21	20	80			
The hospital undertakes patient follow up twice a month	1	2	0	0	2	9.138	8	0.331
	2	3	2	1	6			
	3	9	6	1	16			
	4	11	9	10	30			
	5	14	4	8	26			
	Total	39	21	20	80			
The average outpatient treatment turnaround time is less than three hours	1	1	0	0	1	7.223	8	0.513
	2	2	0	1	3			
	3	5	6	1	12			
	4	10	4	4	18			
	5	21	11	14	46			
	Total	39	21	20	80			

The overall performance from dimension reduction of the indicators to a composite measure of performance also showed similarity in performance across the categories. An

analysis of variance on the performance between the classification groups showed that there was actually no significant mean difference in performance across the groups (Table 4.11). All the groups significantly have equal mean performances. The p-value of the F-statistic was found to be 0.136 which is greater than 0.05 implying no significant differences in mean performance between the classifications as the mean performance of the government, private and mission hospitals are significantly equal. The Levine's test of homogeneity of variance however shows that the variances of performance are significantly different across the classifications. The p-value of the Levine's F-statistics is less than 0.03 implying that even if the mean performances are equal across the classifications, performance is still heterogeneous with respect to classifications as variations in performances differ across the group discussions. It is instructive that the findings reveal that no category or classification of hospitals significantly performs better than others. These findings justify the choice of the unit of analysis as NHIF hospitals accredited based of fulfilment of given standards as laid down by the NHIF agency.

Table 4. 11: One-way ANOVA on performance between hospital classification

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**	**Levene Statistic**	**Sig.**
Between Groups	3.900	2	1.95	2.048	0.136	6.444	.003
Within Groups	75.234	79	0.952				
Total	79.135	81					

4.6.2 Cost Leadership Strategy on Hospitals in Kenya

The study measured cost leadership strategy by 6 indicators of which 5 all retained as valid and reliable measurements of the construct in the pilot study. Table 4.12, shows the descriptive statistics of the data on the indicators of cost leadership strategies.

The first indicator of the variable sought to find out the perception of the respondents regarding whether the hospital engages in efficient resource capacity utilization.

Majority (54.3%) of the respondents agreed. None of the respondents strongly disagreed, while 1.2% of the respondents disagreed and 6.2% of the respondents were neutral. Some 54.3% of the respondents agreed and another 38.3% strongly agreed that the hospital engages in efficient resource capacity utilization. The mean score of 4.296 which is greater than 4 the standard deviation of 0.641 show that on average the respondents are in agreement to the hospital engaging in efficient resource capacity utilization.

As per the second indicator, majority (54.3%) of the respondents agreed that the hospital is adequately equipped with state-of-the-art technology solutions. There were 2.5% respondents who strongly disagreed, while 6.2% of the respondents disagreed and 8.6% of the respondents were neutral. Some 54.3% of the respondents agreed and another 28.4% strongly agreed that the hospital is adequately equipped with state-of-the-art technology solutions. The mean score of 4 which tends to 4 the standard deviation of 0.922 show that on average the respondents are in agreement to the hospital being adequately equipped with state of the arts technology solutions.

As per the indicator that the suppliers of goods and services are reliable and offer favourable terms of contract, the distribution was that there were 1.2% respondents who strongly disagreed, while 1.2% of the respondents disagreed and 8.6% of the respondents were neutral.

Some 60.5% of the respondents agreed and another 28.4% strongly agreed that the suppliers of goods and services are reliable and offer favourable terms of contract. The mean score of 4.136 which is greater than 4 the standard deviation of 0.72 show that on average the respondents are in agreement to the suppliers of goods and services being reliable and offer favourable terms of contract.

As per the indicator that the hospital offers standard service flow-Majority (58%) of the respondents agreed that the hospital facility offers standard service impressive in/outpatient flow. There were 2.5% respondents who strongly disagreed, while 1.2% of

the respondents disagreed and 4.9% of the respondents were neutral. Some 58% of the respondents agreed and another 33.3% strongly agreed that the hospital facility offers standard services in/outpatient flow. The mean score of 4.185 which is greater than 4 the standard deviation of 0.792 show that on average the respondents are in agreement to the hospital facility offers standard services.

As per the indicator that the institution's offers competitive medical services of production is contained, the distribution was that there were 1.2% respondents who strongly disagreed, while 7.4% of the respondents disagreed and 13.6% of the respondents were neutral. Some 44.4% of the respondents agreed and another 33.3% strongly agreed that the institution's offers competitive medical services. The mean score of 4.012 which is greater than 4 the standard deviation of 0.942 show that on average the respondents are in agreement to the institution's offering competitive medical services.

Another indicator of the construct sought to find out the view of the respondents regarding whether the hospital procures supplies in bulk. Majority (55.6%) of the respondents strongly agreed. There were 1.2% respondents who strongly disagreed, while 2.5% of the respondents disagreed and 4.9% of the respondents were neutral. Some 35.8% of the respondents agreed and another 55.6% strongly agreed that the hospital procures supplies in bulk.

The mean score of 4.42 which is greater than 4 the standard deviation of 0.804 show that on average the respondents are in agreement to the hospital procuring supplies in bulk. On all it indicates the mean score posted averaging at four revealing that the respondents were in agreement in the adoption of the cost leadership strategy and therefore underscoring its significance in the operations facility.

Table 4.12: Cost leadership descriptive statistics

		1-SD	2-D	3-N	4-A	5-SA	Mean	Std dev.
The hospital engages in efficient large resource utilization	Freq.	0.00	1.00	5.00	44.00	31.00	4.296	0.641
	Percent	0.00	1.23	6.17	54.32	38.27		
The hospital is adequately equipped with state of the arts technology solutions.	Freq.	2.00	5.00	7.00	44.00	23.00	4.000	0.922
	Percent	2.47	6.17	8.64	54.32	28.40		
The suppliers of goods and services are reliable and offer favourable terms of contract	Freq.	1.00	1.00	7.00	49.00	23.00	4.136	0.720
	Percent	1.23	1.23	8.64	60.49	28.40		
The hospital facility offers competitive medical services	Freq.	2.00	1.00	4.00	47.00	27.00	4.185	0.792
	Percent	2.47	1.23	4.94	58.02	33.33		
The hospital procures supplies in services	Freq.	1.00	2.00	4.00	29.00	45.00	4.420	0.804
	Percent	1.23	2.47	4.94	35.80	55.56		

Discussions of the findings: Cost Leadership Strategy

From the results, the means were averaging at four units revealing that the respondents were in agreement in the adoption of the cost and leadership strategy, thus, underscoring its significance as a strategy in arriving the operations of institution (Porter, 1985)states that cost leadership strategy requires sale of standard products and services combined with aggressive pricing. This study compiled the said indicators as standards services and competitive pricing.

4.6.2 Differentiation strategy in NHIF accredited Hospitals in Kenya:

Differentiation strategy in this study was measured by 6 indicators that were all retained as valid and reliable measurements of the construct in the pilot study. The indicators were measured on an ordinal Likert scale of 5 as categorical representations of the levels of agreement by the respondents on the indicator statements from strong disagreement to strong agreement. In table 4.13, are the descriptive statistics of the data on each indicator of performance.

The first indicator of differentiation strategy sought to find out the view of the respondents regarding whether the hospital offers partners focused service delivery. Majority (45.7%) of the respondents strongly agreed. There were 3.7% respondents who strongly disagreed, while 3.7% of the respondents disagreed and 4.9% of the respondents were neutral. Some 42% of the respondents agreed and another 45.7% strongly agreed that the hospital offers patients focused service delivery, for instance, the insurance and pharmaceutical firms. The mean score of 4.222 which is greater than 4 the standard deviation of 0.975 show that on average the respondents are in agreement to the hospital offering service that focus on the patient.

Majority (45.7%) of the respondents agreed that the hospital has in place systems and procedures to expedite service delivery. There were 2.5% respondents who strongly disagreed, while 3.7% of the respondents disagreed and 11.1% of the respondents were neutral. Some 45.7% of the respondents agreed and another 37% strongly agreed that the hospital has in place systems and procedures to expedite service delivery. The mean score of 4.111 which is greater than 4 the standard deviation of 0.922 show that on average the respondents are in agreement to the hospital putting in place systems and procedures to expedite service delivery.

Majority (48.2%) of the respondents agreed that the hospital has a strong brand image within the industry. There were 2.5% respondents who strongly disagreed, while 3.7% of the respondents disagreed and 9.9% of the respondents were neutral. Some 48.2% of the respondents agreed and another 35.8% strongly agreed that the hospital has a strong brand image within the industry. The mean score of 4.111 which is greater than 4 the standard deviation of 0.908 show that on average the respondents are in agreement to the hospital having a strong brand image within the industry.

The fourth indicator of the variable sought to find out the view of the respondents regarding whether the hospital places a premium in research and development. Majority (42%) of the respondents agreed. There were 1.2% respondents who strongly disagreed, while 8.6% of the respondents disagreed and 8.6% of the respondents were neutral.

Some 42% of the respondents agreed and another 39.5% strongly agreed that the hospital places a premium in research and development. The mean score of 4.099 which is greater than 4 the standard deviation of 0.97 show that on average the respondents are in agreement to the hospital placing a premium in research and development.

The other indicator of the variable sought to find out the view of the respondents regarding whether the hospital has a corporate culture that provides an enabling environment for the staff and the client. Majority (43.2%) of the respondents agreed.

None of the respondents strongly disagreed, while 6.2% of the respondents disagreed and 9.9% of the respondents were neutral. Some 43.2% of the respondents agreed and another 40.7% strongly agreed that the hospital has a corporate culture that provides an enabling environment for the staff and the client. The mean score of 4.185 which is greater than 4 the standard deviation of 0.853 show that on average the respondents are in agreement to the hospital having a corporate culture that provides an enabling environment for the staff and the client.

Majority (50.6%) of the respondents agreed that the hospital partners with local and international research and education institutions to ensure the provisions of high-quality services. There were 2.5% respondents who strongly disagreed, while 3.7% of the respondents disagreed and 12.4% of the respondents were neutral. Some 50.6% of the respondents agreed and another 30.9% strongly agreed that the hospital partners with local and international research and education institutions to ensure the provision of high-quality services. The mean score of 4.383 which is greater than 4 the standard deviation of 0.561 show that on average the respondents are in agreement to the hospital partnering with local and international research and education institutions to ensure the provision of high-quality services.

Table 4.13: descriptive analysis for Differentiation strategy indicators

		1-SD	2-D	3-N	4-A	5-SA	Mean	Std dev.
The hospital offers customer focus service delivery	Freq.	3.00	3.00	4.00	34.00	37.00	4.222	0.975
	Percent	3.70	3.70	4.94	41.98	45.68		
The hospital has in place systems and procedures to expedite service delivery	Freq.	2.00	3.00	9.00	37.00	30.00	4.111	0.922
	Percent	2.47	3.70	11.11	45.68	37.04		
The hospital has a strong brand image within the industry	Freq.	2.00	3.00	8.00	39.00	29.00	4.111	0.908
	Percent	2.47	3.70	9.88	48.15	35.80		
The hospital places a premium in research and development	Freq.	1.00	7.00	7.00	34.00	32.00	4.099	0.970
	Percent	1.23	8.64	8.64	41.98	39.51		
The hospital partners with local and international research and education institutions to ensure the provision of high-quality services	Freq.	2.00	3.00	10.00	41.00	25.00	4.383	0.561
	Percent	2.47	3.70	12.35	50.62	30.86		

Discussion: Differentiation Strategy

The findings indicated a mean score of above four units a standard deviation of below one unit for all indicators part of the respondent being in agreement that differentiation strategy is significant in addressing performance. (Griffin RW, 2005)notes that differentiation strategy is a strategy which an organization seeks to distinguish itself from its competitors through quality of its products or service. This may capture uniqueness of service creativity innovation as indicators (David Fr, 2011)postulates that differentiation refers to development of unique product or service

4.6.3 Focus strategy in NHIF accredited Hospitals in Kenya:

The measurement of Focus strategy was based on 5 indicators that were all considered valid and reliable and thus retained during the pilot study. The indicators were also measured on an ordinal Likert scale of 5 as categorical representations of the levels of agreement by the respondents on the indicator statements from strong disagreement to strong agreement. In table 4.14, are the descriptive statistics of the data on each indicator of performance.

The first indicator of the construct sought to find out the view of the respondents regarding whether the hospital focuses on treating specific health conditions. Majority (58%) of the respondents agreed. None of the respondents strongly disagreed, while 1.2% of the respondents disagreed and none of the respondents were neutral. Some 58% of the respondents agreed and another 40.7% strongly agreed that the hospital has focused on specific health conditions. The mean score of 4.383 which is greater than 4 the standard deviation of 0.681 show that on average the respondents are in agreement to the hospitals focusing on specific health conditions.

As per the indicator that the hospital has a reputation for handling non-communicable diseases, the distribution was that None of the respondents strongly disagreed, while 2.5% of the respondents disagreed and 3.7% of the respondents were neutral. some 46.9% of the respondents agreed and another 46.9% strongly agreed that the hospital has a reputation for handling non-communicable diseases. The mean score of 3.58 which tends to 4 the standard deviation of 1.023 show that on average the respondents are in agreement to the hospitals has a reputation for handling non-communicable diseases.

The third indicator of the variable sought to find out the view of the respondents regarding whether the facility is a referral institution for the diplomatic fraternity within the east African region. Majority (40.7%) of the respondents agreed.

There were 4.9% respondents who strongly disagreed, while 7.4% of the respondents disagreed and 29.6% of the respondents were neutral. Some 40.7% of the respondents agreed and another 17.3% strongly agreed that the facility is a referral institution for the diplomatic fraternity within the east African region, The mean score of 4.025 which is greater than 4 the standard deviation of 0.894 show that on average the respondents are in agreement to the facility being a referral institution for the diplomatic fraternity within the east Africa region.

The other indicator of the variable sought to find out the view of the respondents regarding whether the hospitals offer specific services with premium pricing. Majority

(49.4%) of the respondents agreed. There were 2.5% respondents who strongly disagreed, while none of the respondents disagreed and 6.2% of the respondents were neutral. Some 49.4% of the respondents agreed and another 42% strongly agreed that the pricing structure is attractive to the clientele segment who seek specialized service. The mean score of 4.037 which is greater than 4 the standard deviation of 0.901 show that on average the respondents are in agreement to the hospitals offering specific service with the pricing structure being attractive to the clientele segment.

Table 4.14: Descriptive statistics for focus strategies

		1-SD	2-D	3-N	4-A	5-SA	Mean	Std dev.
The hospital has put in place facilities to treat specific health conditions	Freq.	0.00	1.00	0.00	47.00	33.00	4.383	0.681
	Percent	0.00	1.23	0.00	58.02	40.74		
The hospital has a reputation for handling non-communicable diseases	Freq.	0.00	2.00	3.00	38.00	38.00	3.580	1.023
	Percent	0.00	2.47	3.70	46.91	46.91		
The facility is a referral institution for the diplomatic fraternity within the East African region	Freq.	4.00	6.00	24.00	33.00	14.00	4.025	0.894
	Percent	4.94	7.41	29.63	40.74	17.28		
	Percent	1.23	6.17	12.35	49.38	30.86		
The hospitals offers speciality services with premium pricing	Freq.	2.00	0.00	5.00	40.00	34.00	4.037	0.901
	Percent	2.47	0.00	6.17	49.38	41.98		

Discussion: Focus strategy

The findings underscored the significance of the focus strategy to hospitals' performance based on the mean score emerging at four units and standard deviation at less than one unit. (Mustafa & LAt Kovicki, 2020)observed that if a firm implemented focus strategy in an appropriate way, its performance would be increased and that focus was a strategy in which an organization concentrated on a specific regional market product line or group of buyers. This study reflected the foregoing assertion by identifying the

indicators such as segmented markets, premium pricing and serving the diplomatic community.

4.6.4 Competition among NHIF accredited Hospitals in Kenya:

The first indicator of the study sought to find out the view of the respondents regarding whether the hospital faces considerable competition in the local hospital market informed by the existence of similar institution in the locality. Majority (46.9%) of the respondents agreed. There were 4.9% respondents who strongly disagreed, while 7.4% of the respondents disagreed and 9.9% of the respondents were neutral. Some 46.9% of the respondents agreed and another 30.9% strongly agreed that the hospital faces considerable competition in the local hospital market. The mean score of 3.914 which tends to 4 the standard deviation of 1.075 show that on average the respondents are in agreement to the hospital facing considerable competition in the local hospital market.

The second indicator of the construct sought to find out the view of the respondents regarding whether the hospital offers discounted medical services. Majority (56.8%) of the respondents agreed. None of the respondents strongly disagreed, while 3.7% of the respondents disagreed and none of the respondents were neutral. Some 56.8% of the respondents agreed and another 39.5% strongly agreed that the medical price structure of the hospital offers discounted medical services. The mean score of 4.358 which is greater than 4 the standard deviation of 0.555 show that on average the respondents are in agreement to the hospital offering discounted medical services.

Majority (55.6%) of the respondents strongly agreed that the hospital offers a variety of medical services informed by the availability of modern efficient technology solutions serve to offer exceptional delivery service informed by the availability of modern efficient technology solutions. None of the respondents strongly disagreed, while 8.6% of the respondents disagreed and none of the respondents were neutral. Some 35.8% of the respondents agreed and another 55.6% strongly agreed that the hospital offers a variety of medical services informed by the availability of modern efficient technology

solutions. The mean score of 4.469 which is greater than 4 the standard deviation of 0.654 show that on average the respondents are in agreement to the hospital offering a variety of medical services informed by the availability of modern efficient technology solutions, that ensure exceptional service delivery.

As per the indicator that the hospital attracts highly qualified physicians as consultants in the market, the distribution was that there were 3.7% respondents who strongly disagreed, while 4.9% of the respondents disagreed and 14.8% of the respondents were neutral. Some 40.7% of the respondents agreed and another 35.8% strongly agreed that the hospital attracts highly qualified physicians as consultants in the market. The mean score which tends to 4units and the standard deviation of 1.025 show that on average the respondents are in agreement to the hospital attracting highly qualified physicians as consultants in the market.

Table 4.15: Descriptive analysis on Competition

		1-SD	2-D	3-N	4-A	5-SA	Mean	Std dev.
The hospital faces considerable competition in the local hospital market	Freq.	4.00	6.00	8.00	38.00	25.00	3.914	1.075
	Percent	4.94	7.41	9.88	46.91	30.86		
The hospital offers discounted medical services	Freq.	0.00	3.00	0.00	46.00	32.00	4.358	0.555
	Percent	0.00	3.70	0.00	56.79	39.51		
The hospital offers a variety of medical services informed by the availability of modern efficient technology solutions to provide exceptional delivery service	Freq.	0.00	7.00	0.00	29.00	45.00	4.469	0.654
	Percent	0.00	8.64	0.00	35.8	55.56		
The hospital attracts highly qualified physians as consultants in the market	Freq.	3.00	4.00	12.00	33.00	29.00	4.000	1.025
	Percent	3.70	4.94	14.81	40.74	35.8		

Discussion: Competition among NHIF accredited Hospitals in Kenya

The mean scores for the competition indicate that ranged between 3.914 to 4.358 and standard deviation ranging between 0.55 to 1.075, reveal a strong agreement by the respondents on the significance of the indicators in determining competition. The indicators included concentration of hospitals in the locality; pricing; attracting consultant physicians; offering diverse medical service. These indicators were adequately featured in a study by Rivers& Glover (2010) titled health care competition strategy mission and patient satisfaction. In addition, Eggy Ecent et al (2010) noted that emphasis on hospital competition was in terms of high-quality service, decrease in health care expenses and this too, was captured in the study.

4.7 Qualitative content analysis

A thematic/ content analysis was carried out for the qualitative responses from the interviews held. The CEOs were found to have had, an average of 4.5 years with the facilities they were managing. This period was considered adequate. for the respondents to possess solid institutional memory to adequately respond to the research questions.

4.7.1 Cost leadership strategies and performance

It was revealed that majority (28) of the hospital CEOs used strategies of cost leadership to manage performance that led them to improved performance. CEOs of hospitals that utilised cost leadership strategies to lower costs experienced a boost in the market share. Among the cost leadership strategies used by hospitals was partnering with employers to provide medical services to employees; One of the CEOs who stated that:

"Through NHIF, all clients are advised to join it so that they can access various services at a lower cost. It boosts the market because the NHIF pays the facility to buy various commodities for our clients"

There were 62 CEOs who affirmed to partnering with employers to provide services to their employees. Some hospitals who partnered with employers tend ended to rely on the employees to have medical insurance cards and NHIF cards. They therefore offered

subsidized medical services for those employees who had NHIF cards and other health insurance cards.

Mission hospitals whose CEOs leveraged cost leadership strategy tendended to do so by adjusting costs depending on funds received from missionary operations to buffer the costs of services. A mission hospital CEO had this to say about strategies used in managing the hospital:

"It's faith based and focuses mainly on the cost of leadership and provision of quality services. The hospital is always in the forefront of making the treatment to patients a reality thus improving brand image"

4.7.2 Differentiation strategies and performance

The interviews carried out revealed that differentiation strategies positively impacted performance. The content analysis of the interview results showed that various differentiation strategies were adopted by the CEOs in managing the hospitals. 59 interviewees affirmed to the question as to the use of product differentiation from competitors. One of the CEOs confirmed to using differentiation strategies and stated the following as the differentiation strategies adopted by their hospital:

> "Our competitors focus on profit maximisation while we offer focus on maximum service delivery. Yes, our service is unique for its cheap and affordable to the local community. We offer free medical surgical camp to the community so as to make sure people acknowledge the efforts of the health department and collaboration with medical students of the Muslim family. This strategy helps us get to do surgery to those people who might not have been able to pay for their surgeries"

On the strategies used, one of the CEOs stated the use of differentiation strategies among others and stated that this strategy enabled them to, manage competition and realize good performance:

> "We adopt performance, focus and differentiation strategies in order to manage stiff competition. The mergers of strategies ensure provision of quality services, good client relation and at affordable costs. We have fully operational renal eye and mental unit, therapy, dental unit, superb mother and child clinic, casualty and also ICU. The environment is also conducive for patients. Yes, we focus on professionalism during service delivery, efficiency in approach to give best services each time. Integrity i.e. staff offer services with honesty and with understanding of individual client needs. the staff adhere to set standards and guidelines at all times"

4.7.3 Focus strategy and performance

From the interviews, it was revealed that the hospital CEOs attempted to use focus strategies to elevate the hospital performance. Through focus strategy, the hospitals tended to have ability to achieve impressive performance though retaining the clients and the maintaining the market share of the hospital. Some of the CEOs managed the hospitals through focus strategies by focusing on niche markets that had not been explored in their localities. On the question of the strategies used, one of the CEOs adopting focus strategies said that:

> "The most common business strategy we use here is focusing on the niche market, we mostly focus on the children, and the hospital is clean always to enhance health"

Another CEOs response to the strategies used and its influence on performance was on the use of both cost leadership strategies and focus strategies:

> "Cost leadership and focus strategy majors on maternity and children we have equipment theatre needed / strategy the art of technology impressive costumes flow etc. our focus being on maternity and children most of the

clients tend to be attracted to the facility and due to our quality and affordable costs it increases our market share in the hospital industry."

4.8 Correlation analysis between generic strategies dimensions and the performance of Hospitals in Kenya

The aim of the study was to assess the relationship between generic strategies and the performance of Hospitals in Kenya as one of the objectives. Each correlation analysis was assessed between performance of NHIF accredited Hospitals and each dimension of generic strategies. Considering the continuous scale of the index scores generated as latent measurements of the study variables, Pearson product moment correlation coefficient was used as the tool for assessing the relationships. To assess the relationship between the study variables by strength and direction, a correlation analysis was carried out as shown in table 4.16. The analysis involved generating the Pearson correlation coefficient between each pair of constructs.

Between cost leadership strategy and performance, the Pearson correlation coefficient was found to be significant and positive ($r=0.482$, $p=0.000<0.00$). This showed that the relationship was positive, moderate and significant.

That implies that when the level of cost leadership increases, the levels of performance of the NHIF accredited Hospitals in Kenya also increases. The study also found a significant correlation between differentiation strategy and performance ($r=-0.676$, $p=0.000<0.00$). The relationship is significant and strong positive implying that performance of NHIF accredited Hospitals in Kenya increase with increased differentiation strategy. The results imply that when the level of focus increases, the levels of performance of the hospitals also increases. The Pearson correlation coefficient between focus strategy and performance was also found to be significant and positive ($r=0.604$, $p=0.000<0.00$). The coefficient of 0.601 implies a strong positive relationship between focus strategy and performance.

Table 4.16: Correlation Matrix

		X1	X2	X3	Z	Y
X1 – Cost leadership strategy	Pearson Correlation	1	.490**	.410	.334	.482**
	Sig. (2-tailed)		0.049	0.051	0.201	0.000
	N	81	81	81	81	81
X2 – Differentiation strategy	Pearson Correlation	.490**	1	.367	.251	.676**
	Sig. (2-tailed)	0.049		0.210	0.324	0.000
	N	81	81	81	81	81
X2 – Focus strategy	Pearson Correlation	.410	.367	1	.394	.641**
	Sig. (2-tailed)	0.051	0.210		0.083	0.000
	N	81	81	81	81	81
Z – Competition	Pearson Correlation	.334	.251	.394	1	.655**
	Sig. (2-tailed)	0.201	0.324	0.123		0.000
	N	81	81	81	81	81
Y – Performance	Pearson Correlation	.482**	.676**	.641**	.655**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	81	81	81	81	81

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

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

Discussion: Correlation analysis between generic strategies dimensions and the performance of Hospitals in Kenya

The correlation analysis undertaken posted through the Pearson correlation coefficient and positive relationship for all the generic strategies (cost leadership r=0.482; 78.2%, differentiation at r=0.676; 67.6%, focus at r=.0604; 60.40% with the differentiation strategy presenting a substantial result indicating its strength and direction on its impact on the strategies, cost leadership may be attributed to what porter (1985) postulates “if product or service is Umar, this strategy provides high customer loyalty, loyal to the company and willing to pay higher price for its products. The findings are consistent

with the findings presented by (Islam et al, 2020)in a study titled “living porters’ generic strategy to firm performance”.

4.9 Regression analysis to assess the effect of generic strategies on the performance of NHIF accredited Hospitals in Kenya

4.9.1 Impact of cost leadership strategy and the performance of NHIF accredited Hospitals in Kenya

To assess the direct effect of cost leadership strategy as a predictor of performance of NHIF accredited hospitals in Kenya, a simple bivariate linear regression model between the 2 constructs was fitted to estimate the significance and magnitude of the linear influence (coefficient) of cost leadership strategy. Considering the use of Ordinary least squares (OLS) in fitting the model, the classical assumptions (normality, homoscedasticity and non-autocorrelation) of linear modelling was therefore tested on the model residuals as detailed in table 4.17. Figure 4.5 is a histogram of the model residuals generated from the model on the influence of cost leadership strategy on performance. The histogram shows a possible normal distribution of the residuals as assumed for linear models.

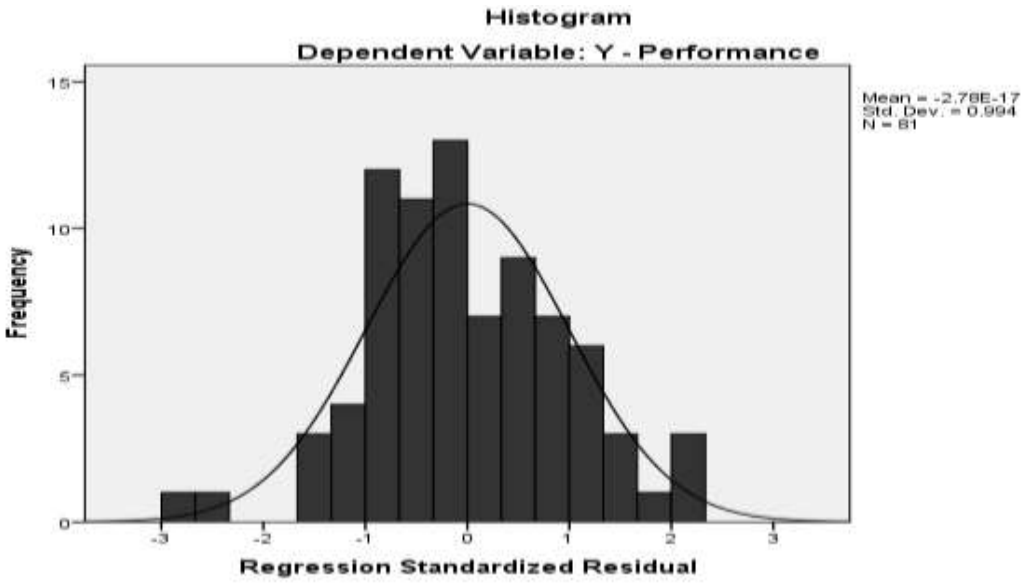

Figure 4.5: Histogram; cost leadership strategy and performance model residuals

To confirm normality of the residuals, a further test for normality using Shapiro-Wilk test was carried out. As shown in table 4.17, the p-value of the Shapiro-Wilk statistic was found to be greater than 0.05 to imply that the distribution of the model residuals does not significantly deviate from normality. Homoscedasticity of the residuals as a classical assumption of OLS was also assessed. The Breusch-Pagan test for homogeneity of variance was carried out where the BP Lagrange multiplier (LM) statistic was computed for the residuals. The P-value of the BP-LM Chi-square statistic was found to be 0.067 which is greater than 0.05. This showed that that the model residuals did not exhibit heteroscedasticity but were homoscedastic implying that the model met the homoscedasticity assumption.

The linear model assumption of autocorrelation was also tested on the residuals of the model used to assess the effect of cost leadership strategy on performance.

Autocorrelation also referred to as serial correlation is the phenomenon where observations of a variable (residuals) are a function of other successive values of the same variable. Autocorrelation of the model residuals implies that successive values of

the residuals can be sued to predict other values of the residual term. The Durbin-Watson (d) test was used to check for existence of autocorrelation of the residuals. Small values of the D-W statistic indicated successive error terms were correlated. As shown in the results, the calculated D-W statistic is larger than the upper tabulated value (1.662) from Durbin-Watson tables shown in appendix VIII. The tabulated upper value for a model with one regressor and a sample size of 81 is less than the calculated D-W which is an indication that the residuals are not serially related thus the non-autocorrelation assumption is met.

Table 4.17: Diagnostic tests; cost leadership strategy and performance model

	Test	**Statistic**	**P-value**	**Conclusion**
Normality	Kolmogorov-Smirnov	0.093	0.081	Normally distributed residuals
	Shapiro-Wilk	0.983	0.358	Normally distributed residuals
Homoscedasticity	BP-LM	3.355	0.067	Homoscedastic residuals
Autocorrelation	Durbin-Watson	1.889		Non-auto-correlated residuals

The diagnostic tests confirmed that the model fitted between cost leadership strategy and performance met all the linear modelling assumptions. The model summary table 4.18 provides information regarding the ability of the regression line to predict the variation in the dependent variable. The coefficient of determination (R-square) also referred to as the explanatory power of this model was found to be 0.232.

This is shows that 23.2% of the variation in performance of the hospitals is explained by the variation of predictors in the model (cost leadership strategy). The difference percentage, 76.8% is the portion of variance explained by other factors that have not been included in this model that only considered cost leadership strategy.

ANOVA in this regression analysis involved calculations providing information about levels of variability within a regression model forming a basis for testing the general

significance of the regression model. The ANOVA section of the table shows a breakdown of the variance in the dependent variable (performance) due to the model and due to the residuals. The general significance of the model is determined by testing that the estimates of the model are jointly not equal to zero.

From the ANOVA table, the P-value of the F-statistic is less than 0.05 showing that the coefficient estimates of the model are jointly not equal to zero. This implies that the model is statistically significant in predicting cost leadership impacts the performance of hospitals in Kenya. The results show that the proportion of variance of performance that is due to the regression predictor (cost leadership) is significantly explained in the model.

Table 4.18: Model Summary; cost leadership strategy and performance model

R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
.482[a]	.232	.223	.877

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	18.425	1	18.425	23.921	.000[b]
Residual	60.848	79	.770		
Total	79.272	80			

	Unstandardized Coefficients		**Standardized Coefficients**		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-.015	.098		-.154	.878
X1- cost leadership strategy	.478	.098	.482	4.891	.000

a. Predictors: (Constant), X2

b. Dependent Variable: Y

The regression coefficient estimate of the influence of cost leadership strategy on performance is detailed in table 4.19. The results show that cost leadership strategy has a significant coefficient estimate (β =0.478, t= 4.891, p-value = 0.000) as a predictor of

performance of NHIF accredited hospitals in Kenya. The p-value of the coefficient is less than 0.05 implying significance at 5% level of significance. The results show that increasing the levels of cost leadership strategy by one unit would result in an increase in performance of the hospitals by 4.78 units. The model fitted generated the equation given below;

$$Y = 0.478X + \varepsilon$$

The results from the model fitted on the effect of cost leadership strategy were used to test the hypothesis for the first study objective and to draw conclusions on the relationship.

H_{01}: There is no significant relationship between Cost leadership and performance of NHIF accredited hospitals in Kenya.

Discussion: Impact of cost leadership strategy and the performance of NHIF accredited Hospitals in Kenya

From the results, the p-value of the coefficient of cost leadership strategy was found to be 0.000 which is less than the 0.05 level of significance threshold. The null hypothesis was therefore rejected and a conclusion drawn that Cost leadership strategy has a significant relationship with the performance of NHIF accredited hospitals in Kenya.

The results show that cost leadership strategy has a significant impact on performance. Hospital administrators should therefore consider improving on cost leadership strategies to realise improved performance. The hospitals tend to develop strategies on low costs so as to achieve and sustain their low-cost position within the industry they operate in. with maturity of the industry prices decline such that the hospital that can produce more cheaply remains profitable for a longer period of time and realises better performance. This echoes the assertion by (Pearce & Robinson, 2007)that the low cost elates deposit on some fairly unique capabilities to achieve and sustain low-cost position

such as having supplies of raw materials being in dominant market share position having high degree of capitalization. Its infrastructure that low-cost products usually excel at cost reduction and efficacies.

The results on cost leadership and its effect on performance from the quantitative data analysis was echoed in the qualitative interviews carried out among the CEOs. On the question regarding the strategies used by the hospital in managing the healthy facility and its influence in performance in terms of the market share, some respondents discussed on cost leadership strategies. A thematic/ content analysis of the responses based on this question revealed that 28 CEOs use strategies of cost leadership to manage performance that have led them to improved performance. The hospital CEOs utilise cost leadership strategies to lower costs experience a boost in the market share. Among the cost leadership strategies used by hospitals is partnering with employers to provide medical services to employees. There are 62 CEOs who affirmed to partnering with employers to provide services to employees. Some hospitals who partner with employers tend to rely on the employees to have medical insurance cards and NHIF cards. They therefore offer subsidized medication cost for those employees who have NHIF cards and other health insurance cards. Mission hospitals whose CEOs strategies on cost leadership tend to do so by adjusting cost depending on funds received from missionary operations to buffer the costs of services.

The findings related to the progression on coefficient are constant with those by (Abwoga, 2019)in a study titled “effect of generic strategies on performance of small and medium enterprises in Nairobi County” (Mwaf, 2017)study on effect of competitive strategies on performance of insurance in Kenya which confirm a position significant relationship.

4.9.2 Effect of cost Differentiation strategy and the performance of NHIF accredited Hospitals in Kenya

To establish direct effect of differentiation strategy as a predictor of performance of major hospitals in Kenya, a simple bivariate linear regression model between the 2 constructs was fitted to estimate the significance and magnitude of the linear influence (coefficient) of differentiation strategy. Considering the use of Ordinary least squares (OLS) in fitting the model, the classical assumptions (normality, homoscedasticity and non-autocorrelation) of linear modelling was therefore tested on the model residuals as detailed in table 4.19. Figure 4.6 is a histogram of the model residuals generated from the model on the influence of differentiation strategy on performance. The histogram shows a possible normal distribution of the residuals as assumed for linear models.

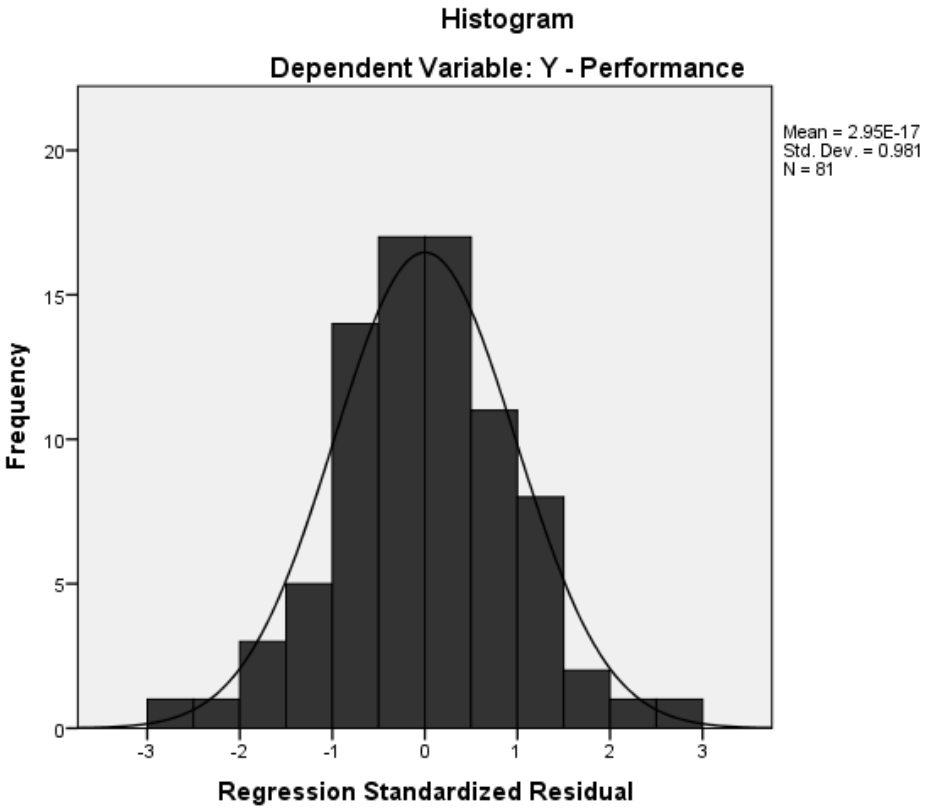

Figure 4.6: Histogram; differentiation strategy and performance model residuals

To confirm normality of the residuals, a further test for normality using Shapiro-Wilk test was carried out. As shown in table 4.19, the p-value of the Shapiro-Wilk statistic was found to be greater than 0.05 to imply that the distribution of the model residuals does not significantly deviate from normality. Homoscedasticity of the residuals as a classical assumption of OLS was also assessed. The Breusch-Pagan test for homogeneity of variance was carried out where the BP Lagrange multiplier (LM) statistic was computed for the residuals. The P-value of the BP-LM Chi-square statistic was found to be 0.067 which is greater than 0.05. This showed that that the model residuals did not exhibit heteroscedasticity but were homoscedastic implying that the model met the homoscedasticity assumption.

The linear model assumption of autocorrelation was also tested on the residuals of the model used to assess the effect of differentiation strategy on performance. Autocorrelation also referred to as serial correlation is the phenomenon where observations of a variable (residuals) are a function of other successive values of the same variable. Autocorrelation of the model residuals implies that successive values of the residuals can be sued to predict other values of the residual term. The Durbin-Watson (d) test was used to check for existence of autocorrelation of the residuals. Small values of the D-W statistic indicated successive error terms were correlated. As shown in the results, the calculated D-W statistic is larger than the upper tabulated value (1.662) from Durbin-Watson tables shown in appendix VIII. The tabulated upper value for a model with one regressor and a sample size of 81 is less than the calculated D-W which is an indication that the residuals are not serially related thus the non-autocorrelation assumption is met.

Table 4.19: Diagnostic tests; differentiation strategy and performance model

	Test	**Statistic**	**P-value**	**Conclusion**
Normality	Kolmogorov-Smirnov	0.069	.200	Normally distributed residuals
	Shapiro-Wilk	0.991	0.867	Normally distributed residuals
Homoscedasticity	BP-LM	0.263	0.627	Homoscedastic residuals
Autocorrelation	Durbin-Watson	2.129		Non-auto-correlated residuals

The diagnosis thus revealed that the fitted model met all the assumptions of linear regression models. The model summary table 4.20 provides information regarding the ability of the regression line to predict the variation in the dependent variable.

The coefficient of determination (R-square) also referred to as the explanatory power of this model was found to be 0.240. This is shows that 24.0% of the variation in performance of the hospitals is explained by the variation of predictors in the model

(differentiation strategy). The difference percentage, 76% is the portion of variance explained by other factors that have not been included in this model that only considered differentiation strategy.

Table 4.20: Model Summary; differentiation strategy and performance model

R	R Square	Adjusted R Square	Std. Error of the Estimate
.490[a]	.240	.231	.8730

	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.057	1	19.057	25.003	.000[b]
Residual	60.215	79	.762		
Total	79.272	80			

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.016	.097		.165	.869
Differentiation strategy - X2	.491	.098	.490	5.000	.000

a. Predictors: (Constant), X2

b. Dependent Variable: Y

ANOVA in this regression analysis involved calculations providing information about levels of variability within a regression model forming a basis for testing the general significance of the regression model. The ANOVA table 4.20 shows a breakdown of the variance in the dependent variable (performance) due to the model and due to the residuals. The general significance of the model is determined by testing that the estimates of the model are jointly not equal to zero.

From the ANOVA table, the P-value of the F-statistic is less than 0.05 showing that the coefficient estimates of the model are jointly not equal to zero. This implies that the model is statistically significant in predicting differentiation strategy impacts the performance of hospitals in Kenya. The results show that the proportion of variance of

performance that is due to the regression predictor (differentiation strategy) is significantly explained in the model. The table shows the proportion of the total variance of the dependent variable that is apportioned to the variation that can be explained by the predictors in the model and the remaining variance due to the residuals that cannot be explained by the independent variables in the model.

The regression coefficient estimate of the influence of differentiation strategy on performance is detailed in table 4.20. The results show that differentiation strategy has a significant coefficient estimate (β =0.491, t= 5.000, p-value = 0.000) as a predictor of performance of hospitals in Kenya. The p-value of the coefficient is less than 0.05 implying significance at 5% level of significance. The results show that increasing the levels of differentiation strategy by one unit would result in an increase in performance of the hospitals by 4.91 units. The model fitted generated the equation given below;

$$Y = 0.491X + \varepsilon$$

H_{03}: There is no significant relationship between Differentiation strategy and performance of major hospitals in Kenya.

Discussion: Effect of cost Differentiation strategy and the performance of NHIF accredited Hospitals in Kenya

The study results revealed that the p-value of the coefficient of differentiation strategy was 0.000 which is less than the 0.05 level of significance threshold. The null hypothesis was therefore rejected and a conclusion drawn that Differentiation strategy has a significant relationship with the performance of major hospitals in Kenya. The results show that Differentiation strategy has a significant impact on performance therefore hospital administrators should consider improving on differentiation strategies to realise improved performance. The hospitals try to position their brands in such a so as to differentiate it from the competition and establish an image that is unique in the eyes of

their clients (Davison, 2011). Through these strategies, the hospital develops and market unique services and products for different customer segments such as unusual features, responsive customer service, rapid services and products innovations and technological leadership, perceived prestige and status, different tastes, and engineering design that in turn yields performance. (Outlet, 2008)noted the key characteristics of differentiations strategy are perceived quality whether real or not this may through product or customer service, superior service design technology or other performance. The strategy calls for development of product or service that after unique atmospheres. The result of the analyses indicated that differentiation strategy had positive and positive impact on hospital performance. This finding being consistent with findings by (Atikiya, 2015)indicated that that differentiation strategy positive impact on performance of manufacturing firms in Kenya and Ismail (Lat Kovic Kj, 2020)in the study 'linking porters' strategies to firm performance'

The results from the interviews also showed that differentiation strategies positively impact performance. The content analysis of the interview results showed that various differentiation strategies were adopted by the CEOs in man ageing the hospitals. 59 interviewees affirmed to the question as to the use of product differentiation from competitors.

4.9.3 Impact of Focus strategy and the performance of major Hospitals in Kenya

To assess the direct effect of focus strategy as a predictor of performance of major hospitals in Kenya, a simple bivariate linear regression model between the 2 constructs was fitted to estimate the significance and magnitude of the linear influence (coefficient) of focus strategy. Considering the use of Ordinary least squares (OLS) in fitting the model, the classical assumptions (normality, homoscedasticity and non-autocorrelation) of linear modelling was therefore tested on the model residuals as detailed in table 4.21. Figure 4.7 is a histogram of the model residuals generated from the model on the influence of focus strategy on performance. The histogram shows a possible normal distribution of the residuals as assumed for linear models.

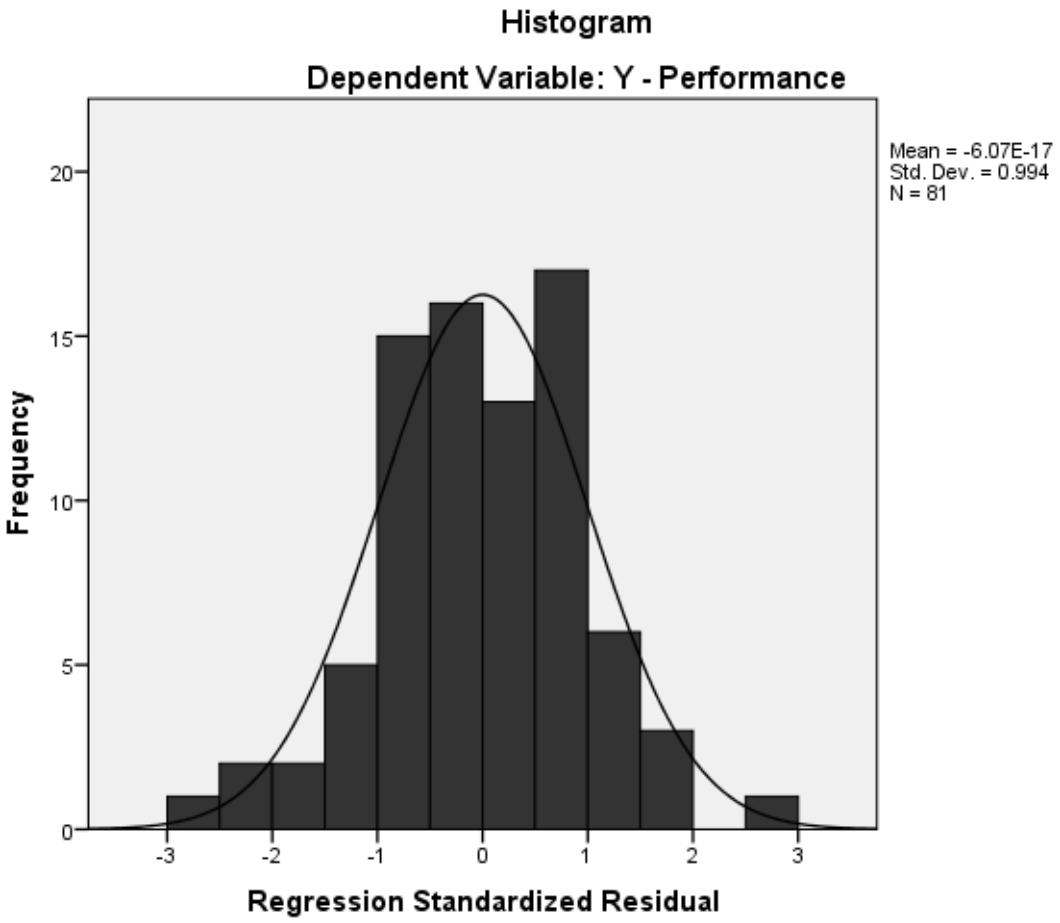

Figure 4.6: Histogram; focus and performance model residuals

To confirm normality of the residuals, a further test for normality using Shapiro-Wilk test was carried out. As shown in table 4.21, the p-value of the Shapiro-Wilk statistic was found to be greater than 0.05 to imply that the distribution of the model residuals does not significantly deviate from normality. Homoscedasticity of the residuals as a classical assumption of OLS was also assessed. The Breusch-Pagan test for homogeneity of variance was carried out where the BP Lagrange multiplier (LM) statistic was computed for the residuals. The P-value of the BP-LM Chi-square statistic was found to be 0.067 which is greater than 0.05. This showed that that the model residuals did not exhibit heteroscedasticity but were homoscedastic implying that the model met the homoscedasticity assumption.

The linear model assumption of autocorrelation was also tested on the residuals of the model used to assess the effect of focus strategy on performance. Autocorrelation also referred to as serial correlation is the phenomenon where observations of a variable (residuals) are a function of other successive values of the same variable. Autocorrelation of the model residuals implies that successive values of the residuals can be sued to predict other values of the residual term. The Durbin-Watson (d) test was used to check for existence of autocorrelation of the residuals. Small values of the D-W statistic indicated successive error terms were correlated. As shown in the results, the calculated D-W statistic is larger than the upper tabulated value (1.662) from Durbin-Watson tables shown in appendix VIII. The tabulated upper value for a model with one regressor and a sample size of 81 is less than the calculated D-W which is an indication that the residuals are not serially related thus the non-autocorrelation assumption is met.

Table 4.21: Diagnostic tests; focus strategy and performance model

	Test	**Statistic**	**P-value**	**Conclusion**
Normality	Kolmogorov-Smirnov	0.049	.200	Normally distributed residuals
	Shapiro-Wilk	0.991	0.869	Normally distributed residuals
Homoscedasticity	BP-LM	2.929	0.087	Homoscedastic residuals
Autocorrelation	Durbin-Watson	1.869		Non-auto-correlated residuals

The diagnostic tests confirmed that the model fitted between focus strategy and performance met all the linear modelling assumptions. The model summary table 4.22 provides information regarding the ability of the regression line to predict the variation in the dependent variable. The coefficient of determination (R-square) also referred to as the explanatory power of this model was found to be 0.411. This is shows that 41.1% of the variation in performance of the hospitals is explained by the variation of predictors in the model (focus strategy). The difference percentage, 58.9% is the portion

of variance explained by other factors that have not been included in this model that only considered focus strategy.

Table 4.22: Model Summary; focus strategy and performance model

R	R Square	Adjusted R Square	Std. Error of the Estimate
.641[a]	.411	.404	.76878487

	Sum of Squares	df	Mean Square	F	Sig.
Regression	32.581	1	32.581	55.126	.000[b]
Residual	46.691	79	.591		
Total	79.272	80			

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.000	.085		-.002	.999
X3 - Focus strategy	.646	.087	.641	7.425	.000

a. Predictors: (Constant), X2

b. Dependent Variable: Y

From the ANOVA table 4.22, the P-value of the F-statistic is less than 0.05 showing that the coefficient estimates of the model are jointly not equal to zero. This implies that the model is statistically significant in predicting focus strategy impacts the performance of hospitals in Kenya. The results show that the proportion of variance of performance that is due to the regression predictor (focus strategy) is significantly explained in the model. The table shows the proportion of the total variance of the dependent variable that is apportioned to the variation that can be explained by the predictors in the model and the remaining variance due to the residuals that cannot be explained by the independent variables in the model.

The regression coefficient estimate of the influence of focus strategy on performance is detailed in table 4.22. The results show that focus strategy has a significant coefficient

estimate (β =0.646, t= 7.425, p-value = 0.000) as a predictor of performance of hospitals in Kenya. The p-value of the coefficient is less than 0.05 implying significance at 5% level of significance. The results show that increasing the levels of focus strategy by one unit would result in an increase in performance of the hospitals by 0.646 units. The model fitted generated the following; equation;

$$Y = 0.646X + \varepsilon$$

H_{03}: There is no significant relationship between Focus strategy and performance of major hospitals in Kenya.

Discussion: Effect of Focus strategy and the performance of major Hospitals in Kenya

According to the results, the p-value of the coefficient of Focus strategy was found to be 0.000 which is less than the 0.05 level of significance threshold. The null hypothesis was therefore rejected and a conclusion drawn that Focus strategy has a significant relationship with the performance of NHIF accredited hospitals in Kenya. The results show that Focus strategy has a significant impact on performance therefore hospital administrators should consider improving on Focus strategies to realise improved performance. The ability of a company to outperform its competition depends on ability to take advantage of market activity trends; ability to capture and protect 'unfair share' of markets; ability to capture premium pricing; prudent creation and introduction of new products (David, 2011).Focus aims at growing market share through operating in a niche market or in markets either not attractive to, or overlooked by, larger competitors. The regressions analysis that posted the regression coefficient at 30646 showed a positive significant relationship between focus strategy and firm performance at 64.6% of changes in the hospital performance was attributed to focus strategy while the remaining may be accorded by other strategies excluded from this mode. The result of the analysis is consistent with timings of previous study (Musyoka, 2010)that sought to examine the

influence of the full strategy on firm performance in the telecommunication industry in large.

The results from the interviews carried out also concur with the findings of the quantitative analysis regarding this objective one of the respondents shared that through focus strategy, the hospitals tend to have ability to achieve performance though retaining the clients and the maintaining the market share of the hospital. Some of the CEOs manage the hospitals through focus strategies by focusing on niche markets that have not been explored in their localities.

4.9.4 Combined effect of generic strategies on performance of NHIF accredited hospitals in Kenya

To assess the joint effect of the generic strategies on performance of hospitals in Kenya, a multiple regression model was fitted. This was a multivariate model including all the study independent variables as predictors of performance.

The model fitted was also based on ordinary least squares (OLS). The classical assumptions (normality, homoscedasticity and non-autocorrelation) of linear modelling were therefore tested on the model residuals as detailed in table 4.23. Figure 4.8 is a histogram of the model residuals generated from the model on the influence of differentiation strategy on performance. The histogram shows a possible normal distribution of the residuals as assumed for linear models.

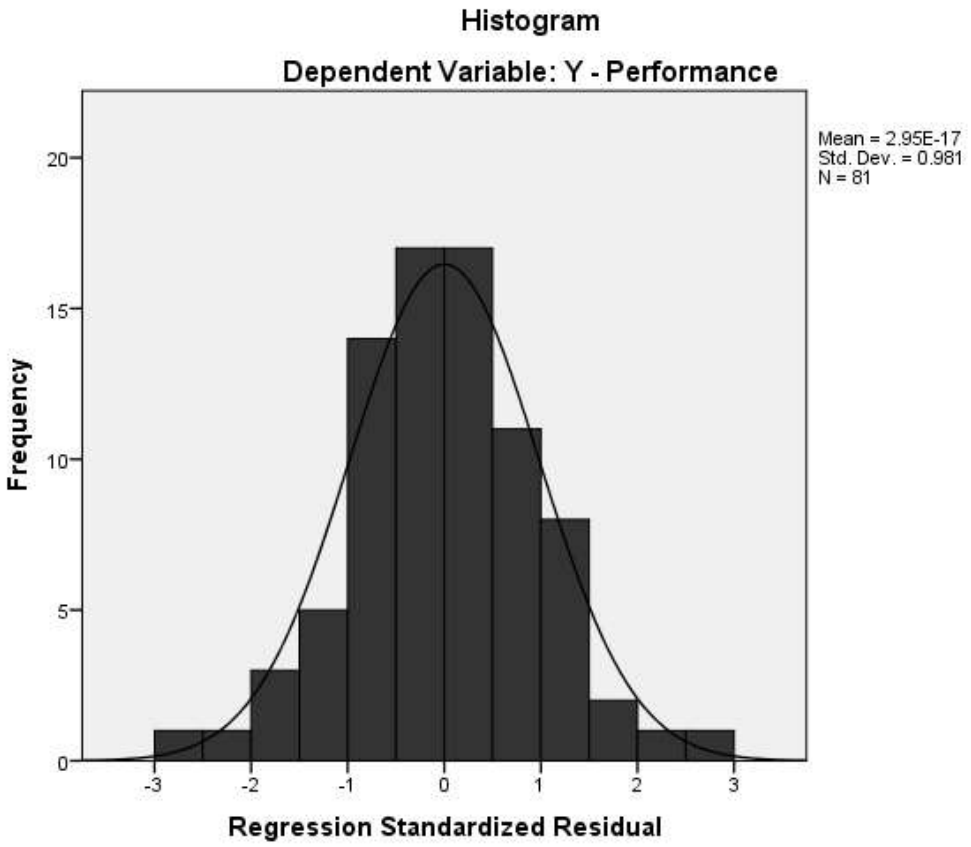

Figure 4.7: Histogram; multiple regression model residuals

To confirm normality of the residuals, a further test for normality using Shapiro-Wilk test was carried out. As shown in table 4.23, the p-value of the Shapiro-Wilk statistic was found to be greater than 0.05 to imply that the distribution of the model residuals does not significantly deviate from normality. Homoscedasticity of the residuals as a classical assumption of OLS was also assessed. The Breusch-Pagan test for homogeneity of variance was carried out where the BP Lagrange multiplier (LM) statistic was computed for the residuals. The P-value of the BP-LM Chi-square statistic was found to be 0.067 which is greater than 0.05. This showed that that the model residuals did not exhibit heteroscedasticity but were homoscedastic implying that the model met the homoscedasticity assumption.

The linear model assumption of autocorrelation was also tested on the residuals of the model used to assess the effect joint of generic strategies on performance. Autocorrelation also referred to as serial correlation is the phenomenon where observations of a variable (residuals) are a function of other successive values of the same variable. Autocorrelation of the model residuals implies that successive values of the residuals can be used to predict other values of the residual term. The Durbin-Watson (d) test was used to check for existence of autocorrelation of the residuals. Small values of the D-W statistic indicated successive error terms were correlated. As shown in the results, the calculated D-W statistic is larger than the upper tabulated value (1.715) from Durbin-Watson tables shown in appendix VIII. The tabulated upper value for a model with 3 regressors and a sample size of 81 is less than the calculated D-W which is an indication that the residuals are not serially related thus the non-autocorrelation assumption is met.

Table 4.23: Diagnostic tests; Multiple regression model

	Test	Statistic	P-value	Conclusion
Normality	Kolmogorov-Smirnov	0.05	.200	Normally distributed residuals
	Shapiro-Wilk	0.992	0.896	Normally distributed residuals
Homoscedasticity	BP-LM	5.396	0.145	Homoscedastic residuals
Autocorrelation	Durbin-Watson	2.070		Non-auto-correlated residuals

Multicollinearity

Variable	VIF	Tolerance
Cost leadership strategy	1.892	0.529
Focus strategy	1.860	0.886
Differentiation strategy	1.589	0.936
Mean VIF	1.780	

The model diagnostic tests carried out on the multiple regression model confirmed that model fitted between generic strategies and performance met all the linear tested

assumptions. The model summary table 4.24 provides information regarding the ability of the regression model to estimate the variability in the dependent variable. The coefficient of determination (R-square) also referred to as the explanatory power of this model was found to be 0.677. This is shows that 67.7% of the variation in performance of the hospitals is explained by the variation of predictors in the multiple regression model which included all the study independent variables. The difference percentage, 32.3% is the portion of variance explained by other factors that have not been included in this model (in this study).

Table 4.24: Model Summary; Multiple regression model

R	R Square	Adjusted R Square	Std. Error of the Estimate
.677[a]	.458	.437	.74717386

	Sum of Squares	df	Mean Square	F	Sig.
Regression	36.286	3	12.095	21.666	.000[b]
Residual	42.987	77	.558		
Total	79.272	80			

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.006	.083		.068	.946
Cost leadership strategy - X1	-.003	.126	-.003	-.022	.982
Differentiation strategy - X2	.532	.107	.528	4.992	.000
Focus strategy - X3	.246	.115	.246	2.148	.035

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

The ANOVA table 4.24 shows a breakdown of the variance in the dependent variable (performance) due to the multiple regression model and due to the residuals. The general significance of the model is determined by testing that the estimates of the model are jointly not equal to zero.

From the ANOVA table, the P-value of the F-statistic is less than 0.05 showing that the coefficient estimates of the 3 independent variables in the study are jointly not equal to zero. This implies that the model is statistically significant in predicting generic strategy impacts the performance of hospitals in Kenya. The results show that the proportion of variance of performance that is due to the regression predictor (generic strategy) is significantly explained in the model. The table shows the proportion of the total variance of the dependent variable that is apportioned to the variation that can be explained by the predictors in the model and the remaining variance due to the residuals that cannot be explained by the independent variables in the model.

Table 4.24 shows the detailed results on the coefficient estimates of the multiple regression model. The results show that jointly, focus strategy and differentiation strategy have significant coefficient estimates (β =0. 246, t= 2.148, p-value = 0.035) for focus strategy and (β =0. 532, t= 4.992, p-value = 0.000) for differentiation strategy. Cost leadership strategy was however found to be insignificant in this multiple regression model (β =-0.003, t= -0.022, p-value = 0.982). The effect of cost leadership strategy was however found to be significant in the bivariate model fitted between cost leadership strategy and performance. The reduction of the effect in the multiple regression to an insignificant influence could be attributed to mediation by one of the independent variables in the study which is beyond the scope of this study. The multiple regression model fitted generated the equation given below;

$$Y = 0.532X_2 + 0.246X_3 + \varepsilon$$

(Pearce & Robinson, 2007)found that a firm can use low-cost leadership, differentiation strategy and the market focus strategy as generic strategies to seek long-term competitive advantage. A firm that engages in each generic strategy but fails to achieve any of them is stuck in the middle.

4.9.5 Moderating influence of competition on the relationship between generic strategies and performance of NHIF accredited hospitals

To assess the moderating effect of competition on the relationship between generic strategies and performance of hospitals, a hierarchical moderated regression model was fitted.

(Todd et al, 2007)argued that the moderating effect is modelled by generating interaction terms (XZ) as cross products of the each of independent variables (X) and the hypothesised moderating variable (Z). Table 4.25 shows the model summary of the hierarchical regression model which was based on 3 steps. In step one, the independent variables generic strategies (Cost leadership strategy, focus strategy and Differentiation strategy) were regressed on the dependent variable yielding results as carried out in the multiple regression model.

In step 2 the moderating variable competition was included to the model as another predictor of performance and in step 3 the interaction terms between each regressor and the moderator were introduced. In each step, the effect of the change in the model structure was assessed as shown by the change statistics in table 4.25. A significant moderating effect was associated to significance of the change due to inclusion of the interaction terms in the model. The results show that in model 1, generic strategies have a significant joint effect on performance. The addition of competition to the model realised a 0.18 (18%) change in R-square which was found to be significant based on the change in F-statistic that had a p-value less than 0.05. The introduction of the interaction terms was found to have an effect of 4% change (increase) in R-square which implied that interactions between competition and generic strategies dimensions increases the

predictive power of the model by 4%. The change in R-square was significant as shown by the change in F. This implied a significant moderating effect.

Detailed analysis of the coefficient estimates of the MMR model is shown in table 4.25. The results for model 1 show that the significant joint effect of generic strategies is attributed to the significant coefficient estimates of focus strategies and differentiation strategies that had p-values less than 0.05. The coefficient estimate of cost leadership strategy was found to be insignificant in this model. In model 2, the coefficient of the moderating variable competition which was included in the model at this stage was found to be significant (β =0.465, t= 6.144, p-value = 0.000). The analysis results yielded model 2 that is given by the equation below;

$$Y = 0.391X_2 + 0.240X_3 + 0.465Z + \varepsilon$$

Table 4.25: Moderated Multiple Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.677[a]	.458	.437	.747	.458	21.666	3	77	.000
2	.799[b]	.638	.619	.615	.180	37.746	1	76	.000
3	.824[c]	.678	.766	.607	.040	3.047	3	73	.034

		Unstandardized Coefficients		Standardized Coefficients		
	Variables	B	Std. Error	Beta	t	Sig.
1	(Constant)	.006	.083		.068	.946
	Cost leadership strategy - X1	-.003	.126	-.003	-.022	.982
	Differentiation strategy - X2	.532	.107	.528	4.992	.000
	Focus strategy - X3	.246	.115	.246	2.148	.035
2	(Constant)	.017	.069		.245	.807
	Cost leadership strategy - X1	-.069	.104	-.070	-.665	.508
	Differentiation strategy - X2	.391	.091	.388	4.311	.000

	Focus strategy - X3	.240	.094	.240	2.547	.013
	Competition - Z	.465	.076	.466	6.144	.000
3	(Constant)	.056	.076		.745	.459
	Cost leadership strategy - X1	-.059	.110	-.059	-.532	.596
	Differentiation strategy - X2	.437	.092	.434	4.744	.000
	Focus strategy - X3	.220	.104	.220	2.115	.038
	Competition – Z	.380	.085	.380	4.450	.000
	X1 intersection Z	.195	.127	.172	1.527	.131
	X2 intersection Z	-.232	.108	-.217	-2.158	.034
	X3 intersection Z	-.081	.094	-.081	-.867	.389

a. Predictors: (Constant), X3, X2, X1

b. Predictors: (Constant), X3, X2, X1, Z

c. Predictors: (Constant), X3, X2, X1, Z, X1 intersection Z, X2 intersection Z, X3 intersection Z

d. Dependent Variable: Y

In model 3, the interaction terms were included in the model which yielded a significant improvement in the model as shown by the significant change in R-square. However, detailed analysis on the coefficient estimates of each interaction term revealed that the interactions between competition and cost leadership strategies and that between focus strategies were insignificant with p-values greater than 0.05.

The interaction between competition and differentiation strategies was however found to be significant with (β =-.232, t= -2.158, p-value = 0.034). Model 3 generated the equation below;

$$Y = 0.437X_2 + 0.220X_3 + 0.380Z - 0.232X_2 * Z + \varepsilon$$

Ho_4: Competition does not significantly influence the relationship between generic strategies and performance of major hospitals in Kenya.

Discussion: Moderating influence of competition on the relationship between generic strategies and performance of NHIF accredited hospitals

The results from the MMR were used in testing the hypothesis on the moderating effect of competition. The change in R-square due to addition of the interaction terms between generic strategies and competition was found to be significant with a p-value of change in F of 0.034 which is less than the 0.05 level of significance. The null hypothesis was therefore rejected and a conclusion drawn that Competition does significantly influence the relationship between generic strategies and performance of hospitals in Kenya.

Further analysis on the coefficients of the interaction terms showed that only the relationship between performance and differentiation strategies was moderated. The coefficient of the interaction term between competition and differentiation was -.232 which implied that competition was a buffering moderator of the relationship. Figure 4.9 displays the buffering effect of competition on the relationship between differentiation strategies and performance. Increase in competition tends to reduce the effect of differentiation on performance. Differentiation strategies have a general positive effect on performance as shown by the positive coefficient 0.437 and the positive slope shown in the graph. However, the slope is higher when competition is low but tend to reduce (flatten) with increasing competition to reflect the buffering effect of competition which is a reduction in the effect of differentiation on performance as competition increases. This study reveals that competition significantly moderates the performance of Hospitals in particular those adopting the differentiations strategy.

The findings however are not consistent those by (Owino, 2014)that concluded that competition and not have a moderating influence relationship between organizational culture and non-financial performance of micro-financial institution in Kenya. The findings of the study are however agreeable for those (Ogaga et al , 2017).That industry competition significantly affects the influence of cooperates strategy on performance and therefore concluding that the performance of a firm depends on the extent that the strategy pursued by the firm is aligned to the competitive environment

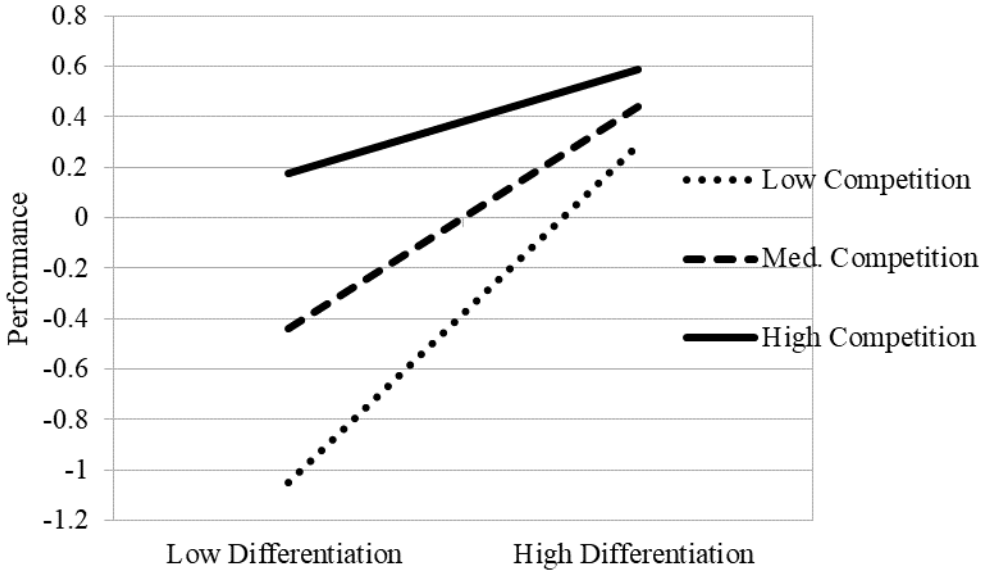

Figure 4.8: Mod graph on the moderating effect of competition on the relationship between differentiation strategies and performance.

Table 4.26: Summary of hypothesis testing

Hypothesis	Findings	Verdict
$H0_1$: There is no significant relationship between Cost leadership and performance of NHIF accredited hospitals in Kenya.	β =0.478 t= 4.891 p-value = 0.000	p-value less than 0.05; H_{01} was Rejected
$H0_2$: There is no significant relationship between Differentiation strategy and performance of NHIF accredited hospitals in Kenya.	β =0.491 t= 5.000 p-value = 0.000	p-value less than 0.05; H_{02} was Rejected
$H0_3$: There is no significant relationship between Focus strategy and performance of NHIF accredited hospitals in Kenya.	β =0.646 t= 7.425 p-value = 0.000	p-value less than 0.05; H_{03} was rejected
Ho4: Competition does not significantly influence the relationship between generic strategies and performance of NHIF accredited hospitals in Kenya.	Change in R-square = 0.040 Change in F-statistic = 3.047 P-value of change = 0.034	p-value less than 0.05; H_{04} was rejected

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study findings as guided by the objective conclusions and recommendations as well as direction for future research.

5.2 Summary

This study sought to examine the moderating role of competition on the relationship between generic strategies and performance of hospitals in Kenya. The focus was on the NHIF accredited Hospitals across the 47 Counties in Kenya. The summary was guided by the specific objectives

5.2.1 To ascertain find out the relationship between cost leadership strategy and performance of Hospitals in Kenya.

The Pearson product moment coefficient posted a result of .482 which indicated a moderate positive relationship between the cost leadership strategy and performance of Hospitals. This finding was corroborated by the findings of the interviews where majority of the CEOs affirmed to the use of cost leadership strategies to manage performance and record improved performance. According to the encyclopedia of production and manufacturing Management (2000 edition) a firm that follows a cost leadership strategy attempts to earn high returns and competitive advantage through products or services at the lowest prices in the industry. Cost leadership requires vigorous pursuits of cost minimization techniques as reflected in section 4.6.2, in the analyses of the performance indices of cost leadership strategy.

The regression analysis posted of regression coefficient of 0.478 which indicated that increasing the level of cost leadership strategy by one unit would result in an increase in performance by 4.78 units.

In addition, the coefficient of determination (R square) posted .232 revealing that 23.2% of the Hospital performance was explained by the cost leadership strategy. The P value of the regression coefficient posted 0.000 which was less than 0.05 significance at 5% level of significance, leading to the rejection of the Null hypothesis when cost leadership strategy was subjected to joint model (multivariate regression analysis) the regression coefficient stood @ β = -0.003 indicative of an insignificant impact of cost leadership strategy on performance when subjected in a joint model.

5.2.3 To assess the relationship between differentiation strategy and performance of Hospitals in the Kenya

The Pearson product moment coefficient for differentiation strategy was r = 0.676 indicating a strong positive relationship between the strategy and hospital performance.

The regression coefficient estimates of the influence of differentiation strategy on performance stood at β=0.491 the result showing that increasing levels of differentiation strategy resulted in an increase in performance of the hospitals by 4.91 units. It was further noted that the values of the regression analysis were less than 0.05 implying significance at 5% level of significance and since p value of regression was less than 0.05 the null hypothesis was rejected, drawing the conclusion that differentiation strategy had significant impact on the performance of hospitals. The coefficient of determination stood @ .240, explaining that24% was explained by the differentiation strategy while 76% is the portion of variance explained by other factors that had not been included in the model... The findings corroborated with the findings of the interviews that showed CEOs used various differentiation strategies to secure a competitive edge in the market. In assessing the joint effect of generic strategies, the coefficient of determination (R square) posted0.677. Differentiation strategy and focus

strategy jointly posted significant, coefficient estimates @ β=.532 for differentiation strategy and B=.246 for focus strategy in addition the R square, coefficient

(Barney & Hersterley, 2006)posited that differentiation involves offering product or service perceived as unique. Industry wide the strategy based on diverse dimensions including brand image innovativeness, product quality, firm reputations and more, differentiate According to

(Allans & Helms, 2006)differentiations help a firm to build customer loyalty by offering unique products or service thus helping them to perform better than competitors. Coefficient of determination in the joint model posted 0.677 indicating that67.7% of performance was attributed to the differentiation and focus strategies, as the cost leadership strategy had posted an insignificant regression coefficient estimate @ B= -0.03 in the multiple regression model. This finding suggested that superior performance can be associated with combination of the generic strategies; however, this observation is not supported by the findings of (Porter & Hahn , 2014)that estimated that US banking industry is unlikely to produce superior performance by only relying on differentiation and focus strategy. The findings are also centrally to porters (1980) assertion that superior performance is associated with the pursuit of single generic strategy. Findings of the study by (Chelanga et al, 2017)strategy demonstrated that the differentiation strategy and market focus strategy had positive and significant effect on financial performance of SMEs

5.2.4 To evaluate the relationship between focus strategy and the performance of Hospitals in Kenya.

The Pearson correlation coefficient between focus strategy and performance was found to be significant and positive. @ r = 0.604) implying a strong and positive relationship between focus strategy and performance of Hospitals, this finding was consistent with the findings of a study by

(Norah, 2020) which indicated a positive relationship between focus strategy and firm performance in the Petroleum Market. (Khakhlary, 2021)observed that focus strategy is when an organization concentrates on a specific regional Market, product line or group of buyers and that they are most effective when consumers have distinctive preference or requirements and rivals' firms are not attempting to specialize in the same target segment. The coefficient estimates in regression analysis stood. (a) $\beta = .0646$ showing a significant relationship between focus strategy and performance of Hospitals. That the application of one unit of focus strategy led to an increase of 64.6 units in hospital performance.

Furthermore, the results of the interviews confirm the findings of the quantitative analysis that focus strategy significantly and positively relatives to the performance of Hospitals in Kenya. The findings are further supported by those of (Musyoka, 2019)that sought to examine the influence of focus strategy in the Telecommunication industry in Kenya. The results of the interviews confirmed the findings of the quantitative analysis that Focus strategy significantly positively impacted on the performance of Hospitals in Kenya.

5.2.5 To establish the moderating influence of competition on the relationship between generic strategies and performance of Hospitals in Kenya.

Hierarchical moderated regression model was specifically used to assess the moderating influence of competition on the relationship between generic strategies and Hospital performance. In the model, generic strategies were found to have a significant joint effect on performance. Addition of competition in the model realized an 18% change in R(square) which was found to be significant based on the change in F statistic that led a P value less than 0.05 the introduction of interaction firms was found to have an effect of 4% change (increase) in R(square) which implied that interactions between competition and generic strategies increased the predictive power of the model by 4%. It is also revealed that the interactions between competition and cost leadership strategy and that between focus strategies were insignificant with P values greater than 0.05. the

interaction between competition and differentiation strategies was however found to be significant with β = 232 and P value = 0.034) the change in R – square due to addition of the interaction terms between generic strategies and competition was found to be significant with P value of change in F of 0.034 which is less than 0.05 level of significance leading to the rejection of Null hypothesis of concluding that competition does significantly influence the relationship between generic strategies and performance of Hospitals in Kenya.

Further analysis on the coefficients of interaction terms showed that only the relationship between performances and differentiation strategies was moderated coefficient of the interaction term between competition and differentiation was -232 which implied that competition was a buffering moderator of the relationship. It was noted that an increase of competition tended to reduce the effect of differentiation on performance.

The findings support the findings of a study by (Ogaga et al, 2017)that affirmed that industry competition significantly affected the corporate strategy on performance

5.3 Conclusions

The study concluded that cost leadership strategy employed by Hospitals was a statistically significant factor with respect to the Hospital performance; the Hospitals were therefore encouraged to adopt the strategy by endeavoring to earn high returns and competitive advantage through offering services of the lowest cost in the industry in particular offering standardized services, most importantly to engage in vigorous pursuits of cost minimization techniques such as offering competitive medical services, procuring supplies in built out favorable terms, observing economic of scale in production and use of state of art technology solutions. It was also noted that cost leadership strategy posted insignificant impact when applied jointly with other generic strategies cost leadership strategy can be employed to manage the competition as this study revealed that interactions between competition and cost leadership strategies were

insignificant with P Value greater than 0.05 indicating that the strategy is not moderated by competition.

The findings from the interviews by the CEOs underscored the significance of adopting the cost leadership strategy, by the use of cost minimization techniques such as being a member of NHIF cards, partnering with insurance companies in the use of their services by potential patients, companies and employers in offering medical services to their employees at affordable rates.

The study also concluded that differentiation strategy significantly influenced the performance of Hospitals. This was reflected in the statistical findings posted including Pearson product coefficient r = 0.676 regression coefficient estimate β = 0.491, P-Value of the regression analysis (a) less than 0.05, coefficient of determination (a) 0.240, strong regression analysis coefficient estimates in the joint model β = 0.532. the differentiation strategy stood out in its impact on Hospital performance as compared to the other two strategies respectively; Accordingly, Hospitals were encouraged to adopt the use of the strategy by offering unique service, through continuous innovative, service quality, building a brand image with a view to earn customer loyalty and sustain a competitive advantage. It is instructive that the quantitative analyses findings were confirmed by the results of the CEOs interviews that corroborated the significance of the differentiation strategy in impacting the Hospital performance.

The focus strategy has been associated with firms concentrating on market segments including specific required markets, product line or group of buyers and is not effective when distinctive preference or requirements, and rival firms are not attempting to specialize in the same target segment.

This study further posted significant and positive results as pertaining to the relationship between focus strategy and relationship of Hospitals. The findings included; Pearson correlation coefficient (a) r = 0.604 regression analysis coefficient estimate (a) β = 0.646. The focus strategy was further found to be significant in performance when

jointly employed with another, especially the differentiation strategy as posted in the study. However, the focus strategy was not to be moderated by competition. The findings of the interviews of the CEOs confirmed the findings of the quantitative analyses and indeed affirmed to the targeting of unexploited market niche to excel in performance.

The focus business strategy is encouraged in areas where there is great potential of unexploited market niche in the Hospital Industry.

Business firms are subjected to internal and external environment factors. The study findings were able to reveal the effect of competition in a competitive environment of the Hospital Industry. The findings also revealed that competition had a significant moderating influence on the relationship between the generic strategies and performance of Hospitals. Differentiation strategy was the only strategy moderated by competition as the coefficient of the interaction term stood at -.232 concluding that competition was a buffering force on performance, whereby increase in competition tended to decrease the effect of differentiation strategy on performance. It is the focus and cost leadership strategies were found f not to be moderated by competition. It is instructive that NHIF's mandate is to ensure that all Kenyan access quality and affordable health services. It is imperative that the agency encourage its accredited Hospitals to invest in the cost leadership strategy with a view to achieve its mandate, especially now that it is the agency the government is relying upon to introduce and implement the Universal Health coverage program Part of the government's agenda Four a development agenda

5.4 Recommendations

Based on the findings and the conclusions of the study, the following recommendations were advanced: that the hospital be encouraged to use generic strategies to secure superior performance especially the differentiation strategy for the hospital that has a large capital financial resource base: that the hospitals could employ appropriate generic strategies like the focus and differentiation strategies with a view to achieve the superior

performance with the use of joint strategy ;that ;that hospitals employ differentiation strategy with a caution especially when subjected to intense competition in the market, since competition tended to reduce its impact of differentiation strategy on performance of hospitals during fierce competition in the market.

5.5 Contribution to Theory

The current study contributes to strategic management Literature in the area of employing appropriate strategies for the Hospital Industry. The study reveals the impact of the business strategy on performance of the Hospitals in the face of the existence of external environment factors such as competition.

This study proposes generic directions to the management of the health sector performance dimensions.

5.6 Area for Further Research

Based on the findings the researcher proposes a longitudinal study be done on the effect of the competition on the performance of the Hospital Industry in the country with the view to establish the impact of the business strategy on the Hospital performance over a long period under the influence of competition and other external environmental factors in Kenya

The research further proposes to the adoption of objective measures as opposed to the perceptual measures of measurement as was used in the current study.

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APPENDICES

Appendix I: Semi-Structured Questionnaire for Chief Managers

This questionnaire is designed to obtain data from the Key staff from (finance, nursing, records &pharmacy) pertaining to strategies and performances of the hospital. The participation of the targeted respondent is highly appreciated. The information obtained will be used purely for academic purposes.

Part A:

1. Name of the Hospital (optional).....

2. Length of Service of the Respondent as a chief manager.....

Below 5 years [ ] 5 -10 years [ ] Above 10 years [ ]

3. How would you describe this hospital's business strategy……?

Part B

SECTION B: Cost Leadership

Use (5 - *Strongly Agree*; 4 - *Agree*; 3 - *Neutral*; 2 - *Disagree*; 1 - *Strongly Disagree*)

Cost Leadership Strategy	**1**	**2**	**3**	**4**	**5**
The hospital engages in the economies of scale production					
This hospital is adequately equipped with state of the arts technology solutions.					
The hospital's suppliers of goods and services offer favourable terms of contract and are reliable					
The hospital records large numbers in outpatient and inpatient patronage daily					
The hospital offers standardized medical services					

The hospital procures supplies in bulk					
Differentiation Strategy	**1**	**2**	**3**	**4**	**5**
The Hospital endeavours to customer focused services					
The hospital has a strong brand image within the industry					
The hospital has a strong brand image within the industry					
The hospital places a premium in research and development					
The hospital has a corporate culture that provides an enabling environment for the staff and the client					
The hospital partners with local and international research and education institutions to ensure the provision of high-quality services					
Focus Strategy	**1**	**2**	**3**	**4**	**5**
This hospital focuses on treating specific health conditions					
The hospital has a reputation for handling non-communicable diseases					
This hospital serves as a referral hospital for the diplomatic fraternity within the west African Region					
The hospital focuses on children					
The Hospital offers competitive model services					
Competition	**1**	**2**	**3**	**4**	**5**
The Hospital faces competition in the local market					
The hospital is assorted with affordable medical services					
The hospitals diverse medical services giving it a competitive edge over its competitors.					
Performance	**1**	**2**	**3**	**4**	**5**
The hospital has an average of 50% bed occupation at any time					
The hospital has high rate of in/out patient flow due to outstanding service delivery					
The hospital receives an average of 50 referrals per day					

The hospital is a frequent recipient of service accreditation awards					
This hospital undertakes patients follow up twice a month					

Appendix II: Interview Schedule: In-Depth Interview Schedule for the CEO

Thank you for accepting to participate in this interview on the strategies affecting the performance of hospitals. This is an academic exercise and your input will greatly benefit the policy makers and scholars in their endeavor to improve the delivery of service in the health sector.

The information given in this questionnaire will be treated with strict confidentiality. (***The interview will be recorded***).

1. Classification of the hospital

Government [ ] Mission [ ] Private [ ]

2. For how long have you been at the helm of this health facility?
3. Kindly share with me the vision and mission of this hospital.
4. Do you consider the cost of your operating costs to be reasonable and sustainable? Briefly share how you ensure sustainability of your operating cost.
5. Which business strategy does your hospital use in managing the healthy facility? How does this strategy influence your market share in the hospital industry?
6. How different are your services from your competitors? Would you consider your services unique in the industry? If yes, then what's your competitive advantage?
7. Briefly describe your turn-around time in out-patient management.
8. Does your hospital partner with employers to provide medical services to their employees? If so to what extent?
9. How has the business competition affected the operations of this hospital?
10. Has your hospital been ISO standard certified? If yes, when was the first time? Has it ever been renewed? How about peer reviews by the stakeholders?
11. Please briefly describe the kind of patients you frequently handle.
12. Anything you wish to share and add to the interview pertaining to the performance of the health facility?

Thank you for granting me audience Sir/Madam.

Appendix III: List of NHIF Accredited Hospitals in Kenya as at July 2016

NO	HOSPITAL	BED CAPACITY	LOCATION
1.	AAR HEALTH SERVICES LTD	30	BURUBURU-C
2.	ANDALUS NURSING HOME	50	BURUBURU-B
3.	AVENUE HEALTH CENTRE LTD	60	WESTLANDS-C
4.	BALDO IPPOLITA CATH. HLTH CENTRE	5	IND. AREA –B
5.	BLESSED LOUIS P. HEALTH CENTRE	24	WESTLANDS B
6.	CANA FAMILY CLINIC & RESOURCE CENTRE	12	IND. AREA-B
7.	CARE HOSPITAL LIMITED	20	EASTLEIGH-C
8.	CHIROMO LANE MEDICAL CENTRE	150	WESTLAND C
9.	COPTIC HOSPITAL	37	NAIROBI-C
10.	DIVINE WORD PARISH HLTH CENTRE	32	BURUBUR-B
11.	DORKCARE NURSING HOME LTD	15	EASTLEIGH-C
12.	EAGLE HEALTH & CLINICAL SERVICES	5	KANGEMI-B
13.	EDELVALE TRUST JAMAA H&M HOSPITAL	46	BURUBURU-C
14.	EDNAH MEDICAL CENTRE	10	EASTLEIGH-B
15.	EMARA HOSPITAL	28	EASTLEIGH-C
16.	EMMAUS INNERCORE NURSING HOME	16	BURUBURU-C
17.	FAMILY HEALTH OPTIONS	19	IND. AREA-C
18.	FREPALS NURSING HOME	40	NAIROBI-B
19.	GERTRUDES GARDEN CHILDRENS HOSPITAL	72	WESTLANDS-C
20.	GIOVANNA-SYLVIA MEDICAL CENTRE	10	RUARAKA-B
21.	GURU NANAK HOSPITAL	85	RUARAKA-C
22.	AGA KHAN HOSPITAL	165	WESTLANDS-

	(NAIROBI)		C
23.	IMARA HEALTH CARE CENTRE	30	IND. AREA-B
24.	JACARANDA MATERNITY HOSPITAL	12	RUARAKA-C
25.	KAHAWA WEST HEALTH CENTRE	31	RUARAKA-A
26.	KASARANI NURSING HOME	60	RUARAKA-B
27.	KAYOLE HOSPITAL	40	BURUBURU-C
28.	KENYATTA NATIONAL HOSPITAL (AMENITY WING)	225	NAIROBI-C
29.	KENYATTA NATIONAL HOSPITAL (GEN.WRD)	1804	NAIROBI-A
30.	LADNAN HOSPITAL LIMITED	50	EASTLEIGH-C
31.	LIONS SIGHT FIRST EYE HOSPITAL	52	WESTLANDS-C
32.	MADINA HOSPITAL LIMITED	18	EASTLEIGH-C
33.	MARIA IMMACULATE HOSPITAL	28	WESTLANDS-C
34.	MARIA MAT. & NURSING HOME	20	BURUBURU-B
35.	MARIAKANI COTTAGE HOSPITAL	21	IND.AREA-C
36.	MARIE STOPES KENYA LIMITED	19	EASTLEIGH-C
37.	MARURA NURSING HOME	13	RUARAKA-B
38.	MATER MISERICORDIAE HOSPITAL NAIROBI	135	IND.AREA-C
39.	MATHARE MENTAL HOSPITAL (GEN.WARD)	1138	RUARAKA-A
40.	MBAGATHI DISTRICT HOSPITAL	250	NAIROBI-A
41.	MELCHIZEDEK HOSPITAL	19	NAIROBI-C
42.	MENELIK MEDICAL CENTRE	13	NAIROBI-C
43.	METROPOLITAN HOSPITAL	35	BURUBURU-C
44.	MIDHILL MATERNITY & NURSING HOME	28	NAIROBI-C
45.	MKUNGA MATERNITY & MATERNITY HOME	14	BURUBURU-B

46.	MOTHER & CHILD HOSPITAL	23	EASTLEIGH-C
47.	MUTEITHANIA NURSING & MATERNITY HOME	23	KANGEMI-B
48.	NAIROBI EQUATOR HOSPITAL	40	IND.AREA C
49.	NAIROBI HOSPITAL	220	NAIROBI-C
50.	NAIROBI SOUTH MEDICAL CENTRE	15	IND.AREA-C
51.	NAIROBI WEST HOSPITAL	66	IND-AREA-C
52.	NATIONAL SPINAL INJURY HOSPITAL	30	NAIROBI-A
53.	NEEMA HOSPITAL	19	RUARAKA-C
54.	NGUMBA CENTRE & LABORATORY SERVICES	412	RUARAKA-C
55.	OLIVE LINK HEALTH CARE	10	IND. AREA-B
56.	PARKROAD NURSING HOME NAIROBI	57	RUARAKA-C
57.	PUMWANI HOSPITAL MANAGEMENT BOARD	350	EASTLEIGH-A
58.	RADIANT GROUP OF HOSPITAL	34	BURUBURU-C
59.	REINHA ROSARY HEALTH CENTRE	14	IND.AREA-B
60.	RUAI FAMILY MEDICAL CENTRE	25	BURUBURU-B
61.	RUARAKA UHAI NEEMA HOSPITAL	28	RUARAKA-C
62.	M.P. SHAH HOSPTIAL NAIROBI	108	WESTLANDS-C
63.	SAMARITAN MEDICAL SERVICES	32	RUARAKA-C
64.	SCION HELATH CARE LIMITED	10	IND.AREA-B
65.	SEVENTH DAY ADVENTIST HEALTH	30	NAIROBI-C
66.	SOUTH-B HOSPITAL	12	IND.AREA-C
67.	SOUTH-C HOSPITAL	1	IND.AREA-C
68.	ST. JOHNS HOSPITAL LIMITED	17	RUARAKA-C
69.	ST. FRANCIS COMMUNITY HOSPITAL	100	RUARAKA-C
70.	ST. FRANCIS HEALTH SERVICES	6	RUARAKA-B

71.	TEXAS CANCER CENTRE	20	NAIROBI-C
72.	UMOJA HOSPITAL	13	BURUBURU-C
73.	UNITY MATERNITY & NURSING HOME	8	BURUBURU-B
74.	UNIVERSITY DENTAL HOSPITAL, NAIROBI	9	NAIROBI-A
75.	UNIVERSITY OF NAIROBI HEALTH SERVICES	12	NAIROBI-A
76.	UZIMA DISPENSARY AND MATERNITY	11	RUARAKA –B
77.	WEMA MATERNITY & AIC KIJABE MED.CTR	20	LIMURU-B
78.	ACK MOUNT KENYA HOSPITAL	32	KERUGOYA-B
79.	AIC-CURE INTERNATIONAL CHILDRENS HOS	30	LIMURU-C
80.	AIC- GITHUMU HOSPITAL	40	MURANGA-B
81.	BAARI HEALTH CENTRE	13	OLKALOU-A
82.	BETA CARE HOSPITAL LIMITED	50	KIAMBU-B
83.	CARITAS COMMUNITY HOSPITAL	50	THIKA-B
84.	CENTRAL MEMORIAL HOSPITAL-THIKA	29	THIKA-B
85.	CONSOLATA HOSPITAL NYERI	239	NYERI-B
86.	DNYO SABUK MAT& NUR HOME	29	THIKA-B
87.	EBENEZER NURSING HOME	20	NYERI-C
88.	GAICHANJIRU CATHOLIC HOSPITAL	483	MURANGA-B
89.	GAKOE HEALTH CENTRE	24	THIKA-A
90.	GATUNDU DISTRICT HOSPITAL	124	RUIRU-A
91.	GITHUNGURI HEALTH CENTRE	10	KIAMBU-A
92.	HOLY FAMILY CATHOLIC M. HOSPITAL	27	KIAMBU-B
93.	GEGANIA HEALTH CENTRE	14	THIKA-A
94.	IMMACULATE HEART OF MARY HOSPITAL	56	THIKA-B

95.	ISMC SERVICES HOSPITAL	18	LIMURU-B
96.	ITHANGA HEALTH CENTRE	5	THIKA-A
97.	J.KU.A.T. HOSPITAL	20	THIKA-C
98.	M. KARIUKI (OL-KALOU) DISTRICT HOSPITAL	222	OLKALOU-A
99.	JAMII HOSPITAL	46	NYERI-C
100.	JUJA FARM HEALTH CENTRE	6	THIKA-A
101.	KAGIO NURSING HOME	24	KERUGOYA-B
102.	KALIMONI MISSION HOSPITAL	30	THIKA-B
103.	KARATINA DISTRICT HOSPITAL	88	NYERI-A
104.	KARATINA MATERNITY AND NURISNG HOME	20	NYERI-B
105.	KERUGOYA CATH. HEALTH CENTRE	6	KERUGOYA-B
106.	KERUGOYA DISTRICT HOSPTIAL	197	KERUGOYA-A
107.	KERUGOYA MEDICAL CENTRE	120	KERUGOYA-B
108.	KIAMBU DISTRICT HOSPITAL	417	KIAMBU-A
109.	KIANDUTU HEALTH CENTRE	4	THIKA-A
110.	KIANYAGA SUB-DISTRICT HOSPITAL	20	KERUGOYA-A
111.	KIKUYU NURSING HOME	67	LIMURU-B
112.	KIKUYU NURSING HOME	67	LIMURU-B
113.	KIMBIMBI SUB-DISTRICT HOSPITAL	46	KERUGOYA-A
114.	KIMKAN HOSPITAL	56	MURANGA-C
115.	KIRIANI CONSOLATA HOSPITAL	190	MURANGA-B
116.	LARI HEALTH CENTRE	5	LIMURU-A
117.	LIMURU NURSING HOME	55	LIMURU-C
118.	MARAGUA DISTRICT HOSPITAL	24	MURANGA-A
119.	MARIE-STOPES HOSPITAL (K) LTD	15	MURANGA-C
120.	MARY HELP OF THE SICK MISSION HOSP.	79	THIKA-B
121.	MARY IMMACULATE	42	NYERI-B

	HOSPITAL		
122.	MERCY LIGHT HOSPITAL	17	KIAMBU-B
123.	MT. KENYA HOSPITAL	17	THIKA-B
124.	MT. SINAI HOSPITAL	8	THIKA-B
125.	MUGUMO MEDICAL CENTRE - KAGUMO	5	KERUGUOYA-B
126.	MUKURWE-INI SUB DISTRICT HOSPITAL	78	NYERI-A
127.	MURANGA DISTRICT HOSPITAL	317	MURANGA-A
128.	MURIRANJA DISTRICT HOSPITAL	400	MURANGA-A
129.	MWEA COUNTY MEDICAL CENRE	40	KERUGOYA-B
130.	MWEA MEDICAL CENTRE	106	KERUGOYA-B
131.	NAIDU HOSPITAL	75	THIKA-B
132.	NAZARETH HOSPITAL RIARA RIDGE	210	KIAMBU-C
133.	NAZARETH HOSPITAL RUIRU	45	KIAMBU-C
134.	NDEIYA HEALTH CENTRE	17	LIMURU-A
135.	NGENDA HEALTH CENTRE	2	RUIRU-A
136.	NGOLIBA HEALTH CENTRE	10	THIKA-A
137.	NGORIKA HEALTH CENTRE	8	OLKALOU-A
138.	NGURUBANI MEDICAL SERVICES	40	KERUGOYA-B
139.	NORTH KINANGOP CATHOLIC SERVICES	66	OLKALOU-B
140.	NYATHUNA SUB-COUNTY HOSPITAL	10	LIMURU-A
141.	NYERI PROVINCIAL GENERAL HOSPITAL	407	NYERI-A
142.	OASIS MISSION HOSPITAL – NAIROBI	15	THIKA-C
143.	OLD MAWINGO HEALTH CENTRE	9	OLKALOU-A
144.	OTHAYA SUB-DISTRICT HOSPITAL	77	NYERI-A
145.	OUR LADY OF LOURDES MWEA HOSPITAL	106	KERUGOYA-B
146.	OUR LADY HOSPICE	9	LIMURU C
147.	OUTSPAN HOSPITAL	69	NYERI-C

148.	P.C.E.A HOSPITAL KIKUYU - KARATINA	243	LIMURU-C
149.	PEFA MERCY MEDICAL CENTRE	5	KIAMBU-B
150.	PLAINSVIEW NURSING HOME	12	RUIRU-B
151.	RADIANT GROUP OF HOSPITAL- KIAMBU	16	KIAMBU-C
152.	ROMKAN MEDICAL CENRE	5	THIKA-B
153.	RUBY MEDICAL CENTRE	16	LIMURU-C
154.	RUIRU PRIVATE HOSPITAL	35	RUIRU-B
155.	RUIRU SUB-DISTRICT HOSPITAL	14	RUIRU-A
156.	JUDE NURSING HOME	10	RUIRU-C
157.	ST. MATIA MULUMBA HOSPITAL	40	THIKA-B
158.	ST. ANN MEDICAL CENTRE	8	LIMURU-C
159.	ST. TERESA KIKUYU MATERNITY & NURS HOME	17	LIMURU-B
160.	THIKA LEVEL 5 HOSPITAL	317	THIKA-B
161.	THIKA NURSING HOME (THIKA)	17	THIKA-B
162.	TIGONI DISTRICT HOSPITAL	68	LIMURU-A
163.	VINEYARD HOSPITAL	40	THIKA-B
164.	WAKA RURINGU MATERNITY	120	NYERI-B
165.	WANGIGE HEALTH CENTRE	10	KANGEMI-C
166.	AIC-GATABI HEALTH CENTRE	11	MARSABIT-B
167.	AIC- MULANGO HEALTH CENTRE	10	KITUI-B
168.	AL-BILAL NURSING HOME	25	MOYALE-B
169.	ATHI RIVER HEALTH CENTRE	14	MACHAKOS-B
170.	BISHOP KIOKO CATHOLIC HOSPITAL	140	MACHAKOS-B
171.	CONSOLATA HOSPITAL CHUKA (MERU)	54	CHUKA-B
172.	CONSOLATA HOSPITAL KYENI (EMBU)	167	EMBU-B
173.	CONSOLATA HOSPITAL	257	MERU-B

	KYENI (NKUBU)		
174.	COTTOLENGO MISSION HOSPITAL	30	MERU-B
175.	COUNTY MEDICAL CENTRE	40	EMBU-B
176.	MALI NURSING HOME	15	WOTE-B
177.	EMBU CHILDREN'S HOSPITAL	50	EMBU-C
178.	EMBU PROVINCIAL HOSPITAL	199	EMBU-A
179.	GABARTULLA DISTRICT HOSPITAL	60	ISIOLO-B
180.	IGIAKI SUB-DISTRICT HOSPITAL	8	MERU-A
181.	IKUTHA HEALTH CENTRE	2	MWINGI-A
182.	ISHIARA DISTRICT HOSPITAL	2	EMBU-A
183.	ISIOLO COUNTY NURSING HOME	9	ISIOLO-B
184.	JORDAN HOSPITAL	30	KITUI-C
185.	JOY KIM NURISNG HOME	30	EMBU-B
186.	KANGUNDO DISTICT HOSPITAL	128	MACHAKOS-A
187.	KANYAKINE SUB-DISTRICT HOSPITAL	80	MERU-A
188.	KASAALA HEALTH CENTRE	6	MWINGI-A
189.	KATHIANI HOSPITAL	180	MACHAKOS-A
190.	KATSE HEALTH CENTRE	5	MWINGI-A
191.	KATULANI SUB-DISTRICT HOSPITAL	33	KITUI-A
192.	KIKOKO MISSION HOSPITAL – MACHAKOS	52	WOTE-B
193.	KILALA MODEL HEALTH CENTRE	124	WOTE-A
194.	KILOME MATERNITY & NURSING HOME	35	WOTE-B
195.	KISASI HEALTH CENTRE	24	KITUI-A
196.	KISAU SUB-COUNTY HOSPITAL	31	WOTE-A
197.	KITUI DISTRICT HOSPITAL	20	KITUI-A
198.	KYUASINI HEALTH CENTRE	10	WOTE-A
199.	LAARE NURSING &	22	MERU-B

	MATERNITY HOME		
200.	LAISAMIS CATHOLIC HOSPITAL	40	MARSABIT-B
201.	LIBERTY MATERNITY & NURSING HOME	10	EMBU-B
202.	MACHAKOS MEDICAL CLINIC	12	MACHAKOS-B
203.	MAGUTUNI DISTRICT HOSPITAL	40	CHUKA-A
204.	MAKINDU DISTRICT HOSPITAL	58	WOTE-A
205.	MAKUENI HOSPITAL	58	WOTE-A
206.	MARSABIT DISTRICT HOSPITAL	94	MARSABIT-A
207.	MATUNGULU MEDICAL CENTRE	8	MACHAKOS-B
208.	MATUU SUB-DISTRICT HOSPITAL	20	MACHAKOS-A
209.	MAUA METHODIS HOSPITAL (MERU)	164	MERU-B
210.	MBEERE DISTRICT HOSPITAL	30	EMBU-A
211.	MBITINI HEALTH CENTRE	12	KITUI-A
212.	MBOONI SUB-DISTRICT HOSPITAL	30	WOTE-A
213.	MERIT DISTRICT HOSPITAL	16	ISIOLO-A
214.	MERU DISTRICT HOSPITAL (GENERAL)	246	MERU-A
215.	MIAMBANI HEALTH CENTRE	12	KITUI-A
216.	MIATHENE DISTRICT HOSPITAL	40	MAUA-A
217.	MIGWANI SUB-DISTRICT HOSPITAL	12	KITUI-A
218.	MIKINDURI CATHOLIC CHURCH HLTH. CTR	24	CHUKA-B
219.	MIKINDURI SUB-DISTRICT HOSPITAL	32	MERU-A
220.	MIKUMBUNE SUB-DISTRICT HOSPITAL	30	MERU-A
221.	MILIMANI MAT. & NURSING HOME (MERU)	41	MERU-C
222.	MITUNGUU MEDICAL	26	MERU-B

	SERVICES		
223.	MOYALE DISTRICT HOSPITAL	58	MOYALE-A
224.	MOYALE NURSING HOME	17	MOYALE-C
225.	MUKOTHIMA C.C. HEALTH CENTRE	32	CHUKA-B
226.	MUMBUNI MATERNITY & NURSINGHOME	23	MWNGI-B
227.	MUMONI NURSING HOME	8	KITUI-B
228.	MUTHALE MISSION HOSPITAL (KITUI)	75	KITUI-B
229.	MUTOMO HEALTH CENTRE	16	MUTOMO-A
230.	MUTOMO MISSION HOSPITAL (MUTOMO)	140	KITUI-B
231.	MUTUATI CATHOLIC MISSION HOSPITAL	60	MERU-B
232.	MUTUATI SUB-DISTRICT HOSPITAL	15	MERU-A
233.	MWINGI HOSPITAL (KITUI)	73	KITUI-A
234.	MWNGI MEDICAL CENTRE	22	MWINGI-B
235.	MWINGI NURSING HOME	18	MWINGI-C
236.	NEEMA HOSPITAL	49	KITUI-C
237.	NEW NGEI ROAD MATERNITY & NURS. HOME	40	MACHAKOS-B
238.	NGOMENI MODEL HEALTH CENTRE	31	KITUI-A
239.	NUU SUB-DISTRICT HOSPITAL	4	KITUI-A
240.	NYAMBENE CLINICAL SERVICES & NURSING	20	MAUA-C
241.	NYAMBENE DISTRICT HOSPITAL	40	MAUA-A
242.	NYAMBENE MATERNITY& NURSING HOME	30	MERU-B
243.	P.C.E.A CHOGORIA HOSPITAL (MERU)	297	MERU-B
244.	MACHAKOS PROVINCIAL GEN. HOSPITAL	507	MACHAKOS-A
245.	SHALOM HOSPITAL MACHAKOS	220	MACHAKOS-B
246.	SOLOLO MISSION HOSPITAL	64	MOYALE-B

247.	ST. ANNE MATERNITY – COTTAGE –MERU	43	MERU-C
248.	ST. LUCIES HOSPITAL	10	CHUKA-C
249.	ST. LUKE COTTAGE HOSPITAL –KIAMURI	37	MERU-B
250.	ST. MICHAEL MATERNITY & NURSING HOME	48	MACHAKOS-C
251.	ST. MICHALE NURSING HOME	50	EMBU-B
252.	ST. ORSOLA HOSPITAL, MATERI	70	CHUKA-B
253.	ST. TERESA RIIJI HEALTH CENTRE	15	MERU-B
254.	ST. FRANCIS DE SALES HEALTH CENTRE	16	CHUKA-B
255.	ST. THERESA'S MISSION HOSPITAL	10	MERU-B
256.	SULTAN HAMUD SUB-COUNTY HOSPITAL	16	WOTE-A
257.	TAHIDI NURSING HOME (MWINGI)	15	KITUI-B
258.	TEI WA YESU HOSPITAL	45	KITUI-B
259.	TEST HOSPITAL OF HOPE	5	MACHAKOS-A
260.	THARAKA DISTRICT HOSPITAL	22	CHUKA-A
261.	THE KITUI MATERNITY & NURSING HOME	20	KITUI-C
262.	TIGANIA HOSPITAL (MERU)	43	MERU-B
263.	TSEIKURU SUB-DISTRICT HOSPITAL	20	KITUI-A
264.	ITUURU COTTOLENGO HEALTH CENTRE	22	MERU-B
265.	WASO MEDICAL SERVICES & NURSING HOME	29	ISIOLO-C
266.	WOODLANDS HOSPITAL – MERU	27	MERU-C
267.	YANZUU HEALTH CENTRE	4	KITUI-A
268.	ADU DISPENSARY	2	MALINDI-A
269.	ALFAROOQ HOSPITAL	30	MOMBASA-C
270.	BAKARANI MATERNITY & NURSING HOME	16	MOMBASA-C
271.	BAMBA SUB-DISTRICT HOSPITAL	17	KILIFI-A

272.	BARICHO DISPENSARY	3	MALINDI-A
273.	BOALALA MODEL HEALTH CENTRE	10	MALINDI-A
274.	BOMANI MALDE DISPENSARY	1	KILIFI-A
275.	BOMU MEDICAL CENTRE	18	MOMBASA-C
276.	BURA SUB-COUNTY HOSPITAL	10	HOLA-A
277.	CHAKAMA DISPENSARY	2	MALINDI-A
278.	COAST GENERAL HOSPITAL MOMBASA	533	MOMBASA-A
279.	DAGAMRA DISPENSARY	8	MALINDI-A
280.	DIANI BEACH HOSPITAL	32	UKUNDA-C
281.	DIDA DISPENSARY	2	KILIFI-A
282.	DUNGICHA DISPENSARY	1	KILIFI-A
283.	DZIKUNZE DISPENSARY	3	MALINID-A
284.	FAZA SUB-DISTRICT HOSPITAL	20	LAMU-A
285.	FUNDI ISSA DISPENSARY	1	MALINDI-A
286.	GANZE HEALTH CENTRE	8	KILIFI-A
287.	GARASHI DISPENSARY	6	MALINDI-A
288.	GEDE HEALTH CENTRE	56	MALINDI-A
289.	GONGONI HEALTH CENTRE	16	MALINDI-A
290.	AGA KHAN HOSPITAL (MOMBASA)	111	MOMBASA-C
291.	HOLA DISTRICT HOSPITAL	157	HOLA-A
292.	IBNUSINA NURSING HOME	6	LAMU-C
293.	JARIBUNI DISPENSARY	1	KILIFI-A
294.	JIBANA HEALTH CENTRE	54	MOMBASA-A
295.	JILORE DISPENSARY	8	MALINIDI-A
296.	JOCHAM HOSPITAL	53	MOMBASA-C
297.	KALONENI DISPENSARY	2	MALINDI-A
298.	KARIMBONI DISPENSARY	2	MALINDI-A
299.	KHAIRAT MEDICAL CENTRE	3	KILIFI-B
300.	KIKONENI HEALTH CENTRE	10	UKUNDA-A
301.	KILIFI DISTRICT HOSPITAL	192	MTWAPA-A
302.	KINANGO HOSPITAL	116	UKUNDA-A
303.	KINONDO KWETU HEALTH SERVICES	9	UKUNDA-B
304.	KIPINI DISTRICT HOSPITAL	32	LAMU-A

305.	KITEJE DISPENSARY	1	UKUNDA-A
306.	KIZIBE DISPENSARY	9	UKUNDA-A
307.	KWALE DISTRICT EYE CENTRE	52	UKUNDA-A
308.	KWALE DISTRICT HOSPITAL	16	UKUNDDA-A
309.	LADY GRIGGS MATERNITY HOSPITAL	195	MOMBASA-A
310.	LAMU DISTRICT HOSPITAL	34	LAMU-A
311.	LANGONI NURSIN HOME	13	LAMU-C
312.	MADUNGUNI DISPENSARY	6	MALINDI-A
313.	MAINLAND HEALTH CENTRE	30	MOMBASA-C
314.	MALINDI DISTRICT HOSPITAL	145	MALINDI-A
315.	MAMBA DISPENSARY	1	UKUNDA –A
316.	MAMBRUI DISPENSARY	4	MALINDI-A
317.	MARAFA HEALTH CENTRE	17	MALINDI-A
318.	MAREKEBUNI DISPENSRY	2	MALINDI-A
319.	MARERENI DISPENSARY	6	MALINDI-A
320.	MARIAKANI SUB-DISTRICT HOSPITAL	60	MOMBASA-A
321.	MARIE STOPES HOSPITAL (K) MOMBASA	10	MOMBASA-C
322.	MARY IMMACULATE MATERNITY & DISP.	17	MOMBASA-B
323.	MATOLANI DISPENSARY	1	MALINDI-A
324.	MATSANGONI MODEL HEALTH CENTRE	20	MTWAPA-A
325.	MAZUMALUME DISPENSARY	2	UKUNDA-A
326.	MBUANI DISPENSARY	9	UKUNDA-A
327.	MBUGINI DISPENSARY	1	UKUNDA-A
328.	MEDINA DIAGNOSTIC LIMITED HOLA	32	HOLA-C
329.	MEWA MEDICAL CENTRE	44	MOMBASA-C
330.	MIDOINA DISPENSARY	1	MALINDI-A
331.	MIZIJINI DISPENSARY	2	MALINDI-A
332.	MLA LEO HEALTH CENTRE	18	MOMBASA-C
333.	MOI HOSPITAL-VOI	88	VOI-A
334.	MOMBASA HOSPITAL ASSOCIATION	80	MOMBASA-C
335.	MPEKETONI SUB-DISTRICT	48	LAMU-A

	HOSPITAL		
336.	MSAMBWENI DISTRICT HOSPITAL	106	UKUNDA-A
337.	MTONDIA DISPENSARY	2	MTWAPA-A
338.	MTWAPA HEALTH CENTRE	6	MTWAPA-A
339.	MTWAPA MEDICAL CLINIC & NURS. HOME	8	KILIFI-B
340.	MUHAKA DISPENSARY	2	UKUNDA-A
341.	MWALUPHAMBA DISPENSARY	4	UKUNDA-A
342.	MWANGATINI DISPENSARY	1	MALINDI-A
343.	MZIZIMA DISPENSARY	3	UKUNDA-A
344.	NAIROBI HOMES NURSING HOME	16	MOMBASA-C
345.	NEW WANANCHI MATERNITY & NURS. HOME	10	MTWAPA-B
346.	NGAO HOSPITAL –TANA RIVER	68	HOLA-A
347.	NGERENYA DISPENSRY	4	MTWAPA-A
348.	NJUKINI HEALTH CENTRE	7	VOI-A
349.	PABLO HORSTMAN HEALTH CENTRE	10	LAMU-B
350.	PALAKUMI DISPENSARY	1	MALINDI-A
351.	PANDYA MEMORIAL HOSPITAL – MOMBASA	95	MOMBASA-C
352.	PORT REITZ CHEST HOSPITAL	121	MOMBASA-A
353.	PWANI MATERNITY & NURSING HOME	12	MTWAPA-C
354.	RABAI RURAL HEALTH DEMONSRATION CTR	22	MOMBASA-A
355.	RIFLOT MEDICAL CENTRE	15	VOI-C
356.	ROKA MAWENI DISPENSARY	10	KILIFI-A
357.	SOKOKE DISPENSARY	1	MALINDI-A
358.	SABAKI DISPENSARY	1	MALINDI-A
359.	SAGALLA HEALTH CENTRE	20	VOI-A
360.	SAYYID FATMAH HOSPITAL, KISAUNI	38	MOMBASA-C
361.	HOMELLA DISPENSARY	2	MALINDI-A
362.	SOSONI DISPENSARY	6	MALINDI-A

363.	ST. JOSEPH SHELTHER OF HOPE HLTH CENTRE	140	MOMBASA-B
364.	ST. LUKE HOSPITAL KALOLENI (MOMBASA)	150	MOMBASA-B
365.	ST. THOMAS MATERNITY HOSPITAL	12	UKUNDA-B
366.	STAR HOSPITAL	28	MALINDI-C
367.	TAVETA DISTRICT HOSPITAL	105	VOI-A
368.	TAWFIQ HOSPITAL	96	MALINDI-C
369.	THE RIVIER JORDAN MEDICAL CENTRE	12	VOI-B
370.	THE SOFIAZ MEDICAL CLINICS	20	VOI-B
371.	TUDOR HEALTH CARE	15	MOMBASA-C
372.	UKUNDA MEDICAL CENTRE	10	UKUNDA-C
373.	VIGURUNGA DISPENSARY	10	UKUNDA-C
374.	VIPINGO HEALTH CENTRE	16	MTWAPA-A
375.	VITENGENI HEALTH CENTRE	13	MTWAPA-A
376.	VISTANGALAWENI DISPENSARY	1	UKUNDA-A
377.	WATAMU NURSING HOME	10	MALINDI-B
378.	WESU DISTRICT HOSPITAL	172	VOI-A
379.	ALHAYA NURSING HOME	18	WAJIR-B
380.	ALLIANCE MEDICAL CENTRE	20	GARISSA-C
381.	BALAMBALA SUB-COUNTY HOSPITAL	30	GARISSA-A
382.	BLUE LIGHT NURSING HOME	12	MANDERA-C
383.	BUNA NURSING HOME	18	WAJIR-C
384.	CAMEL MEDICAL CENTRE	30	WAJIR-B
385.	DISTRICT HOSPITAL MANDERA	53	MANDERA-A
386.	EASTGATE MEDICAL CENTRE	6	MANDERA-B
387.	ELDAS HEALTH CENTRE	20	WAJIR-A
388.	EXCEL HEALTH SERVICES, GARISSA	12	GARISSA-B
389.	GARISSA MOTHER & CHILD HLTH CARE	4	GARISSA-B
390.	GARISSA NURSING HOME	18	GARISSA-C

391.	HULUGHO SUB-DISTRICT HOSPITAL	20	GARISSA-A
392.	IFTTIN SUB-DISTRICT HOSPITAL	30	GARISSA-A
393.	IJARA DISTRICT HOSPITAL	20	GARISSA-A
394.	MANDERA WEST NURSING HOME	15	MANDERA-B
395.	MEDINA DIAGNOSTIC LIMITED	10	GARISSA-C
396.	PROVINCIAL GENERAL HOSPITAL GARISSA	162	GARISSA-A
397.	SAMAAD HOSPITAL	30	WAJIR-B
398.	IMAHO MCH/FP CLINIC	7	GARISA-B
399.	TAKABA DISTRICT HOSPITAL	20	MANDERA-A
400.	TWAHEED COMMUNITY NURSING HOME	40	GARISSA-C
401.	WAJIR DISTRICT HOSPITAL (WAJIR)	79	WAJIR-A
402.	WOODLANDS HOSPITAL	20	MANDERA-C
403.	ZONAL ANNEX NURSING HOME	24	MANDERA-B
404.	ACORN COMMUNITY HOSPITAL	13	HOMABAY-B
405.	AFYA HEALTH SYSTEMS ORGANIZATION	8	HOMABAY-C
406.	AHERO SUB-DISTRICT HOSPITAL	62	KISUMU-A
407.	ALPHA COMMUNITY & NURSING HOME	30	MIGORI-B
408.	AMBIRA SUB-COUNTY HOSPITAL	25	SIAYA-A
409.	AWASI CATHOLIC MISSION DISPENSARY	17	KISUMU-B
410.	AWENDO SUB-DISTRICT HOSPITAL	7	MIGORI-A
411.	BAMA. A. NURSING & MATERNITY HOME	20	SIAYA-B
412.	BONDO MEDICAL CENTRE	31	SIAYA-B
413.	BONDO SUB-COUNTY HOSPITAL	38	SIAYA-B
414.	BOSONGO MEDICAL CENTRE	35	KISIII-B
415.	BOYA RURAL NURSING	114	KISUMU-C

	HOME		
416.	CHEMELIL SUGAR COMPANY HLTH CENTRE	3	KISUMU-A
417.	CHRISTA MARIANNE HOSPITAL HLTH CTRQ	143	KISIII-B
418.	COPTIC NURSING HOME – MASENO	15	KISUMU-B
419.	DIVINE MERCY ALUOR HEALTH CENTRE	23	SIAYA-B
420.	DOPHIL NURSING & MATERNITY HOME	29	SIAYA-B
421.	ETAGO SUB-DISTRICT HOSPITAL	14	KISIII-A
422.	GESUUS SUB-DISTRICT HOSPITAL	17	KISIII-A
423.	GETEMBE NURSING HOME	83	KISIII-B
424.	GUCHA COTTAGE MATERNITY & NURS. HOME	10	KISIII-B
425.	GUCHA DISTRICT HOSPITAL	25	KISIII-A
426.	AGA KHAN DISP. & MATERNITY HOSPITAL	76	KISUMU-C
427.	HEMA HOSPITAL	245	KISIII-B
428.	HOLY FAMILY CATHOLIC MISSION HOSPITAL	18	KISUMU-B
429.	HOMABAY DISTRICT HOSPITAL	294	HOMABAY-A
430.	HOMEGROUND MEDICAL CENTRE	15	SIAYA-B
431.	INUKA NURSING HOME	20	SIAYA-B
432.	ISANA NURSING HOME	14	KISIII-B
433.	ISEBANIA SUB-DISTRICT HOSPITAL	24	MIGORI-A
434.	JALARAM NURSING & MATERNITY HOME	97	KISUMU-B
435.	JANEIRO NURSING HOME	77	HOMABAY-B
436.	KENDU MISSION HOSPITAL	164	OYUGIS-B
437.	KISII LEVELV HOSPITAL	450	KISIII-A
438.	KISUMU DISTRICT HOSPITAL	565	KISUMU-A
439.	KOMBEWA DISTRICT HOSPITAL	54	KISUMU-A

440.	KURIA DISTRICT HOSPITAL	35	MIGORI-A
441.	LENMEK HOSPITAL	60	KISIII-B
442.	MADIANY DISTRICT HOSPITAL	16	SIAYA-A
443.	MAMA PILISTA HEALTH CENTRE	15	KISUMU-B
444.	MAMAS NURSING HOME-RIAT	38	HOMABAY-B
445.	MASENO HOSPITAL	150	KISUMU-B
446.	MATANGWE COMMUNITY MEDICAL CENTRE	11	SIAYA-A
447.	MATATA NURSING & MATERNITY HOME	60	OYUGIS-B
448.	MIGORI DISTRICT HOSPITAL	45	MIGORI-A
449.	MILIMANI MATERNITY HOSPITAL	15	KISUMU-C
450.	MOTHER SOLBRIT HEALTH CENTRE	12	MIGORI-B
451.	MT. SINAI HOSPITAL	39	KISUMU-B
452.	NIGHTINGALE MATERNITY & NURSING HOME	40	KISUMU-B
453.	NYABONDO CENTRE FOR THE DISABLED	36	KISUMU-B
454.	NYAMIRA DISTRICT HOSPITAL	242	NYAMIRA-A
455.	NYAMIRA MATERNITY & NURSING HOME	30	NYAMIRA-B
456.	NYANGENA HOSPITAL	150	KISIII-B
457.	NYANGOMA SUB-COUNTY HOSPITAL	10	KISUMU-A
458.	NYANSIONGO MATERNITY & NURS. HOME	40	NYAMIRA-B
459.	OASIS DOCTORS PLAZA – KISUMU	20	KISUMU-C
460.	OASIS SPECIALIST HOSPITAL	20	KISIII-C
461.	OGEMBO MEDICAL CENTRE	30	KISIII-B
462.	OGRA MEDICAL CENTRE & COMMUNITY	30	KISUMU-B
463. ‘	OJELE MEMORIAL	40	MIGORI-B

	HOSPITAL		
464.	ORUBA NURSING & MATERNITY HOME	91	MIGORI-B
465.	OWENS MATERNITY & NURISNG HOME	30	SIAYA-B
466.	PASTOR MACHAGE MEMORIAL HOSPITAL	74	MIGORI-B
467.	PROVINCIAL GENERAL HOSPITAL – KISUMU	461	KISUMU-A
468.	RABUOR SUB-COUNTY HOSPITAL	8	KISUMU-A
469.	RACHAR SUGAR BELT NURSING HOME	40	KISUMU-C
470.	RACHUONYO DISTRICT HOSPITAL	27	HOMABAY-A
471.	RAM MEMORIAL HOSPITAL	60	KISIII-C
472.	RANGALA MISSION HOSPITAL	60	KISIII-C
473.	RAPOGI COMMUNITY HEALTH & MAT. CTR	30	MIGORI-B
474.	RONGO SUB-DISTRICT HOSPITAL	26	MIGORI-A
475.	ROSEWOOD NURSING HOME	25	MIGORI-B
476.	SAGAM COMMUNITY HOSPITAL	L55	SIAYA-B
477.	SAMJOMEN NURSING HOME	15	MIGORI-B
478.	SANTA JANE NURSING HOME & MATERNITY	46	KISUMU-B
479.	SEGA COTTAGE HOSPITAL	40	SIAYA-B
480.	SIAYA COUNTY REFERRAL HOSPITAL	227	SIAYA-A
481.	SORI LAKESIDE NURSING HOME	114	MIGORI-B
482.	ST. AKIDIVA MEMORIAL HOSPITAL	30	MIGORI-B
483.	ST. MARY'S MISSION HEALTH CENTRE	20	MBITA-B
484.	ST. AKIDIVA MINDIRA MABERA	125	MIGORI-B
485.	ST. CONSOLATA KISUMU HOSPITAL	23	KISUMU-B

486.	ST. ELIZABETH CHIGA DISPENSARY	21	KISUMU-B
487.	ST. ELIZABETH HOSPITAL LWAK	40	SIAYA-B
488.	ST. ELIZABETH NDISI HEALTH CENTRE	21	HOMABAY-B
489.	ST. JOSEPH'S HOSPITAL (NYABONDO)	167	KISUMU-B
490.	ST. JOSEPH'S MISSION HOSPITAL – MIGORI	164	MIGORI-B
491.	ST. LUKE'S MEDICAL CENTRE	16	KISUMU-C
492.	ST. MONICA'S HOSPITAL	80	KISUMU-C
493.	ST. CAMILLUS MISSION HOSPITAL	64	MIGORI-B
494.	ST. PAUL'S MISSION HOSPITAL	42	HOMABAY-B
495.	ST. VINCENT DE PAUSL HEALTH CENTRE	41	SIAYA-B
496.	STAR CHILDREN'S HOSPITAL	30	KISUMU-B
497.	STEKEN NYAROMBO MAT. & NURSING HOME	23	MIGORI-B
498.	SUBA DISTRICT HOSPITAL	31	MBITA-A
499.	SUNA MAT & NURSING HOME	30	MIGORI-B
500.	TABAKA MISSION HOSPITAL – KISIII	240	KISIII-B
501.	PORT FLORENCE COMMUNITY HOSPITAL	40	KISUMU-B
502.	TOMBE MEDICARE CENTRE	20	NYAMIRA-B
503.	VICTORIA HOSPITAL – KISUMU	23	KISUMU-A
504.	WORLD YTH INTERNATIONAL MAMA ODEDE HLTH COMPLEX	18	SIAYA-B
505.	YALA SUB DISTRICT HOSPITAL	20	SIAYA-A
506.	AIC KAPSOWAR HOSPITAL –ELDOREDT	130	ITEN-B
507.	AIC. LITEIN COTTAGE HOSPITAL – KERICHO	57	KERICHO-B
508.	AIC. KIJABE HOSPITAL	22	NAIVASHA-B

	NAIVASHA MED. CTR		
509.	AKEMO VALLEY MATERNITY & NURS. HOME	38	KILGORIS-B
510.	ALEXANDRIA CANCER CTR & PALLIATIVE CARE HOSPITAL	40	ELDORET-C
511.	ARCHERS POST HEALTH CENTRE	31	NANYUKI-B
512. ‘	ARROR HEALTH CENTRE	32	ITEN-A
513.	ASSISI NURSING HOME	15	KITENGELA-B
514.	ATHI-RIVER MEDICAL SERVICES	15	KITENGELA-B
515.	ATHI –RIVER SHALOM COMMUNITY HOSPITAL	278	KITENGELA-B
516.	BAHATI DISTRICT HOSPITAL	54	NAKURU-A
517.	BARAKA MATERNITY NURSING HOME	20	NAKURU-C
518.	BARATON JEREMIC COMMUNITY MED. CTR	50	KAPSABET-C
519.	BARINGO DISTRICT HOSPITAL (KABARNET)	120	KABARNET-A
520.	BARENT MEMORIAL MEDICAL CENTRE	14	KABARNET-B
521.	BETHANIA MEDICAL CENTRE	19	NAKURU-B
522.	BISHOP EDDIE LONG BONDENI HOSPITAL	65	NAKURU-A
523.	BURNT FOREST SUB-DISTRICT HOSPITAL	16	ELDORET-A
524.	CAREGIVERS COMMUNITY HOSPITAL	11	KAJIADO-B
525.	CATHOLIC HOSPITAL WAMBA MARALAL	L59	MARALAL-B
526.	CHARITY MEDICAL CENTRE	30	NANYUKI-B
527.	CHEBORGEI HEALTH CENTRE	10	SOTIK-A
528.	CHEMASE HEALTH CENTRE	20	KAPSABET-A
529.	CHEMOSOT HEALTH CENTRE	6	SOTIK-A
530.	CHEPKANGA HEALTH	8	ELDORET-A

	CENTRE		
531.	CHEPKIGEN HEALTH CENTRE	25	ELDORET-A
532.	CHEPKORIO HEALTH CENTRE	12	ITEN-A
533.	CHEPTIL DISPENSARY MATERNITY WING	2	KAPSABET-A
534.	CHERANGANY NURSING HOME	27	KITALE-C
535.	CHESONGOCH HEALTH CENTRE	49	ITEN-B
536.	CONSOLATA MAT. & CHILDREN'S HOSPITAL	25	NANYUKI-B
537.	COUNTY MEDICARE LIMITED	10	MARALAL-B
538.	EGERTON UNIVERSITY HEALTH CENTRE	30	NAKURU-B
539.	ELBURGON NYAYO HOSPITAL	72	NAKURU-A
540.	ELDAMA RAVINE SUB-DISTRICT HOSPITAL	29	KABARNET-A
541.	ELDORET HOSPITAL	136	KABARNET-A
542.	ELGON VIEW HOSPITAL	42	ELDORET-C
543.	EMINING HEALTH CENTRE	10	KABARNET-A
544.	ENDO HEALTH CENTRE	36	ITEN-A
545.	ENKITOK JOY NURSING HOME	15	ONG. RONGAI-C
546.	ENTARARA HEALTH CENTRE	20	LOITOKITOK-A
547.	ENTASOPIA HELATH CENTRE	10	ONG. RONGAI-A
548.	ESAGERI HEALTH CENTRE	7	KABARNET-A
549.	EVANS SUNRISE MEDICAL CENTRE	44	NAKURU-B
550. '	FAMILY HEALTH CARE MEDICAL CENTRE	6	ELDORET-C
551.	FATIMA MATERNITY HOSPITAL	32	ONG. RONGAI-C
552.	FAVOUR MEDICAL SERVICES	6	KAJIADO-B
553.	FINLAYS MEDICAL CENTRE	44	NAIVASHA-B
554.	FOUNTAIN MEDICAL CENTRE	14	NAKURU-B

555.	FOUNTAIN HEALTH CARE	24	ELDORET-C
556.	GILGIL SUB-DISTRICT HOSPITAL	15	NAIVASHA-A
557.	GOLDENLIFE VICTOR'S HOSPITAL LIMITED	50	NAIVASHA-B
558.	GOOD HOPE MEDICAL CENTRE	15	NANYUKI-C
559.	IMURTOT HEALTH CENTRE	18	LOITOKITOK-A
560.	ITEN DISTRICT HOSPITAL	17	ITEN-A
561.	KAIBOI MISSIN HEALTH CENTRE	34	KAPSABET-B
562. '	KAJIADO DISTRICT HOSPITAL	100	KAJIADO-A
563.	KAKUMA MISSION HOSPITAL	56	LODWAR-B
564.	KAPENGURIA DISTRICT HOSPITAL	286	KAPENGURIA-A
565.	KAPKATET DISTRICT HOSPITAL	46	KERICHO-A
566.	KAPKOI HEALTH CENTRE	15	ITEN-B
567.	KAPSABET DISTRICT HOSPITAL	124	KAPSABET-A
568.	KAPSARA DISTRICT HOSPITAL	40	KITALE-A
569.	KAPTARAKWA SUB-DISTRICT HOSPITAL	24	ELDORET-A
570.	KAREN HOSPITAL LIMITED	102	ONG.RONGAI-C
571.	KENLANDS HEALTH SERVICES MAILI SITA	16	NAKURU-B
572.	KERICHO DISTRICT HOSPITAL	142	KERICHO-A
573.	KERICHO NURSING HOME LIMITED	142	KERICHO-B
574.	KERINGET HEALTH CENTRE	12	NAKURU-A
575.	KIMALEL HELATH CENTRE	24	KABARNET-A
576.	KIMANJO SUB-COUNTY HOSPITAL	24	NANYUKI-A
577.	KIMININI COTTAGE HOSPITAL	50	KITALE-B
578.	KIPCHIMCHIM MISSION	40	KERICHO-B

	HOSPITAL		
579.	KIPWASTUIYO HEALTH CENTRE	15	SOTIK-A
580.	KITALE DISTRICT HOSPITAL	167	KITALE-A
581.	KITALE NURSING HOME	62	KITALE-C
582.	KITENGELA MEDICAL SERVICES	20	KAJIADO-B
583.	KOBUJOI MISSION HOSPITAL	30	NANDI-HILLS-B
584.	KOCH.HOLWA SUB-DISTRICT HOSPITAL	20	ELDORET-A
585.	LANGAS RACECOURSE HEALTH CENTRE	5	ELDORET-B
586.	LANGATA HOSPITAL	133	ONG. RONGAI-C
587.	LELMOLOK NURSING HOME	13	ELDORET-B
588.	LODWAR DISTRICT	38	LODWAR-A
589.	LOITOKITOK DISTRICT HOSPITAL	150	KAJIADO-A
590.	LOKITANG HOSPITAL LODWAR	12	LODWAR-A
591.	LONDIANI DISTRICT HOSPITAL	39	KERICHO-A
592.	LONGISA COUNTY REFERRAL HOSPITAL	78	BOMET-A
593.	LOPIDING DISTRICT HOPSITAL	150	LODWAR-A
594.	MAASAI NURSING HOME	26	NAROK-C
595.	MAGADI SODA COMPANY HOSPITAL	50	ONG.RONGAI-C
596.	MAKADARA HEALTH CARE & ATHI RIVER	18	KITENGEAL-B
597.	MARALAL DISTRICT HOSPITAL	59	MARALAL-A
598.	MARIGAT SUB-DISTRICT HOSPITAL	12	KABARNET-A
599.	MARYHILL MEDICAL CENTRE	12	NYAHURURU-B
600.	MATASIA HEALTH CLINIC	23	ONG. RONGAI-C
601.	MEDIHEAL HOSP & FERTILITY CENTRE	18	ELDORET-C

602.	MEDIHEAL HOSPITAL	65	NAKURU-C
603.	MERCY HOSPITAL ELDAMA RAVINE	79	KABARNET-B
604.	METEITEI SUB-DISTRICT HOSPITAL	24	NANDI HILLS-A
605.	MOGIL HEALTH CENTRE	30	ITEN-A
606.	MOGOTIO SUB-COUNTY HOSPITAL	22	NAKURU-A
607.	MOI TEACHING & REFERRAL HOSPITAL	420	ELDORET-C
608.	MOLO DISTRICT HOSPITAL	130	NAKURU-A
609.	MOSORIOT RURAL HEALTH TRAINING CLINIC	15	KAPSABET-A
610.	MT. OLIVE SINAI HOSPITAL LIMITED	32	ONG. RONGAI-C
611.	MT. LONGONOT MEDICAL SERVICES LTD	27	NAIVASHA-B
612.	MULEMI MATERNITY NURSING HOME	10	NAIVASHA-B
613.	NAIVASHA DISTRICT HOSPITAL	66	NAIVASHA-A
614.	NAIVASHA QUALITY HEALTH CARE LTD	15	NAIVASHA-B
615.	NAKURU HEART CENTRE	60	NAKURU-C
616.	NAKURU NURSING & MATERNITY HOME	65	NAKURU-C
617.	NAKURU WAR MEMORIAL HOSPITAL	16	NAKURU-C
618.	NANDI HILLS DISTRICT HOSPITAL	53	KAPSABET-A
619.	NANYUKI COTTAGE HOSPITAL	120	NANYUKI-C
620.	NANYUKI DISTRICCT HOSPITAL	102	NANYUKI-A
621.	NANYUKI MATERNITY & NURSING HOME	159	NANYUKI-C
622.	NAROK COTTAGE HOSPITAL	17	NAROK-B
623.	NAROK COUNTY REFERRAL HOSPITAL	99	NAROK-A
624.	NASHA LENGOT MEDICAL CENTRE	36	NAKURU-B
625.	NDARAGWA HEALTH CENTRE	5	NYAHURURU-A

626.	NGONG RAPHA HOSPITAL	5	ONG-RONGAI-B
627.	NJORO HEALTH CENTRE	16	NAKURU-A
628.	NYAHURURU DISTRICT HOSPITAL	105	NANYUKI-A
629.	NYAHURURU PRIVATE HOSPITAL	35	NANYUKI-C
630.	OLCHOBOSEI MEDICAL CENTRE	5	NAROK-B
631.	OLEGURUONE SUB-DISTRICT HOSPIAL	25	NAKURU-A
632.	OLJABET ANNEX MEDICAL & NURSING HOME	25	NANYUKI-B
633.	OLJABET MEDICAL CENTRE	25	NANYUKI-B
634.	OLKIRAMATIAN DISPENSARY	2	KAJIADO-A
635.	ORTUM MISSIN HOSPIAL – KITALE	104	KAPENGURIA-B
636.	P.C.E.A NAKURU WEST HOSPITAL	8	NAKURU-B
637.	PLATEAU MISSION HOSPITAL – ELDORET	77	ELDORET-B
638.	POLY-CLINIC HOSPITAL	40	NAIVASHA-B
639.	PROVINCIAL GEN. HOSP. ANNEX NAKURU	482	NAKURU-A
640.	RAPHA MEDICAL CENTRE NAKURU	8	NAKURU-B
641.	REALE MEDICAL CENTRE	127	ELDORET-C
642.	RIFT VALLEY PROV. GENERAL HOSPITAL	580	NAKURU-A
643.	ROMBO MISSION HOSPIAL	25	KAJIABDO-B
644.	RORET SUB-DISTRICT HOSPITAL	50	SOTIK-A
645.	SEGERA MISSIN CLINIC	5	NANYUKI-B
646.	SENIORS MEDICAL SERVICES	15	KITENGELA-B
647.	SEREOLIPI HEALTH CENTRE	3	MARALAL-A
648.	SIGOR SUB-DISTRICT HOSPITAL	31	BOMET-A
649.	SILOAM HOSPIAL	70	KERICHO-B
650.	SINAI HOSPITAL	32	ONG.RONGAI-

			C
651.	SIPILI MATERNITY & NURSING HOME	16	NANYUKI-B
652.	SISTER FRIDA'S MEDICAL CENTRE	18	KITALE-B
653.	SISTER MAZZOLDI DISPENSARY & MATRNTY	7	NAKURU-B
654.	SOY HEALTH CENTRE	8	ELDORET-A
655.	ST. ELIZABETH MEDICAL CENTRE	32	NAKURU-C
656.	ST. ANTHONY HEALTH CENTRE	15	NAKURU-B
657.	ST. BRIGITAS CATHOLIC YA MUMBI	16	ELDORET-B
658.	ST. CLARES MISSION HOSPITAL –KAPLONG	220	SOTIK-B
659.	ST. JOSEPH MISSION HOSPITAL	50	KAPSAEBT-B
660.	ST. JOSEPH'S HOSPITAL – KILGORIS	200	NAROK-B
661.	ST. JOSEPH'S NURSING & MATERNITY HOME	22	NAKURU-B
662.	ST. LEONARD'S HOSPITAL LIMITED	124	KERICHO-B
663.	ST. PETER'S CLAVER RC DISPENSARY	5	ONG. RONGAI-B
664.	TAMBACH DISTRICT HOSPITAL	72	ITEN-A
665.	TAMBACH SUB-DISTRICT HOSPITAL	72	ELDORET-A
666.	TENGES HEALTH CENTRE	24	KABARNET-A
667.	TENWEK HOSPITAL BOMET (SOTIK)	299	BOMET-B
668.	THE LIGHT NAIVASHA DOCTORS PLAZA	5	NAIVASHA-C
669.	NAIROBI WOMEN'S HOSPITAL – KITENGELA	21	KITENGELA-C
670.	TIMBOROA HEALTH CENTRE	5	ELDAMA RAVIN-A
671.	TRANSMARA MEDICARE HOSPITAL	50	KILGORIS-B
672.	TRANSMARA WEST SUB-COUNTY HOSPITAL	32	KILGORIS-A
673.	TRINITY CARE CENTRE	29	ONG.RONGAI-

	LIMITED		C
674.	UASIN GISHU DISTRICT HOSPITAL	5	ELDORET-A
675.	UNILEVER TEA (K) CENTRAL HOSPITAL	50	KERICHO-B
676.	VALLEY HOSPITAL LIMITED	72	NAKURU-B
677.	WAMA NURSING HOME	8	ONG. RONGAI-B
678.	WANANCHI JAMII MATERNITY & NURSING	12	ONG. RONGAI-B
679.	AHMADIYA MUSLIM HOSPITAL	20	MUMIA-B
680.	ALUPE HOSPITAL – BUSIA	102	BUSIA-A
681.	APPEX HOSPITL	20	BUSIA-B
682.	BANJA HEALTH CENTRE	18	VIHIGA-A
683.	BUKAYA MEDICAL CENTRE	20	MUMIAS-C
684.	BUNGOMA DISTRICT HOSPITAL	216	BUNGOMA-A
685.	BUSIA DISTRICT HOSPITAL	13	BUSIA-A
686.	BUTERE DISTRICT HOSPITAL	34	MUMIAS-A
687.	BUTULA MISSION HOSPITAL- BUSIA	42	BUSIA-B
688.	CENTRAL MATERNITY & NURSING HOME	56	KAKAMEGA-B
689.	ELGON VIEW MEDICAL COTTAGE	16	BUNGOMA-B
690.	EMUHAYA SUB-DISTRICT HOSPITAL	K30	VIHIGA-A
691.	FRIENDS LUGULU HOSPITAL	101	BUNGOMA-B
692.	HOLY FAMILY HOSPIAL – NANGINA	78	BUSIA-B
693.	ITANDO MISSION OF HOPE & HEALTH CARE	123	KAKAMEGA-B
694.	JUMUIA FRIENDS HOSPITAL	75	VIHIGA-B
695.	KAKAMEGA COUNTY GENERAL HOSPITAL	322	KAKAMEGA-A
696.	KAKAMEGA ORTHOPAEDIC HOSPITAL	10	KAKAMEGA-B
697.	KARI (TRC) ALUPE	16	MUMIAS -C

	HOSPITAL-BUSIA		
698.	KIMA MISSION HOSPITAL	50	VIHIGA-B
699.	KIMILILI DISTRICT HOSPITAL	149	BUNGOMA-A
700.	KORY FAMILY HOSPITAL	15	BUNGOMA-B
701.	LIKUYANI SUB-COUNTY HOSPITAL	50	KAKAMEGA-A
702.	LUMAKANDA COUNTY HOSPITAL	12	KAKAMEGA-A
703.	LUMINO MATERNITY & NURSING HOME	25	KAKAMEGA-B
704.	LUPE MEDICAL CENTRE	32	KAKAEMGA-B
705.	MAKUNGA RURAL HLTH DEMONSRATION CTR	13	MUMIAS-A
706.	MALAVA COUNTY HOSPITAL	66	KAKAMEGA-A
707.	MANYALA SUB-COUNTY HOSPITAL	26	MUMIAS-A
708.	MAUTUMA SUB-COUNTY HOSPITAL	26	MUMIAS-A
709.	MT. ELGON COUNTY HOSPITAL	36	BUNGOMA-A
710.	MUNGOMA HOSPITAL	15	VIHIGA-B
711.	MWIHILA MISSION HOSPITAL (YALA)	111	MUMIAS-B
712.	NALA MATERNTITY & NURSING HOME	40	KAKAMEGA-B
713.	NAMASOLI HEALTH CENTRE	26	MUMIAS-B
714.	NAVAKHOLO SUB-COUNTY HOSPITAL	16	KAKAMEGA-A
715.	NEW BUSIA MATERNITY & NURSING HOME	101	BUSIA-C
716.	NZOIA MEDICAL CENTRE	20	BUNGOM-B
717.	PORT VICTORIA SUB-DISTRICT HOSPITAL	35	BUSIA-A
718.	SABATIA EYE HOSPITAL	40	VIHIGA-C
719.	SHIBWE SUB-COUNTY HOSPITAL	15	KAKAMEGA-A
720.	ST. DAMIANO MEDICAL HOSPITAL	50	BUNGOMA-B
721.	ST. ELIZABETH HOSPIAL - MUKUMU	233	KAKAMEG-B
722.	ST. MARY'S HOSPITAL –	220	MUMIAS-B

	MUMIAS		
723.	TANAKA NURSING HOME	30	BUSIA-B
724.	TESO DISTRICT HOSPITAL	27	BUSIA-A
725.	THE GREAT LACKES MEDICAL CENTRE	30	VIHIGA-B
726.	VIHIGA DISTRICT HOSPITAL	145	VIHIGA-A
727.	WEBUYE DISTRICT HOSPITAL	40	BUNGOMA-A

Source: NHIF Records, 2016

Appendix IV: Questionnaire and Interview guide question codes

Questionnaire codes

A1	Name of hospital
A2	Length of Service of the Respondent as a chief manager
A3	How would you describe this hospital's business strategy
Bi1	The hospital engages in optimal resource capacity utilization
Bi2	The hospital is adequately equipped with state-of-the-art technology solutions
Bi3	The suppliers of goods and services are reliable and offer favorable terms of contract
Bi4	The hospital facility records impressive in/outpatient flow
Bi5	The institution's cost of factors of production is contained
Bi6	The hospital procures supplies in bulk
Bii1	The hospital has partners with like-minded stakeholders, for instance, the insurance and pharmaceutical firms
Bii2	The hospital has in place systems and procedures to expedite service delivery
Bii3	The hospital has a strong brand image within the industry
Bii4	The hospital places a premium in research and development
Bii5	The hospital has a corporate culture that provides an enabling environment for the staff and the client
Bii6	The hospital partners with local and international research and education institutions to ensure the provision of high-quality services
Biii1	The hospital has put in place facilities to treat different health conditions
Biii2	The hospital has a reputation for handling non-communicable diseases

Biii3	The facility is a referral institution for the diplomatic fraternity within the East African region
Biii4	The hospital focuses on children
Biii5	The pricing structure is attractive to the clientele segment
Biv1	There exist similar health providers in the vicinity
Biv2	The medical price structure of the hospitals has continued to secure significant customer flow
Biv3	The rising inflation has increased the cost of delivering the services
Biv4	The hospital has efficient technology solutions that has secured a competitive edge over its competitors
Bv1	The hospital has an average of 50% bed occupation at any time
Bv2	The hospital has high rate of in/out patient flow due to outstanding service delivery
Bv3	The hospital receives an average of 50 referrals per day
Bv4	The hospital is a frequent recipient of service accreditation awards
Bv5	The average outpatient treatment turnaround time is less than three hours

Interview guide codes

CEO1	Classification of the hospital
CEO2	For how long have you been at the helm of this health facility?
CEO3	Kindly share with me the vision and mission of this hospital
CEO4	Do you consider the cost of your operating costs to be reasonable and sustainable? Briefly share how you ensure sustainability of your operating cost.
CEO5	Which business strategy does your hospital use in managing the healthy facility? How does this strategy influence your market share in the hospital industry?
CEO6	How different are your services from your competitors? Would you consider your services unique in the industry? If yes, then what's your competitive advantage?
CEO7	Briefly describe your turn-around time in out-patient management.
CEO8	Does your hospital partner with employers to provide medical services to their

employees? If so to what extent?

CEO9 How has the business competition affected the operations of this hospital?

CEO10 Has your hospital been ISO standard certified? If yes, when was the first time? Has it ever been renewed? How about peer reviews by the stakeholders?

CEO11 Please briefly describe the kind of patients you frequently handle.

CEO12 Anything you wish to share and add to the interview pertaining to the performance of the health facility?

Appendix V: EFA rotated factor loadings matrix

V code	1	2	3	4	5	6	7	8
Bi1	.076	.164	-.040	.074	-.010	.831	.076	.163
Bi2	.343	.554	.246	.304	-.148	.094	-.138	.219
Bi3	.589	.103	-.075	.268	.259	.023	-.445	-.023
Bi4	.833	.092	-.107	.166	-.074	-.200	.086	.080
Bi5	.817	.107	.129	.136	.010	.319	.108	.023
Bi6	.477	.119	.223	.353	.569	-.008	-.065	.016
Bii1	.438	-.012	.062	.344	.494	-.408	.031	.266
Bii2	.823	-.011	.209	.180	.023	.138	.066	.007
Bii3	.654	.186	.184	-.033	.301	.168	-.027	.357
Bii4	-.053	.160	.832	-.002	.105	-.065	-.232	.135
Bii5	.231	-.202	.338	.008	-.085	.166	-.011	.774
Bii6	.264	-.012	.760	.003	-.061	-.142	.126	.173
Biii1	.240	.163	.205	.722	.156	.265	.091	.078
Biii2	.295	.175	-.110	.387	.243	.606	.029	-.118
Biii3	.010	.229	.579	.296	.266	.226	-.168	-.265
Biii4	.223	-.098	.041	.810	-.099	.033	.044	.071
Biii5	.116	.475	-.120	.615	-.087	-.025	.391	-.004
Biv1	-.021	-.341	.058	-.109	-.073	.015	.043	-.730
Biv2	.089	.109	.072	-.040	.704	.337	.344	.026
Biv3	-.099	.428	.012	-.232	.715	-.102	-.155	-.074
Biv4	.152	.774	-.016	-.153	.152	.220	.280	-.208
Bv1	.295	.401	.419	.011	-.096	.326	.534	.107
Bv2	.176	.358	.493	.245	.318	.059	.453	-.077
Bv3	.135	.742	.223	.103	.244	.021	.037	.138
Bv4	-.107	.628	.112	.152	.290	.294	.122	.235

Bv5	-.004	.108	-.200	.185	.096	.040	.742	-.055

Appendix VI: CFA factor loadings

V code	Variable	1	2	3	4	5
Bi1	The hospital engages in optimal resource capacity utilization	.312				
Bi2	The hospital is adequately equipped with state-of-the-art technology solutions	.637				
Bi3	The suppliers of goods and services are reliable and offer favorable terms of contract	.758				
Bi4	The hospital facility records impressive in/outpatient flow	.684				
Bi5	The institution's cost of factors of production is contained	.792				
Bi6	The hospital procures supplies in bulk	.756				
Bii1	The hospital has partners with like-minded stakeholders, for instance, the insurance and pharmaceutical firms		0.629			
Bii2	The hospital has in place systems and procedures to expedite service delivery		0.727			
Bii3	The hospital has a strong brand image within the industry		0.742			

Bii4	The hospital places a premium in research and development	0.560		
Bii5	The hospital has a corporate culture that provides an enabling environment for the staff and the client	0.672		
Bii6	The hospital partners with local and international research and education institutions to ensure the provision of high-quality services	0.674		
Biii1	The hospital has put in place facilities to treat different health conditions		0.765	
Biii2	The hospital has a reputation for handling non-communicable diseases		0.650	
Biii3	The facility is a referral institution for the diplomatic fraternity within the East African region		0.546	
Biii4	The hospital focuses on children		0.712	
Biii5	The pricing structure is attractive to the clientele segment		0.747	
Biv1	There exist similar health providers in the vicinity			-0.255
Biv2	The medical price structure of the hospitals has continued to secure significant customer flow			0.780
Biv3	The rising inflation has increased the cost of delivering the services			0.738

Biv4	The hospital has efficient technology solutions that has secured a competitive edge over its competitors	0.772	
Bv1	The hospital has an average of 50% bed occupation at any time		0.819
Bv2	The hospital has high rate of in/out patient flow due to outstanding service delivery		0.861
Bv3	The hospital receives an average of 50 referrals per day		0.745
Bv4	The hospital is a frequent recipient of service accreditation awards		0.760
Bv5	The average outpatient treatment turnaround time is less than three hours		0.372

Appendix VII: Durbin Watson tables

Durbin-Watson "d" statistic: Significance points of dL and dU at 0.05 level of significance

k'=number of explanatory variables excluding the constant term

obs. N	**k'= 1**		**k'= 2**		**k'= 3**		**k'= 4**		**k'= 5**		**k'= 6**		**k'= 7**	
	dL	**Du**	**dL**	**du**	**dL**	**Du**	**dL**	**du**	**dL**	**du**	**dL**	**du**	**dL**	**du**
6	**0.610**	**1.400**	-	-	-	-	-	-	-	-	-	-	-	-

7	**0.700**	**1.356**	**0.467**	**1.896**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
8	**0.763**	**1.332**	**0.559**	**1.777**	**0.368**	**2.287**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
9	**0.724**	**1.320**	**0.629**	**1.699**	**0.455**	**2.128**	**0.296**	**2.588**	**-**	**-**	**-**	**-**	**-**	**-**
10	**0.879**	**1.320**	**0.697**	**1.641**	**0.525**	**2.016**	**0.376**	**1.414**	**0.243**	**2.822**	**-**	**-**	**-**	**-**
11	**0.927**	**1.324**	**0.658**	**1.604**	**0.595**	**1.928**	**0.444**	**2.283**	**0.316**	**2.645**	**0.203**	**3.005**	**-**	**-**
12	**0.971**	**1.331**	**0.812**	**1.579**	**0.658**	**1.864**	**0.512**	**2.177**	**0.379**	**2.506**	**0.268**	**2.832**	**0.171**	**3.149**
13	**1.010**	**1.340**	**0.861**	**1.562**	**0.715**	**1.816**	**0.574**	**1.094**	**0.445**	**2.390**	**0.328**	**1.692**	**0.230**	**2.985**
14	**1.045**	**1.350**	**0.905**	**1.551**	**0.767**	**1.779**	**0.632**	**2.030**	**0.505**	**2.296**	**0.389**	**1.572**	**0.286**	**1.848**
15	**1.077**	**1.361**	**0.946**	**1.543**	**0.814**	**1.750**	**0.685**	**1.977**	**0.562**	**2.220**	**0.447**	**2.472**	**0.343**	**2.727**
16	**1.106**	**1.371**	**0.982**	**1.539**	**0.857**	**1.728**	**0.734**	**1.935**	**0.615**	**2.157**	**0.502**	**2.388**	**0.396**	**2.624**
17	**1.133**	**1.381**	**1.015**	**1.536**	**0.897**	**1.710**	**0.779**	**1.900**	**0.664**	**2.104**	**0.554**	**2.318**	**0.447**	**2.537**
18	**1.158**	**1.391**	**1.046**	**1.535**	**0.933**	**1.696**	**0.820**	**1.872**	**0.710**	**2.060**	**0.603**	**2.257**	**0.496**	**2.461**
19	**1.180**	**1.401**	**1.074**	**1.536**	**0.967**	**1.685**	**0.859**	**1.848**	**0.752**	**2.023**	**0.649**	**2.206**	**0.543**	**2.396**
20	**1.201**	**1.411**	**1.100**	**1.537**	**0.998**	**1.676**	**0.894**	**1.828**	**0.792**	**1.991**	**0.692**	**2.162**	**0.587**	**2.339**
21	**1.221**	**1.420**	**1.125**	**1.538**	**1.026**	**1.669**	**0.927**	**1.812**	**0.829**	**1.964**	**0.732**	**2.124**	**0.629**	**2.290**

22	1.2	1.4	1.1	1.5	1.0	1.6	0.9	1.7	0.8	1.9	0.7	2.0	0.6	2.2
	39	29	47	41	53	64	58	97	63	40	69	90	77	46
23	1.2	1.4	1.1	1.5	1.0	1.6	0.9	1.7	0.8	1.9	0.8	2.0	0.7	2.2
	57	37	68	43	78	60	86	85	95	20	04	61	15	08
24	1.2	1.4	1.1	1.5	1.1	1.6	1.0	1.7	0.9	1.9	0.8	2.0	0.7	2.1
	73	46	88	46	01	56	13	75	25	02	37	35	51	74
25	1.2	1.4	1.2	1.5	1.1	1.6	1.0	1.7	0.9	1.8	0.8	2.0	0.7	2.1
	88	54	06	50	23	54	38	67	53	86	68	12	84	44
26	1.3	1.4	1.2	1.5	1.1	1.6	1.0	1.7	0.9	1.8	0.8	1.9	0.8	2.1
	02	61	24	53	43	52	62	59	79	73	97	92	16	17
27	1.3	1.4	1.2	1.5	1.1	1.6	1.0	1.7	1.0	1.8	0.9	1.9	0.8	2.0
	16	69	40	56	62	51	84	53	04	61	25	74	45	93
28	1.3	1.4	1.2	1.5	1.1	1.6	1.1	1.7	1.0	1.8	0.9	1.9	0.8	2.0
	28	76	55	60	81	50	04	47	28	50	51	58	74	71
29	1.3	1.4	1.2	1.5	1.1	1.6	1.1	1.7	1.0	1.8	0.9	1.9	0.9	2.0
	41	83	70	63	98	50	24	43	50	41	75	44	00	52
30	1.3	1.4	1.2	1.5	1.2	1.6	1.1	1.7	1.0	1.8	0.9	1.9	0.9	2.0
	52	89	84	67	14	50	43	39	71	33	98	31	26	34
31	1.3	1.4	1.2	1.5	1.2	1.6	1.1	1.7	1.0	1.8	1.0	1.9	0.9	2.0
	63	96	97	70	29	50	60	35	90	25	20	20	50	18
32	1.3	1.5	1.3	1.5	1.2	1.6	1.1	1.7	1.1	1.8	1.0	1.9	0.9	2.0
	73	02	09	74	44	50	77	32	09	19	41	09	72	04
33	1.3	1.5	1.3	1.5	1.2	1.6	1.1	1.7	1.1	1.8	1.0	1.9	0.9	1.9
	83	08	21	77	58	51	93	30	27	13	61	00	94	91
34	1.9	1.5	1.3	1.5	1.2	1.6	1.2	1.7	1.1	1.8	1.0	1.8	1.0	1.9
	93	14	33	80	71	52	08	28	44	08	80	91	15	79
35	1.4	1.5	1.3	1.5	1.2	1.6	1.2	1.7	1.1	1.8	1.0	1.8	1.0	1.9
	02	19	43	84	83	53	22	26	60	03	97	84	34	67
36	1.4	1.5	1.3	1.5	1.2	1.6	1.2	1.7	1.1	1.7	1.1	1.8	1.0	1.9
	11	25	54	87	95	54	36	24	75	99	14	77	53	57

37	1.4	1.5	1.3	1.5	1.3	1.6	1.2	1.7	1.1	1.7	1.1	1.8	1.0	1.9
	19	30	64	90	07	55	49	23	90	95	31	70	71	48
38	1.4	1.5	1.3	1.5	1.3	1.6	1.2	1.7	1.2	1.7	1.1	1.8	1.0	1.9
	27	35	73	94	18	56	61	22	04	92	46	64	88	39
39	1.4	1.5	1.3	1.5	1.3	1.6	1.2	1.7	1.2	1.7	1.1	1.8	1.1	1.9
	35	40	82	97	28	58	73	22	18	89	61	59	04	32
40	1.4	1.5	1.3	1.6	1.3	1.6	1.2	1.7	1.2	1.7	1.1	1.8	1.1	1.9
	42	44	91	00	38	59	85	21	30	86	75	54	20	24
45	1.4	1.5	1.4	1.6	1.3	1.6	1.3	1.7	1.2	1.7	1.2	1.8	1.1	1.8
	75	66	30	15	83	66	36	20	87	76	38	35	89	95
50	1.5	1.5	1.4	1.6	1.4	1.6	1.3	1.7	1.3	1.7	1.2	1.8	1.2	1.8
	03	85	62	28	21	74	78	21	35	71	91	22	46	75
55	1.5	1.6	1.4	1.6	1.4	1.6	1.4	1.7	1.3	1.7	1.3	1.8	1.2	1.8
	28	01	90	41	52	81	14	24	74	68	34	14	94	61
60	1.5	1.6	1.5	1.6	1.4	1.6	1.4	1.7	1.4	1.7	1.3	1.8	1.3	1.8
	49	16	14	52	80	89	44	27	08	67	72	08	35	50
65	1.5	1.6	1.5	1.6	1.5	1.6	1.4	1.7	1.4	1.7	1.4	1.8	1.3	1.8
	67	29	36	62	03	96	71	31	38	67	04	06	70	43
70	1.5	1.6	1.5	1.6	1.5	1.7	1.4	1.7	1.4	1.7	1.4	1.8	1.4	1.8
	83	41	54	72	25	03	94	35	64	68	33	02	01	37
75	1.5	1.6	1.5	1.6	1.5	1.7	1.5	1.7	1.4	1.7	1.4	1.8	1.4	1.8
	98	52	71	80	43	09	15	39	87	70	58	01	28	34
80	1.6	1.6	1.5	1.6	1.5	1.7	1.5	1.7	1.5	1.7	1.4	1.8	1.4	1.8
	11	62	86	88	60	15	34	43	07	72	80	01	53	31
85	1.6	1.6	1.6	1.6	1.5	1.7	1.5	1.7	1.5	1.7	1.5	1.8	1.4	1.8
	24	71	00	96	75	21	50	47	25	74	00	01	74	29
90	1.6	1.6	1.6	1.7	1.5	1.7	1.5	1.7	1.5	1.7	1.5	1.8	1.4	1.8
	35	79	12	03	89	26	66	51	42	76	18	01	94	27
95	1.6	1.6	1.6	1.7	1.6	1.7	1.5	1.7	1.5	1.7	1.5	1.8	1.5	1.8
	45	87	23	09	02	32	79	55	57	78	36	02	12	27

10	**1.6**	**1.6**	**1.6**	**1.7**	**1.6**	**1.7**	**1.5**	**1.7**	**1.5**	**1.7**	**1.5**	**1.8**	**1.5**	**1.8**
0	**54**	**94**	**34**	**15**	**13**	**36**	**92**	**58**	**71**	**80**	**50**	**03**	**28**	**26**
15	**1.7**	**1.7**	**1.7**	**1.7**	**1.6**	**1.7**	**1.6**	**1.7**	**1.6**	**1.8**	**1.6**	**1.8**	**1.6**	**1.8**
0	**20**	**46**	**06**	**60**	**93**	**74**	**79**	**88**	**65**	**02**	**51**	**17**	**37**	**32**
20	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.8**	**1.7**	**1.8**	**1.7**	**1.8**	**1.6**	**1.8**
0	**58**	**78**	**48**	**89**	**38**	**99**	**28**	**10**	**18**	**20**	**07**	**31**	**97**	**41**

Appendix VIII: NARCOSTI Research Permit 1

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

NACOSTI/P/18/52628/26692 5th December, 2018

Grace Kahenda Ochieda
Jomo Kenyatta University of
Agriculture and Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Moderating influence of competition on the relationship between generic strategies and performance of NHIF accredited hospitals in Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **all Counties** for the period ending **5th December, 2019.**

You are advised to report to **the County Commissioners and the County Directors of Education, all Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

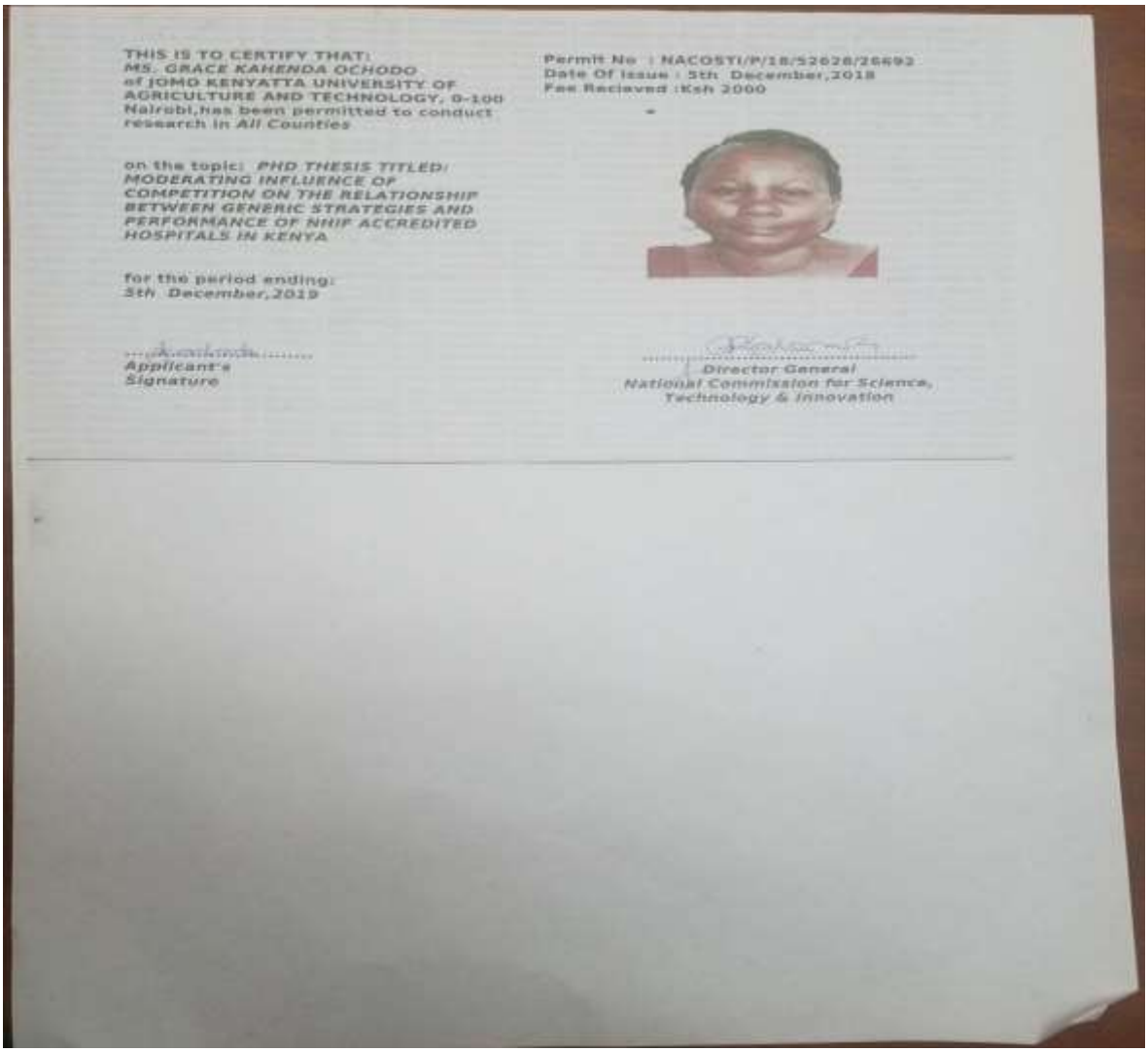
GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
All Counties

The County Directors of Education
All Counties

Appendix IX: NARCOSTI Research Permit 2



THIS IS TO CERTIFY THAT:
MS. GRACE KAHENDA OCHODO
of JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, 0-100 Nairobi,has been permitted to conduct research in All Counties

on the topic: PHD THESIS TITLED: MODERATING INFLUENCE OF COMPETITION ON THE RELATIONSHIP BETWEEN GENERIC STRATEGIES AND PERFORMANCE OF NHIF ACCREDITED HOSPITALS IN KENYA

for the period ending:
5th December,2019

Applicant's Signature

Permit No : NACOSTI/P/18/52628/26493
Date Of Issue : 5th December,2018
Fee Recieved :Ksh 2000

Director General
National Commission for Science, Technology & Innovation