# INTERNAL ENVIRONMENT INLUENCING PERFORMANCE OF PRIVATE HOSPITALS IN KENYA: A CASE OF BUNGOMA SOUTH SUB COUNTY

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# **DECLARATION**

This research project is my original work and has not been	en presented for any award in any other
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# **DEDICATION**

I dedicate this work to my beloved spouse Mrs. Sarah Sarifu Mulumeti, My parents, Mr. Michael Maloba Chimoyi and Mrs. Julia Akinyi, and lastly my daughter Sancha Akinyi Oduor.

#### **ACKNOWLEDGEMENT**

I feel encouraged by the widespread response and valuable contribution by the University of Nairobi, my supervisor, Mr. Vincent Marani for setting the hard criticism that gave me intellectual guidance for setting the pace of the development of this study. More so I wish to express my gratitude for his willingness, enthusiasm and ideas towards perfecting my work. In addition, I wish to register my gratitude to the entire team of the university of Nairobi lecturers. Especially, I recognize Mr. Marani Vincent the confident lecturer and others who took me through the course and proposal writing, and other stakeholders and the entire University of Nairobi for providing the technical assistance that boosted the development of the document in particular not to forget Mr. Marcus Mahangiru, Mr.Shamirr Issa, and Mr. William Kweyu. I'm humbled to recognize the concerted effort of all students of Master of Arts in project planning and management of the 2016 cohart for having been supportive with vital ideas throughout my course work period. Lastly I wish to acknowledge the entire University of Nairobi for giving me a chance to pursue my Master degree and creating conducive learning environment.

God bless you all.

# TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	viii
ABBREVIATIONS AND ACRONYMS	x
ABSTRACT	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the problem	4
1.3 Purpose of the study	5
1.4 Objectives of the study	5
1.5 Research Questions	5
1.6 Significance of the study	6
1.7 Assumption of the study	6
1.8 Limitation of the study	7
1.9 Delimitation of the study	7
1.10 Definition of significant terms	7
1.11 Organization of the Study	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Human Resources and Performance of Private Hospitals	9
2.3 ICTs Resources and Performance of Private Hospitals	11
2.4 Service Delivery and Performance of Private Hospitals	14

2.5 Drug Supply and Performance of Private Hospitals	
2.6 Theoretical Framework	18
2.7 Conceptual Framework.	19
2.8 Summary of Literature Review	21
CHAPTER THREE	22
RESEARCH METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	292
3.3 Target Population	23
3.4 Sample size and Sampling Procedures	23
3.4.1 Sample Size	23
3.4.2 Sampling Procedures	24
3.5 Data Collection Instruments	24
3.6 Pilot Testing of Instruments	25
3.6.1 Validity of the Research Instruments	26
3.6.2 Reliability of the Data Collection Instruments	26
3.7 Data Collection Procedures	27
3.8 Data Analysis Techniques	27
3.9 Ethical Considerations	28
3.10 Operational Definition of Variables	39
CHAPTER FOUR	30
DATA ANALYSIS, PRESENTATION AND DISCUSION	30
4.1 Introduction.	30
4.2 Response Return Rate	30
4.3 Demographic Description of Respondents	31
4.4 Human Resources and Performance of Private Hospitals	32
4.5 ICTs Integration and Performance of Private Hospitals	36
4.6 Service Factors and Performance of Private Hospitals	40
4.7 Drug Supply and Performance of Private Hospitals	44
CHADTED FIVE	40

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	48
5.1 Introduction.	48
5.2 Summary of Findings	48
5.3 Conclusion.	49
5.4 Recommendations	51
5.5 Areas for Further Study	52
REFERENCES	53
APPENDINCES	61
APPENDIX I: TRANSMITTAL LETTER	61
APPENDIX II: QUESTIONNAIRE FOR PATIENTS	62
APPENDIX III: KREJCIE AND MORGAN SAMPLE SIZE TABLE	63

# LIST OF TABLES

Table 3.2 Operational Definition of Variables.	29
Table 4.1 Response Return Rate	30
Table 4.2 Gender of Respondents	31
Table 4.3 Educational Level of Respondents.	32
Table 4.4 Human Resource Specialists and Performance of Private Hospitals	33
Table 4.5 Adequacy of Medical Specialists and Performance of Private Hospitals	34
Table 4.6 ICTs Online Resources and Performance of Private Hospitals	37
Table 4.7 Improvement of e-health and Performance of Private Hospitals	39
Table 4.8 Reliability of Medical Staff and Performance of Private Hospitals	41
Table 4.9 Staff Responsiveness and Performance of Private Hospitals	42
Table 4.10 Staff Assurance and General Performance of Private Hospitals	43
Table 4.11 Adequacy of Drug Stock and Performance of Private Hospitals	44
Table 4.12 Category of Drugs and Performance of Private Hospitals	45
Table 4.15 Improvement on Drug Distribution and Performance of Private Hospitals	47

# LISTS OF FIGURES

Figure 1: Concepts	al Framework		0
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# ABBREVIATIONS AND ACRONYMS

AIDS Acquired Immune-Deficiency Syndrome

CBO Community Based Organizations

CMO County Medical Officer's

FBO Faith Based Organizations

FHI Family Health International

GPRS General Packet Radio Service

GSM Global System for Mobile Communications

HIV Human Immunodeficiency Virus

ICT Information, Communication and Technologies

ILS Integrated Logistic System

ISO International Organization for Standardization

MSD Medical Store Department

NGO Non Governmental organizations

PC Personal Computer

PDA Personal Digital Assistance

PPH Post Partum Hemorrhage

SMS Short Message Services

#### **ABSTRACT**

The purpose of this study was to investigate on the internal environment influencing performance of private hospitals in Bungoma South Sub County. The study was guided by the following objectives; to determine how human resources influence performance of private hospitals in Bungoma South Sub County, to establish the how ICTs resources influence performance of private hospitals in Bungoma South Sub County, to find out how service factors influence performance of private hospitals in Bungoma South Sub County and lastly to assess how drug supply influence performance of private hospitals in Bungoma South Sub County. The study was based on descriptive survey design and the target population comprised of 3,000 patients in three major private hospitals in Bungoma County. The sample population was 341 patients who were selected using a mathematical formula as postulated by Krejcie and Morgan (1970). Questionnaire and document review schedules were used as data collection instruments. Validity and reliability of the research instruments was tested prior to actual collection of data. The data was analyzed using SPSS and presented in the tables showing frequencies, percentages and mean. The study findings indicated that human resources, ICTs integration, service quality and drug supply influenced patients' satisfaction in private hospitals in Bungoma County. The study recommended that adequate and competent personnel be hired in hospitals, that ICTs should be integrated in medical facilities, that medical staff to be motivated so as to reliable, responsive and to assure the patients of utmost care and finally government policy makers to ensure that drug and equipment procurement laws are followed in the devolved medical units. The pilot study was conducted in Tanaka Mission Hospital and Busia Nursing Home respectively at a certain validity and reliability of research instruments.

#### CHAPTER ONE

#### INTRODUCTION

# 1.1 Background of the study

Hospitals in the developed world recognize the importance of delivering patient satisfaction as a strategic variable and a crucial determinant of long-term viability and success (Davies and Ware 1988; Makoul et al. 2005; Royal Pharmaceutical Society 2007). Donabedian (2008) suggests that 'patient satisfaction may be considered to be one of the desired outcomes of care . . . information about patient satisfaction should be as indispensable to assessments of quality as to the design and management of health care systems'.

The recent CAHPS surveys and their wide use in the health care industry in the USA reflect the importance accorded to consumers' experiences with a variety of services including Medicare and Medicaid (Lake et al. 2005). Other organizations such as the National Committee on Quality Assurance (NCQA), The Center for Medicare and Medicaid Services (CMS), and The National CAHPS Benchmarking Database (NCBD) are also deeply involved with assessing the patient's perspective. The World Health Organization (WHO) has similarly created a performance system based on five composite measures in which health system 'responsiveness' (patient satisfaction) and its distribution in the population (of varying economic status) are key components. However, the measures are based on surveying public health experts (and not patients) on the assumption that the performance of a health system is too complex for the general public to understand. In this regard, Blendon et al. (2001) show that the WHO ratings differ substantially for 17 industrialized countries when compared with the perceptions of their citizens.

In developing countries such as Bangladesh, few studies have sought patients' views on satisfaction with services, and there is little effort to involve them in measuring satisfaction or defining health service standards. Consequences of patient dissatisfaction can include patients not following treatment regimen, failing to pursue follow-up care and, in extreme cases, resorting to negative word-of-mouth that dissuades others from seeking health care from the system. Service orientation of doctors was found to be the strongest factor influencing patient satisfaction in hospitals. Service orientation of nurses is an important factor for ensuring patient satisfaction in Bangladesh, but the dearth of nurses is a continuing problem. Foreign hospitals are rated

highest on all service dimensions. Unless this perception is matched by local hospitals, foreign exchange losses can be substantial as patients seek care abroad (Buttell, Hendler and Daley, 2007).

While the plethora of approaches to studying patient satisfaction represents intense interest in giving voice to the patients in the developed world, in developing countries in Africa such as Nigeria, South Africa and Egypt, patients have very little voice (Blendon et al, 2001). Few studies have sought their views and there is little effort to involve them in measuring satisfaction or defining health service standards. This has implications for how health care services are ultimately perceived and the extent to which they are used. We believe that a patient who endures the physical, psychological, social and economic experiences during the overall health service delivery process would be able to make an appropriate evaluative judgment of how they were treated, as reflected in their overall satisfaction or dissatisfaction measures.

In East African countries such as Uganda, Tanzania and Kenya, in the healthcare industry, patients' satisfaction is more than a concept; it is an important factor in the delivery of healthcare (Buttell, Hendler and Daley, 2007). It is a critical dimension of social justice and human rights principle and norms, and it forms one of the pillars of a viable and sustainable healthcare system (MOMS and MoPHS, 2011).

The ability to satisfy customers is vital for a number of reasons. For one, today's buyers of health care services in developed countries are better informed, a condition that is being driven by greater levels of information available to them. These buyers are therefore more discerning, knowing exactly what they need. Customer satisfaction is also a valuable competitive tool; hospitals that are customer focused have been able to increase capacity utilization and market share (Gregory 2006; Boscarino, 2012). Recent research has shown that service satisfaction can significantly enhance patients' quality of life (Dagger and Sweeney 2006) and enable service providers to determine specific problems of customers, on which corrective action can then be taken (Oja et al. 2006). Patients' voice ought to derive similar changes in the developing countries.

Patient satisfaction is deemed an important outcome measure for health services. As part of providing quality health care, addressing consumer satisfaction becomes paramount. Patient

satisfaction is an important measure of healthcare quality because it offers information on the provider's success at meeting the expectations of the client. Patient satisfaction has been an important issue for health care managers. Many previous studies have developed and applied patient satisfaction as a quality improvement tool for health care providers (Young, Meterko and Desai, 2000). Following increased levels of competition and the emphasis on consumerism, patient satisfaction has become an important measurement for monitoring health care performance of health plans (Jatulis et al, 1997). This 14 measurement has developed along with a new feature: the patient's perspective of quality of care (Rubin, 1990). Various dimensions of patient satisfaction have been identified, ranging from admission to discharge services, as well as from medical care to interpersonal communication. Well-recognized criteria include responsiveness, communication, attitude, clinical skill, comforting skill, amenities and food services. It has also been reported that the interpersonal and technical skills of health care provider are two unique dimensions involved in patient assessment of hospital care (GoK, 2009).

In Bungoma County, issues of quality of healthcare have lately come into sharp focus (MoMS, 2017). One such desired outcome is the patient satisfaction. While many studies have been done on patient-related factors influencing his/her satisfaction with quality of healthcare received, very few if any at all has attempted to determine how human resources, ICT integration, service factors and drugs supply influence performance of private hospitals with special reference to Bungoma South Sub County, where most of the patients prefer private hospitals as compared with the government owned hospital facilities in the study area and thus this was the basis of the current study.

# 1.2 Statement of the problem

In 2001, the IOM (USA) asserted that as "as medicals science and technology has advanced at a rapid phase, the healthcare delivery system has floundered in its ability to provide consistently high quality care to all". As per WHO (2017), a wealth of knowledge and experience in enhancing the quality of health care has accumulated globally over many decades. In spite of this wealth of experience, the problem frequently faced by policy-makers at country level in both high- and low-middle-income countries is to know which quality strategies –complemented by and integrated with existent strategic initiatives – would have the greatest impact on the outcomes delivered by their health systems. In Kenya, issues of quality of healthcare have lately

come into sharp focus (MoMS, 2017). One such desired outcome is the patient satisfaction. While many studies have been done on patient-related factors influencing his/her satisfaction with quality of healthcare received, very few if any at all has attempted to determine how human resources, ICT integration, service factors and drugs supply influence performance of private hospitals with special reference to Bungoma South Sub County, where most of the patients prefer private hospitals as compared with the government owned hospital facilities in the study area and thus this was the basis of the current study.

## 1.3 Purpose of the study

The purpose of this study was to investigate on internal environment influencing performance of private hospitals in Bungoma South Sub County

## 1.4 Objectives of the study

The study was guided by the following objectives:

- 1. To determine the extent to which human resource influence performance of private hospitals in Bungoma south sub county.
- 2. To determine how ICT integration influence performance of private hospitals in Bungoma south sub county.
- 3. To find out the extent to which service quality influence performance of private hospitals in Bungoma south sub county.
- 4. To examine the extent to which drugs supply influence performance of private hospitals in Bungoma south sub county.

## 1.5 Research Questions

The following research questions guided the study:-

- 1. What is the extent to which human resource influence performance of private hospitals in Bungoma south sub county?
- 2. How does ICT integration influence performance of private hospitals in Bungoma south sub county?
- 3. What is the extent to which service factors influence performance of private hospitals in Bungoma south sub county?
- 4. What is the extent to which drugs supply influence performance of private hospitals in Bungoma south sub county?

# 1.6 Significance of the study

It is hoped that the study will contribute to existing literature in addressing future research problems. The study will add to the existing knowledge on internal environment influencing the performance of private hospitals in Kenya. Policy makers in private hospitals are expected to use this study as an evaluation tools towards the factors that influence satisfaction of patients in private hospitals. This will help improve on existing research policies. The study also will provide an opportunity for beneficiaries of private hospitals in Bungoma South Sub County to present their opinion on the performance of private hospitals.

# 1.7 Assumption of the study

The research was carried out on the basis that private hospitals would add value to the study area. It was expected that respondents would easily be available and would give their response without fear and biases. It was also assumed that the patients were a aware of the internal environment influencing the performance of private hospitals.

# 1.8 Limitation of the study

The study encountered following constraints:

The study encountered several challenges one being financially as the cost was a bit high but the researcher invited friends who contributed towards the funding of the project, the second challenge was how to locate the women who were the most suitable respondents but with the help of the correspondents on the ground the researcher was able to reach the suitable respondents.

#### 1.9 Delimitation of the study

The study was limited to Bungoma South Sub County which was not much wider and only targeted a population within Bungoma County. Therefore implications and generalizations of the study findings to other areas in Kenya would be done with caution since the situations are different in other Kenyan private hospitals as a result of the differing socio-economic conditions.

# 1.10 Definition of significant terms

**Developing Nations:** These are countries that are not developed and can be found by inverting factors that define a developed nation: where people tend to have lower life expectancy, less education, and generally less income

**Drug Supply:** In terms of this study is the process which the medical supplies take from the Government central stores Kenya Medical Supplies Agency to Lumboka Hospital, Bungoma West Hospital and St. Domiano Hospital. This entails the frequency of supplies, availability of procured drugs and storage at these three hospitals.

**Health Care:** As used in this study refers to the work done in providing primary care (prevention), secondary care (treatment and curative), and tertiary care (palliative), as well as in public health. It is delivered by practitioners in health profession.

**Private Hospital:** A Private Hospital is a facility that is funded individual owners for its daily operation. They provide medical care at a fee.

**Service delivery:** Service delivery in this study context means the process of offering needed assistance to the patient from admission until discharge, both in and outpatient services including the process of discharge from hospital as per the opinion of service providers and the patients.

#### 1.11 Organization of the Study

The study was organized in five chapters. Chapter one shall introduce the study under the following topics: background of the study, statement of the problem, the purpose of the study, research objectives, research questions, significance of the study, basic assumptions of the study, limitations of the study, delimitations of the study and definition of significant terms of the study. Chapter two covered contain literature review related to the study in various themes as stated in research objectives and research questions. Chapter three—outlined the research methodology concerning the research design, target population, sample size and sampling procedure, data collection instruments, pilot testing of the instruments, validity of the instruments, reliability of the instruments, data collection procedures, data analysis techniques, ethical consideration and operational definitions of variables. Chapter four presents data analysis,

presentation and discussion, while Chapter five deals with summary of findings, conclusion and recommendations.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviewed literature related to the study objectives as outlined: To examine the influence of human resources, influence of ICT resources, influence of service factors and influence of drug supply on performance of private hospitals in Bungoma South Sub County. The chapter also highlights Theoretical Framework, Conceptual Framework and gaps established in the Literature Review.

## 2.2 Human Resources and Performance of Private Hospitals

To meet the current and future performances, human resource development has become a continuous process for improving the caliber and competence of employees. In addition to imparting requisite skills by training to all levels of employees, management also aims at changing the behavioural patterns of the employees in a direction which is in line to achieve the organizational effectiveness, sustainability and growth (Argote and Ingram, 2010).

In this era of fast changing scenario, solid financial foundation is not enough for any private health care organization nor is state of the art technology, automated systems, because the cutting edge now remains the quality of the human resources, which at the end of the day decides whether the public organizations would ultimately survive in the long-run (Argote and Ingram, 2010). As a service sector, health care remains an important sub set, whose growth is forecasted to be the most rapid in the changing economic scenario of the country.

The past years have witnessed several problems emerge in the area of training. The focus has been on urban curative care in tertiary care settings concerning basic medical education hence less preparation for doctors in roles in rural primary health systems with barely no or less system for induction when these medical officers join government system in primary health care. This compounded by the fact that they do not have a basic training in management and public health yet they are expected to supervise staff under them in the cadre (Argote, 2010).

Nurses training either way in the lower level is also mostly technical in operation with a very limited component of social aspects of health care, community involvement and participation,

mobilization and health education. Public and Private healthcare organization therefore need to revamp their entire organizational strategy in view of the above, in respect of procuring, retaining, developing and grooming their human resources in a manner that they are not only useful and valuable but most important human assets for the present, and vital with uniqueness for the future.

Within the Private Hospital setting, various personnel both in the management and lower cadre of hospital employees are in one way or the other involved in the healthcare services delivery. The hospital staff includes physicians, nurses, administrators, and ancillary staff. Studies indicate a positive relationship between highly skilled personnel and improved health services delivery outcomes (Argote and Ingram, 2010). Establishing the health training framework and programs, appropriate recruitment methods and continuous training and development of the health staff remains critical for the attainment of highly skilled personnel within Public Hospitals that geared towards attaining the desired outcome. The phenomenon is common in developed countries and is one of the reasons why such countries attain greater services in Public Hospitals. Hospitals need to implement human resource strategies like selective hiring, retention, monitoring performance to meet standards and retain credentials for them to offer quality services and growth (Cohen and Levinthal, 2001). Studies in Kenya have observed a very low standard of teaching in training schools for auxiliary nurses is very low in comparison with training standards in developed countries around the world thereby explaining the substandard patient and community care (Argote, 2010). Lack of proper training systems and inadequate reorientation courses has led to this substandard training, especially in general hospital management as there is still evidence of reliance on conservative training programs by health training colleges which have been taken over by events and time (Argote and Ingram, 2010). This screams of a clear neglect of human resource development in the health sector.

# 2.3 ICT Integration and Performance of Private Hospitals

Improving the quality, accessibility and efficiency of healthcare for citizens is considered as the main aim of Information Communication and Technologies for health. ICT for health is considered as the application of information and communication technologies across a range of functions that are affecting the health sector.

Controlling escalation of costs and improving the healthcare of citizens is what every nations seek to achieve. In 2010 alone, the size of ICT enabled healthcare services was estimated to be about \$ 3.1 billion worldwide, and out of this, 80 per cent were in developed countries (Rudowski, 2009). Consultations which are done online by patients and doctors using websites and emails, distance referrals, emergency evacuations, and advance transmission of images and data of patients from ambulances is known to reduce lead times of intervention in emergency wards of most hospitals. This level of ICT in health has not been reached in developing countries by most professional and community users. Due to insufficient studies aimed at establishing relevance, applicability or cost effectiveness, most of these approaches are still at their relatively new stage of implementation (Berland, Elliott and Morales, 2010). The Governments in these nations therefore find it complex to determine their investment priorities especially in ICT (Chandrasekhar and Ghosh, 2001).

North America and Europe for example have application of ICT in healthcare service delivery in the advanced stage. In fact, the use of technology in delivery of health services has been described in various ways including telemedicine, tele-nursing, tele-homecare and many others. The use of ICT in delivery of healthcare services is hence the whole idea. The success of the use of ICT in the healthcare services delivery has been attributed to well develop technological infrastructure. A lot of studies have been conducted on how e-health has been achieved through the application of technologies. A significant contribution to technical solutions in social context and in relation to individual needs is therefore needed in research and practice of health-enabling and ambient-assistive technologies (Koch et al., 2009). Telehealth systems such as online and mobile tools have already opened up the possibilities for reducing hospitalization and an increase in home care (Venter et al., 2012). Studies associated with tele-nursing have indicated an increased benefit of using technology in the nursing care delivery system in USA. The benefits of using the tele-nursing technologies range from improved diagnosis and consultations to the development of career options and professional nurses (Hebda and Czar, 2013). 13 Most importantly, tele-nursing have led to the improved patients' clinical and healthcare outcomes. Each of the benefit areas are related to the patients' safety concerns (Hebda and Czar, 2013). Tele-nursing is becoming an attractive and exceptional area in the professionals nursing practice where practitioners are required to develop skills in using the technologies that are applied in the patient care delivery system.

Expectations in health have risen due to the advancement of information and communication technologies (Dury, 2005). ICT impacts in almost every aspect of the healthcare sector. Information management and communication especially in Public Health Sector is important and can be improved by the available system (Olukunle, 2009). The emergence of electronic health, which is ICT supported health provision, has reduced the cost of healthcare thereby increasing efficiency by data management and transfer, disease management and quality transfer of knowledge (Oladosu et al., 2009).

In Africa, South Africa emerges as one of the nations where e-health has found its wide applications. The success of e-health in South Africa has been attributed to highly developed ICT infrastructure, huge investments in ICT particularly by the Public Hospitals, well trained public health personnel, well developed training and health institutions and belief in the ICT solutions to the health problems (Adesina, 2007). Currently, technology plays a critical role in the healthcare services delivery in South Africa. However, like most developing countries, innovative approach to eHealth remains significant. One of the successes of such innovations is the application of Cell-life and Mindset health models. Cell life is a system which was started by two universities in South Africa in 2003for the therapeutic and logistics management of HIV/AIDS population. It is built on mobile devices with 3G/GPRS/SMS networks mostly on mobile phones for health solutions. It is mainly used by community health volunteers to assist their fellows on HIV positive management and also assists in organizational planning for drug supply and emergency situations in the community (Adesina and Jim, 2008). Emphasis of eHealth solution exists in Nigeria where rural communities trying by using ICT to solve various challenges of health services delivery (Ajayi and Tokon, 2009). Development of innovative solutions that require less infrastructure provision is essential in such communities to reduce cost of operation (Bello, 2004).

In Kenya, evidence that healthcare professionals have a better access to adequate and reliable knowledge in Information Communication Technology is little (Gatero, 2011). The country continues to face health threats for example ravaging HIV/AIDS pandemics, the spread of infectious diseases including malaria, soaring levels of infant and maternal mortality, very low levels of life expectancy and further deteriorating healthcare facilities (Gatero, 2011). Notable barriers include few physical access capturing and slow or unreliable internet connectivity, very

high subscription cost of information materials, inadequate awareness of what is available, lack of relevance of available information that ends up not meeting peoples' needs in terms of scope, style, or format, limited time and incentives to access information and lack of valued interpretation skills (Bii and Otike, 2003). Private Hospitals in Kenya have not shown robust commitments or willingness to invest in information technology despite its wide application and use. Even though ICT application is gaining popularity within the public sector, the private institutions are yet to embrace the significance of ICT and other physical facilities in healthcare service delivery.

# 2.4 Service Quality and Performance of Private Hospitals

Studies in the developing world have shown a clear link between patient satisfaction and a variety of explanatory factors, among which service quality has been prominent (Rao et al. 2006; Zineldin 2006). The researcher believes this link is important also in the health care sector in Kenya. Earlier studies suggest that service quality can be adequately measured using the SERVQUAL framework (Parasuraman et al. 1991, 1993), and its refined version in the context of Kenya (Andaleeb 2000a, 2001), to help explain patient satisfaction.

According to Rao et ai, (2006) Reliability refers to providers' ability to perform the promised service dependably and accurately. In Kenya, reliability of the provider is often perceived as low for various reasons, such as the accusation that doctors recommend unnecessary medical tests, there is an irregular supply of drugs at the hospital premises, supervision of patients by care providers is irregular, and specialists are unavailable. Perceptions of reliability are also attenuated when doctors do not provide correct treatment the first time. In view of these reliability drivers, we felt that the more reliable the health care providers, the greater the patients' satisfaction.

According to Rao et ai, (2006), Patients expect hospital staff to respond promptly when needed. They also expect the required equipment to be available, functional and able to provide quick diagnoses of diseases. In addition, patients also expect prescribed drugs to be available and properly administered, as other indicators of responsiveness. Thus we posit that the greater the responsiveness of health care providers, the greater the satisfaction of patients.

Knowledge, skill and courtesy of the doctors and nurses can provide a sense of assurance that they have the patient's best interest in mind and that they will deliver services with integrity, fairness and beneficence. For a service that is largely credence based (Zeithaml and Bitner, 2000), where customers are unable to evaluate the quality of the services after purchase and consumption, the sense of assurance that is engendered can greatly influence patient satisfaction. In the health care system, assurance is embodied in service providers who correctly interpret laboratory reports, diagnose the disease competently, provide appropriate explanations to queries, and generate a sense of safety. Nurses also play an important part in providing additional support to patients' feelings of assurance by being well-trained and by addressing their needs competently. Thus, the greater the perceived assurance from the health care providers, the greater will be the satisfaction of patients.

According to Zeithaml and Bitner (2000), Physical evidence that the hospital will provide satisfactory services is very important to patient satisfaction judgments. Generally, good appearance (tangibility) of the physical facilities, equipment, personnel and written materials create positive impressions. A clean and organized appearance of a hospital, its staff, its premises, restrooms, equipment, wards and beds can influence patients' impressions about the hospital. However, in Kenya, most of the hospitals/clinics are lacking in many of the above attributes, thereby attenuating patient satisfaction. We posit that the better the physical appearance (tangibility) of the health care service facility and the service providers, the greater will be the patients' satisfaction.

#### 2.5 Drug Supply and Performance of Private Hospitals

There is a significant impact which is played by drugs, medical supplies and equipment on the quality of patient care which further account for a considerably high proportion of health care costs. In order to avoid wasting the available limited resources, health services need to make informed choices about what to buy so that they can meet priority health needs (Granehein and Lundman, 2004). There exists less information about essential medical supplies and equipment though most Private Health organizations have useful information about essential drugs.

Even with this information, selection of supplies and equipment has been given little attention with availability of a range of brands and items to choose from leading to acquisition of

inappropriate and technically unsuitable items, which are incompatible with existing equipment, unavailable spare parts and consumables or unskilled staff on their use all together (Dogba and Fournier, 2009). Procurement is only one part of managing medical supplies and equipment, and effective storage, stock control, care and maintenance are also critical if health services are to get the most out of what they buy (Dogba and Fournier, 2009). The Government of Kenya in collaboration with other players has produced medical supplies and equipment manual that remains critical in addressing some of these challenges. The manual applies to all healthcare levels as a reference for responsible procurement and management of medical supplies and equipment (Granehein and Lundman, 2004). Middle income countries face real shortage of drugs and medical supplies for healthcare services posing a challenge in provision of health care thereby contributing to poor quality health services and a further leading to increased mortalities (Tumwine et al., 2010).

It is estimated that almost 99% of all deaths due to inappropriate equipment and drugs occur in developing countries especially is the in rural areas. Adequate health services involving emergency care to the public could lead to drastic reduction in such deaths. Most countries in sub-Saharan Africa still finds it complicated to access essential medical items thereby compromising provision of timely care to the patients (Tumwine et al., 2010).

In Kenya, supply and availability of medical items and drugs is still an unknown system with devolution worsening the situation with County level hospitals being affected more by lack of adequate drugs and medical supplies (Mselle et al., 2013). The government through its strategy of improving healthcare services delivery aims to provide basic drugs and medical supplies by strengthening public health facilities (Olsen, Ndeki and Norheim, 2005). Currently, due to decentralization following the new constitutional, there is devolution of healthcare to the County governments that are responsible for health facilities within their jurisdictions. However, the Ministry of Health has consistently provided funds for the procurement of drugs and critical medical supplies via its Medical Stores Department to Public hospitals and therefore Private Hospitals should adopt ways of acquiring hospital equipments (Mselle et al., 2013), which is the basis of this study.

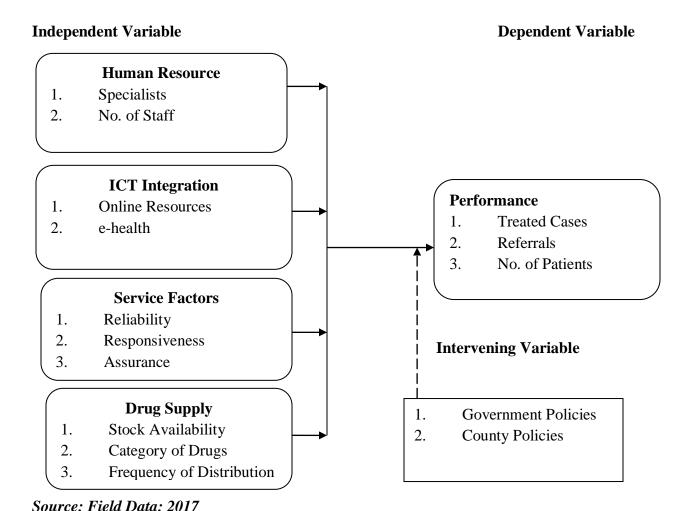
#### 2.6 Theoretical Framework

This study was informed by the change theory of Kurt Lewin (Bernard, 2004). It is based around the process Unfreeze, Change and Freeze, providing a higher level approach to the change process. With this theory, a manager or other change agents have a chance on a framework for implementing change effort however sensitive but seamless as possible. It follows three steps: i. implementing a radical change, ii. Reduce disruption of operations structure and iii. Permanent adoption of change. The change theory can be well adopted by a variety of change agents to ensure that the devolution of health services to the lowest levels is well executed, operational and function to the greater good of the people. The changes will come with resistance due to the initial centralized system but with good understanding of the process of change, most administrators will be able to pass this through to their team members in terms of change in human resources development, physical facilities, management style, and hospital equipments. Unfreeze Habits and routine naturally settled in where structures have been in place for a while. People in an organization may staff off course in as much as the organization may be headed in the right direction. Unfreezing is simply a means of getting people to understand a perspective on their daily activities, reject their undesirable habits, and be open to new ways of achieving the objectives. It sets the wheels of change in motion. Change With open minds, change can then start. The process is very dynamic and for effectiveness, it has to take time which involves a transition period. People take new tasks and responsibilities so as to gain efficiency, but has to be gradual and sometimes bring slowness to the organization before it can steady. Refreeze By making change permanent, it can then reach its full desired effect. The new organization become standard after the change has been cemented and all effort should be made to ensure that it succeeds. Force field analysis is a model that describes restructuring and making decision between driving and restraining forces and finally equilibrium where the forces match. The analysis investigates where power concentrates, decision makers, those for and against change and finally ways to influence dissenting voices. In an organization, Driving forces are looking for opportunity to improve while Resisting (restraining) forces are pro status-quo. The goal is to achieve equilibrium. This theory is relevant to this study as it will tend to understand the relationship between management and junior staff in terms of handling of disputes and conflict resolution. This will also determine the factors at play that usually fail to reach a consensus leading to labour unrest in these hospitals and how they can best be understood. Finally, the theory will assist the researcher to best understand how implementation of change and consider challenges that the management may face in the processes.

# 2.7 Conceptual Framework

This study was guided by the following conceptual framework, which is used to explain the interrelationship between variables. A conceptual framework is a scheme of variables a researcher operationalize in order to achieve the set objectives (Oso and Onen, 2000). In this study, the independent variables are human resources, ICT integration, service factors and drug supply. Government and County policies are the moderating variables and Patient satisfaction is the dependent Variable as shown in Figure 1.

Figure 2.1 Conceptual Framework



It was hypothesized that the independent variable factors, with its' components human resources, ICT integration, service factors and drug supply directly influence the dependent variable performance of private hospitals in Bungoma South Sub County, however the influence might be accelerated or delayed by the intervening variables county and national government policies respectively.

# 2.8 Summary of Literature

The influence of human resource, physical facilities, management style, and hospital equipments in private hospital in Bungoma South Sub County, Kenya is not well understood. While much of the contributions of these factors to the overall healthcare services delivery had been debated, how they influence the patients' satisfaction in private hospitals at the local levels is still in its infancy stage of establishment. Further, it is due to these factors that the sector of public health has failed to provide expected quality services. The study remained critical in tracing the degree to which these factors influence patients' satisfaction in Private Hospitals in Bungoma South Sub County. The study would provide information on performance of Private Hospitals as well as the new approaches to the current needs of innovative health services as well as the main drivers of innovations in Private Health as it relates to the quality of patients' satisfaction.

#### **CHAPTER THREEE**

# RESEARCH METHODOLOGY

#### 3.1 Introduction

The chapter dealt with the research design, target population, methodology and procedures followed in carrying out the study. The chapter describes the area of study, sample size and sampling procedures, ethical consideration and operation definition of variables, data collection methods, the research instruments used and data analysis techniques.

# 3.2 Research Design

A descriptive survey design was used in the proposed study where it utilized both qualitative and quantitative data. Descriptive survey design was used in preliminary and exploratory studies, Lucky and Reuben, (1992) in Orodho (2004) to allow the researchers gather information, summarize, present and interpret for the purpose of clarification. (Borg and Gall, 1989) state that "Descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and educators. A survey design was preferred because it is the only design through which desired information can be obtained more easily and less expensively as compared to other sources (Sharma *et al*, 1989). The design entailed the process of collecting data in order to answer questions concerning the current status of the subject in the study. Descriptive research determines and reports things the way they are like behavior, attitudes values and characteristics. The research design was used to describe, explain and validate findings showing the relationship of variables under investigation.

# 3.3 Target Population

In this study, the target population was 3,000 patients who had sought medical care from the three major private hospitals in Bungoma South Sub County between the months of July to September 2017. Namely life care hospital had 1200 patients, Bungoma West, 1100 patients while St. Domiano with 700 patients respectively (Hospital Health Records, 2017).

### 3.4 Sample size and Sampling Procedures

A simple random sampling method, a probability method was used. The unit measurement was patients in the three major private hospitals in Bungoma South Sub County. These category of

patients were found to make up full of the total hospital patients treated between the months of July and September 2017.

# 3.4.1 Sample size

The sample size will be selected using Krejcie and Morgan (2003) Table of determining sample size for social research studies. Therefore from a target population of 3000 respondents the sample size for the study will be 341 respondents who will be distributed proportionately by using simple random sampling procedure.

# 3.4.2 Sampling Procedure

The patients in the three private hospitals were deemed viable when carrying out this research (Evans and Lindsay, 2009). The table for determining the sample size by Krejcie and Morgan (2003) was applied to 3000 patients who were considered to be the target population and the researcher arrived at a sample size of 341 participants (see appendix iii). The proportional formula in stratified sampling was used to calculate the number of patients to be interviewed in each hospital.

$$n_1 \quad = \quad \underline{n} \quad \underline{x} \quad \underline{N_1}$$

N

Where N (Sample Frame) and n (sample size) all have their initial values as constant,  $N_1$  is total number of patients in a hospital;  $n_1$  was the number of patients to be interviewed in a hospital.

The detail of the use of the formula for the calculation of the number of patients to be interviewed in a hospital was as follows:

$$N = 3000$$
,  $n = 341$  and

Life care hospital  $(1200) = 341/3000 \times 1200 = 136$ 

The same procedure was used to calculate for the remaining Hospitals. Table 3.1 shows the sampling frame

**Table 3.1 Sampling Frame** 

Hospital	<b>Target Population</b>	Sample Population
Life care Hospital	1200	136
Bungoma West Hospital	1100	125
St. Domino Hospital	700	80
Total	3000	341

#### 3.5 Data Collection Instruments

The research instruments that were employed in this study as a tool for data collection were Questionnaires and interview schedule which were used to supplement each other to give a deeper and wider exploration into research perspective which gave the researcher more quality. According to Bourke (2005) simply states that questionnaires are used to obtain different type of information. It has several advantages. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. It is also anonymous, anonymity helps to produce more candid answers than is possible in an interview, low cost of collecting data, designing the questionnaire is easy and sending it to a respondent as well is being less expensive in analyzing and processing the data, It also presents an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data.

## 3.5.1 Questionnaires for the patients

The questionnaire was used for data collection because it offers considerable advantages in the administration. It also presented an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. It is also anonymous. Anonymity helps to produce more candid answers than is possible in an interview. The questionnaires were used to collect data from the

patients. The questionnaire comprised of five sections and each of the sections collected data based on the study objectives. The questionnaire comprised of both close-ended and open-ended items.

#### 3.5.2 Document Review

Document review was used as a back up to study questionnaires where patients' records were analyzed, drugs supplies records were viewed in regard to the procurement processes. The document review schedule contained items covering all the objectives of the study.

#### **3.6 Pilot Testing of Instruments**

To standardize the instruments before they are used for data collection, a minor study called a pilot study was conducted. The main aim of the pilot study was to identify problems that respondents could encounter and to determine if the items in the research instruments held the required data for the main study. Thereafter, the items in the instrument were revised depending for the study were developed and opinion of colleagues and experts were sought for. This ensured that all the themes in objectives were captured and the instrument captured the data in the best manner.

# 3.6.2 Reliability and validity of the Data Collection Instruments

For data to be reliable the data collection tools must be reliable, hence the tools must have the ability to consistently yield the same results when repeated measurements are taken under the same conditions (Sharma et al, 1989; Koul 1993). Reliability of the instruments was established through split-half technique in the sampled hospitals. This technique involved administering only one testing session and taking the results obtained from one half of the scale items and checking against the other half of the items to determine the correlation co-efficient.

Validity refers to the degree to which results obtained from the analysis of the data actually represent the phenomena under study (Mugenda and Mugenda, 1999). (Gay, 1987) states validity as the ability of an instrument to measure what it is intended to measure. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators of a particular concept (Mugenda and Mugenda, 2003). In this study, the researcher ensured that the questionnaire items are constructed or formulated based on the

objectives of the study. The item was written in a clear and simple language for easy comprehension by the respondents. To ensure content validity, the researcher used the University lectures including the supervisor to determine the validity of the questionnaires. This ensured that the items in the instruments captured the intended information accurately according to the objectives of the study.

#### **3.7 Data Collection Procedures**

After the approval of the proposal, the researcher proceeds to obtain permit from the National Council of Research (NCR) and a letter of authority to conduct research from the University of Nairobi (UoN). The researcher then wrote a letter of introduction for the respondents. The letter indicated the purpose and significance of the study. The researcher undertook survey of the sample population and developed a rapport with the respondents before the actual study. The researchers carried out a pilot testing of the instrument to ensure reliability. The researcher then collected the data from the field, assisted by two research assistants whom were inducted on how to carry out the research. Once the information was collected it was analyzed using the instruments, write a report and submit it before a panel for consideration of the award of a Masters Degree in Project Planning and Management.

#### 3.8 Data Analysis Techniques

Data analysis is the process of inspecting, cleaning, transforming and modeling data with a prime intent of highlighting useful information, suggesting conclusion and supporting making (Rogers and Hrovat`, 1977). Quantitative data processing and analysis began with editing the questionnaires to minimize errors. The field supervisors ensured completeness and consistency. It was followed by coding the open ended data entry transformation, analysis and interpretation. The statistical package for social science (SPSS) was conducted to run descriptive analysis which produced frequency distribution tables percentages, cross tabulations, correlations that systematically and meaningfully displayed data for the purpose of reporting and provided adequate statistical support to the research findings.

#### 3.9 Ethical Considerations

The researcher sought approval and recommendation from the National Council for Science and Technology and Innovation (NCSTI) to conduct the study in Bungoma South Sub County. When the researcher was granted the permit, the researcher proceeded to liaise with the County

Commissioner and County Chief Officer with the permit as approved by (NCSTI). The study entailed involvement of patients of the selected private hospitals. The patients who were the respondents for the study were assured of their confidentiality after obtaining their consent to participate in the study. The information obtained from the respondents was not disclosed to other respondents throughout the study. Therefore, research and professional ethics was upheld.

# **3.10 Operational Definition of Variables Table 3.2: Operational definition of Variables**

Objectives	Types of	Indicators	Scale of	Tool of
	variables		measurement	Analysis
To examine how human	Independent	> Specialists	Nominal	Descriptive
resources influence	Human	No. of Staff		analysis
performance of private	Resources			
hospitals in Bungoma	Dependent			
South Sub County	Variables		Ordinal	Frequency
	Performance			means
To determine how ICT	Independent	> Online	Nominal	Descriptive
integration influence	ICT Integration	resources		analysis
performance of private	Dependent	> e-health		
hospitals in Bungoma	Variables			
South Sub County	Performance		Ordinal	Frequency
				means
To determine how service	Independent	Reliability	Nominal	Descriptive
factors influence	Service Factors	Responsiven		analysis
performance of private	Dependent	ess	Ordinal	
hospitals in Bungoma	Performance	> Assurance	Ordinar	Frequency
South Sub County				means
To determine how Hospital	Independent	> Stock	Nominal	Descriptive
Equipments influence	Hospital	Availability		analysis
performance of private	Equipments	Category of	Ondinol	
hospitals in Bungoma	Dependent	Drugs	Ordinal	Frequency
South Sub County	Performance	> Frequency of		means
		Distribution		

#### **CHAPTER FOUR**

# DATA ANALYSIS, PRESENTATION AND DISCUSION

#### 4.1 Introduction

The chapter deals with study findings and discussions of quantitative data of the study obtained from study respondents in the three private hospitals in Bungoma County namely life care hospital, Bungoma West, and St. Domiano. It was divided into two major sections. The first section describes the personal characteristics of the respondents, which covered the age of the respondents, gender of respondents, and educational qualification. The second section of the chapter provides results and discussions based on the four research questions of the study. For the preliminary analysis, descriptive statistics was frequently adopted to describe the characteristics of the data collection.

### **4.2 Response Return Rate**

The researcher was interested in knowing about the questionnaires return rate. This owes to the fact that the return rate determines whether bias exists or does not. Nevertheless it was of importance because declining survey participation rates threaten the source of information and its perceived utility and thereby allowing for biasness in the data collected, (National Research Council, 2013). Out of 341 questionnaires dispatched, 330 were fully filled and returned. The response rate is shown in the table 4.1

**Table 4.1 Response Return Rate** 

Dispatched	Returned	Percentage
341	330	96.77
Total	330	96.77

From the table 4.1, the percentage return rate was 330 (96.77%). This can be attributed to fact the researcher administered the questionnaires in person and ensured that the filled questionnaires were fully returned.

### 4.3 Demographic Description of Respondents

The current study sought to determine the demographic description of respondents since it would assist the researcher categorize the findings based on demographic details.

### 4.3.1 Gender of the respondents

Gender differences are complementary; individuals, our collective humanity, and society as a whole, all benefit from masculine and feminine characteristics. We are better for having men with a clear understanding of their masculinity and women with a clear understanding of their femininity, the respondents were asked to indicate their gender from either being male or female choice as given on the questionnaire. The findings are as shown in table 4.2.

**Table 4.2 Gender of Respondents** 

Category	Frequency	Percentage
Female	170	51.52
Male	160	48.48
Total	330	100.0

The findings in table 4.2 shows that majority of the respondents were female as indicated by 170 (52.52%) responses. Therefore more female than male respondents participated in this study. Therefore, there were more female patients seeking medical services in private hospitals in Bungoma County as compared to their counterparts.

### **4.3.2** Educational Level of Respondents

The educational qualification of respondents was sought since its findings would assist the study categorize respondents based on their educational qualification and the findings are as shown in table 4.3.

**Table 4.3 Educational Level of Respondents** 

Description		Frequency	Percentage
Level of Education	Primary	33	10.00
	Secondary	40	12.12
	Certificate	60	18.18
	Diploma	70	21.21
	Degree	77	23.33
	Masters	38	11.51
	PhD	12	03.65
Total		330	100.0

From table 4.3 above, most of the patients were degree graduates as represented by 23.33 % of the respondents. The respondents in the study had acquired the right academic.

## **4.4.1** Medical Specialist and Performance of Private Hospitals

The study sought to determine whether the study hospitals had medical specialists to handle different medical conditions to enhance the performance of private hospitals in Bungoma County and the findings are as shown in Table 4.4.

**Table 4.4 Medical Specialist and Performance of Private Hospitals** 

Medical Specialist	Frequency	Percentage
Yes	220	66.67
No	80	24.24
Do not know	30	09.09
Total	330	100.0

From Table 4.4 it can be deduced that majority of the patients 220 (66.67%) were of the opinion that the study hospitals had different medical specialist to handle different medical conditions that enhanced the performance of this hospitals. Therefore it can be summarized that private hospitals in Bungoma County had medical specialists to handle different medical conditions and were more likely to offer a satisfactory customer service. Therefore to meet the current and future performances, human resource development has become a continuous process for improving the caliber and competence of employees. In addition to imparting requisite skills by training to all levels of employees, (Argote and Ingram, 2010) noted that, the management should also aim at changing the behavioural patterns of the employees in a direction which is in line to achieve the organizational effectiveness, sustainability and growth. Recent research has shown that service satisfaction can significantly enhance patients' quality of life (Dagger and Sweeney 2006) and enable service providers to determine specific problems of customers, on which corrective action can then be taken (Oja et al. 2006). Patients' voice ought to derive similar changes in the developing countries. Performance is deemed an important outcome measure for health services. As part of providing quality health care, addressing consumer satisfaction becomes paramount. Performance is an important measure of healthcare quality because it offers information on the provider's success at meeting the expectations of the client. Specialist performance has been an important issue for health care managers.

### 4.4.2 Adequacy of Medical Specialists and Performance of Private Hospitals

The study sought to determine the patients' opinion on the adequacy of medical specialist in the study hospitals and this would likely influence the performance of private hospitals in Bungoma County. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of strongly disagree (1), disagree (2), agree (3), and strongly agree (4) and the findings are as shown in Table 4.5.

Table 4.5 Adequacy of Medical Specialists and Performance of Private Hospitals

Category	Frequency	Percentage
Strongly Disagree	30	9.1
Disagree	25	7.6
Agree	140	42.4
Strongly Agree	135	40.9
Total	330	100.0

The statistics in Table 4.5 showed that majority of the respondents 42.4% agreed that the hospitals under study had an adequate number of medical specialists to enhance good medical delivery to their patients. The overall study mean of 3.15 also lays between agree and strongly agree as indicated on the likert scale measurements as used in the study and therefore it was deduced that there was an adequate number of medical specialists in the private hospitals in Bungoma County. Studies indicate a positive relationship between adequacy of highly skilled personnel and improved health services delivery outcomes (Argote and Ingram, 2010). Establishing the health training framework and programs, appropriate recruitment methods and continuous training and development of the health staff remains critical for the attainment of highly skilled personnel within Public Hospitals that geared towards attaining the desired outcome. The phenomenon is common in developed countries and is one of the reasons why such countries attain greater services in Public Hospitals. Hospitals need to implement human resource strategies like selective hiring, retention, monitoring performance to meet standards and retain credentials for them to offer quality services and growth (Cohen and Levinthal, 2001).

Based on this objective it can concluded that human resource components such as different medical specialists and adequate numbers directly influenced the performance of private hospitals and therefore employers should strive to ensure that their hospitals have the right number of specialist medical staff and experienced human resources manpower.

### 4.5 ICT Integration and Performance of Private Hospitals in Bungoma County

Improving the quality, accessibility and efficiency of healthcare for citizens is considered as the main aim of Information Communication and Technologies for health. ICT for health is considered as the application of information and communication technologies across a range of functions that are affecting the health sector. The current study therefore sought to determine the influence of ICT integration on performance of private hospitals in Bungoma County under the following themes;

### **4.5.1 ICTs online Resources and Performance of Private Hospitals**

The study sought to determine whether the hospitals had adequate ICTs online resources that facilitated the performance of private hospitals in Bungoma County. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of very inadequate (1), inadequate (2), adequate (3), and very inadequate (4) and the findings are as shown in Table 4.6.

Table 4.6 ICTs online Resources and Performance of Private Hospitals

<b>Adequacy of ICT Online Resources</b>	Frequency	Percentage
Very Inadequate	100	30.3
Inadequate	120	50.4
Adequate	70	21.2
Very Adequate	40	12.1
Total	330	100.0

The findings in Table 4.6 revealed that majority of respondents 36.4% asserted that ICTs online resources such as tele-nursing, tele-home care were inadequate. The overall mean of 2.1515 was also within the likert scale of very inadequate and inadequate and therefore ICTs online resources are inadequate to offer satisfactory performance in private hospitals in Bungoma County. The study findings are in line with earlier findings that stated that in 2010 alone, the size of ICT enabled healthcare services was estimated to be about \$ 3.1 billion worldwide, and out of this, 80 per cent were in developed countries (Rudowski, 2009). Consultations which are done online by patients and doctors using websites and emails, distance referrals, emergency evacuations, and advance transmission of images and data of patients from ambulances is known to reduce lead times of intervention in emergency wards of most hospitals. Expectations in health have risen due to the advancement of information and communication technologies (Dury, 2005). ICT impacts in almost every aspect of the healthcare sector. Information management and communication especially in Public Health Sector is important and can be improved by the available system (Olukunle, 2009). The emergence of electronic health, which is ICT supported health provision, has reduced the cost of healthcare thereby increasing efficiency by data management and transfer, disease management and quality transfer of knowledge.

### 4.5.2 E-health and Performance of Private Hospitals

The study also sought to determine the respondents' opinion on the improvement of e-health on performance of private hospitals in Bungoma County. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of very big extent (1), big extent (2), little extent (3), and no change (4) and the findings were presented in Table 4.7.

Table 4.7 Improvement of e-health and Performance of Private Hospitals

Improvement of e-health	Frequency	Percentage	Mean
Very Big Extent	115	34.8	
Big Extent	105	31.8	
Little Extent	60	18.2	
No change	50	15.2	
Total	330	100.0	2.1364

From Table 4.7, it can be deduced that majority of patients were of the opinion that an improvement in e-health will increase the performance of private hospitals to a very big extent as indicated by a mean of 34.8% with a general mean of 2.1364 respectively. The findings of the study therefore showed that private hospitals in Bungoma County should improve on e-health services for enhanced performance. The use of technology in delivery of e-health services has been described in various ways including tele-medicine, tele-nursing, tele-homecare and many others. The use of ICT in delivery of healthcare services is hence the whole idea. The success of the use of ICT in the e-healthcare services delivery has been attributed to well develop technological infrastructure. A lot of studies have been conducted on how e-health has been achieved through the application of technologies. A significant contribution to technical solutions in social context and in relation to individual needs is therefore needed in research and practice of health-enabling and ambient-assistive technologies (Koch et al., 2009). e-health systems such as online and mobile tools have already opened up the possibilities for reducing hospitalization and an increase in home care (Venter et al., 2012). Studies associated with ehealth have indicated an increased benefit of using technology in the nursing care delivery system in USA. The benefits of using the e-health technologies range from improved diagnosis and consultations to the development of career options and professional nurses (Hebda and Czar, 2013). Most importantly, e-health has led to the improved patients' clinical and healthcare outcomes. Each of the benefit areas are related to the patients' safety concerns. e-health is becoming an attractive and exceptional area in the professionals nursing practice where

practitioners are required to develop skills in using the technologies that are applied in the patient care delivery system.

### 4.6 Service Quality Indicators and Performance of Private Hospitals in Bungoma County

Studies in the developing world have shown a clear link between patient satisfaction and a variety of explanatory factors, among which service quality has been prominent. Earlier studies suggest that service quality can adequately lead to customer satisfaction. Therefore the current study also sought to determine service quality indicators that influence performance of private hospitals in Bungoma County under the following themes;

### 4.6.1 Reliability of Medical Services and Performance of Private Hospitals

The study sought to establish whether the private hospitals provided reliable medical services to their patients' as this would likely influence their performance. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of strongly agree (1), agree (2), neutral (3), disagree (4) and strongly disagree (5) and the findings were presented in Table 4.8.

Table 4.8 Reliability of Medical Services and Performance of Private Hospitals

Reliable Medical Service	Frequency	Percentage
Strongly Agree	120	36.4
Agree	105	31.8
Neutral	15	04.5
Disagree	50	15.2
Strongly Disagree	40	12.1
Total	330	100.0

From Table 4.8, the bulky of respondents strongly asserted that the private hospitals under study provided the patients with reliable medical services that led to their satisfaction as indicated by 36.4% and a total mean of 2.3485 respectively. Therefore the private hospitals in Bungoma County provided the customers with reliable medical services to their satisfaction. According to

Rao et al, (2006) reliability refers to providers' ability to perform the promised service dependably and accurately. Reliability of the provider is often perceived as low for various reasons, such as the accusation that doctors recommend unnecessary medical tests, there is an irregular supply of drugs at the hospital premises, supervision of patients by care providers is irregular, and specialists are unavailable. Perceptions of reliability are also attenuated when doctors do not provide correct treatment the first time. In view of these reliability drivers, we felt that the more reliable the health care providers, the greater the patients' satisfaction.

### 4.6.2 Staff Responsiveness and Performance of Private Hospitals

The study also sought to determine whether the medical staff responsiveness has led to effective medical services delivery performance in private hospitals. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of strongly agree (1), agree (2), neutral (3), disagree (4) and strongly disagree (5) and the findings were presented in Table 4.9.

**Table 4.9 Staff Responsiveness and Performance of Private Hospitals** 

Staff Responsiveness	Frequency	Percentage	Mean
Strongly Agree	125	37.9	
Agree	115	34.8	
Neutral	05	01.5	
Disagree	45	13.6	
Strongly Disagree	40	12.1	
Total	330	100.0	2.3485

The findings in Table 4.9 showed that majority of the respondents strongly agreed that staff responsiveness in private hospitals has led to better performance of medical services and hence customer satisfaction as indicated by 37.9% with a mean of 2.3485 which also indicated that respondents agreed that staff in private hospitals under study in Bungoma County were

responsive to patients' medical requirements. According to Rao et al, (2006), patients expect hospital staff to respond promptly when needed. They also expect the required equipment to be available, functional and able to provide quick diagnoses of diseases. In addition, patients also expect prescribed drugs to be available and properly administered, as other indicators of responsiveness. Thus we posit that the greater the responsiveness of health care providers, the greater the satisfaction of patients.

### 4.6.3 Staff Assurance and Performance of Private Hospitals

The study also sought to determine how staff assurance influenced the general performance of private hospitals in Bungoma County. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of very big influence (1), big influence (2), moderate influence (3), small influence (4) and no influence (5) and the findings were presented in Table 4.10.

**Table 4.10 Staff Assurance and Performance of Private Hospitals** 

Staff Assurance	Frequency	Percentage	Mean
Very big influence	130	39.4	
Big influence	120	36.4	
Moderate influence	40	12.1	
Small influence	45	10.6	
No influence	05	05.1	
Total	330	100.0	1.9848

The statistics in Table 4.10 shows that majority of respondents 39.4% asserted that staff assurance influenced the general performance of private hospitals in Bungoma County to a very big extent. The findings had a mean of 1.9848 which was in agreement of the findings of the study. Therefore staff assurance directly influenced the general performance of private hospitals under study in Bungoma County. Therefore knowledge, skill and courtesy of the doctors and nurses can provide a sense of assurance that they have the patient's best interest in mind and that

they will deliver services with integrity, fairness and beneficence. For a service that is largely credence based (Zeithaml and Bitner, 2000), where customers are unable to evaluate the quality of the services after purchase and consumption, the sense of assurance that is engendered can greatly influence patient satisfaction. In the health care system, assurance is embodied in service providers who correctly interpret laboratory reports, diagnose the disease competently, provide appropriate explanations to queries, and generate a sense of safety. Nurses also play an important part in providing additional support to patients' feelings of assurance by being well-trained and by addressing their needs competently. Thus, the greater the perceived assurance from the health care providers, the greater will be the satisfaction of patients.

### 4.7 Drug Supply and Performance of Private Hospitals

There is a significant impact which is played by drugs, medical supplies and equipment on the quality of patient care which further account for a considerably high proportion of health care costs. In order to avoid wasting the available limited resources, health services need to make informed choices about what to buy so that they can meet priority health needs. It was against this background that the current study sought to determine the influence of drug supply on performance of private hospitals in Bungoma County under the following themes;

### 4.7.1 Adequacy of Drug Stock and Performance of Private Hospitals

The study sought to determine the extent to which adequacy of drug stock influenced the performance of private hospitals in Bungoma County. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of strongly agree (1), agree (2), neutral (3), disagree (4) and strongly disagree (5) and the findings were presented in Table 4.11.

Table 4.11 Adequacy of Drug Stock and Performance of Private Hospitals

Adequacy of Drug Stock	Frequency	Percentage	Mean
Strongly Agree	40	12.1	
Agree	15	04.5	
Neutral	50	15.2	
Disagree	105	31.8	
Strongly Disagree	120	36.4	
Total	330	100.0	3.3505

The findings in Table 4.11 show that the bulky of respondents 36.4% strongly disagreed that the available medical drugs were inadequate for an effective medical service performance. Therefore the study hospitals did not have adequate drugs for effective patient satisfaction. The Government of Kenya in collaboration with other players has produced medical supplies and equipment manual that remains critical in addressing some of these challenges. The manual applies to all healthcare levels as a reference for responsible procurement and management of medical supplies and equipment (Granehein and Lundman, 2004) however the availability of drugs to hospitals is still low in many parts of the country. Middle income countries face real shortage of drugs and medical supplies for healthcare services posing a challenge in provision of health care thereby contributing to poor quality health services and a further leading to increased mortalities.

### 4.7.2 Category of Drugs and Performance of Private Hospitals

The study also sought to determine whether the private hospitals in the study area had all categories of drugs for effective medical care to its patients. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of strongly agree (1), agree (2), neutral (3), disagree (4) and strongly disagree (5) and the findings were shown in Table 4.12.

**Table 4.12 Category of Drugs and Performance of Private Hospitals** 

Category of Drugs	Frequency	Percentage	Mean
Strongly Agree	30	09.1	
Agree	15	04.5	
Neutral	50	15.2	
Disagree	115	34.8	
Strongly Disagree	120	36.4	
Total	330	100.0	3.8485

From Table 4.12 it can be asserted that majority of respondents were of the opinion that the private hospitals under study did not have all categories of drugs for an effective medical care to its patients as indicated by 36.4% with a mean of 3.8485 respectively. Therefore there was need for a continuous supply of all categories of drugs to meet the ever changing patient needs. In Kenya, supply and availability of medical items and drugs is still an unknown system with devolution worsening the situation with County level hospitals being affected more by lack of adequate drugs and medical supplies (Mselle et al., 2013). The government through its strategy of improving healthcare services delivery aims to provide basic drugs and medical supplies by strengthening public health facilities (Olsen, Ndeki and Norheim, 2005). Currently, due to decentralization following the new constitutional, there is devolution of healthcare to the County governments that are responsible for health facilities within their jurisdictions. However, the Ministry of Health has consistently provided funds for the procurement of drugs and critical medical supplies via its Medical Stores Department to Public hospitals and therefore Private Hospitals should adopt ways of acquiring hospital equipments which was the basis of this study.

### 4.7.3 Improvement on Drug Distribution and Performance of private Hospitals

Lastly the study sought to determine whether improvement on drug distribution in private hospitals will lead to better medical performance. To answer this objective the respondents were asked to indicate their level of agreement to given statements using a likert scale of very big

extent (1), big extent (2), little extent (3) and no change (4) and the findings were presented in Table 4.13.

Table 4.13 Improvement on Drug Distribution and Performance of Private Hospitals

<b>Drugs Distribution</b>	Frequency	Percentage
Very big extent	130	39.4
Big extent	120	34.4
Little extent	70	21.2
No change	10	03.0
Total	330	100.0

The findings in Table 4.13 indicated that majority of respondents felt that an improvement on drug distribution in private hospitals will influence their performance to very big extent as indicated by 39.4% with a mean of 1.8788 respectively. Therefore a steady distribution of drugs to private hospitals in Bungoma County will enhance performance to medical services provided by the study hospitals. Procurement is only one part of managing medical supplies and equipment, and effective storage, stock control, care and maintenance are also critical if health services are to get the most out of what they buy (Dogba and Fournier, 2009). In order to avoid wasting the available limited resources, health services need to make informed choices about what to buy so that they can meet priority health needs (Granehein and Lundman, 2004). There exists less information about essential medical supplies and equipment though most Private Health organizations have useful information about essential drugs. Even with this information, selection of supplies and equipment has been given little attention with availability of a range of brands and items to choose from leading to acquisition of inappropriate and technically unsuitable items, which are incompatible with existing equipment, unavailable spare parts and consumables or unskilled staff on their use all together.

#### **CHAPTER FIVE**

## SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of findings, conclusion and recommendations based on the study objectives.

### **5.2 Summary of Findings**

The study sought to determine the internal environment influencing performance of private hospitals in Kenya with special reference to Bungoma County;

The first objective sought to determine the influence of human resources and performance of private hospitals in Bungoma County and the findings showed that majority of the patients 66.67% were of the opinion that the study hospitals had different medical specialist to handle different medical conditions that enhanced the performance of this hospitals. The study further found that 42.4% agreed that the hospitals under study had an adequate number of medical specialists to enhance good medical delivery to their patients. Based on this objective it can concluded that human resource components such as different medical specialists and adequate numbers directly influenced the performance of private hospitals and therefore employers should strive to ensure that their hospitals have the right number of specialist medical staff and experienced human resources manpower.

Concerning the second objective which sought to establish the influence of ICT integration on performance of private hospitals in Bungoma County found 36.4% asserted that ICTs online resources such as tele-nursing, tele-home care were inadequate. The overall mean of 2.1515 was also within the likert scale of very inadequate and inadequate and therefore ICTs online resources are inadequate to offer satisfactory performance in private hospitals in Bungoma County. The study also showed that majority of patients were of the opinion that an improvement in e-health will increase the performance of private hospitals to a very big extent as indicated by a mean of 34.8% with a general mean of 2.1364 respectively.

The third objective sought to establish the influence of services quality on performance of private hospitals in Bungoma County revealed that the private hospitals under study provided the patients with reliable medical services that led to their satisfaction as indicated by 36.4% and a total mean of 2.3485 respectively. Therefore the private hospitals in Bungoma County provided the customers with reliable medical services to their satisfaction. The study further showed that majority of the respondents strongly agreed that staff responsiveness in private hospitals has led to better performance of medical services and hence customer satisfaction as indicated by 37.9% with a mean of 2.3485 which also indicated that respondents agreed that staff in private hospitals under study in Bungoma County were responsive to patients' medical requirements. The study also indicated that majority of respondents 39.4% asserted that staff assurance influenced the general performance of private hospitals in Bungoma County to a very big extent. The findings had a mean of 1.9848 which was in agreement of the findings of the study. Therefore staff assurance directly influenced the general performance of private hospitals under study in Bungoma County.

The forth objective sought to find out the influence of drug supply and performance of private hospitals and the findings revealed that the bulky of respondents 36.4% strongly disagreed that the available medical drugs were inadequate for an effective medical service performance. Therefore the study hospitals did not have adequate drugs for effective patient satisfaction. The study further asserted that majority of respondents were of the opinion that the private hospitals under study did not have all categories of drugs for an effective medical care to its patients as indicated by 36.4% with a mean of 3.8485 respectively. It was also revealed that majority of respondents felt that an improvement on drug distribution in private hospitals will influence their performance to very big extent as indicated by 39.4% with a mean of 1.8788 respectively.

#### 5.3 Conclusion

The study sought to determine the internal environment influencing performance of private hospitals in Kenya with special reference to Bungoma County;

The first objective sought to determine the influence of human resources and performance of private hospitals in Bungoma County and the findings showed that majority of the patients were of the opinion that the study hospitals had different medical specialist to handle different medical

conditions that enhanced the performance of this hospitals. The study further found that the bulky of respondents agreed that the hospitals under study had an adequate number of medical specialists to enhance good medical delivery to their patients. Based on this objective it can concluded that human resource components such as different medical specialists and adequate numbers directly influenced the performance of private hospitals and therefore employers should strive to ensure that their hospitals have the right number of specialist medical staff and experienced human resources manpower.

Concerning the second objective which sought to establish the influence of ICT integration on performance of private hospitals in Bungoma County found majority of respondents asserted that ICTs online resources such as tele-nursing, tele-home care were inadequate. The study also showed that majority of patients was of the opinion that an improvement in e-health will increase the performance of private hospitals to a very big extent.

The third objective sought to establish the influence of services quality on performance of private hospitals in Bungoma County revealed that the private hospitals under study provided the patients with reliable medical services that led to their satisfaction. Therefore the private hospitals in Bungoma County provided the customers with reliable medical services to their satisfaction. The study further showed that majority of the respondents strongly agreed that staff responsiveness in private hospitals has led to better performance of medical services and hence customer satisfaction. The study also indicated that majority of respondents asserted that staff assurance influenced the general performance of private hospitals in Bungoma County to a very big extent. Therefore staff assurance directly influenced the general performance of private hospitals under study in Bungoma County.

The forth objective sought to find out the influence of drug supply and performance of private hospitals and the findings revealed that the bulky of respondents strongly disagreed that the available medical drugs were inadequate for an effective medical service performance. Therefore the study hospitals did not have adequate drugs for effective patient satisfaction. The study further found that majority of respondents was of the opinion that the private hospitals under study did not have all categories of drugs for an effective medical care to its patients. It was also revealed that majority of respondents felt that an improvement on drug distribution in private hospitals will influence their performance to very big extent.

#### **5.4 Recommendations**

Based on the findings of the research findings, the study recommends that;

- i. Hospitals should recruit more medical specialist and in adequate numbers so as to meet the ever changing medical needs of their patients as human resources play a major role in the implementation of medical services as earlier studies also indicate a positive relationship between highly skilled personnel and improved health services delivery outcomes.
- ii. The government and other medical stakeholders should consider integrating ICTs in medical services as this will enhance service delivery to their patients. ICT services such as e-health, tele-nursing will help lower the costs of medic care in the country and would facilitate faster diagnosis and patient consultations and hence led to effective medical service delivery.
- iii. The medical staff should be reliable, responsive and should offer assurance the patient population and therefore the management should ensure that health human resource is fully motivated so as to provide adequate and effective medical services to their clients.
- iv. The Government should put in place policy guidelines on procurement of drugs and medical equipments so that there is a steady supply of both drugs and medical equipment to both public and private hospitals and should also support the devolution of medical services to County Governments.

#### **5.5** Recommendation for Further Study

The study further proposes the following areas for further study;

- i. A similar study to be carried in other counties so as to compare the study findings and also to formulate possible strategies for improvement.
- ii. Effect of ICTs integration on patients' satisfaction in public hospitals in Kenya.
- iii. Factors influencing the performance of private hospitals in Kenya.

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**APPENDINCES** 

APPENDIX I: TRANSMITTAL LETTER

Bonface Maloba

L50/88019/2016

Bungoma

To whom it may concern;

Dear Sir/ Madam,

**REF: REQUEST FOR COLLECTION OF DATA** 

I am currently a student at the University of Nairobi pursuing a Master's degree in project

planning and management. You have been identified as a participant in this research survey on

"Internal environment Influencing Performance of Private Hospitals in Bungoma South Sub

County: Kenya"

You are kindly advised to fill this questionnaire all sections, giving your opinion as freely and,

honestly as possible. Your views and contributions are vital and shall be held with confidence.

The information gathered will be strictly used for academic purpose and in fulfillment of the

requirements of the University of Nairobi graduate qualifications in Project planning and

Management. Your assistance and cooperation will be highly appreciated.

Yours faithfully,

Bonface Maloba

61

### **APPENDIX II:**

## QUESTIONNAIRE FOR PATIENTS

### **Instructions**

Fill in the questionnaire as truthful as possible by ticking in the relevant boxes and filling the blank spaces. The information gathered in this study will be treated with utmost privacy and confidentiality.

## **Section 1: Personal details**

## 1.1 Tick your gender as appropriate

Male ( )
Female ( )
1.2 Age in complete years
20-25 ( )
26-30 ( )
31-35 ( )
36-40 ( )
41-45 ( )
46-50 ( )
51-55 above 56 ( )
1.3 Level of education
Primary ( )
Secondary ( )
College Certificate ( )
College Diploma ( )
Bachelor Degree ( )
Masters Degree ( )
PhD ( )

# SECTION 2: HUMAN RESOURCES AND PERFORMANCE OF PRIVATE **HOSPITALS**

To investigate how human resources influences patients satisfaction in Private Hospitals in

Bungoma South Sub County
2.1 Do you believe that there are different medical specialists in Private Hospitals?
Yes ( )
No ( )
I am not sure ( )
I don't Know ( )
2.2 Do you believe that the current hospital staff is adequate for satisfactory performance?
Yes ( )
No ( )
I am not sure ( )
I don't Know ( )
2.3 On a scale of 1-5 to what extent do you think the current human resource is adequate to
influence patient outcome?
Very Big Extent ( )
Big Extent ( )
Moderate Extent ( )
Small Extent ( )
No Extent ( )
Section 3: ICT Integration and Performance of Private Hospitals
To investigate how ICT Integration influences patients' satisfaction in Private Hospitals in
Bungoma South Sub County
3.1 Do you believe ICT integration play a significant role in provision of health services in
Private Hospitals?
Yes ( )
No ( )
I am not sure ( )

I don't Know ( )
3.2 In your opinion how do you rate the availability of ICTs online facilities that enhance
patient satisfaction?
Very Adequate ( )
Adequate ( )
Inadequate ( )
Very Inadequate ( )
2.3 Do you agree that the hospital has is adequate ICT communication system to deliver
effective medical services to the patients?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )
3.4 On a scale of 1-5 do you think improving e-health will influence patient satisfaction?
Very Big Extent ( )
Big Extent ( )
Little Extent ( )
Very Little Extent ( )
No change ( )
SECTION 4: SERVICE QUALITY AND PERFORMANCE OF PRIVATE HOSPITALS
To investigate how service factors influences patients' satisfaction in Private Hospitals in
Bungoma South Sub County
4.1 Do you agree that the current service factors influence the daily service delivery within
the hospital?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )

4.2 Do you agree that the medical service provided by the hospital is reliable for patient
satisfaction?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )
4.3 Do you agree that staff responsiveness has led to effective medical services to the
patients?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )
4.4 On a scale of 1-5 how much do you think staff assurance influence the general hospital
service delivery?
Very Big Influence ( )
Big Influence ( )
Moderate Influence ( )
Small Influence ( )
No change ( )
4.5 What is your view on the current medical services within this hospital in relation to
patients
satisfaction?

## SECTION 5: DRUG SUPPLY AND PERFORMANCE OF PRIVATE HOSPITALS

To investigate how drugs supply influences patients' satisfaction in Private Hospitals in

Bungoma South Sub County
5.1 Is the available drug stock adequate for effective medical service delivery within the
hospital?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )
5.2 Do you believe that the hospital has all categories of drugs for sufficient medical
provision?
Strongly Disagree ( )
Disagree ( )
Neutral ( )
Agree Strongly ( )
Agree ( )
5.4 On a scale of 1-5 to what extent do you feel that the improvement on drug distribution
will improve the patient satisfaction?
Not at all ( )
May be ( )
Slightly ( )
High Impact ( )
Huge Impact ( )
5.5 What is your view on the current hospital equipments within this hospital in relation to
patients
satisfaction?

**THANKS** 

APPENDIX III:

KREJCIE AND MORGA TABLE OF DETERMINING SAMPLE SIZE

Table 3	.1									
Table for Determining Sample Size of a Known Population										
N	S	N	S	N	S	N	S	N	S	
10	10	100	80	280	162	800	260	2800	338	
15	14	110	86	290	165	850	265	3000	341	
20	19	120	92	300	169	900	269	3500	346	
25	24	130	97	320	175	950	274	4000	351	
30	28	140	103	340	181	1000	278	4500	354	
35	32	150	108	360	186	1100	285	5000	357	
40	36	160	113	380	191	1200	291	6000	361	
45	40	170	118	400	196	1300	297	7000	364	
50	44	180	123	420	201	1400	302	8000	367	
55	48	190	127	440	205	1500	306	9000	368	
60	52	200	132	460	210	1600	310	10000	370	
65	56	210	136	480	214	1700	313	15000	375	
70	59	220	140	500	217	1800	317	20000	377	
75	63	230	144	550	226	1900	320	30000	379	
80	66	240	148	600	234	2000	322	40000	380	
85	70	250	152	650	242	2200	327	50000	381	
90	73	260	155	700	248	2400	331	75000	382	
95	76	270	159	750	254	2600	335	1000000	384	
Note: N is Population Size; S is Sample Size Source: Krejcie & Morgan, 1970										