

**PROCUREMENT PROCESSES AND PERFORMANCE OF REFERRAL  
HOSPITALS IN UGANDA; A CASE OF CHINA-UGANDA  
FRIENDSHIP HOSPITAL**

**By**

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**A Dissertation Submitted to the School of Business and Management in Partial  
Fulfilment of the requirements for the award of A Master's in Management  
Studies (Procurement & Supply Chain Management)  
Uganda Management Institute**

**MARCH, 2019**

## DECLARATION

I Muyambi Mercy registration number 17-MMS PSCM-43-012, hereby declare that this dissertation is my work and has never been presented to any University or Institution of learning for any academic award.

Signature: .....

Date: .....

## APPROVAL

The work reported in this research was carried out by the Muyambi Mercy, registration number 17-MMS PSCM-43-012 under my supervision.

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## **DEDICATION**

I dedicate this report to my dear parents, my wife and children.

May God Bless You

## **ACKNOWLEDGEMENT**

In a very special way I thank my supervisors, Dr. Kiwanuka Michael and Mr Businge Hannington for their continued and invaluable guidance that has enabled me to make this project a success. I thank my respondents for accepting to objectively participate in this study.

I thank all previous researchers whose good work has enabled me to review literature and develop a better conceptualization of the subject matter.

I thank my employers, China-Uganda Friendship Hospital Naguru for according me the time to attend all classes and as well as the freedom to conduct my research without interruptions.

Honestly, I cannot mention by name all the people to whom I am indebted but to you all, I am grateful, may the almighty God reward you abundantly.

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## LIST OF ACRONYMS

<b>ANOVA</b>	Analysis of Variance
<b>CUFH-N</b>	China-Uganda Friendship Hospital Naguru
<b>CIPS</b>	Chartered Institute of Procurement and Supply
<b>CVI</b>	Content Validity Index
<b>HOD</b>	Head of Department
<b>HRM</b>	Human Resource Manager
<b>ICT</b>	Information Communications and Technology
<b>PDE's</b>	Referral Hospitals
<b>PPDA</b>	Public Procurement and Disposal of Public Assets
<b>SACCO</b>	Saving And Credit Cooperative Organisation
<b>SPSS</b>	Statistical Package for Social Scientists
<b>USAID</b>	United States Agency for International Development

## ABSTRACT

The study established the relationship between Procurement Processes and Performance of Referral Hospitals, a case of China-Uganda Friendship Hospital Naguru. The independent variables of the study was Procurement Processes measured in terms of Procurement Planning, supplier selection and evaluation and contract Management while the dependent variable, Performance of Referral Hospitals was measured in terms of Quality of Services, Budget Utilization and Responsiveness or Timeliness of Services. The target population was 96 respondents however the sample size of 87 respondents (was guided by Krejcie and Morgan table, 1970) were selected using Simple Random Sampling and purposive sampling as the sampling techniques. Data was collected using Questionnaire and Key Informant Interviews. Both quantitative and qualitative data was collected, quantitative data was analyzed using Descriptive statistics, Regression, Pearson's correlations and ANOVA while qualitative data was analyzed using thematic analysis. The response rate was 87.3%, the study established a very strong positive relationship between Procurement planning and Performance of Hospitals with a correlation of 0.965, the  $R^2$  was 93.1% and P-value of 0.000. The study as well established a very strong positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals with a Pearson's correlation of 0.933, the  $R^2$  was 87% and the P-value was 0.000 and finally the study as well established a moderate positive relationship between Contract Management and Performance of Hospitals with a Pearson's correlation of 0.494, the  $R^2$  was 23.3% and the p-value was 0.000. The study concluded that there is a positive relationship between Procurement planning, Supplier Selection and Evaluation, Contract Management and Performance of Hospitals. The study therefore recommended that CUFH-N should put more emphasis on improving its Procurement planning, Supplier Selection and Evaluation and Contract Management as a measure to improve the Performance of Hospitals by CUFH-N.

# **CHAPTER ONE: INTRODUCTION**

## **1.1 Introduction**

This study aimed at establishing the relationship between Procurement Processes and Performance of Referral Hospitals, a case of China-Uganda Friendship Hospital Naguru. Procurement Processes in this study was conceived to be the Independent Variable whereas performance as the Dependent variable. Procurement Processes was measured in terms of; Procurement Planning, supplier selection and evaluation and contract Management, whereas Performance of Referral Hospitals was measured in terms of; Quality of Services, Budget Utilization and Responsiveness or Timeliness of Services. This chapter covered the Background to the study, Statement of the problem, General Objective of the study, Specific Objectives, Research Questions, Research Hypothesis, the Conceptual Framework, Significance of the study, Justification of the study, Scope of the study and as well as operational definitions of key terms and concepts.

## **1.2 Background of the Study**

### **1.2.1. Historical Background**

World over, the performance of Hospitals remains a major concern of governments and development partners (Karen, et al. 2007). China specifically has made spectacular progress in improving living standards and lifting millions out of poverty (Ravallion and Chen, 2007). Its health system, which was once honoured by health specialists worldwide, has found itself increasingly the subject of negative comments both in China and overseas. One persistent set of criticisms concerns the delivery system, which has been argued to be inefficient, prone to the provision of unnecessary care, of poor quality, overly focussed on drugs and high-tech care, and insufficiently focused on public health. However, while there is broad agreement

that the system needs reform, there is less agreement on the causes of the system's failure and the reforms necessary to improve it. Some suggest that the solution is to encourage greater competition in the sector, including between private and public providers. Some urge rapid expansion of the private sector; others argue for a much firmer control by the government of public facilities that are seen as already de facto private. Some argue that competition and ownership are far less important issues than the way providers are paid, and urge moves away from fee-for-service (FFS) and reforms to China's highly distorted price schedule (Karen, et al. 2007).

It is widely accepted that, however measured, the quality of care in China could be improved. Drugs and equipment are widely available: for example, China has more MRI scanners per million people than Thailand and Mexico, which are considerably more affluent. By contrast, qualified staff is in short supply, especially at lower-level facilities. A large-scale study of 46 counties and 781 village doctors in 9 western provinces conducted in 2001 found that 70% of village doctors had no more than a high school education and had received an average of only 20 months of medical training (Wang et al., 2003).

“In most African hospitals, even in clinics, there is no love. When you arrive at the hospital, they give you the patient form. He holds his pen. You tell him: Papa, write, my child is dying; he will answer, pay the money. He even crosses his legs; you are anxious, fidgeting and he will insist that you pay the money. Before the money arrives, the child dies. There is no love there. To use the hospital, it is money in full or you'll die if you do not have the money” (Focus Group Discussion women). In Africa, every decade since the 1940s, health policy makers, professionals and providers have launched new global and national initiatives in an attempt to address the health challenges and needs of populations, particularly those living in sub-Saharan Africa. However, few reforms have been successful. Recent debates have emphasized how to make progress in strengthening the health systems, achieving universal



health coverage and making progress towards meeting the Sustainable Development Goals (SDG's).

Improving the health of the nationals of any given country is an international priority and a Sustainable Development Goal. To this effect since late 1980s up-to date 2018, Uganda has instituted numerous health sector reforms and policies aiming at improving the functioning and performance of the health sector and, ultimately, the health status of the population. Despite these reforms and policies, including an overall decentralization of government, health services and health status remain largely unchanged in Uganda. In fact the health care and health status indicators for Uganda have remained poor. For example data from the Uganda Demographic Health Survey of 2000–2001 suggest further declining health status and health service delivery compared to the situation five years earlier. A case in point, the Maternal Mortality Ratio (MMR) was estimated in 2006 at 435 maternal deaths per 100 000 live births (Uganda Bureau of Statistics and Macro International Inc. 2007), showing little progress towards the government's own goal of reducing maternal mortality from 500 to 300 between 2001 and 2008. Considering these developments, an overview is necessary to analyze the current status as well as past trends regarding health service delivery in Uganda with an object to identify the various challenges and barriers in the system and possibly come up with recommendations in this paper. Health services in Uganda are provided by the Ministry of Health (MoH), Ministry of Local Government (MoLG), Private and non-government organizations (NGOs) particularly religious groups. MoH is responsible for planning and developing health policies and for providing health care in all government hospitals while the MoLG is in charge of health care delivery at the district level and below. The NGOs provide services both in hospitals and in smaller medical units. The current health system is organized under four levels of health care: primary, secondary, tertiary and quaternary. The primary level care (comprising of health centres and other lower units; the

secondary level comprises a network of district and rural hospitals; the tertiary level includes all General Referral Hospitals based at regional capital; and the two national hospitals (Mulago and Butabika) comprise the quaternary and highest level of care. Usually each of original 39 districts in the country has at least one hospital and several other smaller health units (Health Centre IVs & IIIs). With this arrangement, it was estimated that some 27% of the population are within 5 km of the nearest health unit, while 57% are within 10km (Uganda Government, 1992).

Traditionally, performance measurement involved management accountants with budgetary control and the development of indicators such as return on investment (Chenhall, 2000). Nonetheless, today's work environment has increased trends of public sector reliance on non-financial measures to assess the performance which include fulfilling the objectives of speed, quality, dependability, cost and flexibility (Slack, 2007). Munyua (2012) while quoting Handfield et al (2009) also observes that Performance of Referral Hospitals can be measured through price performance, cost effectiveness, revenue, responsiveness, technology or innovation, supplier performance, strategic performance, administration and efficiency.

CIPS Australia (2005) presents the differences between efficiency and effectiveness. Efficiency reflects that the organization is "doing things right" whereas effectiveness relates to the organization "doing the right thing". This means an organization can be effective and fail to be efficient, the challenge being to balance between the two. Whatever is not measured cannot be managed; Performance measures provide the information necessary for decision makers to plan, control and direct the activities of the organization and by identifying deviations from standards. Carton (2004) adds that there is no authoritative list of performance measures in the prior literature; nonetheless, the overall agreement is that performance is an end result of given activities.

Knowing what exactly to measure and how to measure it helps to critically gauge the Performance of Referral Hospitals level. USAID (2013) report and Marr (2013) identify performance scorecards that assist in measuring Performance of Referral Hospitals namely: timely delivery, quality, Client service, Procurement cycle time, payment processing time, transparent price information, overall equipment effectiveness and machine downtime level.

Today organizations are competing in multi-faceted environments hence an accurate understanding of their goals and methods for attaining their goals are paramount. Knowing what to measure provides managers with the instruments they need to navigate to future competitive success. The balance scorecard for example measures organization performance across four balanced perspective: financials, Clients, internal business processes and learning and growth (Kaplan & Norton, 1996). This study will focus more on qualitative measures of Performance of Hospitals.

Measuring Performance of Referral Hospitals yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage (Christopher, 2005).

### **1.2.2. Theoretical Background**

This study is grounded on a Systems Theory proposed by Bertalanffy (1920). The theory states that all blocks in a unit are integrated in a living system with dynamism of each element, in this study Procurement planning, Contract Management and Supplier Selection and Evaluation are the blocks or elements of the system that affect the performance of the Hospital. In his theory he viewed a system as “a set of elements standing in interrelation among themselves and with the environment” (Bertalanffy, 1972). Literally, a system contains parts which are organized and related in the manner that they function to deliver a

pre-determined result or outcome. However, these parts are not static, they change depending on the environment and the context in which they operate. According to Frye and Hemmer (2012) social interactions, human beings and animals are all systems. They further argued that the systems theory holds the notion that gradual change is a natural part of a system which are either closed or open. However, only systems that are open to change are a true characteristic of living systems which evolve over time.

In the context of this study, Performance of Referral Hospitals is a broad goal and its evaluation by China-Uganda Friendship Hospital Naguru observes a social system in management composed of concepts, with connections and interrelations among the concepts as parts in the system. It provides for communication mechanism with a continuous flow and exchange of information within the complex environment. These components or parts are existing within the evaluation context of Performance of Referral Hospitals and interact with the dynamic environment of Performance of Referral Hospitals within China-Uganda Friendship Hospital Naguru. First, Performance of Referral Hospitals itself is interconnected and very broad both in design, implementation and evaluation. Secondly, the evaluation of Performance of Referral Hospitals is complicated due to the absence of a Procurement system with guiding frameworks and plans to supports their Procurement. Additionally, the Procurement Procedures are not well known to its entire stakeholder. In China-Uganda Friendship Hospital Naguru, evaluation of Performance of Referral Hospitals cannot be straight forward without a clear understanding of what it is and its targets besides appreciating its roles and identifying the underlying constraints that may hinder its execution. Therefore, to comprehend the China-Uganda Friendship Hospital Naguru and evaluation of Procurement as a system, it would require an approach consistent with the general system theory. Although the general systems theory is interdisciplinary, few critics find it as a pseudoscience that approaches things in a holistic way. However, the general systems model

has been used in evaluating education and health programmes and common evaluation theories like the Logic and the CIPP models are grounded on it.

### **1.2.3. Conceptual Background**

According to the World Health Organisation (WHO, 2001), Hospital Performance refers to the maintenance of a state of a functioning hospital that corresponds to societal, patient and professional norms. Hospital performance was based on professional competences in application of present knowledge, available technologies and resources, efficiency in the use of resources, minimal risk of the patient, responsiveness to patients and as well as contribution to health outcomes. However, most hospitals across the world have not met this basic understanding of hospital performance, China-Uganda Friendship Hospital not being exceptional.

According to (Caldwell, 2009), “procurement planning” is the stage in which the procurement professional takes the qualified prospect through a series of questions and answer sessions to determine or identify the requirements of the prospect. During this question and answer session, the procurement personnel attempted to help the user identify and qualify a procurement need or ‘gap’ between where the prospect is today and where they need to be in the future. Based on the gap, needs can be clarified to determine if the solution will fill all or part of this overall gap. Needs can be explained another way: the procurement personnel who use procurement skills to uncover prospects needs then to tailor the response to them. The solutions presented relate directly to the prospects situation and needs. Features are still mentioned, but the emphasis is on the benefit or value to the user, (Caldwell, 2009).

“Supplier evaluation” is a management activity whose primary aim is acquiring information to analyse and to manage supplier relationships and supply situations (Li et al., 2006). The

process entails the simultaneous consideration of a number of critical supplier performance features that include price, delivery lead-times, and quality. The importance of supplier evaluation is evident from its impact on firm performance and more specifically on final product attributes such as cost, design, manufacturability, quality, and so forth (Sarkis & Talluri, 2002).

After determining where to source, a supplier selection decision within the chosen area can be made. Supplier selection decisions must include strategic and operational factors as well as tangible and intangible factors in the analysis (Sarkis & Talluri, 2002). That's why decision maker can analyse the supplier selection decision in a systematic and scientific approach by means of utilizing the proposed model.

Value for money necessitates selecting carefully suitable suppliers for collaboration. It is critical that supplier selection process be able to bring together all of the stakeholders into a common collaboration that generates buy-in and their judgments“, comments and evaluation be captured through the process as well. Decision is made from the suppliers who have passed the qualification requirements and are eligible for contracts award (Nganga, 2014).

Public sector entities specifically Ministries, Departments and Agencies have different policies and criteria that they put in place during suppliers selection however, these policies are all guided by the PPDA Act. 2003. Policies are generally adopted by the Board or senior governance body within an organization whereas procedures or protocols would be developed and adopted by senior executive officers. Organization policies can assist in both subjective and objective decision making process. According to Matook et al. (2009) the operational success of organizations policies will often depend on the development of a network of reliable and trustworthy suppliers and consequently, making the right supplier selection decisions are important. According to Slack and Lewis (2002) if there is a gap of

unsatisfactory performance, it's assumed that public sector will adapt its strategies thus dealing with operational decision areas in allocation of resources, level of cooperation and outsourcing in order to be strategically fit between the enablers and requirements of the beneficiaries”.

Due to the high costs involved in the evaluation processes Kamenya (2014) suggests that criteria was used in the following situations: purchase of strategic high profit, high risk items, where potential suppliers do not hold accreditation, purchase of non-standard items, expenditure on capital items, global sourcing, outsourcing, placing of construction and similar contracts, among others. Suppliers may be evaluated in many ways: financial ability, quality, production facilities, environmental issues, supplier's organizational culture, cost factors production capacity and employee capabilities among others (Wu, Shunk, Blackhurst, & Appalla, 2007).

“Supplier Selection” basically involves scanning, analysing, examining and filtering the basic background and bio data of suppliers within the market with the aim of choosing the best one that will propel the performance of the organization to a better direction (Stormy, 2005). The dynamic business environment owing to technological advancements and sophisticated market demands has forced procuring entities to earnestly source for new suppliers who will meet their business needs hence; the importance of supplier selection under the purchasing function cannot be stressed enough.

“Contract management” is the process of managing contract creation, execution and analysis to maximize operational and financial performance at an organization, all while reducing financial risk. Organizations encounter an ever-increasing amount of pressure to reduce costs and improve company performance. Contract management proves to be a very time-consuming element of business, which facilitates the need for effective and automated contract management system. Contract management or Contract Lifecycle Management is the Management of contracts from Vendors, Partners, Clients and

Employees. It supports the entire Client and contract lifecycle which covers any process that contributes, creates or utilizes contract data. Effective Contract Management requires an understanding of every step in the contract process, including any step that contributes, creates, or utilizes contract data.

#### **1.2.4. Contextual Background**

China-Uganda Friendship Hospital is a Ugandan based hospital located on Naguru Hill, Nakawa Division, Kampala District in Kampala the Capital City of Uganda. The hospital lies approximately 6.5 kilometres (4 miles) and by road its east of the central business district of Kampala. The Hospital was donated by the Government of the People's Republic of China and was completed and handed over to the Government of Uganda on 6th January 2012. The Chinese government, designed and built the hospital between 2009 and 2012 as a gift to the people of Uganda, at a cost of US\$8 million (UGX 20 billion). The hospital is on Naguru Road, on Naguru Hill, Nakawa Division. Naguru Hospital is also meant to decongest Mulago National Referral Hospital, the only general public hospital serving an estimated 3 million inhabitants of the Kampala Metropolitan Area. The hospital is primarily intended to serve the residents of; Nakawa Division, Kampala Metropolitan Area and other needful Ugandans. However in a bid to ensure improved performance of CUFH-N and growth of the hospital through advancement in the number of clients, majority of whom access reproductive health services, specialized services such as urology, gastroenterology, orthopaedics, acupuncture, Ear, Nose and Throat ( E.N.T), diabetes, hypertension, specialized paediatrics among others are offered.

China-Uganda Friendship Hospital has a bed capacity of 100 beds and its mandate is stipulated in the National Hospital policy of 2006. The number of employees of the hospital has progressively increased from “207 Staff, 9 Chinese medical team and 34 medical interns” in FY 2015/2016 to “259 Staff, 12 Chinese medical team and 41 medical interns” in



FY2016/17 and subsequently to “288 Staff, 12 Chinese medical team and 62 medical interns” in FY2017/18, this as well illustrates why this specific study was conducted in CUFH-N. This study was conducted at CUFH-N examining the hospitals procurement processes and their effect on the performance of the Hospital. In the middle of strong emphasis on compliance to established procurement procedures as enshrined in the PPDA Act 2003 and the large budget allocation to CUFH-N by the government of Uganda aimed at improving service delivery in the Health care systems, there is need to establish whether procurement processes significantly contribute towards the performance of CUFH-N. Procurement function being one of the key players in ensuring performance of PDE’s, there is growing need to find out whether procurement processes affect the performance of CUFH-N and also identify gaps/loopholes if any, and suggest remedial action on the situation.

### **1.3 Statement of the Problem**

China-Uganda Friendship Hospital Naguru (CUFH-N) primarily aims at serving Ugandans and decongesting Mulago National Referral Hospital. However, those among other objectives still go unachieved. The hospital also still faces multiple performance challenges ranging from poor service delivery, poor service quality, inadequate staffing, insufficient budget utilization, inadequate funding, low quality contractors, unsatisfied clients, procurement of substandard goods and services and as well as lack of equipment’s such as medical machines beds, medicine among others. This has affected the provision of; Inpatient Services, Outpatient Services, Diagnostic services, Specialized curative care services, prevention and rehabilitation, Community outreach services, management and support services.

According to a CUFH performance report, (2016) by the management of China-Uganda Friendship Hospital Naguru, several interventions such as increased funding, recruitment of professionals, partnerships, orientation of staff, effective staff supervision mechanisms,

institution of good polices and strategies, motivation of staff and as well as institution of mechanisms to receive feedback from clients have been put in place to ensure that the hospital performs to the predetermined standards. However, the quality of services and performance of China-Uganda Friendship Hospital Naguru (CUFH-N) is still wanting since 2012 when it initiated its operations. The researcher intends to assess the effect of Procurement Planning, Contract Management and Supplier Section and Evaluation on the performance of China-Uganda Friendship Hospital which may help in advancing policy recommendations to the hospitals management and government on possible measures to improve performance of the hospital.

#### **1.4 General Objective of the study**

To examine the relationship between Procurement Processes and Performance of referral hospitals in Uganda taking a case of the China-Uganda Friendship Hospital

#### **1.5. Specific Objectives of the Study**

The proposed study will seek to achieve the following objectives;

- i. To determine the relationship between Procurement Planning and the Performance of China-Uganda Friendship Hospital
- ii. To determine the relationship between Supplier Selection and Evaluation, and the Performance of China-Uganda Friendship Hospital
- iii. To determine the relationship between contract management and the Performance of China-Uganda Friendship Hospital

#### **1.6. Research questions**

The study will seek to respond to the following questions;

- i. What is the effect of Procurement Planning on the Performance of China-Uganda friendship Hospital?
- ii. What is the effect of Supplier Selection and Evaluation on the Performance of China-Uganda friendship Hospital?
- iii. What is the effect of Contract Management on the Performance of China-Uganda Friendship Hospital?

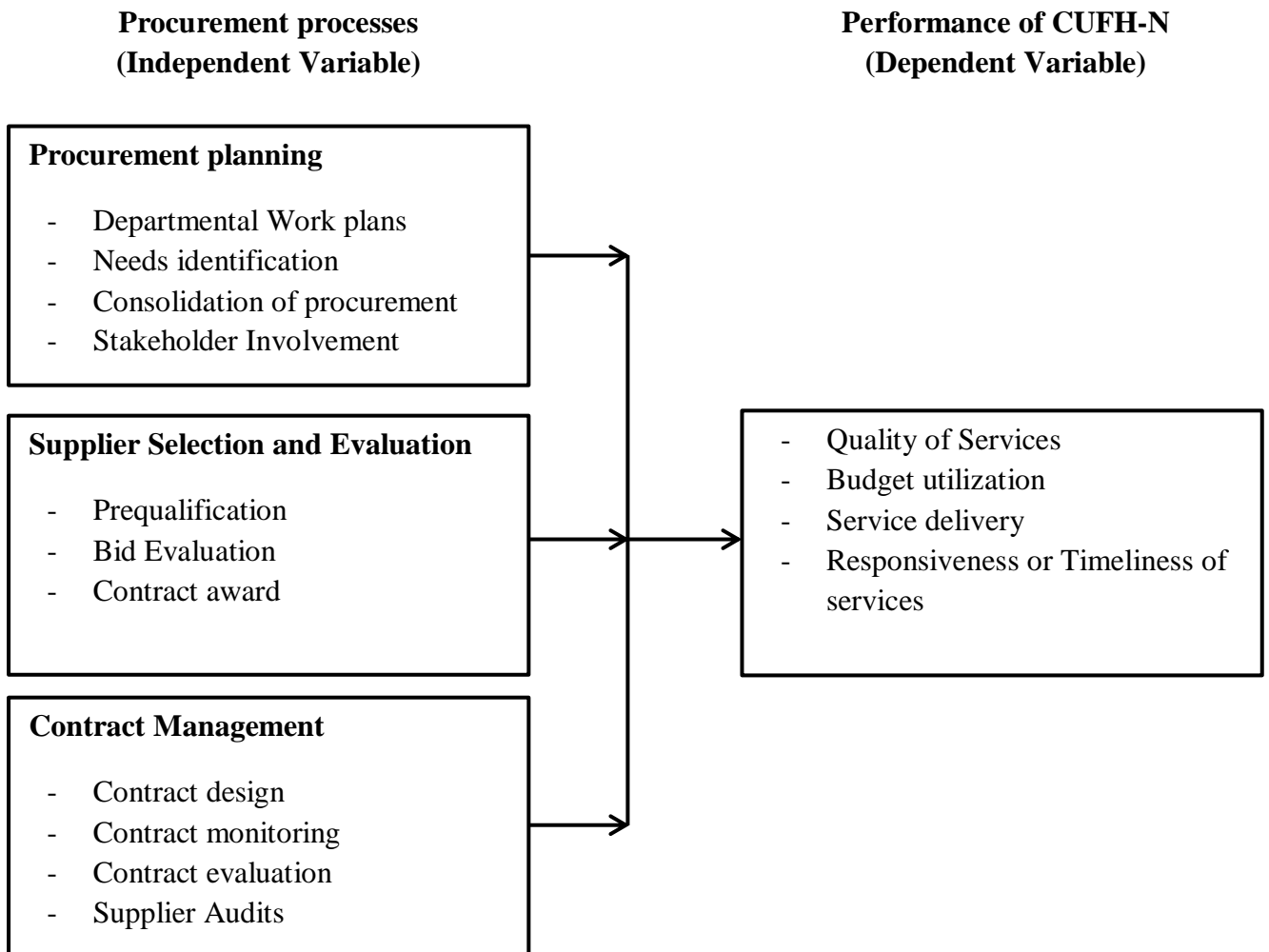
### **1.7. Hypotheses of the study**

The tentative answers to the research questions include;

- i. There is a significant relationship between Procurement Planning and Performance of China-Uganda friendship Hospital
- ii. There is a significant relationship between Supplier Selection and Evaluation, and Performance of China-Uganda Friendship Hospital
- iii. There is a significant relationship between Contract Management and Performance of China-Uganda Friendship Hospital

## 1.8. Conceptual Framework

### CONCEPTUAL FRAMEWORK ILLUSTRATING THE RELATIONSHIP BETWEEN PROCUREMENT PROCESSES & PERFORMANCE OF THE CUFH-N



**Source:** Adopted from Robbins, (2001), John, (2006) & Makabira D.K., & Waiganjo, (2014) with modification by the researcher.

**Figure 1.1:** Conceptual framework

In the conceptual frame work (figure 1) above, procurement processes was the independent variables as measured by; Procurement Planning, Supplier Selection and Evaluation and Contract Management. Performance of Referral Hospitals was the dependent variable as measured in terms of Quality of Service, Budget utilisation, Service delivery and Responsiveness or Timeliness of services.

Also supplier selection and evaluation was analysed using two indicators of prequalification and bid evaluation helps to show transparency and fairness. Contract management had the following indicators as contract design, contract monitoring and contract evaluation which in turn influence Performance of Referral Hospitals of China-Uganda Friendship Hospital Naguru. Procurement planning, supplier evaluation and selection, and contract management are key elements in affecting/influencing performance of China-Uganda Friendship Hospital Naguru in regard to Quality of Services, Budget utilization, Service delivery and Responsiveness or Timeliness of services.

### **1.9. Significance of the study**

This section presents the benefits of the study to the different stakeholders, these include;

This study findings may assist management, user departments, the procuring and disposing unit and the entire procurement stakeholders to appreciate the public sector procurement functions, processes and procedures.

The study findings may help in identifying gaps in Public procurement and suggest ways of bridging the identified gaps so as for CUFH-N realise value for money and enhanced service delivery.

The study findings may also help procurement cadres in rectifying some irregularities in public procurement processes so as to ensure performance of CUFH-N

The study findings may be used by CUFH-N and other MDA's to improve on compliance to procurement processes so as to realise service delivery and performance

The study findings may also inform policy makers in the formulation of strategies and policies geared towards the realisation of sustainable Performance of Referral Hospital at CUFH-N

The findings of the study may add on the body of knowledge and on the existing literature in regard to the procurement processes and Performance of Referral Hospitals of CUFH-N

Finally as a Masters student, completing this study is also a requirement for obtaining a Master's in Management Studies specialising in Procurement and Supply Chain Management. The study may lead to a thesis which was graded to enable graduation and the award of a Master's in Management Studies specialising in Procurement and Supply Chain Management.

### **1.10 Justification of the study**

This section presents a justification of why this study was conducted;

Amidst the strong emphasis on compliance to established procurement procedures as enshrined in the PPDA Act 2003 and the large budget allocation to CUFH-N by the government of Uganda aimed at improving service delivery in the Health care systems , there is need to establish whether procurement processes significantly contribute towards the performance of CUFH-N. Procurement function being one of the key players in ensuring performance of PDE's, there is growing need to find out whether procurement processes affect the performance of CUFH-N and also identify gaps/loopholes if any, and suggest remedial action on the situation.

### **1.11 Scope of the study**

This section presents the geographical scope, content scope and as well as the time scope;

### **1.11.1 Geographical Scope**

The study was carried out at China-Uganda Friendship Hospital Naguru a Ugandan based hospital located on Naguru Hill, Nakawa Division, Kampala District in Kampala the Capital City of Uganda. The hospital lies approximately 6.5 kilometres (4 miles) and by road its east of the central business district of Kampala.

### **1.11.2 Content Scope**

The study content scope was limited to only Procurement Processes and the Performance China-Uganda Friendship Hospital. Procurement Processes was as measured by; Procurement Planning, Supplier Selection and Evaluation and Contract Management while the Performance of China-Uganda Friendship Hospital was measured in terms of; Quality of Services, Budget utilization, Service delivery and Responsiveness or Timeliness of services.

### **1.11.3 Time Scope**

The time scope of this study covered the period from 2012 to 2017 (Five years), the period in which the China-Uganda Friendship Hospital Naguru faced a lot of challenges with the performance of its procuring and disposing unit.

## **1.12 Operational Definition of Key Terms**

**Suppliers**, in this study a supplier is considered the best tangible assets of any organizations that have varied strengths and weaknesses that require careful assessment before order placed.

**Hospital Performance** in this study refers to Quality of Service, Budget utilisation, Service delivery and Responsiveness or Timeliness of services.

**Performance** also refers to completion of a task with application of knowledge, skills and abilities.

**Procurement** is the process of finding, agreeing terms and acquiring goods, services or works from an external source, often via a tendering or competitive bidding process. The process is used to ensure the buyer receives goods, services or works at the best possible price, when aspects such as quality, quantity, time, and location are compared. Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing risk, such as exposure to fraud and collusion.

**Planning** is the process of thinking about the activities required to achieve a desired goal. It involves the creation and maintenance of a plan, such as psychological aspects that require conceptual skills.

**Evaluation** in this study refers to the making of a judgement about the amount, number or value of suppliers.

**Contract** a written or spoken agreement, especially one concerning employment, sales, or tenancy that is intended to be enforceable by law

**Management** is a set of principles relating to the functions of planning, organizing, directing and controlling, and the application of these principles in harnessing physical, financial, human and informational resources efficiently and effectively to achieve organizational goals.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents the review of the related literature on the topic under investigation. The first subsection presents the theoretical review, the second subsection presents the actual literature review done objective by objective and the last subsection presents the synopsis and summary of literature.

### **2.2 Theoretical Review**

This study is grounded on the General Systems Theory that has been widely used in guiding many huge and complex programmes since its development. Mizikaci (2006) adopted a systems approach for the evaluation of quality implementation in higher education by the analysis of systems. He argued that the social, technical and managerial subsystems are components of quality systems in higher education which must be analysed holistically.

Also Wulczyn et al (2010) adapted the systems approach to model functions, structures and capacities in child protection. They acknowledged that “a system accomplishes its work through functions, structures and capacities. System functions and structures are, in many ways, interdependent” Wulczyn et al (2010) further contend that systems are serene with a number of players working at diverse levels from individual to international levels to achieve a systems desired outcome. In support of the view above Gaad et al (2006) agreed that the ability of system functions to attain its desired outcome depends mainly on the strength of system structures and its capacities to function. For example the capacities and understanding of Performance of Referral Hospitals by China-Uganda friendship Hospital Naguru enabled them ascertain how Procurement Processes and Performance of Referral Hospitals.

The systems approach has also been widely used in the health sector with special focus on social and political factors that influence health outcomes. Bennett and Eichler (2006) in their report on developing health systems acknowledged the existence of a multidisciplinary system with a lot of minute subsystems. The report contends that these sub systems as small as there are very inter connected and cannot be eliminated in perspective. Furthermore, Hjorth and Ali (2006) advocated for the use of a systems approach when navigating towards Performance of Referral Hospitals arguing that systems are self-organizing. They identified five important characteristics of systems i.e. inadequate certainty and predictability, causality, rationality and above all change. Although they present arguments along implementation of Programmes, they introduce the role of systems in Performance of Procurement which is a key tenet of the global goals in this study. Finally, Kelly (1998) identified four arguments supporting the application of a systems model in identifying decisive information for Performance of Hospitals. He pointed out identifying linkages among indicators, identification of relationships and promoting learning and change across many disciplines as well as structures. From the theoretical review, it can be seen that that general system theory has been widely used across many disciplines and its principles and fundamental have been adopted and still relevant to current times.

### **2.3 Procurement Planning and Performance of Hospitals.**

Various studies have been conducted by researchers in Uganda to check on various factors influencing procurement in organizations. Chilikona and Muturi (2015) evaluated the factors affecting the performance of the procurement function among public technical training institutions in Kisumu County Kenya. Primary data was collected by using questionnaires. Data was analysed using quantitative analysis by employing both descriptive and inferential

statistics. The study concluded that procurement planning, ethics and staff competency had a positive effect on performance of the procurement function in technical training institutions. This study will not investigate technology, but will focus on the performance of procurement function in organizations.

Ojil, Kibet and Musiega (2014) research sought to assess the factors that influence the performance of supplies unit with special focus on County Government of Kakamega. The study adopted a descriptive research design. The study established that financial stability of a supplier had a positive effect on county government supplies units in Kakamega County. The study also revealed that quality management had a positive impact on county government supplies units in Kakamega County. The study further established that reliability of supplier had a positive effect on county government supplies units in Kakamega County. The study established the performance of suppliers before awarding tenders to them had positive influence on the county government supplies units in Kakamega County.

Bashuna (2013) assessed selected factors affecting effective management of the procurement function at Nakuru North Sub County Procurement Unit. This study carried out a census in the procurement units among departmental heads from all the 30 Ministry departments. The study established that management of the procurement function was found to be slightly effective. This was greatly attributed to project financing, accountability, ICT adoption and the internal control system as applied in departments.

Gikonyo (2014) assessed factors affecting implementation of the public procurement in SACCO societies in Kenya where the main variables include strategic planning, enforcement and organizational culture. Through a descriptive research design, the study findings revealed that 55% of the respondent believes that the impact of the regulator on SACCO is high, .The

findings reveals that on the issue of the SACCO culture favours good procurement procedures, 53% of the respondent strongly agree.

Ocharo (2013) examine the factors that influence Performance of Referral Hospitals in public institutions in Kenya. The study was conducted through a descriptive design using a cross sectional survey within Kenya's Hospitals workforce at the Nairobi head office. Findings indicate that procurement planning has a significant impact on Performance of Hospitals. From the study, the model depicts that Planning accounts for 26.9% of variations in Performance of Hospitals., second resource allocation accounts for 17.2%, third, staff competency accounts for 20.1 % and lastly contract management accounts for 23.3% of variations in Performance of Hospitals.

Njeru (2015) conducted a research on determine factors affecting effective implementation of procurement practices in tertiary public training institutions in Uganda. A descriptive correlational research design was adopted and the target population comprised 40 tertiary public training institutions in Uganda. The study concluded that supplier management followed by training and then procurement policies are the major factors that mostly affect effective implementation of procurement practices tertiary public training institutions in Uganda.

#### **2.4 Supplier Selection and Evaluation, and Performance of Hospitals.**

Supplier selection is largely seen as the most vital role of the procurement function since the organization's suppliers can affect the price, quality, delivery reliability and availability of its products (Li, et al., 2008). Organizations feel that proper supplier selection would assist reduce product and material costs whilst ensuring a high degree of quality and after-sales

services (Sonmez, 2006). The implication here is that an efficient appraisal was in place for the successful procurement (Li, et al., 2008).

Selection of appropriate suppliers is one of the fundamental strategies for enhancing the quality of output of any organization, which has a direct influence on the company's reputation since they can have a very positive or a very adverse impact on the overall performance of the organization (Weber et al., 1991). Cooperation between buyer and supplier is the starting point to establish a successful supply chain management and a necessary, but insufficient condition. The next level requires coordination and collaboration between buyer and suppliers.

There are a number of benefits of supplier appraisal these include: ability to harness the strengths and skills of suppliers to the advantage of buyers (Dwyer, Schurr & Oh, 1987), improved quality and process performance and continuous cost reductions among others (Newman, 1988). According to CIPS, (2007) supplier appraisal is also important in strategic sourcing, supplier management and the achievement of competitive advantage. Firms that appraise their suppliers discover that they have improved visibility into supplier performance, unmask and deal with hidden cost drivers, lower risk, increase competitive advantage through reducing order cycle times and stock, have insight on how to best leverage their supply base, and align practices between themselves and their suppliers (Gordon, 2006). Companies pursuing supplier appraisal commonly see over a 20% improvement in supplier performance metrics such as on-time delivery, quality, and cost.

Procurement can be full of inefficiencies some due to poor policies and strategies at the supplier's, that results to hidden costs such as stock-outs, carrying costs of overstocking, incorrect payments of invoices, slow acknowledgement and reporting of shipment and lost sales which in turn affects productivity, quality issues, increased wasteful costs (extra

inspections, additional freight fees, overtime, buffer stocks, obsolete inventory, multiple sourcing) and slow movement of goods which can be improved by supplier evaluation and better communications between buyers and suppliers (Gordon, 2006). Evaluating and improving supplier performance using the quality and production capacity criteria can lead to the resultant reduction in supplier quality problems eliminates wasteful steps in a firm's own processes and at the same time helps improve understanding of supplier performance and supplier's business policies and processes and thus assisting the buyer help suppliers drive waste and inefficiency out of procurement, resulting in higher-quality suppliers and lower costs which in turn improves the profitability of the buyer (CIPS, 2007; Lysons et al., 2008; Handfield et al., 2008)

Supplier evaluation to ensure compatibility between buyer and supplier in terms of shared business ethics, similar standards of excellence, commitment to continuous improvement are important in performance of suppliers (CIPS, 2012). Compatibility is of concern especially in adoption of procurement best practices such as lean enterprise or any high performance system that drives shorter delivery times, higher quality, and lower prices which could actually have an adverse effect on a supplier who is not aligned with these practices. According to Gordon (2006) a supplier who is unused to pursuing continuous improvement may be unable to keep up with its buyers' increasing requirements for better, cheaper, faster goods and services. Supplier appraisal is therefore important to ensure compatibility and reduce risk of failure of supplies (Handfield et. al., 2008; Lysons et al., 2008)

The financial criteria of supplier appraisal can give an important insight into supplier performance and supplier business practices which help reduce business risk, especially given firms' increasing dependence on its key suppliers. Some of the supplier risks that appraisal can mitigate on include: financial, operational, increased geographic distance and the

performance of sub-tier suppliers whom the prime supplier has no contact with or knowledge of Gordon (2006).

The quality criteria help the supplier in performance improvement (Gordon, 2006). Supplier appraisal is an effective motivation tool when it leads to continuous improvement activities and real supplier performance improvement. A buyer that appraises its suppliers helps them motivated to improve on quality, delivery, and costs especially if these are used as yardsticks to reward performing suppliers (CIPS, 2012). As Gordon, (2006) posits, supplier evaluation can: unearth the causes of performance difficulties; improve understanding of business operations; cultural factors and the leadership at the supplier which lead to follow-up activities, such as supplier training and development, and corrective actions that deal with supplier evaluation findings hence coming up with the best ways to obtain measurable and positive results which will at the end improve profitability and quality performance of buying firm.

## **2.5 Contract Management and Performance of Hospitals.**

According to Dmaid, Dwaikat, & Shweiki (2013), there are two broad objectives of contract management. The first is the definition of the parties' roles with a view of achieving the contractual obligations while the second is the development of a mutually rewarding relationship between parties involved in contract. Aluonzi, Oluka, & Nduhura (2016) noted that contract management involves three diverse aspects; achievement of product quality, delivery on time and within the budget. In this context, Aluonzi et al., (2016) indicated that contract management is divided into the upstream/pre contract award activities and downstream/post contract award activities. Marco (2013) added that contract management involves the proactive management of the relationship between the parties in a contract with a

view of anticipating future needs and managing arising risks with a view of improving the performance over the lifecycle of the contract.

In a study on the procurement contract management in public procurement, Kakwezi (2012) noted that contract management activities can be divided into three broad sections that is service delivery management, relationship management, and contract administration. In this context, the service delivery management involves the full management of all the contractual deliverables, performance levels of the contract as well as the contract quality. Silvana (2015) in a study on the contract management on private public partnership indicates that the aim of contract management is the optimization of the efficiency, effectiveness and economy of service in contractual relationship, balancing costs against risks and actively manages the relationship between procurement parties.

Langat (2013) found that Performance of Referral Hospitals involves the manner in which procurement function is able to reach the objectives and goals with minimum costs. The study examined Performance of Referral Hospitals in terms of efficiency, competitiveness of services procured, quality of goods procured, and reduction of conflict of interests within the procurement activities. Masaba (2010) found that Performance of Referral Hospitals can be measured using two metrics; effectiveness and efficiency. Effectiveness in Performance of Referral Hospitals involves achievement of procurement values such as transparency, accountability and value for money. The efficiency aspects of procurement involve aspects such as adequate consideration of the user needs, efficiency in utilization of public resources and risk management. On the other hand, the study by Kamotho (2014) used metrics such as costs management, inventory levels, time taken to complete procurement process, delivery of best-value contracted goods and service, stronger vendor-buyer relationship, and assured supply to measure the effectiveness of procurement contract management.



Masiko (2013) study on Performance of Referral Hospitals noted that Performance of Referral Hospitals involves the execution of the procurement activities against set standards. These standards include accuracy, completeness, cost, speed, flexibility, quality of supplies, and supplier profile among many others. According Aberdeen Group (2006) compliance may be internal or external. Internal compliance can be interpreted as either conforming to the rules in the agreement by purchasing organization such as payment terms and minimum order requirements or in purchasing from agreement only, that is, purchasing by using framework agreements for the entire company (Telgen, 2004).

According to Aberdeen (2006), the use of framework agreements for the entire company can assist maintaining high contract compliance and reduction in purchasing costs. This can in turn increase the probability of project success. As far as the projects as concerned, external contract compliance can take up several forms including unavailability of products services or qualified personnel, charging prices different from the contracted prices, or late delivery or delivering products that do not meet the contracted specifications.

Rotich (2014) in a study on the contract management practice and operational performance of state corporations indicate that there are diverse aspects involved in contract management. These factors include contractor monitoring and acceptance management; managing the contractor relationship; contract administration; dispute resolution; and contract closure (Vatankhah, Barati, Tofighi, & Rafii, 2012).The contractor monitoring involves the examination that the contractor is fulfilling the contractual obligation as agreed. This enables the identification of any emergent issues and quick resolution of those issues. On the other hand, contract administration involves the maintaining an updated form of the contract; controlling and managing contract variations; paying the contractor; managing assets; drafting reports; and terminating the contract.

Failure to understand the contract document may lead in unnecessary argument between parties and result in loss of reputation and business. Work break down structure of work contracts needs to be documented at each and every stage of implementation (Ndekugiri & Turner, 2014). This is key to effectively communicating the work progress to all key stakeholders and the expectation of each one of them in completion of the contract at the required time and in accordance to quality expectation (Ndekugri and Turner 2014).

PRMPM (2008) asserts that organizations need to create and maintain authentic and reliable records and to protect the integrity of records as long as they are required. This would be done by ensuring that reliable records are created, preserved, accessed, maintained in a safe and secure environment, the integrity of records is safeguarded (complete and unaltered), comply with legal and regulatory environment, and provide an appropriate storage environment and media. Document and records storage may not feel like the most exciting work for your company, but it's one of the most important things in your business that needs to be maintained and managed. Companies can use record storage solutions and records management companies to free up space in their office, optimize workflows, and securely store critical and inactive files (Chandra, 2008).

Contractual obligation by any party in any contract is thrown into a questionable state if the understanding of the terms and interpretation of the contents of the contract documents are not fully appreciated (Mchopa, 2015). The contract documents should fulfil the intended roles of being the references and guidelines for the relationships between the contracting parties throughout the project. To understand the contract requirements is to understand the contents of the documents and the spirit of the contractual relationships. Contracts are formed and signed based on the fair basis where parties agree amicably to discharge their obligations to satisfy each other's needs and requirements (Rotich, 2012). Understanding of contract

documents is very important in order to achieve effective outputs in contract implementations.

In their study based on panel interview with construction industry experts, Davis, Love, and Baccarini (2008) found that inadequate understanding of contract documents lead to serious contractual problems and the output of the projects was affected in term of quality, cost and time. The panels also agreed that the level of understanding of contract document has to be improved for best output of the contract practice with regard to cost, quality and time. Complexity of contract documents was also found to have an influence on the ability of contracting party to understand the contract documents. This is particularly true when contract documents have a lot of legal jargons and phrases sometimes may have irrelevant materials associated to it (Davis et al., 2008). Similarly, the presence of irrelevant materials often leads to the misinterpretation of the actual need of the contract.

Other factors that have the potential of influencing the understanding of the contract document include the use of difficult languages, unclear and illogical specifications, and limited knowledge of the various types of contracts (Hawkins & Muir, 2014). The clarity of the contract documents is also considered an important factor determining the understanding of contract documents. Clarity means easy to understand and parties have no difficulty in translating the documents (Rotich, 2012).

## **2.6 Summary of the Literature Review**

Most research regarding contract management have tended to focus on small and medium sized enterprise as opposed to large companies, investigated the implementation of compliance on contract terms among small and medium sized enterprises. Others have been

with respect to the effect of best procurement practices on profitability and others on quality improvement on contract management.

One of the studies concluded that procurement planning, ethics and staff competency had a positive effect on performance of the procurement function. That study also reflected a gap in the context that it only concentrated on procurement planning and other factors. In another study examining the factors that influence Performance of Referral Hospitals in public institutions, findings of the study indicated that procurement planning has a significant impact on Performance of Hospitals. From his study, the model depicted that Planning accounts for 26.9% of variations in Performance of Hospitals. This therefore provides grounds for this study.

Other studies depict that there are a number of benefits of supplier appraisal; some of the benefits include the ability to harness the strengths and skills of suppliers to the advantage of buyers. This does not adequately relate supplier selection and evaluation to performance, which this study intends to address.

Literature revealed that contract management affects performance of hospitals however these scholars do not reflect the extent to which contract management affects the performance of referral hospitals which this study intends to address.

It is evident that no research has been done specifically on procurement processes and performance of referral hospitals. This study attempts to fill this gap.

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Introduction**

This chapter contains a discussion of various components of research methodology as it was applied in the study. It covers the research design, the study population, sample size selection, sampling procedures, data collection methods, methods of validity and reliability, measures of variables and ethical considerations.

### **3.2 Research design**

This study adopted a cross sectional research design which enabled the researcher to collect data at a point in time and a descriptive survey research design to ascertain on how Procurement processes and Performance of Referral Hospitals; a case of China-Uganda friendship hospital, Naguru. Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or of a group and ascertain whether variables are associated (Kothari, 2004). Survey research seeks to obtain information that describes existing phenomena by asking individuals about their perceptions, attitude, behavior or values (Mugenda & Mugenda, 1999). The descriptive survey method was used by the researcher as the appropriate method for the research at hand because it is the most appropriate in collecting data about the characteristics of a large population in terms of being cost effective and within the constraints of time available. Moreover, the questionnaire was employed as the main tool for data collection. Descriptive data are typically collected through a questionnaire survey and interview methods. The study will triangulate both qualitative and quantitative research approaches.

### 3.3 Study population

Mugenda and Mugenda (2003) define study population as the entire group a researcher is interested in or the group about which the researcher wishes to conclude. The target population for this study was 96 respondents including staff at the China-Uganda friendship hospital, Naguru.

### 3.4 Sampling size determination

The sample size for the study was determined using Krejcie and Morgan (1970) table of determining sample size for research activities using probability and non-probability sampling methods.

**Table 3.1:** Showing sample size of the respondents

Population		Target Population	Sample Size	Sampling Technique
Hospital Director		1	1	Purposive Sampling
Principal Hospital Administrator		1	1	Purposive Sampling
Senior Hospital Administrator		1	1	Purposive Sampling
Hospital Administration		1	1	Purposive Sampling
HOD's (HR, Audit, Accounts, Engineering, Store, Records and Medical)		7	7	Simple Random Sampling
Procurement and Disposal Unit	HOD Procurement	1	1	Purposive Sampling
	Senior Procurement Officer	1	1	Purposive Sampling
	Procurement officer	1	1	Purposive Sampling
Representatives of Medical Staff		1	1	Purposive Sampling
Contracts Committee		5	5	Simple Random Sampling
CSO's working with the Hospital		1	1	Purposive Sampling
Patients (In-patients for classified information)		3	3	Purposive Sampling
Staff of the User departments		72	63	Simple Random Sampling
<b>Total</b>		<b>96</b>	<b>87</b>	

Source: HR records of CUFH-N and guided by Krejcie. & Morgan, (1970) table

### 3.5 Sampling techniques and procedure

This section presents the sampling techniques that was used by the study, these include;

Purposive sampling and Simple Random Sampling.

### **3.5.1 Purposive Sampling**

The researcher used purposive sampling techniques to sample the Procurement and Disposal Unit (HOD Procurement, Senior Procurement Officer & Procurement officer), HOD's (HR, Audit, Accounts, Engineering, Store, Records and Medical), Hospital Administrator, Senior Hospital Administrator, Principal Hospital Administrator and Hospital Director was sampled for an interview. The technique was therefore applicable since purposive sampling involves identifying and selecting individuals or groups of individuals that are knowledgeable about or experienced with a phenomenon of interest.

### **3.5.2 Simple Random Sampling**

Simple random sampling is a strategy that adds credibility to a sample. A simple random sample is a subset of a statistical population in which each member of the subset has an equal probability of being chosen (Sekaran, 2003). This simple random sampling was used to select other Staff of the User departments. By choosing simple random sampling technique each member in the population has an equal chance of being included in the sample.

## **3.6 Data Collection Methods**

This section presents the data collection methods that was used in the study; these include the Questionnaire survey method and the Interview method.

### **3.6.1 Questionnaire Survey Method**

A survey questionnaire was used to generate information to assess Procurement Processes and Performance of Referral Hospitals with focus on China-Uganda Friendship Hospital, Naguru. By using survey method of data collection questionnaires with structured and closed-ended questions was generated which was administered to HOD's (HR, Audit, Accounts, Engineering, Store, Records and Medical), Contracts Committee and Staff of the User

departments who were randomly selected. The questionnaires was used because they are easy to administer and at the same time they generate a large layout of needed data, (Sekaran, 2003). Survey Questionnaires are economical, ensure anonymity, and permit use of standardized questions, save time especially the self-administered as the respondents have an ample time to think and fill the questionnaires at ease, hence minimizing errors.

### **3.6.2 Interview Method**

Interviews were used as a supplementary method for data collection. This method of collecting data involved presentation of oral stimuli and replies in terms of oral verbal responses. Interviews were designed to gather narrative information from key informants that can be used to develop knowledge and understanding of the phenomenon under investigation. By undertaking interviews, the researcher aims to gather a rich, deep participant experience from the participant perspective, (Sekaran, 2003). This method was preferred because it is flexible enough to allow the interviewer to ask probing questions.

## **3.7 Data Collection Instruments**

The researcher used Questionnaires and interview guide to collect data.

### **3.7.1 Questionnaire**

The questionnaires were used since they are easy to administer and at the same time generate a large array of information needed. Questionnaires are economical, ensure anonymity, and allow the use of standardized questions, and save time especially the self-administered. Questionnaires minimize errors since the respondents have ample time to think and fill the questions, (Sekaran, 2003).

The Questionnaire consisted of items applying the Likert scale with the responses ranging from Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree on a 1,2,3,4,5 rating



scale. The Questionnaire also consisted of both open- ended and closed ended questions to offer opportunities for comments, suggestions, and areas of improvement that would make a positive difference Performance of Hospitals.

The questionnaires will also be divided into five sections; Section A: General Information; Section B: Procurement Planning; Section C: Supplier Selection and Evaluation; Section D: Contract Management and Section E: Performance of Hospitals.

### **3.7.2 Interview guide**

An interview guide was used to elicit information from to senior project management team, (Kothari, 2004). The interview guide consisted of open-ended questions to enable the key informants to express their opinions from their point of view about the study

## **3.8 Reliability and Validity**

### **3.8.1 Reliability**

Reliability is the measure of the degree to which a research instrument yields consistent results the same way each time it is used under the same condition. To ensure reliability of the instruments a pilot study was done through administering questionnaire randomly to selected respondents in the area with the similar characteristic as the case under study. It was improved by making necessary adjustments to the questionnaire based on the pilot study, Amin (2005). Reliability analysis was done using Cronbach's Alpha. Alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous (that is, questions with two possible answers) and multi-point formatted questionnaires or scales (i.e., rating scale: 1 = poor, 5 = excellent). The higher the score, the more reliable the generated scale is. Nunnaly (1978) has indicated 0.7 to be an acceptable

reliability coefficient, but lower thresholds are sometimes used in the literature, (Cronbach, L. J., 1951).

In this case reliability was computed using SPSS and determined using the Cronbach's Alpha. The response results were confirmed to be reliable as reflected in the table below. Sekaran (2003) asserts that Cronbach Alpha Coefficient that ranges between 0.6 – 0.8 is more acceptable. From the table below the Cronbach Alpha Coefficient was 0.7432 implying that the findings of the pilot study reflected that the study instruments were reliable. In the contrary, Santos (1999) further argued that there is no commonly agreed cut-off for the Cronbach Alpha Coefficient and that even lower values are sometimes taken as acceptable and used in the literature. The table below is a presentation of the pre-test results of this study

**Table 3.2:** The reliability test results of the study

<b>Narrative Summary</b>	<b>Cronbach Alpha coefficient</b>	<b>Number of items</b>
Procurement Planning	0.7134	7
Supplier Selection and Evaluation	0.7803	7
Contract Management	0.7803	7
Performance of the Hospital	0.7358	8
<b>Average</b>	<b>0.7432</b>	<b>7</b>

**Source:** Primary Data

### **3.8.2 Validity**

Validity is whether the instrument is measuring what it is required to measure. It indicates the extent to which instruments measure constraints under investigation (Mugenda and Mugenda 1999). The researcher used the Content Validity Index (CVI), to test the validity of the instruments. The questionnaire was given to experts to determine the relevant and irrelevant questions. The number of items ticked relevant by all experts in the instrument was summed up and divided by the total number of items in each instrument. The researcher will then compute the Content Validity Index using the formula below:

$$\text{CVI} = \frac{\text{Number of items regarded relevant in the questionnaire}}{\text{Total Number of items in the questionnaire}} \times 100 = \frac{22.62}{29} = 0.78$$

According to Amin (2005), the researcher will consider collecting data using the same instrument if the CVI is 0.7 and above. However, if the CVI is below 0.7, then the instruments was revised accordingly before proceeding to do data collection

The validity of the instruments was tested using the Content Validity Index (CVI) using expert judgment, taking only variables scoring above 0.7 accepted for social sciences (Amin, 2005).

In this case the CVI was 0.78, it was actually considered to be excellent.

### **3.9 Data collection procedures**

The researcher appeared before the university research committee to defend the research proposal. Upon the approval of the research proposal, the researcher will then obtain an introductory letter from Uganda Management Institute introducing him to the management of China-Uganda friendship Hospital Naguru, and finally, questionnaires was administered to the respondents to gather information with regards to the study.

### **3.10 Data Analysis**

The data was analysed using both qualitative and quantitative techniques.

#### **3.10.1 Quantitative Data Analysis**

Quantitative data was analysed using descriptive statistics (Kothari, 2004). Numerical data collected using questionnaires was coded and entered and analysed using Pearson's Correlation, Analysis of Variance and Regression Analysis (these methods are chosen because they were helpful in assessing the relationship between the study variables) with the

help of computer Statistical Package for Social Scientists (SPSS) concerning research objectives. Pearson's correlation which is a form of parametric inferential statistic was used to measure the relationship between the variables of the study. This will help in establishing the relationship between independent variables, i.e., Procurement Planning, Supplier Selection and Evaluation, and Contract Management on the dependent variable Performance of Referral Hospitals of China-Uganda friendship Hospital Naguru

### **3.10.2 Qualitative Data Analysis**

Qualitative data was analysed using content analysis. Data was collected, examined, and checked for completeness and clarity. The findings was presented frequency table, bar graphs, and pie- charts.

### **3.11 Measurement of variables**

The researcher used the likert to measure the strength of respondents' feelings or attitude towards statements that was formulated on the variables and their dimensions, Amin (2005). The variables was measured using the nominal and ordinal types of measurement on a scale of 1-5 represented by Strongly Disagree, Disagree, Not Sure, Agree and Strongly Agree.

### **3.12 Ethical Consideration**

Ethical conduct is an important aspect of research and means in respect of showing consideration to the people who participate in the study. There are areas of concern where the rights and dignity of the subject must be preserved. These areas are: consent, harm, privacy and deception. Research ethics was put into consideration when developing and administering data collection instruments and techniques to avoid any form of harm or violation. This was done through;

**Authorization:** The researcher first obtained the data collection authorization from the China-Uganda friendship hospital Naguru. A copy of the permission letter from the university was given to authority at of China-Uganda friendship hospital Naguru.

**Informed consent:** The respondents was presented consent forms describing the type of study, its purpose, and rights of all participants with an emphasis on participant confidentiality and the right to withdraw from the study if necessary so as to ensure free and voluntary rather than coerced participation

**Confidentiality and anonymity:** The researcher will also ensure Confidentiality by asking the respondents not to include the names or any form of identification on the questionnaire so as to ensure respect for the dignity of participants in the study.

**Objectivity:** Strive to avoid bias in research design, data analysis, data interpretation, peer review and other aspects of research where objectivity is expected or required. Avoid or minimize bias or self-deception. Disclose personal or financial interests that may affect research.

## CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETRATION

### 4.0 Introduction

This chapter analyses and interprets the study findings arising from the field information collected from respondents on Procurement Processes and Performance of referral Hospitals in Uganda, considering a case of China Uganda Friendship Hospital. The first section presents the response rate, followed by presentation and analysis of the study findings in relation to the specific objectives of the researchers study.

### 4.1 Response rate

A total of 75 questionnaires were printed and distributed to the selected members in the sampling frame but only 68 were filled-up and were returned as reflected in the response rate table 4.2 below. A total of 12 interviews were scheduled but only 8 were successfully conducted since at the 8<sup>th</sup> key informant the saturation point was realized (The point where no new idea was being generated).

**Table 4.3:** Response rate

Particulars	Target Response	Actual Response	Response Rate (%)
Questionnaires	75	68	90.7
Interviews	12	8	66.7
Overall	87	76	
<b>The Overall Response Rate</b>			<b>87.3</b>

**Source:** *Primary Data, (2018)*

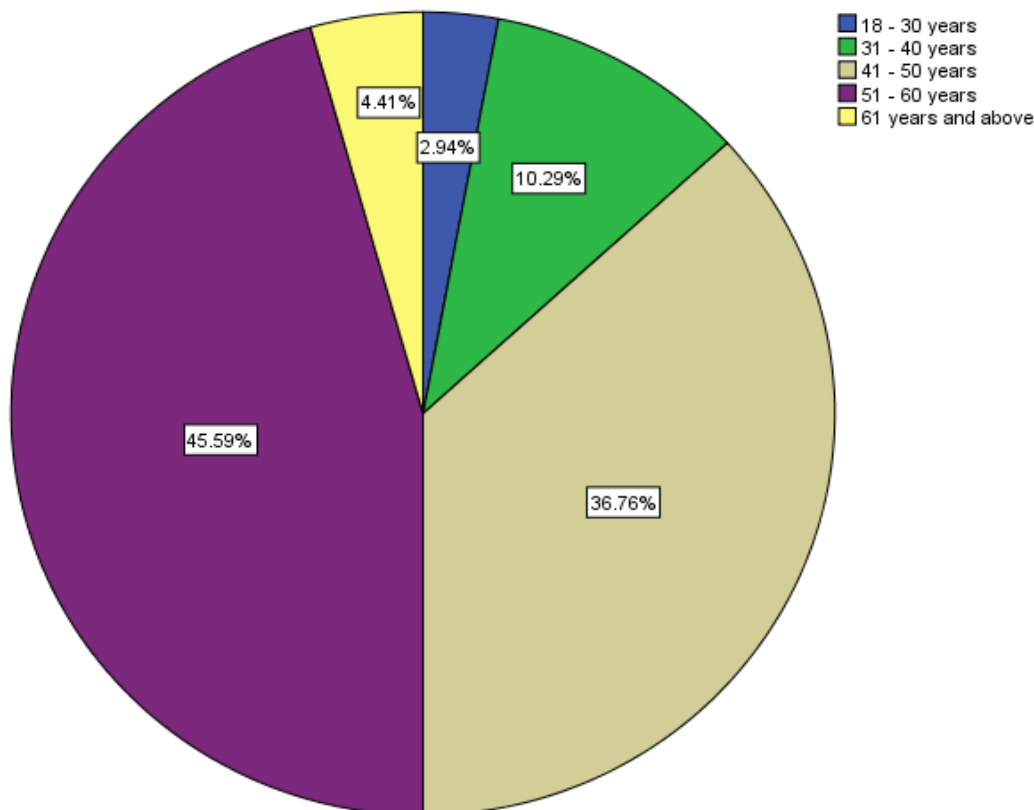
The table 4.3 above shows a resultant response rate of 87.3% suggesting that the results contain substantial information and the survey results were representative of the survey on Procurement Processes and Performance of referral Hospitals in Uganda, considering a case of China Uganda Friendship Hospital. The proportionately high response rates of 87.3% suggested more accurate survey results (Amin, 2005).

## 4.2 Demographic Characteristics

Presentation of the respondents demographic characteristics in form of age group of the respondent, gender of the respondent, highest level of education and respondents years of experience.

### 4.2.1 Age group of the respondent

To establish the age group of the respondents, the study respondents were asked to state their age groups and below are the results in figure 4.2.



**Source:** *Primary Data, (2018)*

**Figure 4.2:** A pie chat illustrating the respondent's age group

The pie chat above illustrates that majority of the respondents were in the age group between 51 to 60 years and these were represented by the purple slice representing 45.59% respondents, followed by respondents in the age group between 41 to 50 years who were represented by the grey slice representing 36.76% of the total percentage of respondents,

followed by respondents in the age group between 31 to 40 years who were represented by the green slice representing 10.29% of the total percentage of respondents, followed by respondents in the age group of 61 years and above who were represented by the grey slice representing 4.41% of the total percentage of respondents and finally respondents in the age group between 18 to 30 years who were represented by the grey slice representing 2.94% of the total percentage of respondents. Therefore the responses were unbiased with regards to the respondent's age group and the findings are representative of all the different age groups.

#### 4.2.2 Gender of the respondent

Respondents were also asked their marital status, whether they were male or female and findings are shown in table 4.4 in details below.

**Table 4.4:** Illustration of the respondents gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	46	67.6	67.6	67.6
Female	22	32.4	32.4	100.0
Total	68	100.0	100.0	

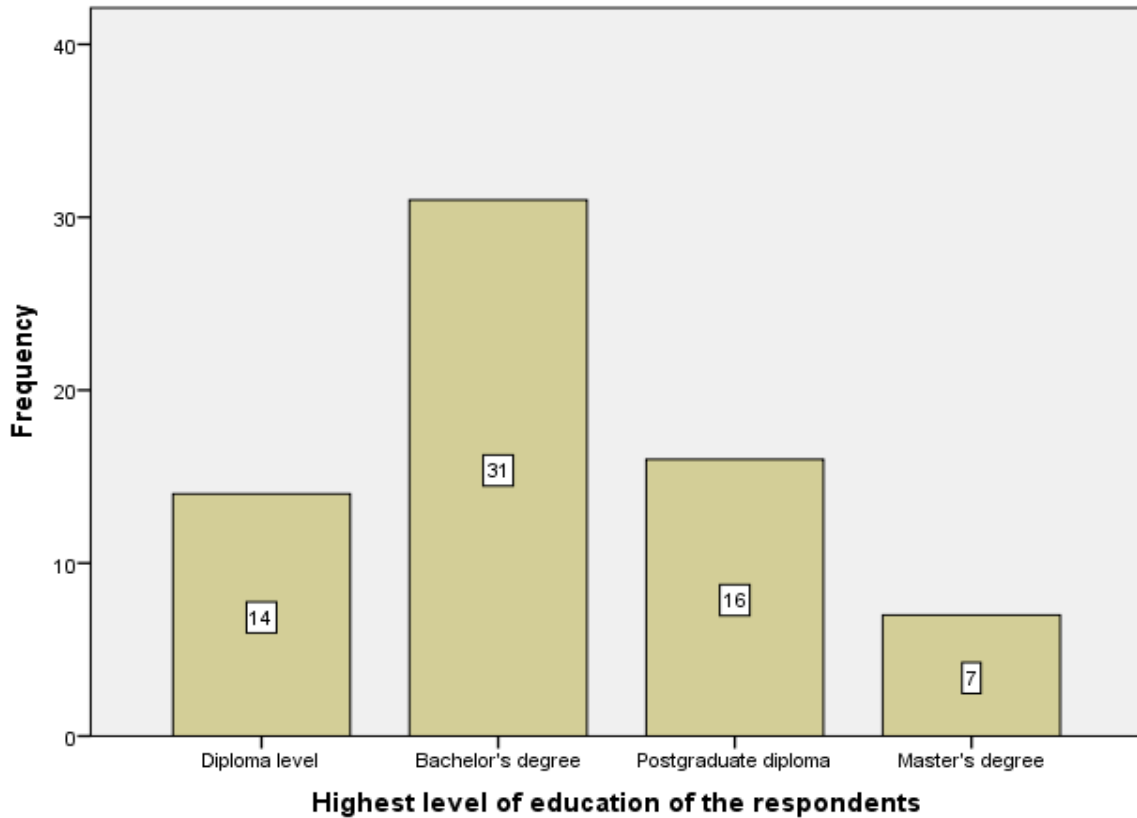
**Source:** *Primary Data, (2018)*

These results in table 4.4 above show that majority of the respondents were male respondents representing 67.6% of the total number of respondents while as the female respondents were 22 respondents representing 32.4% of the total number of respondents. The results in table 4.4 above imply that the responses were not biased with regards to the respondents sex since both male and female respondents were represented.



### 4.2.3 Respondents highest level of education

Respondents were also asked to state their highest level of education and findings are shown in figure 4.3 below, in detail.



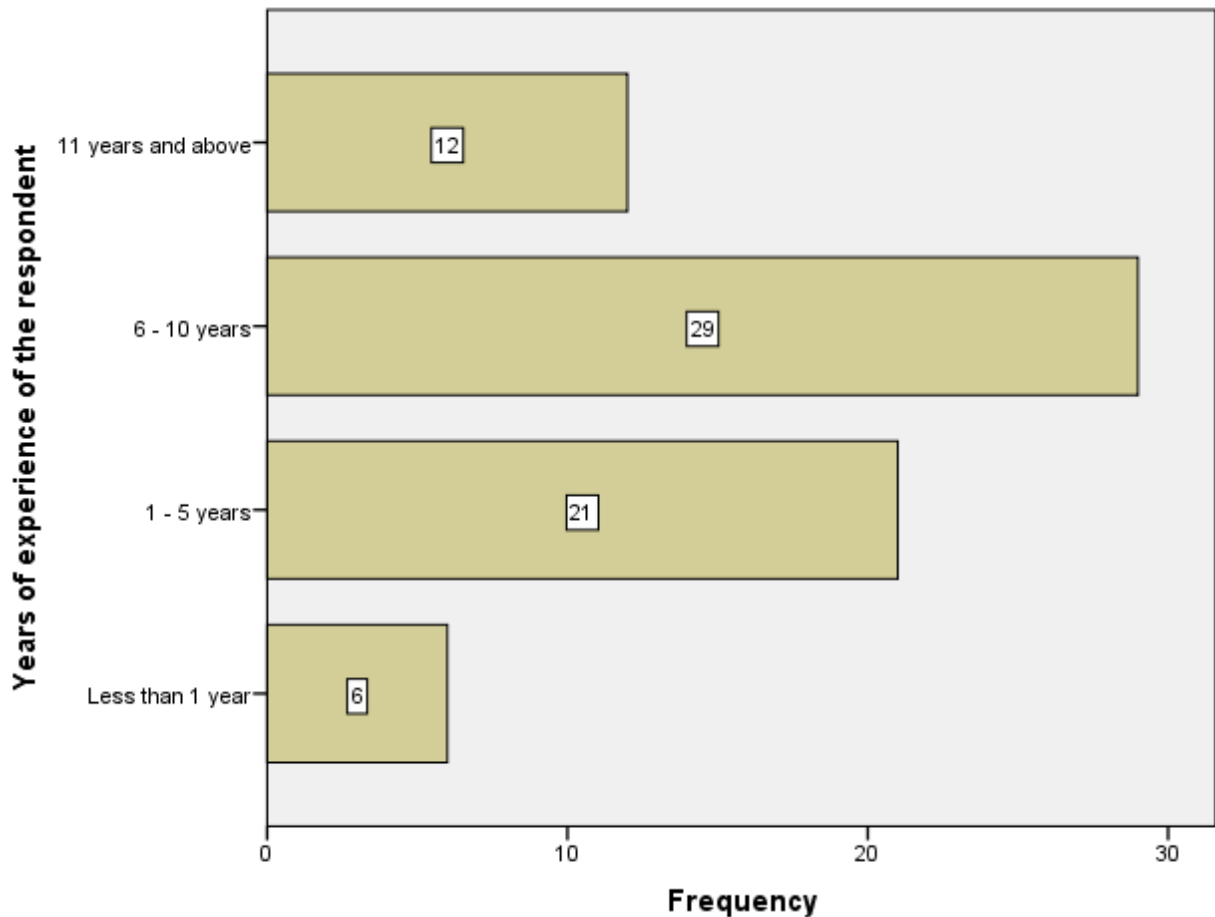
Source: *Primary Data, (2018)*

**Figure 4.3:** A bar graph illustrating the respondent's highest level of education

The results in the illustration in the bar graph in figure 4.3 above, reflect that majority of the respondents were Bachelor's degree holders and these were 31 respondents, followed by Postgraduate Diploma's holders who were 16 respondents, followed by Ordinary Diploma holders who were 14 respondents and subsequently followed by Master's degree holders who were 7 respondents and none of the respondents had PhD. This implies that the responses were not biased with regards to the respondents highest level of education as well since most of the respondents had acquired at least a diploma which is good enough for the respondent to read and respond to the survey.

#### 4.2.4 Respondents years of experience on current job

Respondents were also asked to state their years of experience and findings are shown in figure 4.4 below.



Source: *Primary Data, (2018)*

**Figure 4.4:** A bar graph illustrating the respondents years of experience worked in the hospital

The illustration in figure 4.4 above reflects that the majority of the respondents had 6 – 10 years of experience these were 29 respondents, followed by respondents with 1 – 5 years of experience these were 21 respondents, followed by respondents with 11 years and above of experience and those were 12 respondents and the remaining respondents had less than 1 year of experience and these were 6 respondents and the least represented. Therefore, the

responses were not biased with regards to the respondents years of experience, since most respondents had a significant working experience with China Uganda Friendship Hospital.

### 4.3 Descriptive Statistics Performance of Hospitals

The dependent variable of the study was performance of hospitals. The statement items on performance of hospitals were structured basing on the objectives of the study. Items were measured on a five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree and 5 = Strongly Agree and analysed basing on items which are statistically tabulated and presented in the table 4.5 below with the frequencies and percentages according to the responses collected.

**Table 4.5:** Illustration of the descriptive statistics of Performance of Hospital

No.	Details	SD(1)	D (2)	N(3)	A(4)	SA(5)	Total	Mean
1	The quality of services offered by the Hospital are to the national standard	0 0%	1 1.5%	16 23.5%	39 57.4%	12 17.6%	68 100%	3.91
2	The hospital budget is effectively utilized	0 0%	2 2.9%	3 4.4%	35 51.5%	28 41.2%	68 100%	4.31
3	Key activities of the year are well known	0 0%	1 1.5%	6 8.8%	39 57.4%	22 32.4%	68 100%	4.21
4	There is responsiveness in service delivery within the hospital	0 0%	1 1.5%	3 4.4%	26 38.2%	38 55.9%	68 100%	4.49
5	There is timely service delivery within the hospital	0 0%	5 7.4%	3 4.4%	21 30.9%	39 57.4%	68 100%	4.38
6	Clients of the hospital appreciate the services offered by the hospital	0 0%	5 7.4%	19 27.9%	39 57.4%	5 7.4%	68 100%	3.65
7	Procurement processes have an effect on the performance of the hospital	2 2.9%	16 23.5%	22 32.4%	24 35.3%	4 5.9%	68 100%	3.18
Average of the Means: 4.02, N = 68 Key: SD = Strongly Disagree, D = Disagree, N = Neither A = Agree and SA = Strongly Agree								

**Source:** Primary Data, (2018)

Scores for SA and A were grouped to represent agree while D and SD scores represent respondents who disagreed. In addition, N represents respondents whose opinion was

undecided. The mean  $< 3.00$  (less than 3.00) reveals disagree scores and that above  $>3.00$  (greater than 3.00) reveals agree.

According to table 4.5 above, 51 respondents representing 75% of the total number of respondents who were the majority agreed with the statement that the quality of services offered by the Hospital are to the national standard while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that the quality of services offered by the Hospital are to the national standard and 16 respondents representing 23.5% of the total number of respondents were not sure whether the quality of services offered by the Hospital are to the national standard. The mean of 3.91 implied that majority of the respondents believed that the quality of services offered by the Hospital are to the national standard since  $3.91 > 3.0$ .

According to table 4.5 above, 63 respondents representing 92.7% of the total number of respondents who were the majority agreed with the statement that the hospital budget is effectively utilized while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that the hospital budget is effectively utilized and 23 respondents representing 19.7% of the total number of respondents were not sure whether The hospital budget is effectively utilized The mean of 3.31 implied that majority of the respondents believed that The hospital budget is effectively utilized since  $3.31 > 3.0$ .

According to table 4.5 above, 61 respondents representing 89.8% of the total number of respondents who were the majority agreed with the statement that key activities of the year are well known while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that key activities of the year are well known and 6 respondents representing 8.8% of the total number of respondents were not sure whether key activities of the year are well known. The mean of 3.21 implied that majority of the respondents believed that key activities of the year are well known since  $3.21 > 3.0$ .

According to table 4.5 above, 64 respondents representing 94.1% of the total number of respondents who were the majority agreed with the statement that there is responsiveness in service delivery within the hospital while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that there is responsiveness in service delivery within the hospital and 3 respondents representing 4.4% of the total number of respondents were not sure whether there is responsiveness in service delivery within the hospital. The mean of 4.49 implied that majority of the respondents believed that there is responsiveness in service delivery within the hospital since  $4.49 > 3.0$ .

According to table 4.5 above, 60 respondents representing 88.3% of the total number of respondents who were the majority agreed with the statement that there is timely service delivery within the hospital while as 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that there is timely service delivery within the hospital and only 3 respondents representing 4.4% of the total number of respondents were not sure whether there is timely service delivery within the hospital. The mean of 4.38 implied that majority of the respondents believed that there is timely service delivery within the hospital since  $4.38 > 3.0$ .

According to table 4.5 above, 44 respondents representing 64.8% of the total number of respondents who were the majority agreed with the statement that clients of the hospital appreciate the services offered by the hospital while as only 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that clients of the hospital appreciate the services offered by the hospital and 19 respondents representing 27.9% of the total number of respondents were not sure whether clients of the hospital appreciate the services offered by the hospital. The mean of 3.65 implied that majority of the respondents believed that clients of the hospital appreciate the services offered by the hospital since  $3.65 > 3.0$ .

According to table 4.5 above, 28 respondents representing 41.2% of the total number of respondents who were the majority agreed with the statement that procurement processes have an effect on the performance of the hospital while as only 18 respondents representing 26.4% of the total number of respondents disagreed with the statement that procurement processes have an effect on the performance of the hospital and 22 respondents representing 32.4% of the total number of respondents were not sure whether procurement processes have an effect on the performance of the hospital. The mean of 3.18 implied that majority of the respondents believed that Procurement processes have an effect on the performance of the hospital since  $3.18 > 3.0$ .

Generally the overall Mean of Means was 4.02 implying that majority of the respondents agreed with most of the statements that represented Performance of Hospital since  $4.02 > 3.00$ .

#### **4.4 Procurement planning and Performance of Hospitals**

This section presents that descriptive statistics of Procurement Planning the analysis of the third objective which examined the relationship between Supplier Selection and Evaluation, and performance of hospitals, the objective was assessed with regards to the Pearson's correlation coefficient, analysis of variance, regression analysis and hypothesis testing.

##### **4.4.1 Descriptive Statistics of Procurement planning**

The first objective was to establish the relationship between Procurement Planning and the Performance of China-Uganda Friendship Hospital. The question items on Procurement planning were structured basing on the objectives of the study. Items were measured on a five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 =

Agree and 5 = Strongly Agree and analysed basing on items which are statistically tabulated and presented in the table 4.7 below with the frequencies and percentages according to the responses collected.

**Table 4.6:** Illustration of the descriptive statistics of Procurement planning

No.	Details	SD(1)	D (2)	N(3)	A(4)	SA(5)	Total	Mean
1	The procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification	0 0%	1 1.5%	6 8.8%	39 57.4%	22 32.4%	68 100%	4.21
2	Staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification	0 0%	1 1.5%	3 4.4%	26 38.2%	38 55.9%	68 100%	4.49
3	The budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature	0 0%	5 7.4%	3 4.4%	21 30.9%	39 57.4%	68 100%	4.38
4	The hospital budgets are initiated by user departments	0 0%	5 7.4%	19 27.9%	39 57.4%	5 7.4%	68 100%	3.65
5	The budget approval process of the hospital is inclusive in nature	2 2.9%	16 23.5%	22 32.4%	24 35.3%	4 5.9%	68 100%	3.18
6	The hospital management is involved in the procurement process	0 0%	10 14.7%	27 39.7%	22 32.4%	9 13.2%	68 100%	3.44
7	User departments are the initiators of the procurement process	0 0%	2 2.9%	3 4.4%	35 51.5%	28 41.2%	68 100%	4.31
Average of the Means: 3.95								
Key: SD = Strongly Disagree, D = Disagree, N = Neither A = Agree and SA = Strongly Agree								

**Source:** Primary Data, (2018)

According to table 4.6 above, 60 respondents representing 89.8% of the total number of respondents who were the majority agreed with the statement that the procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that the procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification and 6 respondents representing 8.8% of the total number of respondents were not sure whether the procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification. The mean of 4.21 implied that majority of the respondents believed that the procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification since  $4.21 > 3.0$ .

According to table 4.6 above, 64 respondents representing 94.1% of the total number of respondents who were the majority agreed with the statement that staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification and 3 respondents representing 4.4% of the total number of respondents were not sure whether staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification. The mean of 4.49 implied that majority of the respondents believed that Staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification since  $4.49 > 3.0$ .

According to table 4.6 above, 60 respondents representing 88.3% of the total number of respondents who were the majority agreed with the statement that the budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature while as 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that the budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature and only 3 respondents representing 4.4% of the total number of respondents were not sure whether the budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature. The mean of 4.38 implied that majority of the respondents believed that the budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature since  $4.38 > 3.0$ .

According to table 4.6 above, 44 respondents representing 64.8% of the total number of respondents who were the majority agreed with the statement that the hospital budgets are initiated by user departments while as only 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that the hospital budgets are initiated by user departments and 19 respondents representing 27.9% of the total number of respondents were not sure whether the hospital budgets are initiated by user departments . The mean of 3.65



implied that majority of the respondents believed that the hospital budgets are initiated by user departments since  $3.65 > 3.0$ .

According to table 4.6 above, 28 respondents representing 41.2% of the total number of respondents who were the majority agreed with the statement that the budget approval process of the hospital is inclusive in nature while as only 18 respondents representing 26.4% of the total number of respondents disagreed with the statement that the budget approval process of the hospital is inclusive in nature and 22 respondents representing 32.4% of the total number of respondents were not sure whether the budget approval process of the hospital is inclusive in nature.

The mean of 3.18 implied that majority of the respondents believed that the budget approval process of the hospital is inclusive in nature since  $3.18 > 3.0$ .

According to table 4.6 above, 31 respondents representing 45.6% of the total number of respondents who were the majority agreed with the statement that the hospital management is involved in the procurement process while as only 10 respondents representing 14.7% of the total number of respondents disagreed with the statement that the hospital management is involved in the procurement process and 27 respondents representing 39.7% of the total number of respondents were not sure whether the hospital management is involved in the procurement process.

The mean of 3.44 implied that majority of the respondents believed that the hospital management is involved in the procurement process since  $3.44 > 3.0$ .

According to table 4.6 above, 63 respondents representing 92.7% of the total number of respondents who were the majority agreed with the statement that user departments are the initiators of the procurement process while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that user departments are the initiators of the

procurement process and 3 respondents representing 4.4% of the total number of respondents were not sure whether user departments are the initiators of the procurement process .

The mean of 4.31 implied that majority of the respondents believed that user departments are the initiators of the procurement process since  $4.31 > 3.0$ .

Generally the overall Mean of Means was 3.95 implying that majority of the respondents agreed with most of the statements that represented Procurement planning since  $3.95 > 3.00$ .

*A key informant asserted that, the hospital cannot perform unless there is a proper procurement planning mechanism within the hospital. The informant asserted that there is still a gap regarding the development of departmental work plans but also emphasized that the hospital has a well-organized department in charge of planning.*

#### 4.4.2 Correlation between Procurement planning and Performance of Hospitals

Hypothesis two stated that there is a positive significant relationship between Procurement Planning and Performance of Hospitals. The hypothesis was tested using the Pearson correlation coefficient and results of the hypothesis are given below.

**Table 4.7:** Illustration of correlation of Procurement planning & Performance of Hospitals

		Performance of Hospitals	Procurement Planning
Performance of Hospitals	Pearson Correlation	1	.965**
	Sig. (2-tailed)		.000
	N	68	68
Procurement Planning	Pearson Correlation	.965**	1
	Sig. (2-tailed)	.000	
	N	68	68
**. Correlation is significant at the 0.01 level (2-tailed).			

**Source:** *Primary Data, (2018)*

The results in table 4.7 above illustrates the Pearson’s correlation between Procurement planning and Performance of Hospitals, the correlation value of 0.965 which is very high

implies that there is a very strong positive relationship between Procurement planning and Performance of Hospitals, implying that an improvement in Procurement planning led to a significant increase in the Performance of Hospitals and a deterioration in the Procurement planning led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.7 above which is 0.05 (at 95%) implying that since the P-value of 0.000 is less than 0.05 (P-value < 0.05), the variable Procurement planning is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Procurement planning and Performance of Hospitals.

#### 4.4.4 Model Summary of Procurement planning and Performance of Hospitals

The extent to which Procurement planning accounts for changes in Performance of Hospitals was tested and results of the hypothesis are given below.

**Table 4.8:** Illustration of the summary of Procurement planning & Performance of Hospitals

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.965 <sup>a</sup>	.931	.930	.12435
a. Predictors: (Constant), Procurement Planning				

**Source:** *Primary Data, (2018)*

The model summary in table 4.8 above reflects the results of a bivariate regression between Procurement Planning and Performance of Hospitals. The resultant R<sup>2</sup> which is 0.931 implies that Procurement Planning accounts for 93.1% (0.931\*100) of the variations in Performance of Hospitals and the remaining 6.9% is explained by other factors other than Procurement Planning. The Adjusted R Squared of 0.930 (93%) implies that the independent variable (Procurement Planning) accounts for 93% of the variance in the Performance of Hospitals.

*These findings are in agreement with the assertion made by a key informant who asserted that procurement planning is the heart of performance; the informant added that any efforts geared towards improving needs identification, consolidation of procurement and stakeholder involvement will significantly affect the performance of the hospital. This is in agreement with the high value of the coefficient of determination which is 93.1%.*

#### **4.4.3 Analysis of Variance between Procurement planning and Performance of Hospitals**

The hypothesis was further tested using the Analysis of Variance and results of the hypothesis are given below.

**Table 4.9:** Illustration of the ANOVA of Procurement planning and Performance of Hospitals

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.736	1	13.736	888.249	.000 <sup>b</sup>
	Residual	1.021	66	.015		
	Total	14.756	67			
a. Dependent Variable: Performance of Hospitals						
b. Predictors: (Constant), Procurement Planning						

**Source:** *Primary Data, (2018)*

From the above results in table 4.9, the estimates of variability are 13.736 and 0.015 under mean Square column and their ratio is 888.249 under the column labeled F (F (1, 66)) =888.249. Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 888.249 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Procurement Planning and Performance of Hospitals.

#### 4.4.5 Regression Analysis and Hypothesis Testing

Hypothesis three stated that there is a positive significant relationship between Procurement planning and Performance of Hospitals. The hypothesis was tested using regression analysis and results of the hypothesis are given below.

**Table 4.10:** Illustration of the coefficients of Procurement planning & Performance of Hospitals

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.514	.119		4.335	.000
	Procurement Planning	.887	.030	.965	29.804	.000

a. Dependent Variable: Performance of Hospitals

**Source:** *Primary Data, (2018)*

#### Hypothesis

**H<sub>0</sub>:** There is no relationship between Procurement Planning and Performance of Hospitals.

**H<sub>1</sub>:** There is a significant relationship between Procurement Planning and Performance of Hospitals.

The p-value of Procurement Planning is 0.000 which is less than 0.05 ( $p\text{-value} < 0.05$ ,  $0.000 < 0.05$ ) at a 95% level of significance, implying that we reject the null hypothesis “There is no relationship between Procurement Planning and Performance of Hospitals” and accept the alternative hypothesis which states that “There is a significant positive relationship between Procurement Planning and Performance of Hospitals”. Therefore, the researcher concluded that there is a significant positive relationship between Procurement Planning and Performance of Hospitals.

The standardized beta coefficient 0.965, which is positive, reflects a direct relationship between Procurement Planning and Performance of Hospitals. This implies that an improvement in Procurement Planning leads to a higher likelihood Performance of Hospitals

and where there is low level of Procurement Planning there is usually a low likelihood of Performance of Hospitals.

**Equation 4.1: Model of Performance of Hospitals and Procurement Planning**

$$\text{Performance of Hospitals} = 0.514 + 0.965 \text{ Procurement Planning} \dots\dots\dots (1)$$

Furthermore the coefficient of 0.965 implies that a unit increase in Procurement Planning led to a 0.965 increase in Performance of Hospitals and a unit decrease in Supplier Selection and Evaluation led to a 0.494 decrease in Performance of Hospitals.

**4.5 Supplier Selection and Evaluation and Performance of Hospitals**

This section presents that descriptive statistics of Supplier Selection and Evaluation, the analysis of the third objective which examined the relationship between Supplier Selection and Evaluation, and performance of hospitals, the objective was assessed with regards to the Pearson’s correlation coefficient, analysis of variance, regression analysis and hypothesis testing.

**4.5.1 Descriptive Statistics of Supplier Selection and Evaluation**

The second objective was to determine the relationship between Supplier Selection and Evaluation, and the Performance of China-Uganda Friendship Hospital. The question items on Procurement planning were structured basing on the objectives of the study. Items were measured on a five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree and 5 = Strongly Agree and analysed basing on items which are statistically tabulated and presented in the table 4.11 below with the frequencies and percentages according to the responses collected.

**Table 4.11:** Illustration of the descriptive statistics of Supplier Selection and Evaluation

No.	Details	SD(1)	D (2)	N(3)	A(4)	SA(5)	Total	Mean
1	Procurement unit understands the meaning of evaluation reports	0 0%	3 4.4%	10 14.7%	40 58.8%	15 22.1%	68 100%	3.99
2	Supplier evaluation reports are developed transparently	0 0%	1 1.5%	3 4.4%	26 38.2%	38 55.9%	68 100%	4.49
3	Supplier evaluation reports are developed on time	0 0%	5 7.4%	3 4.4%	21 30.9%	39 57.4%	68 100%	4.38
4	Procurement unit staff understand the meaning of a prequalification list	0 0%	5 7.4%	19 27.9%	39 57.4%	5 7.4%	68 100%	3.65
5	Procurement unit prepares prequalification list	2 2.9%	16 23.5%	22 32.4%	24 35.3%	4 5.9%	68 100%	3.18
6	Prequalification list are prepare transparently	0 0%	10 14.7%	27 39.7%	22 32.4%	9 13.2%	68 100%	3.44
7	Prequalification list are prepared on time	0 0%	2 2.9%	3 4.4%	35 51.5%	28 41.2%	68 100%	4.31
Average of the Means: 3.92 Key: SD = Strongly Disagree, D = Disagree, N = Neither A = Agree and SA = Strongly Agree								

**Source:** Primary Data, (2018)

According to table 4.11 above, 55 respondents representing 80.9% of the total number of respondents who were the majority agreed with the statement that procurement unit understands the meaning of evaluation reports while as only 3 respondents representing 4.4% of the total number of respondents disagreed with the statement that procurement unit understands the meaning of evaluation reports and 10 respondents representing 14.7% of the total number of respondents were not sure whether Procurement unit understands the meaning of evaluation reports. The mean of 3.99 implied that majority of the respondents believed that procurement unit understands the meaning of evaluation reports since  $3.99 > 3.0$ .

According to table 4.11 above, 64 respondents representing 94.1% of the total number of respondents who were the majority agreed with the statement that supplier evaluation reports are developed transparently while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that supplier evaluation reports are developed transparently and 3 respondents representing 4.4% of the total number of respondents were not sure whether supplier evaluation reports are developed transparently. The mean of 4.49 implied

that majority of the respondents believed that supplier evaluation reports are developed transparently since  $4.49 > 3.0$ .

According to table 4.11 above, 60 respondents representing 88.3% of the total number of respondents who were the majority agreed with the statement that supplier evaluation reports are developed on time while as 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that supplier evaluation reports are developed on time and only 3 respondents representing 4.4% of the total number of respondents were not sure whether supplier evaluation reports are developed on time. The mean of 4.38 implied that majority of the respondents believed that Supplier evaluation reports are developed on time since  $4.38 > 3.0$ .

According to table 4.11 above, 44 respondents representing 64.8% of the total number of respondents who were the majority agreed with the statement that procurement unit staff understand the meaning of a prequalification list while as only 5 respondents representing 7.4% of the total number of respondents disagreed with the statement that procurement unit staff understand the meaning of a prequalification list and 19 respondents representing 27.9% of the total number of respondents were not sure whether procurement unit staff understand the meaning of a prequalification list. The mean of 3.65 implied that majority of the respondents believed that procurement unit staff understand the meaning of a prequalification list since  $3.65 > 3.0$ .

According to table 4.11 above, 28 respondents representing 41.2% of the total number of respondents who were the majority agreed with the statement that procurement unit prepares prequalification list while as only 18 respondents representing 26.4% of the total number of respondents disagreed with the statement that procurement unit prepares prequalification list and 22 respondents representing 32.4% of the total number of respondents were not sure whether



procurement unit prepares prequalification list. The mean of 3.18 implied that majority of the respondents believed that procurement unit prepares prequalification list since  $3.18 > 3.0$ .

According to table 4.11 above, 31 respondents representing 45.6% of the total number of respondents who were the majority agreed with the statement that prequalification list are prepared transparently while as only 10 respondents representing 14.7% of the total number of respondents disagreed with the statement that prequalification list are prepared transparently and 27 respondents representing 39.7% of the total number of respondents were not sure whether prequalification list are prepared transparently. The mean of 3.44 implied that majority of the respondents believed that prequalification list are prepared transparently since  $3.44 > 3.0$ .

According to table 4.11 above, 63 respondents representing 92.7% of the total number of respondents who were the majority agreed with the statement that prequalification list are prepared on time while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that prequalification list are prepared on time and 3 respondents representing 4.4% of the total number of respondents were not sure whether prequalification list are prepared on time. The mean of 4.31 implied that majority of the respondents believed that Prequalification list are prepared on time since  $4.31 > 3.0$ .

Generally the overall Mean of Means was 3.92 implying that majority of the respondents agreed with most of the statements that represented Supplier Selection and Evaluation  $3.92 > 3.00$ .

*Most key informants asserted that an elaborate prequalification process of suppliers which is transparent, accompanied by Contract award and Bid Evaluation process are significant for the performance of the hospital the key informants asserted that supplier selection and evaluation is mandatory to improve the procurement process of China Uganda Friendship Hospital and impacting the performance of the hospital*

#### 4.5.2 Correlation between Supplier Selection and Evaluation and Performance of Hospitals

Hypothesis two stated that there is a positive significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals. The hypothesis was tested using the Pearson correlation coefficient and results of the hypothesis are given below.

**Table 4.12:** Correlation of Supplier Selection and Evaluation and Performance of Hospitals

		Performance of Hospitals	Supplier Selection and Evaluation
Performance of Hospitals	Pearson Correlation	1	.933**
	Sig. (2-tailed)		.000
	N	68	68
Supplier Selection and Evaluation	Pearson Correlation	.933**	1
	Sig. (2-tailed)	.000	
	N	68	68

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

**Source:** *Primary Data, (2018)*

The results in table 4.12 above illustrates the Pearson’s correlation between Supplier Selection and Evaluation, and Performance of Hospitals, the correlation value of 0.933 which is very high implies that there is a very strong positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals, implying that an improvement in Supplier Selection and Evaluation, led to a significant increase in the Performance of Hospitals and a deterioration in the Supplier Selection and Evaluation, led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.12 above which is 0.05 (at 95%) implying that since the P-value of 0.000 is less than 0.05 (P-value < 0.05), the variable Supplier Selection and Evaluation, is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals.

### 4.5.3 Analysis of Variance of Supplier Selection & Evaluation, & Performance of Hospitals

The hypothesis was further tested using the Analysis of Variance and results of the hypothesis are given below.

**Table 4.13:** ANOVA between Supplier Selection & Evaluation and Performance of Hospitals

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.835	1	12.835	440.989	.000 <sup>b</sup>
	Residual	1.921	66	.029		
	Total	14.756	67			
a. Dependent Variable: Performance of Hospitals						
b. Predictors: (Constant), Supplier Selection and Evaluation						

**Source:** *Primary Data, (2018)*

From the above results in table 4.13, the estimates of variability are 12.835 and 0.029 under mean Square column and their ratio is 440.989 under the column labeled F (F (1, 66)) =440.989. Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 440.989 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals.

### 4.5.4 Model Summary of Supplier Selection and Evaluation and Performance of Hospitals

The extent to which Supplier Selection and Evaluation accounts for changes in Performance of Hospitals was tested and results of the hypothesis are given below.

**Table 4.14:** summary of Supplier Selection and Evaluation and Performance of Hospitals

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.933 <sup>a</sup>	.870	.868	.17060

a. Predictors: (Constant), Supplier Selection and Evaluation

**Source:** *Primary Data, (2018)*

The model summary in table 4.14 above reflects the results of a bivariate regression between Supplier Selection and Evaluation, and Performance of Hospitals. The resultant  $R^2$  which is 0.870 implies that Supplier Selection and Evaluation accounts for 87% ( $0.870 \times 100$ ) of the variations in Performance of Hospitals and the remaining 13% is explained by other factors other than Supplier Selection and Evaluation. The Adjusted R Squared of 0.868 (86.8%) implies that the independent variable (Supplier Selection and Evaluation) accounts for 86.8% of the variance in the Performance of Hospitals.

#### 4.5.5 Regression Analysis and Hypothesis Testing

Hypothesis two stated that there is a positive significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals. The hypothesis was tested using regression analysis and results of the hypothesis are given below.

**Table 4.15:** Coefficients of Supplier Selection and Evaluation & Performance of Hospitals

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.721	.158		4.552	.000
	Supplier Selection and Evaluation	.841	.040	.933	21.000	.000

a. Dependent Variable: Performance of Hospitals

**Source:** *Primary Data, (2018)*

#### Hypothesis

**H<sub>0</sub>:** There is no relationship between Supplier Selection and Evaluation and Performance of Hospitals.

**H<sub>1</sub>:** There is a significant relationship between Supplier Selection and Evaluation and Performance of Hospitals.

The p-value of Supplier Selection and Evaluation is 0.000 which is less than 0.05 (p-value<0.05, 0.000<0.05) at a 95% level of significance, implying that we reject the null hypothesis “There is no relationship between Supplier Selection and Evaluation, and Performance of Hospitals” and accept the alternative hypothesis which states that “There is a significant positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals”. Therefore, the researcher concluded that there is a significant positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals.

The standardized beta coefficient 0.933, which is positive, reflects a direct relationship between Supplier Selection and Evaluation and Performance of Hospitals. This implies that an improvement in Supplier Selection and Evaluation leads to a higher likelihood Performance of Hospitals and where there is low level of Supplier Selection and Evaluation there is usually a low likelihood of Performance of Hospitals.

**Equation 4.2:** Model of Performance of Hospitals and Supplier Selection and Evaluation

$$\text{Performance of Hospitals} = 0.721 + 0.494 \text{ Supplier Selection and Evaluation} \dots\dots\dots (1)$$

Furthermore the coefficient of 0.494 implies that a unit increase in Supplier Selection and Evaluation led to a 0.494 increase in Performance of Hospitals and a unit decrease in Supplier Selection and Evaluation led to a 0.494 decrease in Performance of Hospitals.

#### **4.6 Contract Management and Performance of Hospitals**

This section presents that descriptive statistics of contract management, the analysis of the third objective which examined the relationship between contract management and

performance of hospitals, the objective was assessed with regards to the Pearson’s correlation coefficient, analysis of variance, regression analysis and hypothesis testing.

#### 4.6.1 Descriptive Statistics of Contract Management

The third objective was to determine the relationship between Contract Management and the Performance of China-Uganda Friendship Hospital. The question items on Procurement planning were structured basing on the objectives of the study. Items were measured on a five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree and 5 = Strongly Agree and analysed basing on items which are statistically tabulated and presented in the table 4.16 below with the frequencies and percentages according to the responses collected.

**Table 4.16:** Illustration of the descriptive statistics of Contract Management

No.	Details	SD(1)	D (2)	N(3)	A(4)	SA(5)	Total	Mean
1	Contact designing is done by professionals	0 0%	3 4.4%	10 14.7%	40 58.8%	15 22.1%	68 100%	3.99
2	Contract design is done in a transparent manner within the organization	0 0%	2 2.9%	22 32.4%	27 39.7%	17 25.0%	68 100%	3.87
3	Contacts monitoring is done by a competent team	3 4.4%	9 13.2%	11 16.2%	30 44.1%	15 22.1%	68 100%	3.66
4	Contract evaluation is done periodically within the organization	0 0%	2 2.9%	13 19.1%	46 67.6%	7 10.3%	68 100%	3.85
5	There is proper contract management in place	0 0%	2 2.9%	13 19.1%	46 67.6%	7 10.3%	68 100%	3.85
6	There is a contract management file in place	0 0%	4 5.9%	13 19.1%	37 54.4%	14 20.6%	68 100%	3.90
7	Contract management files are used for the intended purpose	0 0%	1 1.5%	9 13.2%	33 48.5%	25 36.8%	68 100%	4.21
Average of the Means: 3.904 Key: SD = Strongly Disagree, D = Disagree, N = Neither A = Agree and SA = Strongly Agree								

**Source:** Primary Data, (2018)

According to table 4.16 above, 55 respondents representing 80.9% of the total number of respondents who were the majority agreed with the statement that contact designing is done by

professionals while as only 3 respondents representing 4.4% of the total number of respondents disagreed with the statement that contract designing is done by professionals and 10 respondents representing 14.7% of the total number of respondents were not sure whether contract designing is done by professionals. The mean of 3.99 implied that majority of the respondents believed that Contact designing is done by professionals since  $3.99 > 3.0$ .

According to table 4.16 above, 44 respondents representing 64.7% of the total number of respondents who were the majority agreed with the statement that contract design is done in a transparent manner within the organization while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that contract design is done in a transparent manner within the organization and 22 respondents representing 32.4% of the total number of respondents were not sure whether contract design is done in a transparent manner within the organization. The mean of 3.87 implied that majority of the respondents believed that contract design is done in a transparent manner within the organization since  $3.87 > 3.0$ .

According to table 4.17 above, 45 respondents representing 66.2% of the total number of respondents who were the majority agreed with the statement that contacts monitoring is done by a competent team while as 12 respondents representing 17.6% of the total number of respondents disagreed with the statement that contacts monitoring is done by a competent team and only 11 respondents representing 16.2% of the total number of respondents were not sure whether contacts monitoring is done by a competent team. The mean of 3.66 implied that majority of the respondents believed that contacts monitoring is done by a competent team since  $3.66 > 3.0$ .

According to table 4.16 above, 53 respondents representing 77.9% of the total number of respondents who were the majority agreed with the statement that contract evaluation is done periodically within the organization while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that contract evaluation is done periodically

within the organization and 13 respondents representing 19.1% of the total number of respondents were not sure whether contract evaluation is done periodically within the organization. The mean of 3.85 implied that majority of the respondents believed that Contract evaluation is done periodically within the organization since  $3.85 > 3.0$ .

According to table 4.16 above, 53 respondents representing 77.9% of the total number of respondents who were the majority agreed with the statement that there is proper contract management in place while as only 2 respondents representing 2.9% of the total number of respondents disagreed with the statement that there is proper contract management in place and 13 respondents representing 19.1% of the total number of respondents were not sure whether there is proper contract management in place.

The mean of 3.85 implied that majority of the respondents believed that there is proper contract management in place since  $3.85 > 3.0$ .

According to table 4.16 above, 51 respondents representing 75% of the total number of respondents who were the majority agreed with the statement that there is a contract management file in place while as only 4 respondents representing 5.9% of the total number of respondents disagreed with the statement that there is a contract management file in place and 13 respondents representing 19.1% of the total number of respondents were not sure whether there is a contract management file in place.

The mean of 3.90 implied that majority of the respondents believed that there is a contract management file in place since  $3.90 > 3.0$ .

According to table 4.16 above, 58 respondents representing 85.3% of the total number of respondents who were the majority agreed with the statement that contract management files are used for the intended purpose while as only 1 respondent representing 1.5% of the total number of respondents disagreed with the statement that contract management files are used for the



intended purpose and 9 respondents representing 13.2% of the total number of respondents were not sure whether contract management files are used for the intended purpose.

The mean of 3.21 implied that majority of the respondents believed that Contract management files are used for the intended purpose since  $3.21 > 3.0$ .

Generally the overall Mean of Means was 3.904 implying that majority of the respondents agreed with most of the statements that represented Contract Management since  $3.904 > 3.00$ .

*These quantitative findings are in agreement with findings of a key informant who asserted that effective and efficient contract management is one of the best way to improve organizational procurement process and further lead to a sustainable improvement in the performance of an organization such as Naguru Hospital. The key informant also recommended that effective contract design together with contract monitoring and evaluation and followed by continuous supplier audits is adequate enough to facilitate the effectiveness of the hospital procurement process and further lead to improvement in the performance of China Uganda Friendship Hospital Naguru.*

#### 4.6.2 Correlation between Contract Management and Performance of Hospitals

Hypothesis three stated that there is a positive significant relationship between Contract Management and Performance of Hospitals. The hypothesis was tested using the Pearson correlation coefficient and results of the hypothesis are given below.

**Table 4.17:** Pearson’s correlation of Contract Management & Performance of Hospitals

		Performance of Hospitals	Contract Management
Performance of Hospitals	Pearson Correlation	1	.494**
	Sig. (2-tailed)		.000
	N	68	68
Contract Management	Pearson Correlation	.494**	1
	Sig. (2-tailed)	.000	
	N	68	68

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

**Source:** Primary Data, (2018)

The results in table 4.17 above illustrates the Pearson’s correlation between Correlation between Contract Management and Performance of Hospitals, the correlation value of 0.494 which is very high implies that there is a moderate positive relationship between Contract Management and Performance of Hospitals, implying that an improvement in Contract Management led to a significant increase in the Performance of Hospitals and a deterioration in the Contract Management led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.17 above which is 0.05 (at 95%) implying that since the P-value of 0.000 is less than 0.05 ( $P\text{-value} < 0.05$ ), the variable Contract Management is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Contract Management and Performance of Hospitals.

#### 4.6.3 Analysis of Variance between Contract Management and Performance of Hospitals

The hypothesis was further tested using the Analysis of Variance and results of the hypothesis are given below.

**Table 4.18:** Illustration of the ANOVA of Contract Management and Performance of Hospitals

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.603	1	3.603	21.324	.000 <sup>b</sup>
	Residual	11.153	66	.169		
	Total	14.756	67			
a. Dependent Variable: Performance of Hospitals						
b. Predictors: (Constant), Contract Management						

**Source:** *Primary Data, (2018)*

From the above results in table 4.18, the estimates of variability are 3.603 and 0.169 under mean Square column and their ratio is 21.324 under the column labeled F (F (1, 66))

=21.324. Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 21.324 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Contract Management and Performance of Hospitals.

#### 4.6.4 Model Summary of Contract Management and Performance of Hospitals

The extent to which Contract Management accounts for changes in Performance of Hospitals was tested and results of the hypothesis are given below.

**Table 4.19:** Model summary of Contract Management and Performance of Hospitals

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494 <sup>a</sup>	.244	.233	.41108
a. Predictors: (Constant), Contract Management				

**Source:** *Primary Data, (2018)*

The model summary in table 4.19 above reflects the results of a bivariate regression between Contract Management and Performance of Hospitals. The resultant  $R^2$  which is 0.244 implies that Contract Management accounts for 24.4% ( $0.244 \times 100$ ) of the variations in Performance of Hospitals and the remaining 75.6% is explained by other factors other than Contract Management. The Adjusted R Squared of 0.233 (23.3%) implies that the independent variable (Contract Management) accounts for 23.3% of the variance in the Performance of Hospitals.

#### 4.6.5 Regression Analysis and Hypothesis Testing

Hypothesis three stated that there is a positive significant relationship between Contract Management and Performance of Hospitals. The hypothesis was tested using regression analysis and results of the hypothesis are given below.

**Table 4.20:** Coefficients of Contract Management and Performance of Hospitals

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.151	.407		5.284	.000
	Contract Management	.478	.104	.494	4.618	.000

a. Dependent Variable: Performance of Hospitals

**Source:** *Primary Data, (2018)*

#### Hypothesis

**H<sub>0</sub>:** There is no relationship between Contract Management and Performance of Hospitals.

**H<sub>1</sub>:** There is a significant relationship between Contract Management and Performance of Hospitals.

The p-value of Contract Management is 0.000 which is less than 0.05 ( $p\text{-value} < 0.05$ ,  $0.000 < 0.05$ ) at a 95% level of significance, implying that we reject the null hypothesis “There is no relationship between Contract Management and Performance of Hospitals” and accept the alternative hypothesis which states that “There is a significant positive relationship between Contract Management and Performance of Hospitals”. Therefore, the researcher concluded that there is a significant positive relationship between Contract Management and Performance of Hospitals.

The standardized beta coefficient 0.494, which is positive, reflects a direct relationship between Contract Management and Performance of Hospitals. This implies that an improvement in Contract Management leads to a higher likelihood Performance of Hospitals

and where there is low level of Contract Management there is usually a low likelihood of Performance of Hospitals.

**Equation 4.3:** Model of Performance of Hospitals and Contract Management

$$\text{Performance of Hospitals} = 2.151 + 0.494 \text{ Contract Management} \dots\dots\dots (1)$$

Furthermore the coefficient of 0.494 implies that a unit increase in Contract Management led to a 0.494 increase in Performance of Hospitals and a unit decrease in Contract Management led to a 0.494 decrease in Performance of Hospitals.

## **CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSION & RECOMMENDATIONS**

### **5.1 Introduction**

The study investigated the relationship between Procurement Processes and Performance of referral Hospitals in Uganda, considering a case of China Uganda Friendship Hospital. This chapter presents summary findings, discussion of findings, conclusions, recommendations and areas for further research.

### **5.2 Summary of findings**

#### **5.2.1 Procurement planning and Performance of Hospitals**

The overall Mean of Means was 3.95 implying that majority of the respondents agreed with most of the statements that represented Procurement planning since  $3.95 > 3.00$ .

The Pearson's correlation between Procurement planning and Performance of Hospitals, the correlation value of 0.965 which is very high implies that there is a very strong positive relationship between Procurement planning and Performance of Hospitals, implying that an improvement in Procurement planning led to a significant increase in the Performance of Hospitals and a deterioration in the Procurement planning led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.8 above which is 0.05 (at 95%) implying that since the P-value of 0.000 is less than 0.05 ( $P\text{-value} < 0.05$ ), the variable Procurement planning is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Procurement planning and Performance of Hospitals.

The resultant  $R^2$  which is 0.931 implies that Procurement Planning accounts for 93.1% ( $0.931 * 100$ ) of the variations in Performance of Hospitals and the remaining 6.9% is explained by other factors other than Procurement Planning. The Adjusted R Squared of

0.930 (93%) implies that the independent variable (Procurement Planning) accounts for 93% of the variance in the Performance of Hospitals.

The estimates of variability are 13.736 and 0.015 under mean Square column and their ratio is 888.249 under the column labeled F ( $F(1, 66) = 888.249$ ). Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 888.249 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Procurement Planning and Performance of Hospitals.

The standardized beta coefficient 0.965, which is positive, reflects a direct relationship between Procurement Planning and Performance of Hospitals. This implies that an improvement in Procurement Planning leads to a higher likelihood Performance of Hospitals and where there is low level of Procurement Planning there is usually a low likelihood of Performance of Hospitals.

### **5.2.2 Supplier Selection and Evaluation, and Performance of Hospitals**

The overall Mean of Means was 3.92 implying that majority of the respondents agreed with most of the statements that represented Supplier Selection and Evaluation  $3.92 > 3.00$ .

The correlation value of 0.933 which is very high implies that there is a very strong positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals, implying that an improvement in Supplier Selection and Evaluation, led to a significant increase in the Performance of Hospitals and a deterioration in the Supplier Selection and Evaluation, led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.13 above which is 0.05 (at 95%) implying that since the

P-value of 0.000 is less than 0.05 ( $P\text{-value} < 0.05$ ), the variable Supplier Selection and Evaluation, is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals.

The estimates of variability are 12.835 and 0.029 under mean Square column and their ratio is 440.989 under the column labeled F ( $F(1, 66) = 440.989$ ). Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 440.989 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Supplier Selection and Evaluation, and Performance of Hospitals.

The resultant  $R^2$  which is 0.870 implies that Supplier Selection and Evaluation accounts for 87% ( $0.870 \times 100$ ) of the variations in Performance of Hospitals and the remaining 13% is explained by other factors other than Supplier Selection and Evaluation. The Adjusted R Squared of 0.868 (86.8%) implies that the independent variable (Supplier Selection and Evaluation) accounts for 86.8% of the variance in the Performance of Hospitals.

The standardized beta coefficient 0.933, which is positive, reflects a direct relationship between Supplier Selection and Evaluation and Performance of Hospitals. This implies that an improvement in Supplier Selection and Evaluation leads to a higher likelihood Performance of Hospitals and where there is low level of Supplier Selection and Evaluation there is usually a low likelihood of Performance of Hospitals.

### **5.2.3 Contract Management and Performance of Hospitals**

The overall Mean of Means was 3.904 implying that majority of the respondents agreed with most of the statements that represented Contract Management since  $3.904 > 3.00$ .



The correlation value of 0.494 which is very high implies that there is a moderate positive relationship between Contract Management and Performance of Hospitals, implying that an improvement in Contract Management led to a significant increase in the Performance of Hospitals and a deterioration in the Contract Management led to a subsequent deterioration in the Performance of Hospitals. The level of significance of the results in table 4.13 above which is 0.05 (at 95%) implying that since the P-value of 0.000 is less than 0.05 ( $P\text{-value} < 0.05$ ), the variable Contract Management is significant at 5% level of significance, therefore the researcher rejected the null hypothesis and accepted the alternative hypothesis that there is a significant relationship between Contract Management and Performance of Hospitals.

The estimates of variability are 3.603 and 0.169 under mean Square column and their ratio is 21.324 under the column labeled F ( $F(1, 66) = 21.324$ ). Since the ratio of the between groups mean square to the within groups mean square is not closer to 1, the null hypothesis is not true, further more from the column of Sig, it is reflected that the probability of obtaining the F-ratio of 21.324 is 0.000 (P-value) which is very small as compared to the level of significance of 0.05, implying that the Probability value (P-value) of  $0.000 < 0.05$ . Therefore, the researcher rejected the null hypothesis and concluded that there is a significant relationship between Contract Management and Performance of Hospitals.

The resultant  $R^2$  which is 0.244 implies that Contract Management accounts for 24.4% ( $0.244 * 100$ ) of the variations in Performance of Hospitals and the remaining 75.6% is explained by other factors other than Contract Management. The Adjusted R Squared of 0.233 (23.3%) implies that the independent variable (Contract Management) accounts for 23.3% of the variance in the Performance of Hospitals.

The standardized beta coefficient 0.494, which is positive, reflects a direct relationship between Contract Management and Performance of Hospitals. This implies that an improvement in Contract Management leads to a higher likelihood Performance of Hospitals

and where there is low level of Contract Management there is usually a low likelihood of Performance of Hospitals.

### **5.3 Discussion of the Findings**

#### **5.3.1 Procurement planning and Performance of Hospitals**

The findings of this study were not significantly different from the findings of other researchers such as Ocharo (2013) who asserted that procurement planning has a significant impact on Performance of Hospitals. From the study, the model depicts that Planning accounts for 26.9% of variations in Performance of Hospitals., second resource allocation accounts for 17.2%, third, staff competency accounts for 20.1 % and lastly contract management accounts for 23.3% of variations in Performance of Hospitals. This study as well established that procurement planning has a significant effect on performance of hospitals. The findings of a study by Chilikona and Muturi (2015) were also not different from the findings of this study since their findings as well established that procurement planning, ethics and staff competency had a positive effect on performance of the procurement function in technical training institutions. This study will not investigate technology, but also focused on the performance of procurement function in organizations. The findings of Chilikona and Muturi (2015) were in agreement with the findings of this study. Other studies with similar findings included studies by Bashuna (2013), Gikonyo (2014) and Njeru (2015) who all concluded that Procurement Planning significantly affects performance.

#### **5.3.2 Supplier Selection and Evaluation, and Performance of Hospitals**

According to Gordon, (2006), the researcher asserts that supplier evaluation can: unearth the causes of performance difficulties; improve understanding of business operations; cultural

factors and the leadership at the supplier which lead to follow-up activities, such as supplier training and development, and corrective actions that deal with supplier evaluation findings hence coming up with the best ways to obtain measurable and positive results which will at the end improve profitability and quality performance of buying firm. The findings of Gordon, (2006) are in line with the findings of this study. Other studies in agreement with this study include the studies by Weber et al., (1991), Li, et al., (2008), Sonmez, (2006) Lysons et al., (2008) and Handfield et al., (2008) who assert that supplier selection and evaluation is prudent in determining performance of Hospitals.

### **5.3.3 Contract Management and Performance of Hospitals**

The findings of this study are positively correlated to the findings of several other studies such as the findings of Marco (2013) who asserted that contract management involves the proactive management of the relationship between the parties in a contract with a view of anticipating future needs and managing arising risks with a view of improving the performance over the lifecycle of the contract, which is in agreement with this study which established that contract management affects performance. Kakwezi (2012) established that contract management activities can be divided into three broad sections that is service delivery management, relationship management, and contract administration. In this context, the service delivery management involves the full management of all the contractual deliverables, performance levels of the contract as well as the contract quality and as well Silvana (2015) asserted that contract management on private public partnership indicates that the aim of contract management is the optimization of the efficiency, effectiveness and economy of service in contractual relationship, balancing costs against risks and actively manages the relationship between procurement parties both studies of Kakwezi (2012) and

Silvana (2015) were in line with the findings of this study which has established that Contract Management has a significant effect on performance.

## **5.4 Conclusion of the Findings**

### **5.4.1 Procurement planning and Performance of Hospitals**

This study concluded that there is a very strong positive relationship between the Procurement planning and Performance of Hospitals. The study also concluded that an improvement in Procurement planning significantly leads to Improvements in the Performance of Hospitals especially in terms of Quality of services, Budget Utilization, Service Delivery and as well as Responsiveness or Timeliness of services.

This study additionally concluded that enhancement in the departmental work plans will strengthen the Procurement planning process and further lead to Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

The study furthermore concluded that conducting a clear needs identification will enhance the Procurement planning process and further lead to Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

This study also concluded that any extra effort invested in the consolidation of procurement will strengthen the Procurement planning process and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Finally, this study correspondingly concluded that extra effort devoted to stakeholder involvement will strengthen the Procurement planning process and further lead to better

Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

#### **5.4.2 Supplier Selection and Evaluation, and Performance of Hospitals**

This study concluded that there is a very strong positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals. The study also concluded improvement in Supplier Selection and Evaluation significantly leads to Improvements in the Performance of Hospitals especially in terms of Quality of services, Budget Utilization, Service Delivery and as well as Responsiveness or Timeliness of services.

This study additionally concluded that enhancement in the prequalification process will strengthen Supplier Selection and Evaluation process and further lead to Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

The study furthermore concluded having in place a transparent contract award process will enhance the Supplier Selection and Evaluation and further lead to Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Finally, this study correspondingly concluded that extra effort devoted to improving the bid evaluation process will strengthen Supplier Selection and Evaluation and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

#### **5.4.3 Contract Management and Performance of Hospitals**

This study concluded that there is a moderate positive relationship between the Contract Management and Performance of Hospitals. The study also concluded that an improvement in Contract Management significantly leads to Improvements in the Performance of Hospitals

especially in terms of Quality of services, Budget Utilization, Service Delivery and as well as Responsiveness or Timeliness of services.

This study additionally concluded that enhancement in the contract designs will strengthen the Contract Management process and further lead to Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

The study furthermore concluded that improvements in contract monitoring will enhance the Contract Management process and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

This study also concluded that any extra effort invested in the improvement of contract evaluation will strengthen the Contract Management process and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Finally, this study correspondingly concluded that extra effort devoted to improvement of supplier audits will strengthen the Contract Management process and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

## **5.5 Recommendations**

### **5.5.1 Procurement planning and Performance of Hospitals**

The researcher recommends that in a bid to improve the Performance of Hospitals most especially within China Uganda Friendship Hospital, the hospital and all its stakeholders such as the top management of the hospital and operational managers of the hospital should positively enhance the process of Procurement Planning within China Uganda Friendship

Hospital and other hospitals. Therefore, the hospital top management and other stakeholders should mainly focus on;

Improving departmental work plans, since the findings of this study show that there is a significant positive relationship between procurement planning and Performance of Hospitals, the hospital management should focus on improving departmental work plans and subsequently lead to improved Procurement planning which will further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Focus on conducting adequate needs identification, since the findings show that there is a significant positive relationship between Procurement planning and Performance of Hospitals, the hospitals management should focus on conducting adequate needs identification to foster better Procurement planning which will further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Consolidation of procurement, this study also recommended that any extra effort invested in the consolidation of the procurement process will strengthen Procurement planning and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Promotion of stakeholder involvement, finally China Uganda Friendship Hospital's top management should work on promoting stakeholder involvement as a move to improve Procurement planning for the Hospital and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

### **5.5.2 Supplier Selection and Evaluation, and Performance of Hospitals**

The researcher recommends that in a bid to improve the Performance of Hospitals most especially within China Uganda Friendship Hospital, the hospital and all its stakeholders such as the top management of the hospital and operational managers of the hospital should positively enhance Supplier Selection and Evaluation within China Uganda Friendship Hospital and other hospitals. Therefore, the hospital top management and other stakeholders should mainly focus on;

Ensure inclusive prequalification process, since the findings of this study show that there is a significant positive relationship between Supplier Selection and Evaluation, and Performance of Hospitals, the hospital management should focus on improving the prequalification process and subsequently lead to improved Supplier Selection and Evaluation, which would further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Transparency in Contract Award, since the findings show that there is a significant positive relationship between Supplier Selection and Evaluation and Performance of Hospitals, the hospitals management should focus on ensuring a transparent contract award process, in a bid to foster better Supplier Selection and Evaluation which will further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Improving the Bid Evaluation process, finally China Uganda Friendship Hospital's top management should work on promoting a better Bid Evaluation process as a move to improve Supplier Selection and Evaluation for the Hospital and further lead to better Performance of the Hospital most especially the performance of China Uganda Friendship Hospital.



### **5.5.3 Contract Management and Performance of Hospitals**

The researcher recommends that in a bid to improve the Performance of Hospitals most especially within China Uganda Friendship Hospital, the hospital and all its stakeholders such as the top management of the hospital and operational managers of the hospital should positively enhance the process of Contract Management within China Uganda Friendship Hospital and other hospitals. Therefore, the hospital top management and other stakeholders should mainly focus on;

Improving the contract design process, since the findings of this study show that there is a significant positive relationship between Contract Management and Performance of Hospitals, the hospital management should focus on improving the contract design process and subsequently lead to improved Procurement planning which will further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Improve Contract Monitoring, since the findings show that there is a significant positive relationship between Contract Management and Performance of Hospitals, the hospitals management should focus on improving the Contract Monitoring process in order to foster better Contract Management which will further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Improve the Contract Evaluation process, this study also recommended that any extra effort invested in improving the Contract Evaluation process will strengthen Contract Management and further lead to better Performance of Hospitals most especially the performance of China Uganda Friendship Hospital.

Performing Supplier Audits, finally China Uganda Friendship Hospital's top management should work on exercising of Supplier Audits as a move to improve Contract Management for the Hospital and further lead to better Performance of Hospital most especially the performance of China Uganda Friendship Hospital.

### **5.6 Areas for Further Studies**

The researcher further recommended that additional research was conducted in the areas of Human Resource Capacity, Hospital Policy Framework, Supportive Partnerships of the hospital, Level of financing and their influence on the performance of hospitals.

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# APPENDICES

## Appendix I: Questionnaire

Dear respondent,

The following questionnaire has been designed to be specifically filled by China-Uganda Friendship Hospital Naguru.

Accordingly, you have been identified as a potential provider for useful and reliable data that assisted policy makers and implementers in resolving issues related to Performance of Referral Hospitals within the hospital.

This study aims towards establishing the relationship between Procurement Processes and Performance of Referral Hospitals considering a case of China-Uganda Friendship Hospital Naguru.

Please kindly note that this research is purely for academic purposes and was submitted to Uganda Management Institute at the School of Management Science in partial fulfilment of the requirements for the award of a Master's in Management Studies specializing in Procurement and Supply Management.

Please kindly contribute towards this research by answering the questionnaire with honesty since your responses were analysed and used for generalization.

Thank you in advance.

Yours sincerely

-----  
**Muyambi Mercy**

### SECTION A: Bio-data of respondents

Please tick the appropriate response:

i. **Age:** a)18-30



- b)31-40
- c)41-50
- d)51-60
- e)61 and above

ii. **Sex**

MALE

FEMALE

iii. **Highest qualifications attained**

- a) Primary
- b) Secondary
- c) Diploma level
- d) Bachelor's degree
- e) Postgraduate diploma
- f) Master's degree
- g) PhD

iv. **No of years on this job/service**

- a)1-10 yrs
- b)11-20 yrs
- c)21-30 yrs
- d)31 and above

**INSTRUCTIONS**

For each of the statements in sections B and C, tick the number that best indicates your opinion in the matter using the 5 point Likert scale

1. Strongly Disagree    2. Disagree    3. Neutral    4. Agree    5. Strongly agree

**SECTION B: Procurement planning**

		5	4	3	2	1
1	The procurement process of China-Uganda Friendship Hospital Naguru starts with a needs identification					
2	Staff of China-Uganda Friendship Hospital Naguru understand the meaning of a needs identification					

3	The budgeting process of China-Uganda Friendship Hospital Naguru is participatory in nature					
4	The hospital budgets are initiated by user departments					
5	The budget approval process of the hospital is inclusive in nature					
6	The hospital management is involved in the procurement process					
7	User departments are the initiators of the procurement process					

### **SECTION C: Supplier Selection and Evaluation**

		5	4	3	2	1
1	Procurement unit understands the meaning of evaluation reports					
2	Supplier evaluation reports are developed transparently					
3	Supplier evaluation reports are developed on time					
4	Procurement unit staff understand the meaning of a prequalification list					
5	Procurement unit prepares prequalification list					
6	Prequalification list are prepare transparently					
7	Prequalification list are prepared on time					

### **SECTION D: Contract Management**

		5	4	3	2	1
1	There is a contracts committee in place					
2	Contracts committee understands the meaning of a contract					
3	Contracts committee offers contracts to suppliers					
4	Suppliers receive contracts before they supply					
5	There is proper contract management in place					
6	There is a contract management file in place					
7	Contract management files are used for the intended purpose					

**SECTION E: Performance of Hospitals.**

		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1	The quality of services offered by the Hospital are to the national standard					
2	The hospital budget is effectively utilized					
3	Key activities of the year are well known					
4	There is responsiveness in service delivery within the hospital					
5	The is timely service delivery within the hospital					
6	Clients of the hospital appreciate the services offered by the hospital					
7	Procurement processes have an effect on the performance of the hospital					

## **Appendix II: Interview guide**

Dear respondents,

I am Muyambi Mercy a student of Uganda Management Institute pursuing a Master's in Management Studies specializing in Procurement and Supply Chain Management. This is to humbly request you for an interview, which enabled me, to establish the relationship between Procurement Processes and Performance of Referral Hospitals a case of China-Uganda Friendship Hospital Naguru..

The information you will provide me was treated confidentially and strictly used for academic purpose. Kindly respond diligently and with honest as your responses was analysed for compiling the final report.

- i) What's your opinion about Procurement Planning in China-Uganda Friendship Hospital Naguru?
- ii) What's your opinion about Supplier Selection and Evaluation in China-Uganda Friendship Hospital Naguru?
- iii) What's your opinion about Contract Management in China-Uganda Friendship Hospital Naguru?
- iv) What's your opinion about Performance of Referral Hospitalsin China-Uganda Friendship Hospital Naguru?
- v) How does Procurement Planning affect the Performance of Referral Hospitals?
- vi) How does Supplier Selection and Evaluation affect the Performance of Referral Hospitals?
- vii) How does Contract Management affect the Performance of Referral Hospitals?
- viii) What conclusions and recommendation do you make with regards to procurement process and performance of China-Uganda Friendship Hospital Naguru?

### Appendix III: Budget for the entire research

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Amount</b>
1	Stationary	This will support in the process of writing	L.S	L.S	150,000
2	Research Assistants	These was helpful in data collection	4	200,000	800,000
3	Transport	For both the research assistants and the researcher	L.S	L.S	200,000
4	Printing	To print draft copies and final copies	L.S	L.S	100,000
5	Binding	This is mainly for the final copies of the proposal and report	L.S	L.S	100,000
6	Umbrella's	These will help in saving time mostly in the field and guarding against rain which may spoil documents	5	15,000	75,000
7	Airtime	This will support the communication between the research team and respondents	5	40,000	200,000
8	Meals	Meals while in the field	L.S	L.S	150,000
	Miscellaneous	Other unforeseen costs	L.S	L.S	400,000
	<b>TOTAL COSTS</b>				<b>2,025,000</b>

### Appendix IV: The research work plan

No.	Activity	IMPLEMENTATION SCHEDULE											
		July				August				September			
		1	2	3	4	5	6	7	8	9	10	11	12
1	Introduction												
2	Literature review												
3	Methodology												
4	Designing of instruments												
5	Editing of the final copy												
6	Proposal submission												
7	Proposal Defence												
8	Addressing defence issues												
9	Data collection												
10	Data processing & analysis												
11	Compilation of the report												
12	First Draft of the report												
13	Proof reading and editing												
14	Submission of Research report												

### Appendix V: Morgan & Krejcie (1970) Table

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	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Appendix VI: Letter to the field



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P.O. Box 20131  
Kampala, Uganda  
Website: <http://www.umi.ac.ug>

Your Ref: G/35

Our Ref:

*II  
See  
Please prepare  
acceptance letter  
to conduct  
Research.  
PHTP*

*21/11/18  
Address the comments and  
collect data  
& Nanyang  
firm*

*12/11/2018  
from REC,  
provide advice based  
on his proposal/project  
research document.  
Thanks  
(Signature  
TH)*

TO WHOM IT MAY CONCERN

MASTERS IN MANAGEMENT STUDIES DEGREE RESEARCH

Mr. Muyambi Mercy Reg. Number 17/MMSPSCM/43/012 is a student at Uganda Management Institute pursuing a Masters in Management Studies specializing in Procurement and Supply Chain Management.

In partial fulfillment for award of the Masters, he is conducting a research study titled *“Procurement Process and Performance of Referral Hospitals in Uganda; A Case of China –Uganda Friendship Hospital”*.

This communication therefore serves to formally request you to allow him access any information in your custody/organization, which is relevant to his research.

Thank you for your co-operation on this matter.

Yours Sincerely,

*Ang B 12/11/2018*

Lugemoi Wilfred Bongomin  
CHAIRPERSON RESEARCH COMMITTEE  
SCHOOL OF BUSINESS AND MANAGEMENT





## Appendix VII: Permission to Conduct Research



FOR ANY CORRESPONDENCE ON  
THIS SUBJECT PLEASE QUOTE NO. ....

**CHINA-UGANDA FRIENDSHIP HOSPITAL, NAGURU**  
P. O. Box 20145,  
Nakawa, Uganda  
Tel: Hospital Director: +256-41289741  
General Line: +256-414289740



CHINA AID

**Ref: ADM/N/21/11/18**

21st November 2018

Mr. Muyambi Mercy  
Uganda Management Institute  
**KAMPALA**

### **PERMISSION TO CONDUCT RESEARCH**

Reference is made to your letter dated 12<sup>th</sup> November 2018, requesting this hospital to grant you permission to conduct research, as a requirement for the award of a Masters in Management studies (Procurement and supply chain Management). The research topic is **"PROCUREMENT PROCESSES AND PERFORMANCE OF REFERRAL HOSPITALS IN UGANDA: A CASE OF CHINA UGANDA FRIENDSHIP HOSPITAL"**

This is to inform you that permission has been granted. You will work with the Head Procurement Unit.

At the end of the study, you must share the research findings with the hospital by providing a copy of the dissertation to the Research Committee and you will be provided with a letter confirming completion of the study.

PP

Dr. Batiibwe Emmanuel  
**HOSPITAL DIRECTOR**



**Copied to: H/PDU**