# FACTORS INFLUENCING COMPLETION OF THE ACADEMIC MODEL PROVIDING ACCESS TO HEALTHCARE PROJECTS IN UASIN GISHU COUNTY, KENYA

## $\mathbf{BY}$

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A Research Project Report Submitted in Partial Fulfillment of the Requirements for Award of Degree of Master of Arts in Project Planning and Management of the University of Nairobi

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#### **DECLARATION**

This Research Project Report is my original work and has not been presented for a degree in any other University.

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|-----------|--------|------|
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## **DEDICATION**

This Research Project is dedicated to my father, Dr. Samuel Onchere, my mother Mrs. Pauline Onchere, my wife Betty, our child Peggy and Toto who's soon to be with us for giving me ample time to undertake my post graduate studies which deprived them my presence and attention.

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#### **ABSTRACT**

The purpose of this study was to investigate the factors influencing completion of the Academic Model Providing Access to Healthcare (AMPATH) projects in Uasin Gishu County, AMPATH is a collaboration between Moi University College of Health Sciences, Moi Teaching and Referral Hospital and a consortium of North American academic health centers led by Indiana University working in partnership with the Government of Kenya in the provision of research and healthcare in HIV/AIDS, Primary Healthcare and Chronic Disease Management. The study sought to achieve the following objectives: To establish the influence of processing of contracts on completion of AMPATH projects in Uasin Gishu county; to determine the influence of the IRB approval process on completion of AMPATH projects in Uasin Gishu county; to examine the influence of human resource recruitment process on completion of AMPATH projects in Uasin Gishu county; and to explore the influence of procurement process on completion of AMPATH projects in Uasin Gishu county. The study was guided by the project life-cycle model and adopted a descriptive survey research design. The study target 475 AMPATH employees in Uasin Gishu sites and used random sampling technique to select a sample size of 143 respondents which was 30% of the target population. Data was collected using questionnaires and interview schedule. Data was analyzed using descriptive statistical techniques that included mean and standard deviation. Also inferential statistics which included regression model were used to show the relationships between the variables. Data was presented in frequency tables. The study findings showed that there was no significant influence of contracting process on the completion of projects ( $\beta_1 = -0.360$ , p >0.05). The IRB approval process has a negative and significant influence on the completion of AMPATH projects ( $\beta_2 = -1.177$ , p < 0.05). Human resource recruitment process ( $\beta_3 = 1.329$ , p < 0.05) and the procurement process ( $\beta_4 = 1.132$ , p < 0.05) had a positive and significant influence on completion of AMPATH projects. The study recommends that there is need to tap into the aspects of contracts processing so as to have a positive influence on project completion and there is need to have an overview evaluation of the IRB review process so that there is no delay in terms of project implementation time for those whose projects have been approved. The study also recommends that the HR recruitment process be done early enough and that new employees be trained on the tasks so that they fit in and effectively work towards accomplishment of project objectives. Furthermore, overpurchasing of supplies results in having a surplus of items as well as over-spending and denying of essential finances to other areas of project implementation thus there is need to have proper planning as well as budgeting to avoid such cases.

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#### LIST OF ABBREVIATIONS AND ACRONYMS

**AIDS** Acquired Immunodeficiency Syndrome

AMA American Management Association

**AMPATH** Academic Model Providing Access to Healthcare

**APM** Association for Project Management

**CPPM** Code of Practice for Project Management

**HIV** Human Immunodeficiency Virus

HR Human Resource

**IRB** Institutional Research Board

MTRH Moi Teaching and Referral Hospital

MU Moi University

**NAPA** National Association of Purchasing Agents

NCE No Cost Extension

PI Principal Investigator

PM Project Manager

PMI Project Management Institute

**RA** Research Assistant

**RSPO** Research and Sponsored Projects Office

UK United Kingdom

US United States

#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background to the Study

The project performance parameters are schedule, cost, quality, utility and health and safety consideration (Kuswoyo, 2009). Project delivery is affected by many factors. Every investor wants to be sure of the project time and cost. This is because challenges that may influence project completion have far reaching effects ultimately on the owners' interest.

Chism and Armstrong (2010) in study carried in USA aver that in the current economic landscape, project owners are scaling down or eliminating capital projects due to lack of financing, uncertainty over costs, and concerns about potential delays that could impact the feasibility basis of projects. While in a study carried out in the UK, Fapohunda and Stephenson (2010) state that in projects, conflicts exists between the projects' stated objectives with regard to the appropriateness of cost, time and quality. They also identify the distinct knowledge management areas for project managers' efficient performance to include among others project time management which includes providing an effective project schedule for project delivery besides actually delivering on the schedule.

McNair (2011) advances the importance of a contractor delivering a complete facility for a guaranteed price and by a guaranteed date. It must also perform to the specified level. He further observes that failure to achieve this will usually result to a contractor incurring

monetary liabilities. The subject of achievement of project objectives is therefore a universal concern that affects all parties to a project. It is thus in the interest of the project management as an emerging profession to address all the factors that affect the attainment of project objectives on time. The contractor usually has a limited ability to claim additional money which is limited to the circumstances where the project company has delayed the contractor or has ordered the variation of the works (McNair, 2011).

Ahmed, Azhar, Castillo and Kapagantulla (2002) state that delays of projects are indeed a universal phenomenon and always accompanied by cost and time overruns. Chai and Yusof (2013) state that "time is essence" and "time is revenue" this being a way of capturing the relationship between project delays to revenue loss. They further state that to complete the projects on time and within schedule is as essential benchmark for proprietor and executors as well as the consumers of the services. A similar conclusion was arrived at by Chan and Kumaraswamy (2002) who concluded that timely delivery of projects within budget and to the level of quality standard specified by the client is an index of successful project delivery. This seems to be a conclusion of many studies. They further observe that failure to achieve targeted time, budgeted cost and specified quality result in various unexpected negative influences on the projects. It is further observed that normally when the projects are delayed, they are either extended or accelerated and therefore incur additional cost.

In a study carried out in Ghana by Gaba (2013) it was established that there was an increase in cost overruns, delayed completion, unsatisfactory and unmet project objectives in most projects. This research study investigated the various factors

influencing completion of AMPATH projects in Uasin Gishu County. It is identified that when a project is not completed in time, the cost increases, there is denial of use to the developer and at times the projects are completely abandoned, thus not able to achieve the project objectives.

#### 1.2 Statement of the Problem

A project will be considered totally successful if it gets completed on time, within budget and performs exactly to the designer's specifications. But this is a tall order and many projects would not meet these requirements (Choudhury, 2002). Project implementation varies among various options. In all the implementation options, various factors will play out to determine if the project will be implemented successfully. It is however established that investors have an interest in project being completed in a timely way and according to the budget and that it will meet quality expectations.

Academic Model Providing Access to Healthcare (AMPATH)-Eldoret is a partnership between the Moi Teaching and Referral Hospital, Moi University College of Health Sciences and a consortium of North American Universities led by Indiana University. AMPATH was set up to help combat HIV AIDS but has since expanded also to provision of Primary Healthcare and Chronic Disease Management. AMPATH manages all donor/sponsor funded projects awarded to these institutions. AMPATH manages over 140 sponsored projects and it faces a major challenge of ensuring that the projects are completed as planned.

Studies have been conducted in project completion. Gwayo et al. (2014) noted, there is a growing concern regarding the reasons why the requisite objectives are not achieved as per the projects' client's expectation. An investigation was conducted on factors that occasion delay of construction projects in Kenya (Talukhaba, 1999). Muchung'u (2012) lamented that, some projects takes as many as 10 years before they are completed; a scenario that is usually accompanied by huge cost overruns. The foregoing has resulted in evitable cost overruns, time overrun, idling resources, and also inconveniences to the targeted beneficiaries of such projects (Kikwasi, 2012). This is so due to the fact that, incomplete and/or unsuccessfully completed projects influences service delivery. Projects which have stalled or are unsuccessfully completed will negatively affect beneficiaries. However none of these studies have given evidence on factors that contribute to completion of AMPATH projects creating a gap in the existing literature. Therefore, this study sought to establish the factors influencing completion of AMPATH projects in Uasin Gishu County.

#### 1.3 Purpose of the Study

The purpose of this study was to investigate the factors influencing completion of AMPATH projects in Uasin Gishu County.

#### 1.4 Research Objectives

The study sought to achieve the following objectives:

 To establish the influence of processing of contracts on completion of AMPATH projects in Uasin Gishu County.

- To determine the influence of the IRB approval process on completion of AMPATH projects in Uasin Gishu County.
- To examine the influence of human resource recruitment process on completion of AMPATH projects in Uasin Gishu County.
- 4. To explore how procurement process influences completion of AMPATH projects in Uasin Gishu County.

### 1.5 Research Questions

The study sought to answer the following questions:

- 1. What is the influence of processing of contracts on completion of AMPATH projects in Uasin Gishu County?
- 2. How does the IRB approval process influence completion of AMPATH projects in Uasin Gishu County?
- 3. What is the influence of human resource recruitment process on completion of AMPATH projects in Uasin Gishu County?
- 4. What is the influence of procurement process and completion of AMPATH projects in Uasin Gishu County?

## 1.6 Significance of the Study

The study sought to provide empirical evidence on the factors influencing completion of AMPATH projects in Uasin Gishu County. The study findings were useful to healthcare project managers in Kenya especially on project design, implementation and evaluation.

The managers had an insight on the project life cycle and how each cycle impacts on the completion of the projects.

The findings and recommendations arising from this study guided policies on healthcare project management. The study findings also were useful to the funding agencies with respect to project authorization, funding, monitoring, evaluation and commissioning. In addition, the study findings also helped the managers in charge of selection and recruitment of human resources to enhance the attainment of project objectives on time.

#### 1.7 Limitations of the study

The researcher sought to establish the factors influencing completion of AMPATH projects in Uasin Gishu County. This limited generalizability of the findings to other organizations. Since data was collected using questionnaires and interviews, respondents were not free to provide responses due to fear of victimization. However, they were assured of confidentiality. Intervening variables (which was not studied) such as political interference, community attitude and government policies equally interplayed in affecting the attainment of project objectives on time.

#### 1.8 Delimitations of the study

The study aimed at establishing the factors influencing completion of AMPATH projects in Uasin Gishu County. The specific aspects investigated included: processing of contracts; IRB approval process; human resource recruitment process; and procurement process. Data was collected using questionnaires and interview schedules during the month of May 2015.

## 1.9 Assumptions of the study

The study was based on the following assumptions:

- 1. That the respondents provided true and honest responses to the items in the research instruments.
- 2. That there were updated records on project implementation process.
- 3. Projects that were well designed were successfully implemented and therefore project objectives were achieved on time.

#### 1.10 Definition of significant terms used in the study

**AMPATH-** Academic Model Providing Access to Healthcare (AMPATH)-is a partnership between the Moi Teaching and Referral Hospital, Moi University College of Health Sciences and a consortium of North American Universities led by Indiana University. AMPATH was set up to help combat HIV AIDS but has since expanded also to provision of Primary Healthcare and Chronic Disease Management

**Completion of projects-** refers to the completion of a given project according to the time schedule set out for the project without any delays in accomplishment of the set objectives.

**Contract duration**- This refers to the time agreed by the drafters of the contract in order to complete the terms of the contract.

**Contracts Processing-** this is the process that starts when a project has been funded and negotiations begin so that the agreement is signed by both parties. All parties are thus made aware of their roles and obligations.

**Implementation-**Consists of channeling and disbursing the funds through designated mechanism, as well as grant administration, the revision and changes to the project document.

**No-Cost-Extension**- is an extension of time after the initial project period has ended but project objectives have yet to be met. This only extends the time without additional funding.

**Principal Investigators**- these are the professional medics including doctors and professors who have the overall financial and technical responsibility in ensuring that funds are spent as intended and that the projects achieve their set out objectives efficiently and effectively.

**Project** – Is made up of a group of interrelated work activities constrained by a specific scope, budget, and schedule to deliver capital assets needed to achieve the strategic goals of an organization.

**Project life cycle-** is a parabolic pattern of five phases of conception, growth, maturity and decay of a project. It is comprised of conception, definition, planning, implementation and close-out phases of a project.

**Project Manager** – the person in whom authority is vested to coordinate and supervise the activities during the project life-cycle.

**Start-up Meeting-** This is the meeting held after the contract has been fully executed/signed. It is usually held with all stakeholders present (Principal Investigator, project manager, a representative from the finance, human resource, grants management and procurement departments of RSPO). It is held so that all stakeholders are brought on board and thus aware of the roles and responsibilities.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 Introduction

In this chapter, a literature review relevant to the study was drawn from local and international sources and presented in relation to the research objectives.

## 2.1 The Concept of Project and Project Completion

A project has been defined as an endeavor that has a defined beginning and end, that is, a specified time for completion. A project also has a set of goals, a series of activities and a limited budget. Project completion involves the balancing of three major factors namely cost, quality and time. Project cost is the cost incurred to realize a project (Project Management Institute, 2004).

Project time or duration is the total number of work periods required to complete a project. Time periods are time measures (i.e. days, weeks, and months) that do not include holidays and nonworking periods. A project is on time when the overall project duration does not exceed initially planned project time (Project Management Institute, 2004). Project quality concerns the level to which the completed project satisfies the stakeholders to the project. The Project Management Institute (2004) defines stakeholder satisfaction as meeting the expectations of the stakeholder. Stakeholders are the individuals or entities that are affected by the outcome of the project and include the project manager, project team members, customers, suppliers, management, regulators,

the public / community, sponsors and owners (Project Management Institute, 2004). It is the duty of project managers to ensure that the three- time, cost and quality are included in the project implementation. The Project Management Institute (2004) defined project management as "The application of knowledge, skills, tools and techniques to meet project requirements." Project requirements are time, cost and quality. Project completion time involves a trade-off between time, cost and quality of the project.

Most research has sought to find ways in which implementation time and cost can be improved for successful project completion (Walker and Shen, 2002). Project completion time is agreed by many researchers to depend on project scope and many other factors including project management factors of project planning and control (Chan, 2004). The duration of a project can be compressed by increasing resources for the project. This means that project activities are overlapped and costs are increased. On the other hand, the duration of a project can be increased by reducing costs and reducing number of project employees.

In a study by Assaf and Al- Hejji (2006), delays could be defined as the time overrun either beyond completion date specified in a contract or beyond the date the parties agree for delivery of a project. It is a project slipping over its planned schedule and is considered as a common problem in health projects. Bassioni and El- Razek (2008) identified that project delays often cause lack of trust between project parties. Arditi and Pattanakichamrron (2006) stated that delays in any project activity can cause a number of changes in a project such as late completion, lost productivity, acceleration, increased costs and contract termination.

Al- Momani (2000) investigated causes of delay in 130 projects in Jordan. The main causes of delay were related to weather, site conditions, late deliveries and national economic conditions. Other causes of delay were found to be due to contractors' lack of experience, poor estimation practices and bad decisions in regulating policies and poor national economic performance as the main factors contributing to delay in project completion. In Nigeria, a study by Mansfield (1994) on the causes of delay and cost overrun found that the major causes of delay are financing and payment for completed work, poor contract management, changes in site conditions, shortage of material and improper planning. In Kenya, it is a well-known fact that time and cost overruns are widely prevalent in the public sector projects (Musa, 2010). His findings showed that, poor communication, lack of experience by project manager, procurement delays, lack of planning, poor infrastructure, inadequate resources, lack of motivation, tendering methods, variations, project environment, poor project definition as being some of the major contributors to time and cost overruns.

#### 2.2 Processing of Contracts and Completion of Projects

Usually the client will enter into a contract agreement with a second party. The legally binding agreement has terms stipulated to ensure that the second party will provide the delivery of the project that the client desires to see completed. The contract agreement clearly stipulates contract duration (in the project schedule), it also defines the scope of project to be delivered (in the design drawings and specifications) and it also includes the project cost (in the Bills of Quantities). McNair (2011) states that key clauses in any contract are those that touch on time, cost and quality. Thornton (1988) advances the

hypothesis that there exists an optimum contract duration for which the owner receives an optimum price. He further avers that if the facility is desired in less than optimum duration, the owner pays a premium for acceleration. If the owner allows the contractor more than the optimum duration, he pays additional costs for the facility in terms of lost revenue, denial of use of the facility, and possibly additional costs to the contractor. McMinimee *et al.*, (2009) identifies the use of innovative contracting practices as a good practice leading to successful project delivery. Contract duration is a key determinant as to whether the project will be delivered in a successful manner or it will not.

When a project delays in its delivery then the customers' expectations are not obviously met in terms of cost. Project agreement process therefore places time expectation for the clients on when they can enjoy the benefits of the project. Studies conclude that partial admission to the reality of possible contract delay because of very many unforeseen factors is always acknowledged in the contract agreement where some delays are permitted to the contractor on notice. Beyond these delays however any further contract delay is considered in-excusable (Ahmed, Azhar, Castillo and Kapagantulla, 2002).

Contractual disagreement causes both delay and cost overruns (Ayudhya, 2011). Another study found that only one-eighth of building contracts were completed within the scheduled completion dates and that the average time overruns exceeded 40% (Bromilow, 1974). Ayudhya in 2011 continues to state that contract disagreements may lead to both delay and cost overruns in early stages of set up. Cost overruns due to delay in contract duration can run into a considerable percentage of the contract value. Fixed price contracts are used to transfer the risk of cost overruns to the contractor while fixed

time contracts ensure that the contractor incurs daily liquidated damages if the project delays (McNair, 2011). It is an open secret that many projects often delay and most of the contract figures at the beginning of the project turns up to swell more than double the original tender figure due to variation (Dadzie, Abdul-Aziz & Kwame 2012).

#### 2.3 The IRB Approval Process

The Institutional Review Board (IRB) is charged with reviewing all proposed research projects that involve human subjects to ensure the research is conducted ethically and that appropriate measures are built in for obtaining consent and informing subjects of potential risks. Institutional review boards (IRBs) use codes of ethics, federal regulations, and accreditation standards to evaluate, monitor, and oversee risks posed to human subjects. Little is known about the adequacy of this evaluation, monitoring, and oversight due to a lack of objective, measurable quality indicators and outcome measures for IRBs (U.S. Department of Health & Human Services, 2006). Researchers conducting research that involves human subjects must obtain IRB approval prior to beginning their research. This applies to experiment-based research as well as survey, interview, or observation-based research (Burris & Welsh, 2007).

There are 3 levels of IRB approval which included **Exempt:** This level of approval requires review by the IRB chair. This level is appropriate for projects that involve essentially no risk to adult subjects capable of giving informed consent. **Expedited:** This level of approval involves the IRB chair and two committee members. This level is appropriate for projects that involve minimal risk to adult subjects. This may also be appropriate for minimal risk projects involving subjects from vulnerable populations (for

example, minors, or instances where there may be a language barrier). **Full:** This level requires review and approval by the entire IRB committee. This level is appropriate for projects that involve potentially significant risks to subjects (health risks, employment risks, etc.), work with vulnerable populations (minors, instances where there may be a language barrier, etc.), and/or investigate sensitive topics (collecting identifiable health information, criminal records, inquiring about illegal activities, etc.).

Exempt reviews are typically turned around within a few days, as they only require review by the chair. Expedited reviews may require 1-2 weeks from the time the IRB office receives your documentation. Full committee reviews are scheduled once a month (typically the third Thursday of each month – application materials are due to the IRB office one week in advance), with notifications going out within a week after the review (Taylor, 2007). While IRB approval will not guarantee funding, starting the IRB process early can facilitate a more timely start for projects approved for funding (Borror, Carome, McNeilly, & Weil, 2003).

Some may rightly argue for a critical challenge of the IRB bureaucracy or a complete overhaul (Hammersley, 2009). Hammersley makes an interesting argument that the ethics committee, Britain's version of the IRB, is less qualified to make ethical judgments than the researcher in the field in qualitative research. In qualitative research ethics are involved at every stage of research and not just before the research begins (Blee and Currier 2001). Hammersley asserts that not all possible circumstances can be anticipated and context is necessary for ethical decision making, therefore the ethics committee is to

engage in periodic ongoing review, yet the committee still knows less about the research context than the researcher.

Schrag (2010) has reviewed the development and process of the IRB and emphasizes the mismatch between his own discipline of history and IRB review policies. Traditionally historical research was not subject to IRB review. Schrag's (2010) and Oaks (2002) make clear that the medical model was exported across disciplines with little input from non-medical researchers and may be particularly ill-fitting for qualitative research.

Other studies have provided case examples of the variability and delays associated with multisite IRB reviews (Lux, Edwards, and Osborne 2000; Silverman, Hull, and Sugarman 2001; Stair *et al.* 2001; Hirshon *et al.* 2002). Two of these involved randomized clinical trials (Silverman, Hull and Sugarman 2001; Stair *et al.* 2001), two involved observational health services research (Hirshon *et al.* 2002), and the type of research involved in the fifth was not described (Lux, Edwards, and Osborne 2000). Of the two involving observational health services research, only one discusses the reasons for the delays and the nature of the variable responses, and that study involved IRB review at only three sites.

#### 2.4 Human Resource Recruitment Process and Completion of Projects

Recruitment is the process of attracting individuals on a timely basis, in sufficient numbers and with appropriate qualifications, developing their interest in an organization and encouraging them to apply for jobs within it (Mondy & Noe, 1993; Crawford, 2004). During this process, efforts are made to inform the applicants fully about the selection

career opportunities the organization can provide the employee. Whether or not a particular job vacancy will be filled by someone from within, or outside, the organization depends on the organization's human resource policies, the requirements of the job to be filled, the talent to be found and, often, the organizational politics surrounding the decision (Nankervis *et al.*, 2002).

Selection is the process of choosing from a group of applicants the individual best suited for a particular position (Mondy & Noe, 1993) based on conventional and non-conventional methods (Crawford, 2004). Therefore, the effectiveness of recruitment has a significant impact on the efficiency of the selection process. The selection process should provide as much reliable and valid information as possible about applicants so that their qualifications may be carefully matched with the job requirements.

While the selection process is usually the responsibility of the human resource director or similar professional, managerial and supervisory personnel in all the business units of an organization also have an important role in the selection process (Goldrick, 1997). They need to be well versed in the conventional selection methods of psychological and aptitude testing as well as single-stage to multi-stage interviews. Further, essential experience with non-conventional selection should include graphology, group selection or assessment center and country house weekend techniques. When the final decision of hiring is in the hands of members of a selection committee, it is important that they understand both the objectives/policies relating to selection and the overall strategic direction of the organization.

Though there are many recruitment and selection processes used in both Australia and China, only their most salient features will be discussed in the current paper. It is not suggested that they are the only, or most appropriate, ways of proceeding; simply, that they are broad indicators of HR trends. Australian strategies usually are designed to integrate its multicultural workforce, and in China the opportunities are great, but they create HR challenges because when it comes to recruiting "China has its own particular rules of the road" (Overman, 2001).

The effective recruitment and selection of employees is a fundamental HRM activity, one that if managed well can have a significant impact on organizational performance as well as lead to a more positive organizational image (Pilbeam and Corbridge, 2006). Ineffective recruitment has a number of cost implications for employers: low morale which can affect employee performance; lost business opportunities, as well as higher levels of labour turnover.

Given the relationship between effective recruitment and organizational performance, organizations need to adopt a more strategic approach to HR planning before moving on to the actual recruitment and selection process (Pilbeam and Corbridge, 2006; Bratton and Gold, 2007). HR planning involves defining job roles and the associated competencies, as well as developing an understanding of the labour market, both internal and external, in order to match the availability of potential labour to organizational needs. Various sources indicate ongoing issues with 'hard-to-fill' vacancies in certain business sectors (Labour Force Survey; WERS, 2004; CIPD, 2006). Survey findings from CIPD (2006a), which draws on the quarterly CIPD/KPMG Labour Market Outlook, indicate

that 82% of organizations are experiencing difficulties in filling certain vacancies. A lack of specialist skills was cited as the primary cause of skills shortages reported by two thirds of organizations.

The shift from a manufacturing to a service-based economy seems to have shifted the debate about skills in the workplace from 'hard' technical skills to new 'soft' skills (Crenin, 2003 cited in Grugulis, 2007). The term 'soft' skill is hard to define. It includes references to competencies, personal attributes, individual qualities, transferable skills, as well as social skills. There is a danger that skills may be defined differently in jobs that are predominantly done by women compared with jobs that are predominantly done by men. For example, in one semi-privatized organization that employed more male managers, managerial competencies included: stress tolerance, thriving on pressure, maintaining logic and persuasiveness of argument despite heavy opposition. In contrast managerial competencies in a retail environment that had a higher proportion of female managers, included: open door policy, taking an interest in employees' lives, having concern for wellbeing of individuals (Grugulis, 2007).

Despite the concerns raised above about the confusion relating to the term 'soft' skills, it is clear that organizations are increasingly placing greater emphasis on 'soft' skills in the recruitment and selection process (Bunting, 2004). Hence competency frameworks are replacing traditional person specifications (Boam and Sparrow, 1992 cited in Redman and Wilkinson, 2006). Eighty five per cent of organizations in the 2006 CIPD Recruitment and Retention Survey claim to use competency-based interviews in their selection process. Other writers suggest that competency frameworks are more prevalent

in large service sector organizations (Pilbeam and Corbridge, 2006). However there are no large-scale survey findings to support this picture.

A note of caution relating to the use of competency frameworks comes from Dick and Nadin (2006) who point out that competencies are not necessarily gender neutral and that the competencies used in judging performance often reflect the values and interests of majority role-holders. Drawing on a study of performance in the police service by Dick and Jankowicz (2002), Dick and Nadin (2006) point out how the behaviours associated with the competency of 'commitment' are often the product of a male dominated culture where commitment is defined behaviorally as "... the propensity to put work before home by being prepared to stay late at the end of shift if needed and being prepared to work overtime if the job demanded it." (Dick and Nadin, 2006).

## 2.5 Procurement Process and Completion of Projects

Since the 1930s, procurement performance has been attracting great attention from practitioners, academicians and researchers. In 1931, the National Association of Purchasing Agents (NAPA) in the United States of America (USA) organized a contest on the topic. In 1945, a committee was set up by NAPA to draft guidelines on procurement performance. In 1962, the American Management Association (AMA) funded a survey to assess performance of the procurement function (Lardenoije, Van Raaij & Van Weele, 2005). In the 1970s and 1980s, scholars conducted independently studies in American and Dutch companies on purchasing performance in which they established scores of performance.

Knudsen, (1999) suggested that procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity. According to Van Weele (2006) purchasing performance is considered to be the result of two elements: purchasing effectiveness and purchasing efficiency. Performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements. This means that purchasing performance is not an end in itself but a means to effective and efficient control and monitoring of the purchasing function (Lardenoije, Van Raaij, & Van Weele, 2005). Purchasing efficiency and purchasing effectiveness represent different competencies and capabilities for the purchasing function. 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.

For any organization to change its focus and become more competitive Amaratunga & Baldry (2002) suggest that performance is a key driver to improving quality of services while its absence or use of inappropriate means can act as a barrier to change and may lead to deterioration of the purchasing function. Organizations which do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction and employee turnover (Artley & Stroh, 2001, Amaratunga & Baldry, 2002 and CIPS Australia, 2005). Measuring the

performance of the purchasing function yields benefits to organizations such as cost reduction, enhanced profitability, assured supplies, quality improvements and competitive advantage as was noted by Batenburg and Versendaal (2006).

Until an organization measures purchasing performance they will never know how well they are performing and why they should measure purchasing performance. Department of Public Works, Queensland Government (2006) identified four reasons for measuring purchasing performance:

It provides feedback on the extent to which the planned outcomes for purchasing are being achieved in the organization. It provides information for analysis and decision making. It provides information to executive management about the effectiveness, efficiency, value and contributes to the recognition of the procurement function. It provides focus and motivation for purchasing staff.

#### 2.6 Theoretical Frame work

This study is anchored on the project life-cycle model. The project life cycle model has been recommended for use in health projects by the US Government. The model was published in Health Project Management Handbook in 2007. The model is widely in use not only in the US, but also in the health sector the world over. According to this model, a project goes through the following phases (Fleming, 2007).

**Conception phase** In this phase, a project idea is conceived and put in black and white and given some shape before it's considered. It is appreciated that if this phase is avoided or truncated, the project will have innate defects. A well-conceived project will go a long

way to successful implementation. The idea evolves as the projects progresses and data becomes apparent.

**Definition Phase.** The phase develops the idea generated and produces a document describing the project in sufficient details covering all aspects necessary for the stakeholders to make up their minds on the project idea. The areas to be examined during this phase may be health supplies, size and the physical structure, location and site, technology, project layout, manpower, financial analysis and implementation schedule. This phase needs careful design to minimize the project risk content.

**Planning and organizing phase:** This phase is also called the design phase. It deals with the project infrastructure and enabling services, system design, organization and manpower, schedules and budgets, licensing and government clearance, finance, site preparation and work packaging. Planning helps to avoid crisis in project management.

**Implementation phase** – This is a period of hectic activity specifications of equipment and machinery is availed and lining up contractors. The work is done in accordance with the plans and specifications. The project manager makes timely and decisive decisions. There are clear lines of communication and delegated authority. Changes in scope can be expensive. At this stage, a consultant project manager may be hired.

**Commissioning phase** – This is a process for validation of materials and systems. When the PM allows adequate time and resources in the commissioning phase, the project minimizes the risk of delays, cost overruns and underperforming systems. During this

phase, checks and balances are incorporated to ensure that the documentation, systems and operations are integrated, validated, and accepted.

**Project close out phase** – At this stage, the PM oversees final settlement of project contracts, acceptance of contract deliverable, collection of contract documents and records and approval of final payments.

## 2.7 Conceptual Frame work of the Study

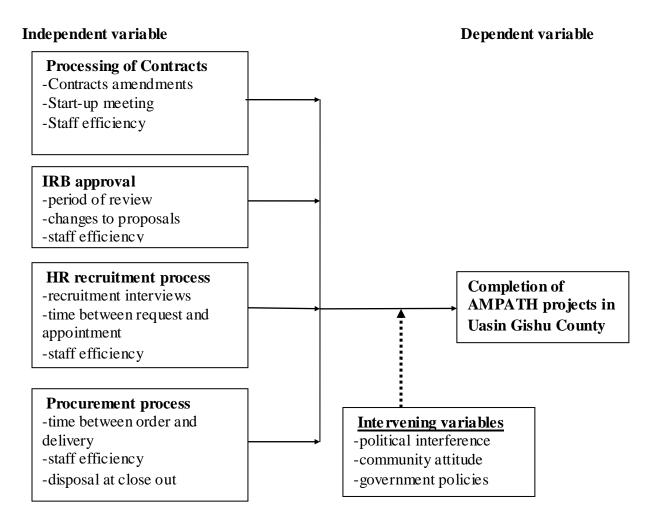


Figure 1: Conceptual Framework of the Study.

The study was guided by the conceptual framework. The conceptual framework helped to illustrate the causal relationships between the independent variable and the dependent variable. The concepts that helped develop the objectives of the study are clearly broken down. Figure 1 shows the relationship between the independent variables which are processing of contracts, IRB approval, HR and Procurement processes. Their relationship with the influence they have on the dependent variable which is completion of AMPATH projects.

There were other variables identified during the study and these are political interference, community attitude and government policies which are intervening variables.

The research was guided by the objectives as identified and defined by the continuous arrows in the conceptual framework. These objectives formed the independent variables whose influence in the dependent variable was investigated. Other variable were identified for the purposes of retaining a global picture and acknowledgement of research done by other scholars but were not the basis of investigation of the study. They are captured by broken lines in the conceptual framework.

# 2.8 Research Gaps

The reviewed literature revealed various studies in different parts of the world that have largely touched on factors relating to project completion. Most research has sought to find ways in which implementation time and cost can be improved for successful project completion (Walker and Shen, 2002). Project completion time is agreed by many researchers to depend on project scope and many other factors including project management factors of project planning and control (Chan, 2004). In a study by Assaf and Al- Hejji (2006), delays could be defined as the time overrun either beyond completion date specified in a contract or beyond the date the parties agree for delivery of a project. It is a project slipping over its planned schedule and is considered as a common problem in health projects. Bassioni and El- Razek (2008) identified that project delays often cause lack of trust between project parties. Arditi and Pattanakichamrron (2006) stated that delays in any project activity can cause a number of changes in a project such

as late completion, lost productivity, acceleration, increased costs and contract termination. Al- Momani (2000) investigated causes of delay in 130 projects in Jordan. In Nigeria, a study by Mansfield (1994) on the causes of delay and cost overrun found that the major causes of delay are financing and payment for completed work, poor contract management, changes in site conditions, shortage of material and improper planning. In Kenya, it is a well-known fact that time and cost overruns are widely prevalent in the public sector projects (Musa, 2010). However there was no literature available on the factors influencing completion of AMPATH projects in Uasin Gishu County as indicated by the limited research on the subject.

# 2.9 Summary of the Chapter

Chapter two discusses the literature relevant to the objectives of the study. Processing of contracts, IRB approval process, Human resource recruitment process and Procurement process. These are discussed in detail and how they influence AMPATH project completion which is the dependent variable. This is also captured in the conceptual framework which is a tabulated relationship between the independent variables and the dependent variable. Finally the research gaps are also identified in this chapter.

### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter described the various methodological procedures that were employed in the study during its execution. The purpose of this section was to provide a description of the research area or setting, research design, an outline of the study population, sample size and sampling techniques, Operational definition of variables, data sources and instruments, data collection procedures, reliability and validity of instruments, data analysis and presentation and ethical considerations. Each of the sub-headings mentioned above was separately explained below.

# 3.1 Research Design

Research design refers to the plan of action that links the philosophical assumptions to specific methods (Creswell, 2003). This study adopted a descriptive survey research design. A descriptive survey research design had been justified for this study because it captured the current perception of the population under the study with regards to the variables of the study. Descriptive Survey research design was intended to collect information about the aspects of project completion that was of interest to the government of Kenya, donors and other healthcare providers. It explored and described the opinions, feelings, views, preferences and attitudes of the selected sample of the population of the study. The design was adopted because the population to be studied was too large to be observed directly and thus economically viable both in time and

money of taking a sample of population to generalize results for the whole population, resulting to in-depth, rich and meaningful research findings.

# 3.2 Target Population

A population is the entire group of individuals, events or objects having common observable characteristics. A target population is that population to which a researcher wants to generalize the results of a study (Kothari, 2008). The study was carried out at AMPATH Uasin Gishu Sites in AMPATH Centre, Burnt Forest, Mosoriot, Turbo and Ziwa. The study targeted all the AMPATH staff in Uasin Gishu sites.

The target population consisted of all the Principal Investigators whose projects had either ended or were on a no-cost-extension, project managers, RSPO staff, pharmacists, nurses, medical officers, clinical officers, data managers and research assistants as shown in Table 3.1 below.

**Table 3. 1: Target Population** 

|              |               | Project       |              | Medical/ | Data              |       |
|--------------|---------------|---------------|--------------|----------|-------------------|-------|
| AMPATH       | Principal     | Managers/RSPO | Pharmacists/ | Clinical | Managers/Research |       |
| Sites        | Investigators | Staff         | Nurses       | Officers | assistants        | Total |
| AMPATH       |               |               |              |          |                   |       |
| Centre       | 7             | 76            | 29           | 28       | 39                | 179   |
| Burnt Forest | 4             | 14            | 10           | 11       | 30                | 69    |
| Mosoriot     | 6             | 10            | 11           | 12       | 28                | 67    |
| Turbo        | 11            | 6             | 9            | 10       | 43                | 79    |
| Ziwa         | 5             | 21            | 10           | 6        | 39                | 81    |
| Total        | 33            | 127           | 69           | 67       | 179               | 475   |

(AMPATH HR, 2015)

There were 33 Principal Investigators, 127 Project Managers and RSPO staff, 69 Pharmacist and Nurses, 67 Medical and Clinical Officers, 179 Data managers and Research Assistants. This makes a total target population of 475.

# 3.3 Sample Size and Sampling Procedures

Sampling is the process of selecting a sub-set of cases in order to draw conclusions about the entire set. A sample is a small part of a large population, which is thought to be representative of a larger population. Any statements made about the sample should be true for the entire population. According to Cohen (2003), determinants such as expense, time and accessibility frequently prevent researchers from gaining information from the entire population, therefore there was need to obtain a smaller group of subset of the total population in such a way that was representative of the total population under study. The study used 30% of the total population in each category. Orodho & Kombo (2002) indicated that 30% sample of a total population of below 1000 is appropriate for a survey design. Mugenda and Mugenda (2003) indicated that 10-30% of the sample is representative of the target total population. This implied that a total of 10 Principal Investigators, 38 Project Managers and RSPO staff, 21 Pharmacists and Nurses, 20 Medical and Clinical Officers and 54 Data Managers and Research Assistants participated in the study. This was a total of 143 respondents. Simple random sampling was used to pick sampled staff in each category.

Table 3. 2: Sample Size

|              |               | Project   |              |          |                   |       |
|--------------|---------------|-----------|--------------|----------|-------------------|-------|
|              |               | Managers/ |              | Medical/ | Data              |       |
| AMPATH       | Principal     | RSPO      | Pharmacists/ | Clinical | Managers/Research |       |
| Sites        | Investigators | staff     | Nurses       | Officers | assistants        | Total |
| AMPATH       |               |           |              |          |                   |       |
| Centre       | 7             | 23        | 9            | 8        | 12                | 59    |
| Burnt Forest | 1             | 4         | 3            | 3        | 9                 | 21    |
| Mosoriot     | 2             | 3         | 3            | 4        | 8                 | 20    |
| Turbo        | 3             | 2         | 3            | 3        | 13                | 24    |
| Ziwa         | 2             | 6         | 3            | 2        | 12                | 24    |
| Total        | 10            | 38        | 21           | 20       | 54                | 143   |

### 3.4 Research Instruments

Research instruments are techniques of data collection such as a quantitative standardized instrument (Creswell, 2003). The researcher used questionnaire and interview as the main tools for collecting data. The selection of these tools had been guided by the nature of data to be collected, the time available as well as by the objectives of the study. The main aim of this study was to investigate the factors influencing completion of AMPATH projects in Uasin Gishu County. The research is was mainly concerned with the views, opinions, perceptions, feelings and attitudes. Such kind of information can be best collected through the use of questionnaire and interview techniques (Cohen and Manion, 2000).

A questionnaire is a set of questions on a topic or group of topics designed to be answered by a respondent. This implied that the respondent was in full control of the questionnaire and thus completed and returned it at his/her own convenient time.

According to Kombo & Tromp (2006), a questionnaire is a research instrument that gathers data over a large sample.

Kothari (2008) observes that interview schedules are particularly suitable for intensive investigation. The interview schedule was used for this study because it provided the researcher with great opportunity to describe the purpose of the study. The items were designed on the basis of the objectives of the study as stated in chapter one. Some of the advantages of using interview were that the researcher obtained more information in greater depth, personal information as well as supplementary information about the respondent's personal characteristics and environment which was often of great value in interpreting results was easy to get through an interview.

In this study, interview schedules were conducted to gather data from PIs aimed at providing a high degree of objectivity, uniformity and also allowed for probing and clarification at the same time. These also were used to seek background information concerning start-up of the projects and in particular negotiations of the contracts.

### 3.5 Data Collection Methods

Before collecting data, the researcher sought for an introductory letter from the School of Continuing and Distance Education, University of Nairobi addressed to the Permanent Secretary, National Commission for Science, Technology and Innovation. Thereafter, a permit and an authorization letter to carry out research were issued by the National Commission for Science, Technology and Innovation. The researcher then proceeded to inform the AMPATH Chief Executive Officer on the intended research. Their

authorization letters were collected by the researcher. The researcher with the assistance of research assistants proceeded to the field where they administered the research instruments.

# 3.6 Reliability and Validity of the research instruments

### 3.6.1 Reliability of the Research Instruments

A data collection instrument must be reliable. That means it should have the ability to consistently yield the same results when repeated measurements are taken of the same individuals under the same conditions. To test reliability of the questionnaire used in this study, the Cronbach's alpha correlation was used, in which the research tools were administered to a sample which had similar characteristics as those of the target population but not in the sample population. This was done in Uasin Gishu District hospital and Huruma Hospitals and repeated after a period of two weeks. From the responses obtained, the Cronbach's alpha formula was used to calculate coefficient of the correlation (r) in order to establish the extent to which the items in the questionnaire were consistent in eliciting the same responses every time they were used. In this study, the correlation coefficient of more than 0.7 was taken as a good measure of reliability. Cronbach alpha coefficient test was employed to measure the internal consistency of the instruments used and the coefficient alpha of these variables were reported in Table 3.3.

Table 3. 3: Reliability test

|                               | Cronbach's Alpha | N of Items |
|-------------------------------|------------------|------------|
| Completion of AMPATH projects | 0.861            | 4          |
| Contracting process           | 0.870            | 10         |
| IRB approval process          | 0.903            | 8          |
| HR recruitment process        | 0.953            | 9          |
| Procurement process           | 0.702            | 7          |

As shown in Table 3.3, the Cronbach alpha test showed values ranging above 0.7. These findings were in line with the benchmark suggested by Hair, et al. (2010) where coefficient of 0.60 is regarded to have an average reliability while coefficient of 0.70 and above indicates that the instrument has a high reliability standard. Thus, it can be concluded that data collected from the pilot study were reliable and have obtained the acceptable level of internal consistency. Therefore, all items were included in the survey instrument.

### 3.6.2 Validity of the Research Instruments

The general concept of validity can be defined as the degree to which a test measures what it claims, or purports, to be measuring (Brown, 1996). The researcher tested validity of the research instruments before administering them to the actual respondents in this study. Content validity is a non-statistical type of validity that involves the systematic examination of the test content to determine whether it covers a representative sample of the behavior domain to be measured (Anastasi & Urbina, 1997). Content validity evidence involves the degree to which the content of the test matches a content domain associated with the construct. Content related evidence typically involves subject matter experts evaluating test items against the test specifications. A test has content validity

built into it by careful selection of which items to include (Anastasi & Urbina, 1997). Items are chosen so that they comply with the test specification which is drawn up through a thorough examination of the subject domain. Foxcroft, Paterson, le Roux & Herbst (2004) note that by using a panel of experts to review the test specifications and the selection of items the content validity of a test can be improved. The experts will be able to review the items and comment on whether the items cover a representative sample of the behaviour domain. In this study, the researcher sought the assistance of experts in the field of Grants Management and guidance from the University supervisor. Their comments were incorporated to improve the validity of the instrument.

# 3.7 Data Analysis

Both descriptive and inferential statistical techniques were used in the analysis process. The mean scores and standard deviations were used because the mean was considered the most efficient measure of central tendency and the standard deviation as the most efficient measure of dispersion (Dornbusch and Schmid, 1965). The descriptive technique was used to determine the proportions of respondents selecting the various factors influencing completion of AMPATH projects in Uasin Gishu County. The study also adopted Regression analysis to estimate the causal effect. SPSS version 20 software was used for Regression analysis and the significant of each independent variable was tested at a confidence level of 95%. The regression equation of the study was applied as shown below;

Regression equation is a function of variables x and  $\beta$ 

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \varepsilon$$

Where  $\alpha$  is the intercept

 $\beta_1 \dots \beta_4$  are regression coefficients

 $X_1 = Contracting process$ 

 $X_2 = IRB$  approval process

 $X_3 = HR$  recruitment process

 $X_4$  = Procurement process

Y = completion of AMPATH projects

 $\varepsilon = \text{Error Term}$ 

### 3.8 Ethical Considerations

Kombo and Tromp (2006), noted that researchers whose subjects are people or animals must consider the conduct of their research, and give attention to the ethical issues associated with carrying out their research. This study dealt with people as respondents. Ethical measures are principles which the researcher should bind himself or herself with in conducting his/her research (Schulze, 2002). In this study, the researcher followed the following research ethics:

(i) Permission to conduct the research: In this study, the researcher sought permission from the School of Continuing and Distance Education to apply for research permit from National Commission for Science, Technology and

- Innovation. An introductory letter was also presented to the relevant office so as to carry out the research.
- (ii) Confidentiality and Anonymity: A researcher had to be responsible at all times and be vigilant, mindful and sensitive to human dignity. In this study, participants' confidentialities were not compromised, as their names were not used or appeared in the collection of data. No private or secret information was divulged since the right of confidentiality of the participants was respected.
- (iii) To establish good working relationship with the participants, the researcher endeavored to develop a rapport with them by maintaining humility and conducted the research with utmost honesty avoiding distortions and misleading data manipulation.
- (iv) The research also strove to uphold intellectual honesty and sought collaborative support which was duly acknowledged. The research also endeavored to arrive at conclusions based on objective inferences were purely and blindly guided by the data collected.

# 3.9 Operationalization of Variables

Table 3. 4: Operationalization of Variables

| Research<br>objective                                                                            | Independe<br>nt variable                    | Indicators                                                                                           | Data<br>Tools                    | Measurement<br>Scale | Data analysis<br>technique                |
|--------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|----------------------|-------------------------------------------|
| To establish the influence of processing of contracts on completion of AMPATH projects.          | Processing<br>of<br>Contracts               | -Contract<br>amendment<br>s<br>-Start-up<br>meetings<br>-Staff<br>efficiency                         | Questionn<br>aire,<br>Interviews | Ordinal, Nominal     | Descriptive and<br>Inferential statistics |
| To determine the influence of the IRB approval process on completion of AMPATH projects.         | IRB<br>approval<br>Process                  | -period of<br>review<br>-changes to<br>proposals<br>-staff<br>efficiency                             | Questionn<br>aire,<br>Interviews | Ordinal, Nominal     | Descriptive and<br>Inferential statistics |
| To examine the influence of human resource recruitment process on completion of AMPATH projects. | Human<br>resource<br>recruitment<br>process | -recruitment<br>interviews<br>-time<br>between<br>request and<br>appointment<br>-staff<br>efficiency | Questionn<br>aire,<br>Interviews | Ordinal, Nominal     | Descriptive and<br>Inferential statistics |
| To explore the influence of procurement process on completion of AMPATH projects                 | Procureme<br>nt process                     | -time<br>between<br>order and<br>delivery<br>-staff<br>efficiency<br>-disposal at<br>close out       | Questionn<br>aire,<br>Interviews | Ordinal, Nominal     | Descriptive and<br>Inferential statistics |

#### **CHAPTER FOUR**

### DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

### 4.0 Introduction

This chapter presents the analysis of the collected data as well as the presentation, interpretation and discussion of the findings basing on the research questions stated with the goal of achieving the stated objectives of the study. The chapter first describes and discusses the descriptive statistics especially those related to factors influencing completion of AMPATH projects using means and standard deviations. These are followed by the factors related to processing of contracts, IRB approval process, human resource recruitment process and procurement process. Means and standard deviations were used for the presentation and analysis of these factors. Finally, the analysis and discussion of the regression model that was developed to predict the behavior of the dependent variable basing on the independent variables was done.

# 4.1 Response Rate

Out of the 143 questionnaires distributed to the respondents, only 132 questionnaires were returned, which gives a response rate of approximately 92.3 % percent. Babbie as cited by Ayudha (2011) suggested that any rate of return of over 50% can be considered reported. While overall value of above 60% and 70% can be mentioned as good and excellent respectively.

# 4.2 Background Information of respondents

An understanding of the background characteristics of the respondents of the study is important in the understanding of the influence of these characteristics as cofounders on the main factors. The study thus sought to establish the background characteristics of the respondents in terms of gender, age and level of education while the contracting, IRB review, HR and Procurement processes were assessed to get an understanding of the processes influence on the completion of AMPATH projects.

The study presents respondent gender in table 4.1 below.

Table 4. 1: Gender of the respondents

|        | Frequency | Percentage |
|--------|-----------|------------|
| Female | 54        | 41         |
| Male   | 78        | 59         |
| total  | 132       | 100        |

The findings showed that males comprised 59% of the respondents while females comprised 41% of the respondents indicating an almost equal representation of males and females although there was male domination. This roughly indicates gender balance but agrees with past studies which have shown that more men are likely to participate in research surveys than women (Curtin, Presser, and Singer, 2000).

The study also assessed respondents' age which was paramount in showing age category of employees in AMPATH Uasin Gishu sites. The findings are shown in table 4.2

Table 4. 2: Age of the respondents

|                | Frequency | Percentage |
|----------------|-----------|------------|
| below 30 years | 25        | 18.9       |
| 30-39 years    | 81        | 61.4       |
| 40-49 years    | 26        | 19.7       |
| total          | 132       | 100        |

The findings in table 4.1 showed that majority of the respondents, 61.4% were aged between 30 and 39 years of age while those aged below 30 years and those aged above 39 years were all below 20%. This also agrees with past studies that indicate that the middle-aged people are more likely to participate in research surveys than older people (Moore & Tarnai, 2002).

It was also necessary to assess respondents' education level which is important for the study since it will indicate if the respondents understood the concept and the questions which were writing in English language. The findings are indicated in table 4.3 below

**Table 4. 3: Education level of the respondents** 

|             | Frequency | Percentage |
|-------------|-----------|------------|
| certificate | 22        | 16.7       |
| diploma     | 1         | 0.8        |
| bachelors   | 42        | 31.8       |
| masters     | 67        | 50.8       |
| total       | 132       | 100.1      |

Findings in table 4.3 showed that 50.8% of the respondents had masters' degrees while diploma holders comprised less than 10% of the total respondents which clearly indicates high levels of education qualifications. Past research have shown that in general, more educated and more affluent people are more likely to participate in surveys than less educated and less affluent people (Goyder, Warriner, & Miller, 2002).

# 4.2 Contracts Processing and project completion

The importance of contracts processing has been highlighted by various others as being critical to the successful completion of the project. Thus, the study sought to establish the nature of contracts processing at AMPATH and establish how this influenced completion of the projects and presented the findings in table 4.4 and 4.5.

**Table 4. 4: Contracting Time** 

|                        |                                 | Frequency | Percentage |
|------------------------|---------------------------------|-----------|------------|
| Time taken to learn    | Less than 1 month after award   | 96        | 72.7       |
| about the award of the | Between 1 -3 months after award | 1         | 0.8        |
| grant                  | More than 3 months after award  | 35        | 26.5       |
|                        | Total                           | 132       | 100        |
| Time taken between     | Less than 1 month               | 30        | 22.7       |
| award and full         | Between 1 - 3 months            | 77        | 58.3       |
| execution of the       | More than 3 months              | 25        | 18.9       |
| contract               | Total                           | 132       | 100        |

From the findings in table 4.4, majority of the respondents, 96 (72.7%), noted that the time taken to learn about the award of the grant was less than 1 month after award while 26.5% of the respondents noted that it took more than 3 months after award. Further investigations revealed that the time taken between award and full execution of the contract was between 1 to 3 months for 58.3% of the cases while 22.7% of the respondents noted that it took less than 1 month.

The findings have shown that although there were no time delays in the contracting process, there were cases that showed more than 3 months taken to learn about the award of the grant as well as time taken between award and full execution of the contract which might cause delays in the completion of projects and this is clearly shown in past studies

that have shown that even partial admission to the reality of possible contract delay because of very many unforeseen factors is always acknowledged in the contract agreement where some delays are permitted to the contractor on notice showing that prior communication as to possible delay is important to the involved parties although as Ahmed et al. (2002) caution that further delays beyond excusable limits in contract delay is considered in-excusable

Specific findings regarding the nature of contracts processing and its influence on completion of projects were presented in table 4.5

**Table 4. 5: Contracts Processing and project completion** 

|                                        |       |      |      |      |      |      |      | Std.      | Skewness |
|----------------------------------------|-------|------|------|------|------|------|------|-----------|----------|
|                                        |       | SD   | D    | N    | A    | SA   | Mean | Deviation |          |
| The contracting process is clear and   | Freq. | 0    | 0    | 22   | 48   | 62   | 4.30 | 0.741     | 0.05     |
| easily understood                      | %     | 0    | 0    | 16.7 | 36.4 | 47   |      |           |          |
| The contracting process takes a short  | Freq. | 0    | 11   | 34   | 72   | 15   | 3.69 | 0.783     | 0.71     |
| time                                   | %     | 0    | 8.3  | 25.8 | 54.5 | 11.4 |      |           |          |
| Most of the contracts are completed    | Freq. | 0    | 1    | 14   | 82   | 35   | 4.14 | 0.619     | -0.063   |
| without any cancelation                | %     | 0    | 0.8  | 10.6 | 62.1 | 26.5 |      |           |          |
| Our contract process is done           | Freq. | 0    | 0    | 10   | 71   | 51   | 4.31 | 0.607     | 1.03     |
| electronically                         | %     | 0    | 0    | 7.6  | 53.8 | 38.6 |      |           |          |
| The contracting process takes all due  | Freq. | 0    | 0    | 0    | 79   | 53   | 4.40 | 0.492     | -0.173   |
| steps                                  | %     | 0    | 0    | 0    | 59.8 | 40.2 |      |           |          |
| There is no coercion/undue influence   | Freq. | 0    | 1    | 0    | 78   | 53   | 4.39 | 0.534     | 0.29     |
| in the contract process                | %     | 0    | 0.8  | 0    | 59.1 | 40.2 |      |           |          |
| The time take to evaluate the contract | Freq. | 20   | 2    | 30   | 42   | 38   | 3.58 | 1.331     | 0.36     |
| does not interfere with the project    | %     | 15.2 | 1.5  | 22.7 | 31.8 | 28.8 |      |           |          |
| Most of the contract have to go        | Freq. | 0    | 28   | 47   | 26   | 31   | 3.45 | 1.073     | -0.15    |
| through many amendments                | %     | 0    | 21.2 | 35.6 | 19.7 | 23.5 |      |           |          |
| RSPO staff/project staff are           | Freq. | 0    | 0    | 0    | 48   | 84   | 4.64 | 0.483     | 1.15     |
| supportive in the contract processing  | %     | 0    | 0    | 0    | 36.4 | 63.6 |      |           |          |
| Most of the contractors end up         | Freq. | 38   | 0    | 57   | 1    | 36   | 2.27 | 1.152     | -0.13    |
| subcontracting hence hindering the     |       |      |      |      |      |      |      |           |          |
| project progress                       | %     | 28.8 | 0    | 43.2 | 0.8  | 27.3 |      |           |          |

Findings in table 4.5 revealed that, 36.4% and 47% of the respondents agreed and strongly agreed that the contracting process is clear and easily understood, mean = 4.3while on overall, it was shown that the contracting process takes a short time where 54.5% of the respondents agreed, mean = 3.69 and this might be due to the fact that for majority of the respondents, 53.8%, mean = 4.31, the contract process is done electronically hence speeding up the process as well as making the contracting process valid and fair across board as shown by the fact that the contracting process takes all due steps, 59.8%, mean = 4.4 and there is no coercion/ undue influence in the contract process, 59.1%, mean = 4.39. Majority of the respondents, 62.1% agreed that most of the contracts are completed without cancelation, mean = 4.14. In addition, majority of the respondents, 31.8% and 28.8% agreed and disagreed that the time taken to evaluate the contract does not interfere with the project, mean = 3.58 although there were 15.2% of the cases where the time take to evaluate the contract did interfere with the project. One challenge/gap identified was in relation to access to important information since majority of them, 35.6% did not know whether most of the contracts have to go through many amendments or not while 43.2% of the respondents were of the opinion that most of the contracts have to go through many amendments, mean = 3.45. The findings also revealed that RSPO staff/ project staff are supportive in the contract processing, 63.6%, mean = 4.64 and finally, for majority of the respondents, 43.2%, it was not clear whether most of the contractors end up sub-contracting hence hindering the project process although 27.3% of them revealed the existence of cases of subcontracting that eventually hinder the project process, mean = 2.27.

From the study findings, there is use of electronic contracting processes which would definitely speed up the contracting process hence minimizing the time of execution of the contract from the award time. These findings are in line with past studies that have shown that the use of innovative contracting practices was a good practice that can lead to successful project delivery (McMinimee *et al.*, 2009) because the contract duration is a key determinant as to whether the project will be delivered in a successful manner or it will not.

# 4.3 IRB Approval process and completion of projects

The importance of the IRB is clear because the board is charged with reviewing all proposed research projects that involve human subjects to ensure the research is conducted ethically and that appropriate measures are built in for obtaining consent and informing subjects of potential risks.

The study findings were summarized and presented in table 4.6, table 4.7 and table 4.8.

Table 4. 6: IRB Approval gotten before Award of the Project

|       | frequency | percentage |
|-------|-----------|------------|
| No    | 29        | 22         |
| Yes   | 103       | 78         |
| total | 132       | 100        |

From the findings in table 4.6, majority of the respondents, 78% noted that IRB approval was gotten before the award of the project. This agrees with past studies that show that most IRB approvals are gotten before award of projects (U.S. Department of Health & Human Services, 2006)

Table 4.7: Changes made on the Proposal before IRB Approval

|            | Frequency | Percentage |
|------------|-----------|------------|
| None       | 1         | 0.8        |
| One<br>Two | 19        | 14.4       |
| Two        | 41        | 31.1       |
| Three      | 71        | 53.7       |
| total      | 132       | 100        |

Table 4.7 revealed that 3 major changes were made on the proposal before IRB approval, 53.8% while in other cases, there were 2 major changes on the proposal. Past studies have shown that many proposals go through many changes due to the bureaucracy of the IRB approval system. (Macdonald, M. E., & Carnevale, F. C. 2008).

Specific findings regarding the nature of IRB approval and its influence in completion of projects were presented in table 4.8

Table 4. 8: IRB Approval process and project completion

|                             |       |      |      |              |              |      |      | Std.      |           |
|-----------------------------|-------|------|------|--------------|--------------|------|------|-----------|-----------|
|                             |       | SD   | D    | $\mathbf{N}$ | $\mathbf{A}$ | SA   | Mean | Deviation | Ske wness |
| The minutes of the          | Freq. | 0    | 0    | 17           | 82           | 33   | 4.12 | 0.606     | -0.06     |
| meetings are circulated on  |       |      |      |              |              |      |      |           |           |
| time for action             | %     | 0    | 0    | 12.9         | 62.1         | 25   |      |           |           |
|                             | Freq. | 0    | 1    | 46           | 84           | 1    | 3.64 | 0.511     | -0.61     |
| IRB fees are paid in time   | %     | 0    | 0.8  | 34.8         | 63.6         | 0.8  |      |           |           |
| All the stakeholders are    | Freq. | 0    | 31   | 37           | 38           | 26   | 3.45 | 1.058     | 0.043     |
| involved in the review      | -     |      |      |              |              |      |      |           |           |
| process                     | %     | 0    | 23.5 | 28           | 28.8         | 19.7 |      |           |           |
| IRB review process          | Freq. | 20   | 11   | 26           | 75           | 0    | 3.18 | 1.111     | -1.05     |
| provided feedback without   | -     |      |      |              |              |      |      |           |           |
| delay                       | %     | 15.2 | 8.3  | 19.7         | 56.8         | 0    |      |           |           |
| IRB review have canceled    | Freq. | 0    | 3    | 54           | 42           | 33   | 3.80 | 0.845     | 0.173     |
| many proposals which do     |       |      |      |              |              |      |      |           |           |
| not meet required standards | %     | 0    | 2.3  | 40.9         | 31.8         | 25   |      |           |           |
| IRB review/application      | Freq. | 0    | 37   | 13           | 81           | 1    | 3.35 | 0.899     | -0.69     |
| forms are easily understood | %     | 0    | 28   | 9.8          | 61.4         | 0.8  |      |           |           |
| IRB staff are efficient and | Freq. | 0    | 0    | 16           | 82           | 34   | 4.14 | 0.602     | -0.06     |
| supportive                  | %     | 0    | 0    | 12.1         | 62.1         | 25.8 |      |           |           |
| Feedback/response time for  | Freq. | 0    | 0    | 42           | 79           | 11   | 3.77 | 0.591     | 0.11      |
| any queries raised take     | 1     |      |      |              |              |      |      |           |           |
| short time                  | %     | 0    | 0    | 31.8         | 59.8         | 8.3  |      |           |           |

Findings in table 4.8 indicated that majority of the respondents, 62.1%, mean = 4.12 agreed that the minutes of the meetings were circulated on time for action and that the IRB review process provided feedback without delay, 56.8%, mean = 3.18 while the feedback/ response time for any queries raised takes a short time, 59.8%, mean = 3.77. In addition to this, the findings showed that all the stakeholders are involved in the review process, 45.8% (agreed and strongly agreed), mean = 3.45. Furthermore, the findings also revealed that the IRB review have canceled many proposals which do not meet required standards, 56.8% (agreed and strongly agreed), mean = 3.80. The findings also showed

that the IRB review/ application forms are easily understood, 61.4%, mean = 3.35 while the IRB staff were seen as efficient and supportive, 62.1%, mean = 4.14.

From the findings, it is clear that the IRB system and how they carry out their activities determines the level and nature of completion of the approved projects especially in terms of approval time and query response time. Although the findings have shown efficiency of the IRB system in timely approvals, Borror *et al.* (2003) note that starting the IRB process early can facilitate a more timely start for projects approved for funding.

# 4.4 HR Recruitment Process and completion of projects

The study sought to establish the nature of the recruitment process and how this would influence the completion of the projects. The findings were summarized and presented in Table 4.9, Table 4.10 and table 4.11.

Table 4. 9: Recruitment plan before start of a project

|       | frequency | percentage |
|-------|-----------|------------|
| No    | 3         | 2          |
| Yes   | 129       | 98         |
| Total | 132       | 100        |

From the findings in Table 4.9, it was revealed by 98% of the respondents that there is a staff recruitment plan before the start of the project. This concurs with what Crawford said that recruitment process is efficient if it is done on a timely basis, individuals are recruited in sufficient numbers and with appropriate qualifications and developing their interest in an organization (Crawford, 2004).

Table 4. 10: Staff Recruitment time

|                                             | Frequency | percentage |
|---------------------------------------------|-----------|------------|
| Less than 1 week after startup meeting      | 13        | 9.8        |
| Between 1-2 week after startup meeting      | 53        | 40.2       |
| Between 2-4 week after startup meeting      | 22        | 16.7       |
| more than 1 one month after startup meeting | 44        | 33.3       |
| Total                                       | 132       | 100        |

In Table 4.10 majority of the respondents, 40.2% noting that staff recruitment occurs between 1 to 2 weeks after start-up meeting while 33.3% occurred more than 1 month after start-up meeting.

The specific factors in relation to HR recruitment process were assessed and the findings in table 4.11

Table 4. 11: HR Recruitment Process and project completion

|                                                                      |       |      |      |      |      |      |      | Std.      |           |
|----------------------------------------------------------------------|-------|------|------|------|------|------|------|-----------|-----------|
|                                                                      |       | SD   | D    | N    | A    | SA   | Mean | Deviation | Ske wness |
| It take a short time between request for staff and                   | Freq. | 1    | 28   | 4    | 98   | 1    | 3.53 | 0.86      | -1.27     |
| placement of adverts                                                 | %     | 0.8  | 21.2 | 3    | 74.2 | 0.8  |      |           |           |
| All stakeholders are present in the staff selection                  | Freq. | 20   | 10   | 1    | 77   | 24   | 3.57 | 1.297     | -1.07     |
| interviews                                                           | %     | 15.2 | 7.6  | 0.8  | 58.3 | 18.2 |      |           |           |
| Minutes are circulated when new staff are                            | Freq. | 26   | 11   | 3    | 45   | 47   | 3.58 | 1.524     | -0.76     |
| recruited                                                            | %     | 19.7 | 8.3  | 2.3  | 34.1 | 35.6 |      |           |           |
| Some interviews are repeated which takes a long                      | Freq. | 0    | 66   | 42   | 22   | 2    | 2.7  | 0.8       | 0.786     |
| time                                                                 | %     | 0    | 50   | 31.8 | 16.7 | 1.5  |      |           |           |
| Some adverts on recruitment are canceled leading to re-advertisement | Freq. | 0    | 58   | 18   | 52   | 4    | 3.02 | 0.981     | 0.167     |
| of the same positions                                                | %     | 0    | 43.9 | 13.6 | 39.4 | 3    |      |           |           |
| Appointment letters are signed and returned on                       | Freq. | 29   | 1    | 76   | 26   |      | 3.75 | 1.014     | -0.77     |
| time for action                                                      | %     | 22   | 0.8  | 57.6 | 19.7 |      |      |           |           |
| It takes time between placement of advert and                        | Freq. | 23   | 46   | 41   | 22   |      | 2.95 | 1.427     | 0.079     |
| appointment of staff                                                 | %     | 17.4 | 34.8 | 31.1 | 16.7 |      |      |           |           |
| New employees are trained                                            | Freq. | 0    | 12   | 52   | 29   | 39   | 3.72 | 0.991     | 0.017     |
| on the new job task                                                  | %     | 0    | 9.1  | 39.4 | 22   | 29.5 |      |           | 4 40      |
| RSPO staff/ project team are supportive in the                       | Freq. | 17   | 0    | 2    | 42   | 71   | 4.14 | 1.306     | -1.68     |
| recruitment process                                                  | %     | 12.9 | 0    | 1.5  | 31.8 | 53.8 |      |           |           |

Findings in table 4.11 revealed that it takes a short time between request for staff and placement of adverts, 74.2%, mean = 3.53. In addition, the findings also revealed that all stakeholders are present in the staff selection interviews, 58.3%, mean = 3.57 hence giving credibility and fairness to the recruitment process although there were few cases where the respondents disagreed. The findings also revealed that although the minutes are circulated when new staffs are recruited, 35.6% mean = 3.58, 19.7% of the respondents noted that the minutes were not circulated. The respondents also disagreed that some adverts on recruitment are canceled leading to re-advertisement of the same positions,

43.9%, mean= 3.02. Furthermore, the findings also showed that appointment letters are signed and returned on time for action, 57.6%, mean = 3.75 although majority, 34.8%, mean = 2.95 disagreed that it takes time between placement of advert and appointment of staff. The respondents were however not sure of whether new employees are trained on the new job task, 39.4%, mean = 3.72 though over 50% noted that the employees are trained on the new job task. Finally, 53.8% of the respondents revealed that RSPO staff/ project team are supportive in the recruitment process, mean = 4.14.

The findings have confirmed that while the HR selection process is usually the responsibility of the human resource, supervisory personnel in all the business units of an organization also have an important role in the selection process (Goldrick, 1997) and thus they need to be well versed in the conventional selection methods of psychological and aptitude testing as well as single-stage to multi-stage interviews because effective recruitment and selection of employees is a fundamental HRM activity, one that if managed well can have a significant impact on organizational performance as well as lead to a more positive organizational image (Pilbeam and Corbridge, 2006).

### 4.5 Procurement Process and completion of projects

The level of competitiveness of an organization is a function of its procurement culture.

The study thus sought to determine the nature of the procurement process with the aim of identifying the gaps that exist within the process. The findings were summarized and

presented in table 4.12 while table 4.13 presented the specific factors in relation to the procurement process.

Table 4. 12: Procure ment Plan before start of the Project

|       | frequency | percentage |
|-------|-----------|------------|
| No    | 104       | 22         |
| Yes   | 28        | 78         |
| Total | 132       | 100        |

From the findings in table 4.12, 78% of the respondents noted that there was a procurement plan before the start of the project although in 22% of the cases, there was no plan.

According to Van Weele (2006) purchasing performance is considered to be the result of two elements: purchasing effectiveness and purchasing efficiency. This starts from having a procurement plan before project start up. Therefore the study findings agree with past studies.

Table 4. 13: Procure ment Process and project completion

|                           |       |      |      |      |              |      |      | Std.      |                  |
|---------------------------|-------|------|------|------|--------------|------|------|-----------|------------------|
|                           |       | SD   | D    | N    | A            | SA   | Mean | Deviation | <b>Ske wness</b> |
| Sometimes we find         | Freq. | 0    | 11   | 17   | 91           | 13   | 3.8  | 0.725     | -1.02            |
| defective items supplied  | %     | 0    | 8.3  | 12.9 | 68.9         | 9.8  |      |           |                  |
| RSPO/project team are     | Freq. | 0    | 0    | 19   | 78           | 35   | 4.12 | 0.63      | -0.1             |
| helpful/efficient in      |       |      |      |      |              |      |      |           |                  |
| procurement of supplies   | %     | 0    | 0    | 14.4 | 59.1         | 26.5 |      |           |                  |
| Some of the requests for  | Freq. | 25   | 26   | 43   | 27           | 11   | 2.8  | 1.209     | 0.033            |
| supplies have to be       |       |      |      |      |              |      |      |           |                  |
| resubmitted               | %     | 18.9 | 19.7 | 32.6 | 20.5         | 8.3  |      |           |                  |
| Our suppliers deliver     | Freq. |      | 4    | 19   | 89           | 20   | 3.95 | 0.646     | -0.64            |
| goods on time stipulated  | %     |      | 3    | 14.4 | 67.4         | 15.2 |      |           |                  |
| It takes short time       | Freq. | 1    | 1    | 41   | 78           | 11   | 3.73 | 0.652     | -0.51            |
| between receipt of goods  |       |      |      |      |              |      |      |           |                  |
| in the store, inspection  |       |      |      |      |              |      |      |           |                  |
| and subsequent            |       |      |      |      |              |      |      |           |                  |
| collection by the project |       | 0.0  | 0.0  | 24.4 | <b>7</b> 0.4 | 0.0  |      |           |                  |
| staff                     | %     | 0.8  | 0.8  | 31.1 | 59.1         | 8.3  | 2.52 | 1.01.1    | 0.047            |
| It takes more time for    | Freq. | 15   | 36   | 62   | 9            | 10   | 2.72 | 1.014     | 0.365            |
| tendering process and the |       |      |      |      |              |      |      |           |                  |
| signing of contracts with | 0/    | 11 / | 27.2 | 47   | <i>c</i> 0   | 7.6  |      |           |                  |
| the supplier              | %     | 11.4 | 27.3 | 47   | 6.8          | 7.6  | 2.02 | 1.01      | 0.42             |
| Sometimes there are       | Freq. | 1    | 18   | 21   | 56           | 36   | 3.82 | 1.01      | -0.62            |
| supplies/equipment to be  |       |      |      |      |              |      |      |           |                  |
| disposed before project   | 0/    | 0.0  | 12.6 | 150  | 10.4         | 27.2 |      |           |                  |
| close out                 | %     | 0.8  | 13.6 | 15.9 | 42.4         | 27.3 |      |           |                  |

The findings in table 4.13 showed that sometimes defective items are supplied, 68.9%, mean = 3.8 despite the fact that suppliers delivering goods on time, 67.4%, mean = 3.95. at the organizational level, it takes a short time between receipt of goods in the store, inspection and subsequent collection by the project staff, 59.1%, mean = 3.73. the respondents were not sure whether it takes more time for tendering process and the signing of contracts with the supplier, 47%, mean = 2.72 while 32.6% of the respondents were not sure whether some of the requests for supplies have to be re-submitted. In addition, there were cases of over-purchasing of supplies with 42.4% of the respondents agreeing that sometimes there are suppliers/ equipment to be disposed before project

closes out which indicate ineffective planning to determine what is enough for the project without over-purchasing of the supplies and equipment.

Past studies have suggested that procurement performance starts from purchasing efficiency and effectiveness in the procurement function in order to change from being reactive to being proactive to attain set performance levels in an entity (Knudsen, 1999). The study therefore agrees with past studies in that the majority of the respondents noted that there was a procurement plan before the start of the project and majority of the respondents agreed that suppliers deliver goods on time.

# 4.6 Completion of the Academic Model Providing Access to Healthcare Projects

While a project is seen to have a cycle, that is, there is a specified time for start and completion, completion of a project involves the balancing of three major factors namely cost, quality and time. Basing on this and the importance attached to the nature of completion of the project, the study sought to establish the level of completion of AMPATH projects with view of establishing existing gaps that can be due to the factors discussed previously hence aim at providing solutions to the gaps. The findings regarding this were summarized and presented in table 4.14.

Table 4. 14: Completion of the Academic Model Providing Access to Healthcare projects

|                    |       | SD   | D   | N    | A    | SA   | Mean | Std.      | Skewness |
|--------------------|-------|------|-----|------|------|------|------|-----------|----------|
|                    |       |      |     |      |      |      |      | Deviation |          |
| We are able to     | Freq. | 17   | 0   | 3    | 111  | 1    | 3.6  | 1.018     | -2.12    |
| complete our       | %     | 12.9 | 0   | 2.3  | 84.1 | 0.8  |      |           |          |
| projects on time   |       |      |     |      |      |      |      |           |          |
| The project was    | Freq. | 17   | 1   | 1    | 61   | 52   | 3.98 | 1.266     | -1.55    |
| ready to start its | %     | 12.9 | 0.8 | 0.8  | 46.2 | 39.4 |      |           |          |
| operations and     |       |      |     |      |      |      |      |           |          |
| functions          |       |      |     |      |      |      |      |           |          |
| immediately after  |       |      |     |      |      |      |      |           |          |
| contract execution |       |      |     |      |      |      |      |           |          |
| There were no      | Freq. | 17   | 1   | 26   | 68   | 20   | 3.55 | 1.161     | -1.11    |
| delays in the      | %     | 12.9 | 0.8 | 19.7 | 51.5 | 15.2 |      |           |          |
| project completion |       |      |     |      |      |      |      |           |          |
| The project        | Freq. | 0    | 0   | 17   | 56   | 59   | 4.32 | 0.691     | -0.52    |
| achieved its       | %     | 0    | 0   | 12.9 | 42.4 | 44.7 |      |           |          |
| objectives         |       |      |     |      |      |      |      |           |          |

From the findings in table 4.14, 84.1%, mean = 3.6, of the respondents noted that they were able to complete their projects on time while also noting that the project was ready to start its operations and functions immediately after contract execution, 46.2%, mean = 3.98 and that there were no delays in the project completion, 51.5%, mean = 3.55. Majority of the respondents also strongly agreed that the project achieved its objectives, 44.7%, mean = 4.32.

Although the findings in this study have shown on time completion of projects for majority of the respondents there are significant though small cases where the projects were not completed on time and Musa (2010) noted that poor communication, lack of experience by project manager, procurement delays, lack of planning, poor infrastructure, inadequate resources, lack of motivation, tendering methods, variations, project

environment and poor project definition as being some of the major contributors to time and cost overruns.

# 4.7 Regression analysis

The regression model was developed to predict the behavior of the dependent variable basing on the independent variables and the findings were summarized and presented in table 4.15.

Table 4. 15: Model Summary

| R          | R Sq           | <sub>l</sub> ua re | Adjusted R Sq | uare ( | Std. Error of the<br>Estimate |  |  |
|------------|----------------|--------------------|---------------|--------|-------------------------------|--|--|
| 0.794a     | 0.6            | 0.631              |               |        | 0.50637                       |  |  |
|            | Sum of Squares | Df                 | Mean Square   | F      | Sig.                          |  |  |
| Regression | 55.732         | 4                  | 13.933        | 54.339 | 9 0.000b                      |  |  |
| Residual   | 32.564         | 127                | 0.256         |        |                               |  |  |
| Total      | 88.295         | 131                |               |        |                               |  |  |

**Dependent Variable: Completion Of AMPATH Projects** 

Predictors: (Constant), Contracts processing, IRB review process, HR recruitment process, Procurement process

From the findings in table 4.16, the independent factors had an overall regression value of 0.794 which was strong as shown with R-square value of 0.631, which implies that 63.1% of the completion of AMPATH projects (DV) is dependent on the independent variables (IVs).

The ANOVA results in table 4.16 showed that the regression model accounts for 54.339 units change in the dependent factor and was significant, p < 0.05 and also implies that the

model contributes more variation to the dependent factor as compared to the error factor, therefore the model is fit to be used in the study

**Table 4. 16: Coefficients of Estimate** 

|                    | Unstandardized<br>Coefficients |            | Standar<br>Coefficie |          | Collinearity<br>Statistics |           |       |
|--------------------|--------------------------------|------------|----------------------|----------|----------------------------|-----------|-------|
|                    | В                              | Std.       | Beta                 | Beta T   |                            | Tolerance | VIF   |
|                    |                                | Error      |                      |          |                            |           |       |
| (Constant)         |                                |            |                      |          |                            |           |       |
| Contracts          | -                              | 0.205      | -0.115               | -1.76    | 0.081                      | 0.678     | 1.475 |
| processing         | 0.360                          |            |                      |          |                            |           |       |
| IRB review process | -                              | 0.181      | -0.548               | -6.519   | 0.000                      | 0.412     | 2.429 |
| •                  | 1.177                          |            |                      |          |                            |           |       |
| HR recruitment     | 1.329                          | 0.151      | 0.655                | 8.789    | 0.000                      | 0.522     | 1.915 |
| process            |                                |            |                      |          |                            |           |       |
| Procurement        | 1.132                          | 0.22       | 0.436                | 5.151    | 0.000                      | 0.404     | 2.473 |
| process            |                                |            |                      |          |                            |           |       |
| Dependent Vari     | able: Cor                      | npletion o | f AMPA               | ГН Ргоје | cts                        |           |       |

From the coefficients of estimates findings in table 4.16, although contracts processing had a negative influence on the completion of projects,  $\beta 1 = -0.360$ , the influence was not significant, p = 0.081. However, the findings revealed that IRB review process had a negative influence on completion of projects,  $\beta 2 = -1.177$  and was significant, p < 0.05 with t = -6.519 indicating that the IRB review process resulting in a decrease in completion of project by over 6 units for each unit change in IRB review process indicating that the IRB approval process had a negative influence on the completion of AMPATH projects in Uasin Gishu county. Furthermore, the HR recruitment process had a positive influence on the completion of projects,  $\beta 3 = 1.329$  and accounted for over 8 units of change in the completion of projects for each unit change in HR recruitment

process, p < 0.05 meaning that the HR recruitment process has a positive and significant influence on the completion of AMPATH projects in Uasin Gishu county while the procurement processes,  $\beta 4 = 1.132$ , p < 0.05 had a positive and significant influence on the completion of projects and accounted for over 5 units of change in the completion of projects with each unit of change in procurement processes in Uasin Gishu County. The variance inflation factor (VIF) showed the absence of multi-Collinearity for the factors in the regression model by rule of thumb i.e. VIF was less than 4 for all the factors and tolerance was greater than 0.2.

#### **CHAPTER FIVE**

# SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

In this chapter, the findings of the study were discussed in summary and the conclusions were drawn based on the findings, and recommendations were made. The purpose of the study was to investigate the factors influencing completion of AMPATH projects in Uasin Gishu County. The study was guided by the following research objectives; to establish the influence of processing of contracts on completion of AMPATH projects, to determine the influence of the IRB approval process on completion of AMPATH projects, to examine the influence of human resource recruitment process on completion of AMPATH projects and to explore how procurement process influences completion of AMPATH projects in Uasin Gishu County.

# 5.1 Summary of the findings

Males formed majority of the respondents i.e. 59% as compared to females while 61.4% of the respondents were aged between 30 and 39 years of age and 50.8% of the respondents had masters' degrees while diploma holders comprised less than 10% of the respondents.

# 5.1.1 Influence of Contracts Processing on Completion of AMPATH projects

Over 72% of the respondents noted that the time taken to learn about the award of the grant was less than 1 month after award while further investigations revealed that the

time taken between award and full execution of the contract was between 1 to 3 months. One challenge/ gap identified was in relation to access to important information where 35.6% of the respondents did not know whether most of the contracts have to go through many amendments or not while 43.2% of the respondents were of the opinion that most of the contracts have to go through many amendments. From the regression model, the findings finally revealed that contracts processing did not have a significant influence on the completion of AMPATH projects,  $\beta 1 = -0.360$ , p = 0.081.

# 5.1.2 Influence of IRB approval on Completion of AMPATH projects

The study found out that 78% of the IRB approval was gotten before the award of the project although after having made up to 3 major changes on the proposal before IRB approval. From the regression model, the findings finally revealed that the IRB review process had a negative and significant influence on completion of projects,  $\beta 2 = -1.177$ , p < 0.05.

### 5.1.3 Influence of HR Recruitment process on Completion of AMPATH projects

The findings have also shown that there is a staff recruitment plan before the start of the project, 98%, and majority of the respondents, 40.2% noting that staff recruitment occurs between 1 to 2 weeks after start-up meeting while 33.3% occurred more than 1 month after start-up meeting. From the regression model, the findings finally revealed that the HR recruitment process had a positive and significant influence on the completion of projects,  $\beta 3 = 1.329$ , p < 0.05.

# 5.1.4 Influence of Procurement process on Completion of AMPATH projects

The study found from 79% of the respondents that there was a procurement plan before the start of the project although in 21% of the cases, there was no plan. From the regression model, the findings finally revealed that the procurement process had a positive and significant influence on completion of AMPATH projects in Uasin Gishu county,  $\beta 4 = 1.132$ , p < 0.05.

### 5.2 Conclusion

During the processing of contracts, the agreement usually stipulates the contract duration which McNair (2011) notes that the key clauses of any contract are those that touch on time, cost and quality thus, McMinimee *et al.*, (2009) identifies the use of innovative contracting practices as a good practice leading to successful project delivery. Contract duration is a key determinant as to whether the project will be delivered in a successful manner or it will not. Although these findings clearly show processing of contracts as a key determinant, the findings in this study have revealed that processing of contracts does not have a significant influence on the completion of AMPATH projects in Uasin Gishu County.

The IRB approval process has a negative and significant influence on the completion of AMPATH projects in Uasin Gishu County which implies that there are gaps and bureaucracies within the IRB approval process which in many cases result in slow start-up of the projects as much time is taken in the review process especially in making amendments to the approval documents with some even doing up to 3 major changes

which ideally takes time to do. Consequently, projects fail to take off within the stipulated times and eventually, the projects are delayed in terms of completion.

Human resource recruitment process has a positive and significant influence on completion of AMPATH projects in Uasin Gishu County which indicates that the recruitment process especially when done early, just after project start-up meeting, enables early identification of the most qualified personnel to run the project as well as providing enough time to get acquainted with the project hence contributing to successful take-off of the project as well as finishing it.

The procurement process has a positive and significant influence on the completion of AMPATH projects in Uasin Gishu County. This implies that an effective procurement process that is characterized by suppliers delivering goods on time, short time between receipt of goods in the store, inspection and subsequent collection by the project staff, avoiding purchasing non-essential items and avoiding purchasing defective items that would often result in more time for tendering process and the signing of contracts with the supplier and re-submission of requests for supplies would often result in a project being run without glitches that result from lack of supplies and thus enables the project to run within the duration that is agreed upon.

### 5.3 Recommendations

The study thus recommends that there is need to tap into the aspects of contracts processing, especially on availing contracts processing information to all project team

members, so as to have a positive influence on the completion of AMPATH projects in Uasin Gishu County since from the study, there was no significant influence of contracts processing on the completion of projects.

In addition, the IRB review process was found to have a negative influence on the completion of projects hence there is need to have an overview evaluation of the review process so that the there is no delay in terms of project implementation time for those whose projects have been approved. There should also be harmonization of the review procedures which should also include all stakeholders so that the process can be made friendlier.

The study also recommends that the HR recruitment process be done early enough and that new employees are trained on the tasks so that they fit in and effectively work towards accomplishment of project objectives. There is also need for RSPO staff to be supportive in the recruitment process since there were some respondents who felt that the RSPO staff were not supportive. These will all go towards ensuring that projects are completed on time and that objectives are met because the HR recruitment process was found to have a positive and significant influence on completion of projects.

Furthermore, over-purchasing of supplies results in having a surplus of items as well as over-spending and denying of essential finances to other areas of project implementation. Thus, there is need to have proper planning as well as budgeting to avoid such cases and also making sure that while looking for suppliers of the items needed in the project, the procurement unit should ensure that there is quality in terms of assessment of the suppliers as well as their history in terms of supplying such items which calls for a more

strict and controlled vetting process of the suppliers in order to assure quality and would save on having to re-purchase items meaning higher spending beyond the budget allocations as well as re-evaluation of suppliers during the implementation of the project hence taking valuable time that would have been used in the implementation of the project.

# 5.4 Suggested Further Research

This research study investigated the factors influencing completion of AMPATH projects in Uasin Gishu County with specific focus on the processing of contracts, the IRB approval process, human resource recruitment process and the procurement process.

The study was thus confined within the organizational based factors without considering external factors such as the subjects environment the project is being conducted in, for instance, human related factors; supplier related factors as well as government related factors. This would provide an understanding of the nature of the influence of both internal and external related factors related to the organization that influence the completion of projects.

While the study was confined to AMPATH projects, the characteristics and levels of operations might vary in other organizations, hence, there is need to conduct similar studies in other organizations in order to gain more insight on how the factors discussed in this study would play in relation to project completion especially under different organizational environments outside medical research. As the study was focused in Uasin Gishu County, expanding the research to other counties would provide a means of

understanding the concept of project completion from a wider perspective hence giving the findings more impetus and have more influence on policy for project planning and management.

# 5.5 Contribution to the body of knowledge

| Objectives                                                                                                             | Contribution                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To establish the influence of processing of contracts on completion of AMPATH projects in Uasin Gishu County           | The findings revealed that contracts processing did not have a significant influence on completion of projects. This can be due to the fact that majority of the respondents did not have much information on the processing of contracts. On the other hand it implies that resources should not be expended so much in contracts processing and the process should therefore be automated.            |
| To determine the influence of<br>the IRB approval process on<br>completion of AMPATH<br>projects in Uasin Gishu County | The key findings in the study were that the IRB approval process had a negative and significant influence on completion of projects. This means that there is so much waste/gaps in the approval process and that most researchers are not really aware of what the approvers are looking for. Therefore there is need to have an overview of the whole process so that projects are completed on time. |
| To examine the influence of human resource recruitment process on completion of AMPATH projects in Uasin Gishu County  | The study found out that the HR recruitment process had a positive and significant influence on completion of projects. It means therefore that the HR recruitment process should begin early and that all departments are involved so that the right people with appropriate skills are placed for the jobs.                                                                                           |
| To explore how procurement process influences completion of AMPATH projects in Uasin Gishu County                      | The key findings here was that the procurement process had a positive and significant influence on completion of projects. This implies that the all project supplies should be available as and when needed so as to ensure that the project doesn't stall due to lack of essential goods and services.                                                                                                |

### REFERENCE

- Abd El-Razek, M.E., Bassioni, H.A.and Mobarak, A.M. (2008) 'Causes of delays in building construction projects in Egypt', Journal of Construction Engineering and Management, 134 (11) 831-841
- Ahmed, S.M., Azhar, S., Castillo, M., Kappagantulla, P. (2002). *Construction delays in florida: An Empirical Study*. Florida: State of Florida Department of Community Affairs.
- Aibinu, Bratton, J. and J. Gold (2007) (4th Edition). *Human Resource Management: Theory and Practice, Basingstoke*: Palgrave Macmillan.
- Amaratunga, D., & Baldry, D. (2002). Moving from Performance Measurement to Performance Management. *Facilities*, 20 (5/6), 217-223.
- Anastasi, A., & Urbina, S. (1997). *Psychological testing* (7thed). Upper Saddle River, NJ: Prentice Hall
- Artley, W., & Stroh, S. (2001, September). *The Performance-Based Management Handbook*, Volume II. Retrieved September 24, 2008, from Oak Ridge Institute for science and education website:http://www.orau.gov/pbm/pbmhandbook/Volume%202.pdf.
- Assaf, S. A. and Al-Hejji, S. (2006), 'Causes of delay in large construction projects'. International Journal of Project Management, 24(4):349-357
- Batenburg, R., & Versendaal, J. (2006, January). *Alignment Matters Improving business functions using the procurement alignment framework*. Retrieved August 13, 2008, from Archive library Utrecht University web site: http://igiturarchive.library.uu.nl/math/2007-121914623/batenburg\_06\_alignmentmatters.pdf.
- Blee, K. M., & Currier, A. (2011). Ethics beyond the IRB: An introductory essay. Qualitative Sociology, 34(3), 401-413
- Borror, K., Carome, M., McNeilly, P., & Weil, C. (2003). A review of OHRP compliance oversight letters. *IRB: Ethics & Human Research*, 25(5), 1-4.
- Brown, J. D. (1996). *Testing in language programs*. Upper Saddle River, NJ: Prentice Hall Regents
- Bunting, M. (2007) in Grugulis, I. *Skills, Training and Human Resource Development*: A Critical Text, Basingstoke: Palgrave Macmillan.

- Burris, S., & Moss, K. (2006). U.S. health researchers review their ethics review boards: a qualitative study. *Journal of Empirical Research on Human Research Ethics*, 1(2), 39-58.
- Burris, S., & Welsh, J. (2007). Regulatory paradox: A review of enforcement letters issued by the Office for Human Research Protection. *Northwestern University Law Review*, 101(2), 643-685.
- Chan and Kumaraswamy, (2002) D.W.M. Chan, M.M. Kumaraswamy Compressing construction durations: *Lessons learned from Hong Kong building projects* Int.J Proj. Manage. 20 (1) (2002), pp. 23–35.
- Chang Saar Chai and Aminah Md Yusof, "SEM Approach: Reclassifying Housing Delay in Malaysian Housing Industry, "Journal of Economics, Business and Management vol. 3, no. 3, pp. 364-369, 2015.
- Chism, N., Armstrong, G. (2010). *Project delivery strategy: getting it right. KPMG* International, pp.1-24.
- Choudhury, S. (2002). *Project management*. New Delhi: Tata McGraw-Hill Publishing Co. Ltd.
- CIPD (2006a) Recruitment, Retention and Turnover Survey. www.cipd.co.uk.
- CIPS Australia. (2005). How do we measure up? An Introduction to Performance Measurement of the Procurement Profession. Retrieved July 17, 2008, from Chartered Institute of Purchasing and Supply.
- Cohen, L & Manion, C. (2000) *Research Methods in Education*. Routledge. P. 254 (5<sup>th</sup> edition).
- Cohen, L. & Manion, C. (2003). *Research Methods in Education*. London: Croom Helm Ltd.
- Crawford, R.B. (2004) "Recruitment and Selection," HR Research Paper No 30, 12 pages, HRDOC Store: London.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed method approaches (2nd Ed.). Thousand Oaks, CA: Sage.
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. Public Opinion Quarterly 64: 413–428.

- Department of Public Works, Queensland Government. (2006, March). *Measuring Procurement Performance*. Retrieved September 28, 2008, from Queensland Government Marketplace website: http://www.qgm.qld.gov.au/00\_downloads/update\_march06.pdf.
- Fapohunda, J. A., and Stephenson. P. (2010) *Optimal construction resources utilization:* reflections of site Managers' Attributes, The Pacific Journal of Science and Technology, Vol. 11, No. 2, November, pp. 353–365
- Gaba, G. (2013). The impact of project delivery systems, cost minimizations and project control on construction project success. Evidence from Ghana (Master's thesis). University College London, London, United Kingdom.
- Gannet Fleming, Inc (2007). Construction Project Management handbook. Federal Transit Administration (retrieval from http://www.fta.dot.gov).
- Goldrick, P. (1997) "What makes a selection system best practice?" HR Monthly, June, 26-27.
- Goyder, J., Warriner, K., & Miller, S. (2002). Evaluating socio-economic status (SES) bias in survey nonresponse. Journal of Official Statistics 18(1), 1–11
- Gwayo, A.O., Masu, S.M., & Wanyona, G. (2014). A Critical Analysis of the Causes of Project Management Failures in Kenya. International Journal of Soft Computing and Engineering, 4(1): 64-69.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey
- Hirshon, J. M., S. D. Krugman, M. D. Witting, J. P. Furuno, M. R. Limcangco, A. R. Perisse, and E. K. Rasch. 2002. "Variability in Institutional Review Board Assessment of Minimal-Risk Research." Academic Emergency Medicine 9 (12):1417–20.
- Kikwasi, G.J. (2012) 'Causes and effects of delays and disruptions in construction projects in Tanzania', Australasian Journal of Construction Economics and Building, Conference Series, 1 (2) 52-59
- Knudsen, D. (1999). *Procurement Performance Measurement System: Focusing on the Swedish Public Sector*. Retrieved July 17, 2008, from Lund Institute of Technology web site: http://www.tlog.lth.se/documents/publications/Lic Daniel Knudsen.PDF.

- Kombo, D. K. & Tromp D. L. (2006). *Proposal and Thesis Writing*: An introduction. Nairobi.
- Kothari, C. R (2008). *Research Methodology*-Methods and Techniques (2<sup>nd</sup> Ed.) New Delhi. New Age International Ltd Publishers.
- Kuswoyo, A. (2009). Project Management Implementation Guideline (PMIG) in Indonesia.
- Lardenoije, E. J., Van Raaij, E. M., & Van Weele, A. J. (2005). Performance Management Models and Purchasing: Relevance Still Lost. *Researches in Purchasing and Supply Management, the 14th IPSERA Conference*, (pp. 687-97). Archamps.
- Lux, A. L., S. W. Edwards, and J. P. Osborne. 2000. "Responses of Local Research Ethics Committees to a Study with Approval from a Multicentre Research Ethics Committee." British Medical Journal 320 (7243): 1182-3
- Macdonald, M. E., & Carnevale, F. C. (2008). Qualitative health research and the IRB: Answering the "so what" with qualitative inquiry. Journal of Academic Ethics, 6(1), 1-5
- Mansfield NR. (1994) Causes of delay and cost overruns in Nigeria construction projects. International Journal of Project Management 1994;12(4):254–60
- Mondy, R.W. and Noe, R.M. (1993) *Human Resource Management*, New York: Allyn & Bacon.
- Moore, D. L., & Tarnai, J. (2002). Evaluating nonresponse error in mail surveys. In: Groves, R. M., Dillman, D. A., Eltinge, J. L., and Little, R. J. A. (eds.), Survey Nonresponse, John Wiley & Sons, New York, pp. 197–211.
- Moss, P. A. (1998). The role of consequences in validity theory. *Educational Measurement*, 17(2), 6-12.
- Muchungu, P. K. (2012). *The Contribution of Human Factors in the Performance of Construction Projects in Kenya*. Unpublished Phd. Thesis, University of Nairobi, Nairobi.
- Mugenda & Mugenda (2003) Research Methods: Acts Press, Nairobi.
- Musa, G. H., (2010)"Determination of Factors Influencing Projects Delays in Water Projects in Kenya: The Case of Government Funded Projects", Unpublished MBA Thesis University Of Nairobi

- Nankervis, A., Compton, R. and Baird, M. (2002) *Strategic Human Resource Management*, Sydney: Thompson.
- Orodho AJ, Kombo DK (2002) *Research Methods*. Nairobi: Kenyatta University, Institute of Open Learning
- Overman, S. (2001) "Recruitment in China," HR Magazine, 46, p.86 [Retrieved 23<sup>rd</sup> March, 2009 from ABI-INFORM database] assumptions' in journal of Occupational and Organizational Psychology 79, 481 498.
- Pilbeam, S. and M. Corbridge (2006) *People Resourcing. Contemporary HRM in Practice*, London: Prentice Hall.
- Project Management Institute, Inc. (2004). A Guide to the Project Management Body of Knowledge (PMBOK Guide) Third Edition. Newton Square, USA. Project Management Institute, Inc.
- Redman, T. and A. Wilkinson (2006) *Contemporary Human Resource Management*: Text and Cases, New Jersey and Harlow: Pearson Education.
- Schrag, Z. M. (2010). Ethical imperialism: Institutional review boards and the social sciences, 1965-2009. Baltimore, ML: Johns Hopkins University Press
- Silverman, H., S. C. Hull, and J. Sugarman. 2001. "Variability among Institutional Review Boards' Decisions within the Context of a Multicenter Trial." Critical Care Medicine 29 (2): 235–41
- Silverman, H., S. C. Hull, and J. Sugarman. 2001. "Variability among Institutional Review Boards' Decisions within the Context of a Multicenter Trial." Critical Care Medicine 29 (2): 235–41.
- Stair, T. O., C. R. Reed, M. S. Radeos, G. Koski, and C. A. Camargo. 2001. "Variation in Institutional Review Board Responses to a Standard Protocol for a Multicenter Clinical Trial." Academic Emergency Medicine 8 (6): 636–41
- Talukhaba, A., (1999), An investigation into factors causing project delays in Kenya: A case study of high rise building projects in Kenya. Unpublished PhD Thesis. University of Nairobi.
- Taylor, H. A. (2007). Moving beyond compliance: Measuring ethical quality to enhance the oversight of human subjects' research. *IRB: Ethics and Human Research*, 29(5), 9-14.
- U.S. Department of Health and Human Services. (2006). *Research on Ethical Issues in Human Subjects Research (RO3)*. Retrieved from http://grants1.nih.gov/grants/guide/pa-files/PA-06-367.html.

- Van Weele, A. J. (2006). Purchasing & Supply Chain Management: Analysis, Strategy, Planning and Practice (4th Ed.). Australia: Thomson.
- Walker and Shen, (2002) D. Walker, Y. Shen *Project understanding, planning, flexibility* of management action and construction time performance: Two Australian case studies Construction Management Economy, 20 (1) (2002), pp. 31–33.

### APPENDIX I: LETTER OF TRANSMITTAL

Abraham Onchere P.O Box 4606-30100 Eldoret

June 29<sup>th</sup> 2015

Dear Sir/Madam,

### RE: REQUEST TO RESPOND TO THE STUDY QUESTIONNAIRE

I am a student at the University of Nairobi undertaking Masters Degree in Project Planning and Management. As part of course requirement I am supposed to conduct a research project and my topic is: Factors influencing completion of the Academic Model Providing Access to Healthcare projects in Uasin Gishu County, Kenya.

In order to achieve this objective, I have designed a questionnaire for collecting information. You have been selected to participate in this study. I kindly therefore request you to provide answers to the questions asked. Your response will be treated with strict confidentiality and will be used for research purpose only. Thank you and kind regards.

Yours faithfully,

Abraham Samba Onchere Student No. L50/72168/2014

# APPENDIX II: QUESTIONNAIRE FOR RESPONDENTS

# A. GENERAL INFORMATION

Please read the following statements and then respond by placing a check mark  $(\sqrt{})$  or (X) in the box or briefly state as appropriate.

| 1. What is your gender?  Male Female                                                                                        |        |         |       |     |   |
|-----------------------------------------------------------------------------------------------------------------------------|--------|---------|-------|-----|---|
| 2. What is your age?  Below 30 years 30-39 years 40-49 ye 50 years                                                          | ars (  |         | ∫Abo  | ove |   |
| 3. How long have you worked at AMPATH?  Less than 1 year Between 1-3 years Between More than 5 years                        | een 3  | -5 yea  | ars   |     |   |
| 4. What is your highest academic qualification?                                                                             |        |         |       |     |   |
| Certificate Diploma Bachelors                                                                                               | ) M    | asters  |       |     |   |
| <ul><li>B. Contracts processing</li><li>5. When did you learn about the award of the grant?</li></ul>                       |        |         |       |     |   |
| Less than 1 month after award  Between 1 - 3 months after award  More than 3 months after award                             |        |         |       |     |   |
| 6. What time was taken between award and full execution of the  Less than 1 month  Between 1 - 3 months  More than 3 months | cont   | ract?   |       |     |   |
| 7. Select one of the numbers below to indicate how well the state your firm contracting process                             | emen   | it desc | ribes | S   |   |
| 1=Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 =                                                                    | = Stro | ongly   | Agre  | ee  |   |
| Contracts processing                                                                                                        | 1      | 2       | 3     | 4   | 5 |
| The contracting process is clear and easily understood                                                                      |        |         |       |     |   |

| The contracting process takes a short time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |         |         |      |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------|---------|------|---|
| Most of the contracts are completed without any cancelation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |         |         |      |   |
| Our contract process is done electronically                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |         |         |      |   |
| The contracting process takes all due steps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |         |         |      |   |
| There is no coercion/undue influence in the contract process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |         |         |      |   |
| The time take to evaluate the contract does not interfere with the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |         |         |      |   |
| project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |         |         |      |   |
| Most of the contract have to go through many amendments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |         |         |      |   |
| RSPO staff/project staff are supportive in the contract processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |         |         |      |   |
| Most of the contractors end up subcontracting hence hindering the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |         |         |      |   |
| project progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |         |         |      |   |
| C. IRB Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |         |         |      |   |
| <ul> <li>8. Was IRB approval gotten before award of the project? Yes  No  </li> <li>9. How many major changes were made on the proposal before</li> <li>None</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IRB          | approv  | al?     |      |   |
| 10. Select one of the numbers below to indicate how well the your firm contracting process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | stat         | ement   | descr   | ibes |   |
| 1=Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | – Sti        | onaly   | A ~~~~  |      |   |
| 1-Subligity Disagree 2- Disagree 3- Neutral 4- Agree 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | – <i>5</i> u | ongry 1 | Agree   |      |   |
| IRB review                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |         |         | 1    |   |
| IRB review                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1            | 2       | Agree 3 | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards                                                                                                                                                                                                                                                                                                                                                                                                        |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood                                                                                                                                                                                                                                                                                                                                                     |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive                                                                                                                                                                                                                                                                                                              |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood                                                                                                                                                                                                                                                                                                                                                     |              |         |         | 4    | 5 |
| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time  All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive Feedback/response time for any queries raised take short time                                                                                                                                                                                                                                               |              |         |         | 4    | 5 |
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| IRB review  The minutes of the meetings are circulated on time for action IRB fees are paid in time  All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive Feedback/response time for any queries raised take short time                                                                                                                                                                                                                                               |              |         |         | 4    | 5 |
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| The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive Feedback/response time for any queries raised take short time  D. HR RECRUITMENT PROCESS 11. Was there a staff recruitment plan before start of the project?  Yes No  No  Less than 1 week after start-up meeting                                                                                                        |              |         |         | 4    | 5 |
| The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive Feedback/response time for any queries raised take short time  D. HR RECRUITMENT PROCESS  11. Was there a staff recruitment plan before start of the project?  Yes No  12. When was the official formal request for staffing received?  Less than 1 week after start-up meeting Between 1-2 weeks after start-up meeting |              |         |         | 4    | 5 |
| The minutes of the meetings are circulated on time for action IRB fees are paid in time All the stakeholders are involved in the review process IRB review process provided feedback without delay IRB review have canceled many proposals which do not meet required standards IRB review/application forms are easily understood IRB staff are efficient and supportive Feedback/response time for any queries raised take short time  D. HR RECRUITMENT PROCESS 11. Was there a staff recruitment plan before start of the project?  Yes No  No  Less than 1 week after start-up meeting                                                                                                        |              |         |         | 4    | 5 |

13. Select one of the numbers below to indicate how well the statement describes your firm HR Recruitment process

1=Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 = Strongly Agree

| HR Recruitment process                                                  |   |   |   |   |   |
|-------------------------------------------------------------------------|---|---|---|---|---|
| The receiptment process                                                 | 1 | 2 | 3 | 4 | 5 |
| It take a short time between request for staff and placement of adverts |   |   |   |   |   |
| All stakeholders are present in the staff selection interviews          |   |   |   |   |   |
| Minutes are circulated when new staff are recruited                     |   |   |   |   |   |
| Some interviews are repeated which takes a long time                    |   |   |   |   |   |
| Some adverts on recruitment are canceled leading to re-advertisement    |   |   |   |   |   |
| of the same positions                                                   |   |   |   |   |   |
| Appointment letters are signed and returned on time for action          |   |   |   |   |   |
| It take time between placement of advert and appointment of staff       |   |   |   |   |   |
| New employees are trained on the new job task                           |   |   |   |   |   |
| RSPO staff/ project team are supportive in the recruitment process      |   |   |   |   |   |

### C. PROCUREMENT PROCESS

14. Was there a procurement plan before start of the project?

Yes No

**15.** Select one of the numbers below to indicate how well the statement describes your Procurement process

1=Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 = Strongly Agree

| 1 |   | _   | 1     |         |
|---|---|-----|-------|---------|
| 1 | 2 | 3   | 4     | 5       |
|   |   |     |       |         |
|   |   |     |       |         |
|   |   |     |       |         |
|   |   |     |       |         |
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|   |   |     |       |         |
|   |   |     |       |         |
|   |   |     |       |         |
|   | 1 | 1 2 | 1 2 3 | 1 2 3 4 |

# COMPLETION OF THE ACADEMIC MODEL PROVIDING ACCESS TO HEALTHCARE PROJECTS

16. How long did it take to complete the project;

1=Strongly Disagree 2= Disagree 3 = Neutral 4= Agree 5 = Strongly Agree

|                                                                         | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------------------------------------------|---|---|---|---|---|
| We are able to complete our projects on time                            |   |   |   |   |   |
| The project was ready to start its operations and functions immediately |   |   |   |   |   |
| after contract execution                                                |   |   |   |   |   |
| There were no delays in the project completion                          |   |   |   |   |   |
| The project achieved its objectives                                     |   |   |   |   |   |

# APPENDIX III: INTERVIEW SCHEDULE WITH PRINCIPAL INVESTIGATORS

- 1. Were the RSPO staffs supportive in the processing of the contract? If no, what was the problem and what do you propose as the way forward?
- 2. In your opinion, to what extent did the processing of the contract affect the completion of the project?
- 3. Were there any changes from the proposal after award? If yes, how did it affect the start of the project?
- 4. Were the IREC staffs supportive/efficient? If no, what was the problem and what do you propose as the way forward?
- 5. Did the IREC review process in any way affect the start of the project?
- 6. Were the RSPO staffs helpful in the staff recruitment process? If no, what was the problem and what do you propose as the way forward?
- 7. Were all the staffs on board in good time for start of project activities?
- 8. In your opinion did the recruitment process influence the start of the project? If yes, what was the problem and what do you propose as the way forward?
- 9. Were the RSPO staffs helpful in the procurement process?
- 10. In your opinion, did the procurement process in any way delay the project? If yes, what was the problem and what do you propose as the way forward?

# APPENDIX IV: RESEARCH AUTHORIZATION LETTER (INSTITUTION)



### UNIVERSITY OF NAIROBI COLLEGE OF EDUCATION AND EXTERNAL STUDIES SCHOOL OF CONTINUING AND DISTANCE EDUCATION

Telegram: "CEES" Telephone: +254-202406706 Our Ref: Uon/Cees/Eld/2/3/(32) P.O. Box 594 ELDORET KENYA

28th May, 2015

TO WHOM IT MAY CONCERN

### REF: SAMBA ABRAHAM ONCHERE - L50/72168/2014

The above named person is a bonafide student at University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra-Mural Studies, Eldoret Centre, pursuing a Postgraduate Studies leading to the award of Master of Arts in Project Planning Management (MAPPM). He has completed his course work and now working on his Project Paper entitled "Factors Influencing Completion of the Academic Model Providing Access to Healthcare Project in Uasin Gishu County, Kenya".

Any assistance accorded to him will be highly appreciated.

Centre Organize

Sakaja Y.M.,

Page 1 of 1.

### APPENDIX V: RESEARCH AUTHORIZATION LETTER (NACOSTI)



# NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420 Fax: +254-20-318245, 318249 Email: secretary@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote 9<sup>th</sup> Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No.

Date:

29th June, 2015

#### NACOSTI/P/15/2007/6502

Abraham Samba Onchere University of Nairobi P.O. Box 30197-00100 NAIROBI.

### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors influencing completion of the academic model providing access to healthcare projects in Uasin Gishu County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Uasin Gishu County for a period ending 6<sup>th</sup> November, 2015.

You are advised to report to the County Commissioner and the County Director of Education, Uasin Gishu County before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies** and one soft copy in pdf of the research report/thesis to our office.

DR. M. K RUGUTT, PhD, HSC DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Uasin Gishu County

The County Director of Education Uasin Gishu County.

National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

### APPENDIX VI: RESEARCH PERMIT (NACOSTI)

### CONDITIONS

- You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
- 2. Government Officers will not be interviewed without prior appointment.
- No questionnaire will be used unless it has been approved.
- Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
- You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice This cancellation.



National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 5544

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MR. ABRAHAM SAMBA ONCHERE
of UNIVERSITY OF NAIROBI, 0-200
NAIROBI,has been permitted to conduct
research in Uasin-Gishu County

on the topic: FACTORS INFLUENCING COMPLETION OF THE ACADEMIC MODEL PROVIDING ACCESS TO HEALTHCARE PROJECTS IN UASIN GISHU COUNTY, KENYA

for the period ending: 6th November,2015

Applicant's Signature Permit No: NACOSTI/P/15/2007/6502 Date Of Issue: 29th June,2015 Fee Recieved: Ksh 1000

Director General National Commission for Science, Technology & Innovation