



**DRIVERS OF IMPLEMENTATION OF SERVICE DELIVERY INNOVATION PROJECTS IN PUBLIC HOSPITALS IN  
NAIROBI CITY COUNTY, KENYA**

**Kisienya, F. K., & Moronge, M.**

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**Kisienya, F. K.,<sup>\*1</sup> & Moronge, M.<sup>2</sup>**

<sup>\*1</sup> Msc Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

<sup>2</sup> Senior Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

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**ABSTRACT**

*The aim of this study was to determine the drivers of implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya. The study was purposely confined to the Nairobi County because it has a number of service delivery innovation projects. The study was limited to the project managers who were directly concerned with implementation of the projects of health care in the institutions. The study used a structured self-administered questionnaire to collect data from the project managers. The collected data was analyzed using both quantitative and qualitative data analysis methods. Data from questionnaire was coded, entered and analyzed using Statistical Package for Social Science (SPSS). It shows that the independent variables in the study were able to explain 60.70% variation in the implementation of service delivery innovation projects while the remaining 39.30% was explained by the variables or other aspects outside the model. This implied that these variables were very significant and they therefore needed to be considered in any effort to boost implementation of service delivery innovation projects. The study therefore identifies variables as critical implementation of service delivery innovation projects in public hospitals in Kenya. The study recommends for the enhancement of the project funding on implementation of projects. There is need to have adequate quality control costs in the projects. There is need to enhance proper communication during the implementation of the projects. Further, there is need for the project team competency to be enhanced to increase efficiency of the procurement process and reduce delayed payment in the projects. The study recommended for the adequate M & E plans for continuous monitoring of project activities. The study contributes the body of knowledge by examining the determinants of implementation of service delivery innovation projects in Kenya is greatly affected by project funding, project team, project communication, monitoring and evaluation.*

**Key Words:** Project Funding, Project Team, Project Communication, Monitoring and Evaluation

## INTRODUCTION

Service is an arrangement or system that supplies clients' needs. A service ought to restrain all features that meet clients' expectation (Weaver & Roberto, 2015). Service delivery is a system of periodical performance of supplying clients' needs. Service delivery indicators consist of reliability, tangibility, responsiveness, accessibility, and empathy (Nderi, 2015). Innovation involves development of new services, products and processes, most of the times based research (BIS, 2011). Innovative economies grow faster; are more productive; deliver higher returns on investment and increased living standards; respond better to changing circumstances through redeploying old activities and jobs; and are more able to find solutions to global challenges, helping people live longer and healthier lives (Nginga, 2015). Innovation has been a phenomenon for centuries which serves the only purpose of making life of human beings more comfortable (Kotsemir & Meissner, 2013).

Service delivery innovations can be described as a novel set of behaviours, routines, and ways of working that are directed at improving health outcomes, administrative efficiency, cost effectiveness, or users' experience and that are implemented by planned and coordinated actions (Greenhalgh, Bate, Kyriakidou, Macfarlane, & Robert, 2004). Firms now compete on the basis of services rather than on the basis of physical products. Service innovation involves assimilation of improved service processes by means of designing and improvising service delivery system (Verma & Jayasimha, 2014).

Service delivery innovations are of two main types: New existing innovation that refers to use of new service channels to provide customer service and services that are already provided; and new innovation that refers to introduction of new

service channels to provide new customer service and/or new services (Chen, Tsou, & Huang, 2009). Recent interest in health system strengthening has increased the use of innovative strategies for improving service delivery such as the introduction of new community-based organizations and workers, facility autonomy, results-based financing, and new information technologies (Berman, Pallas, Smith, Curry, & Bradley, 2011).

In the health sector, service delivery is an immediate product of the inputs such as efficient procurement and supplies channels, investment in infrastructure, and competent human resource into the health system (Nyaga, 2016). Health service delivery performance implies access and use of adequate quality of care to produce health benefits by the needy, efficient use of scarce resources; and organizations that can learn, adapt, and improve for the future (Berman, Pallas, Smith, Curry, & Bradley, 2011) (Van Lerberghe, 2008). Effective and efficient service delivery is the point at which the potential of the health system to improve lives meets the opportunity to realize health gains (Berman, Pallas, Smith, Curry, & Bradley, 2011). The WHO definition of health as "a state of complete physical, mental, and social wellbeing (Hofmann, 2001)

Innovations in health care are related to products and processes (Varkey, Horne, & Bennet, 2008). Innovations in health systems refer to new medicines, diagnostics, health technologies, new ideas, practices, objects or institutional arrangements perceived as novel by an individual or a unit of adoption (Atun, 2012). Innovation is crucial for improving health outcomes in high-income countries as well as in countries of low and middle income, and for achieving the Millennium Development Goals (MDGs) (Howitt, et al., 2012). The healthcare industry has experienced a proliferation of innovations aimed at enhancing life expectancy, quality of life, diagnostic and treatment options, as well as the efficiency and cost

effectiveness of the healthcare system (Omachonu, 2010).

Nearly all nations are working to improve their healthcare delivery systems.(Gillies & Wu, 2013). According to the American Hospital Association 2003, Many hospitals, health systems and payers are adopting delivery system reforms with the goal of better aligning provider incentives to achieve the Triple Aim of improving the patient experience of care (including quality and satisfaction (Priorities, n.d.). In California, Innovation health innovation centres are established to explore and exploit non-traditional solutions to a wide range of systematic health care delivery challenges (Foundation, n.d.).

In South Africa, the National Health Policy is presented as innovative system of healthcare financing that intended to ensure that the population has access to appropriate, efficient, and quality healthcare services as a result of major transformation in the service delivery structures, and in management and administrative systems (Arhete, 2016). In Ethiopia, the Health Extension Worker programme institutionalised approaches that have facilitated good health outcomes at community level by reducing geographical barriers to care, and subsequently increasing the percentage of births with skilled attendants, women receiving antenatal care, and fully immunization of infants (Zulu, Hurtig, Kinsman, & Michelo, 2015).

In Kenya, The Ministry of Devolution and planning describes Service Delivery Innovations as new ways of revolutionizing and improving service delivery in terms of enhancing efficiency, timeliness, quality, flexibility and convenience (Ministry of Devolution & Planning- Kenya, 2015). K-MET service delivery innovation in Kisumu County, is a programme aimed at increasing access to maternal and child health services that include reproductive health and family planning services (Bhattacharyya et al., 2010). An evaluation in 2004 showed that K-MET has successfully created a network of private sector providers in areas where government services are

generally out of reach (Montagu et al. 2005). According to (Mucheru, 2013), Staff ICT literacy, information systems characteristics and top management characteristics significantly influences adoption of information systems in healthcare service delivery. This is essential to reform healthcare systems and meet the needs of patients in the coming decades as observed in his study of Kiambu County.

The Government of Kenya is committed to the improvement of the health and welfare of all its citizens. Strengthening the health system is at the core of the Government of Kenya's reform agenda. Over the years, the government has taken important steps towards the fulfillment of this goal by providing health services within easy reach of Kenyans. The "beyond zero mobile clinics" is one such initiative of bringing health services close to the citizens. It has also placed considerable emphasis on preventive, promotive and rehabilitative health services without ignoring curative services. Among the initiatives/actions taken is the development of the Kenya Health Policy Framework (KHPF 1994-2010), the launch of Vision 2030, and the enactment of a new constitution in 2010 which devolved health into the County Governments. These have greatly influenced the health status of Kenyans and the structure in which health services are provided. In particular, the new constitution creates a devolved system of governance with 47 counties, each of which is responsible for providing and delivering health care services to its citizens. The devolved system is intended to make the realization of the right to health by all Kenyans a reality (Government of Kenya, 2010).

Nairobi County being the capital city of Kenya boasts of eight (8) public hospitals namely; Kenyatta National Hospital, Armed Forces Memorial Hospital, Mathare Mental Hospital, Nairobi Hospice,

Mbagathi District Hospital, National spinal Injury Hospital, Mama Lucy Kibaki District Hospital and Pumwani Maternity Hospital. Kenyatta National Hospital is at the apex of the health care system being one of the two national referral hospitals in Kenya that provides sophisticated diagnostic, therapeutic, and rehabilitative services. Nairobi Hospice was the first hospice to be opened in East Africa in 1990. It offers Palliative care to improve the quality of life of patients facing problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment, treatment of pain, and holistic treatment of other problems including the physical, psychosocial and spiritual. A key component of Palliative care is the support of families and caregivers. Such services are offered on an outpatient basis, in hospitals and in the patients' own homes within a 20 km radius, together with a weekly day-care service. Mathare Mental Hospital offers psychiatric care services to the mentally ill patients referred to them by Government hospitals and correction facilities. Armed Forces Memorial Hospital, Mbagathi District Hospital, National spinal Injury Hospital, Mama Lucy Kibaki District Hospital and Pumwani Maternity Hospital are District hospitals that act as referral hospitals to the citizens of their districts and of Kenya at large.

Public hospitals in Nairobi County have a responsibility of providing and delivering health care services to the County residents. Their mission and vision is to provide preventive, promotive and rehabilitative health services without ignoring curative services to Nairobi County residents. The Minister for Health in Nairobi County is supposed to coordinate all the activities of these hospitals. These notwithstanding, a number of public hospitals in Nairobi County are in a crisis that renders them inadequate to serve the health demands of the city residents.

### **Statement of the Problem**

Development and implementation of service delivery innovation projects in the public hospitals has been marred with challenges. A greater proportion of service delivery innovations have not been fully implemented (Berman, Pallas, Smith, Curry, & Bradley, 2011). Despite sincere attempts in recent years to spread innovation through the dissemination of knowledge and expertise, our experience with the spread of innovation in health care often seems to have more in common with the occasional pleasant surprise and unpleasant frustration. (Plsek, 2003).

Under the current healthcare system, many healthcare providers do not keep up with up-to-date medical discoveries, follow guidelines, or measure their performance, and they coordinate minimally with each other (Bodenheimer, 2008). There exist a lot of good ideas about improvements in the healthcare system but only a few are implemented and it appears to be a challenge to diffuse successful innovations when they are developed (Morton, 2008). Research also indicates that physicians will not use a product that interferes with their workflow, changes the way they care for patients or places imitations on the way they practice medicine (Morton, 2008).

To this end, it is imperative to investigate, identify and understand the variables/factors and establish to what extent they individually or collectively contribute to successful implementation of service delivery innovation projects in public hospitals. This study scrutinized the factors that collectively and significantly contribute to successful implementation of service delivery innovation projects in the public health care sector with a study of public hospitals in Nairobi City County and provide suggestions for future improvements in service delivery innovation projects implementation.

## **Objectives of the Study**

The broad objective of this study was to determine the drivers of implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya. The specific objectives were: -

- Examine how project funding influence implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya.
- Establish how project communication influence implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya.
- Determine how project team competences influence implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya.
- Assess how monitoring and evaluation influence implementation of service delivery innovations projects in public hospitals in Nairobi City County, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Resource Based Theory**

To establish the influence of project funding on implementation of service delivery innovation projects in the public hospitals in Kenya, the study will be based on Resource Based Theory. Penrose (1959) provided initial insights of the resource perspective of the firm. However, the resource-based view of the firm (RBV) was put forward by Wenerfelt (1984) and subsequently popularized by Barney's (1991) work. Many authors for example Nelson & winter (1982); Dierick & Cool (1989); Mohoney & Pandian (1992); Eisenhardt & Martin (2000); Zollo & Winter (2002); Zahra & George (2002) and Winter (2003) made significant contribution to its conceptual development. The theory emphasized the importance of organization

resources and their influence on performance and competitive advantage in the market.

According to RBV, every project has its own unique resources that enable it to be well implemented, by addressing the rapidly changing environment (Helfat, 2007). These resources may be financial, human, physical, technological and information. These may be valuable, rare and non-substitutable (Crook, Ketchen, Combs & Todd, 2008). Critiques of the RBV have pointed out that some resources contribute to project completion while others do not; hence, not all resources of project have the ability to contribute to its implementation. Secondly, the mere availability of resources are coordinated and integrated (Lopez, 2005). To implement service delivery innovation projects in the health projects, there is need to have adequate financial resources (James, 2011).

#### **Theory of Development Communication**

One of the biggest ways to motivate people and make them more confident of what can be achieved is through more effective communication. (Toney & Powers, 1997 and Larkin & Larkin, 1996). Development communication refers to the use of communication to facilitate social development (International Finance Corporation, 2007). Khatri (2009) explains that development communication is founded on an idea that put the modern media of social communication at the service of development. In perspective of Chandler and McEvoy (2010), development communication seeks to elicit a human, and ultimately a social response in the people whom it seeks to serve.

Development communication is an educational process (Sena, 2012). According to Steele (2008), it aims at developing social consciousness, personal responsibility towards one's fellowmen, one's community and country. In other words, it is a social conscience hence sensitizing the conscience. Buchholz (2013) implies development

communication as respect for the human person, respect for his intelligence and his right to self-determination. Development communication help organization to engage the community as a stakeholder in educative and awareness issues and this helps to establish conducive working environment for assessing risks and opportunities and promotes information exchanges to bring about positive social change via sustainable development (Clarkson, 2005). Finlay (2006) point out that development communication technique such as information dissemination and education, behaviour change, social marketing, social mobilization, media advocacy, communication for social change and community participation has helped many organizations with community based projects to succeed even in the phase of hostility if the techniques are well used. The theory of development communication is therefore important to this study as it demonstrates the extent to which project communication influences successful completion of water supply and sanitation projects.

### **Competency Theory**

To establish the influence of project team competences on implementation of service delivery innovation projects in the public hospitals in Kenya, the study will be based on competency theory. The work of McClelland & McBer in the 1980s established the competence theory. The authors defined competency as the underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation. Since then a number of competency frameworks have been developed by different business performance in various organizations, Crawford (as cited in Boyatzis, 2012 & Spencer, 2013), puts a model of competence that integrates knowledge, skills, demonstrable performance, and core personality characteristics, noting the last, personality characteristics, as challenging to develop and assess through training.

She argues that two of the most influential procurement management standards established, are addressed only the knowledge aspect of competence while a third, Australia's National Competency Standards, draws from knowledge but focuses only on demonstrable performance.

Crawford, (2010) study found out that business managers "do not necessarily have the required business management competence perform the full activities required to promote and implement the changes that they are leading as part of their organizations. Interest in enterprise management competence stems from the very reasonable and widely held assumption that if people who manage and work on organizations are competent in procurement, they would perform effectively and that this would lead to successful enterprise management and successful organizations (Beer, 2010; Smith, 2006). Competence is generally accepted, however, as encompassing knowledge, skills, attitudes and behaviors that are causally related to superior job performance. Crawford (as cited in Boyatzis, 1982 & Spencer, 1993), stated that professional competence in project management is attained by combination of knowledge acquired from training and its subsequent application and other skills developed in the course of work. Previous management studies have investigated the impact of competency on project performance.

Dainty (2004) have argued for a competency based performance model for project managers where managerial behavior input is appraised and nine performance indicators for PM competency are developed to comprise team building, leadership, decision-making, mutuality and approachability, honesty and integrity, communication, learning, understanding and application, self-efficacy, and maintenance of external relations. In the context of project management on implementation of service delivery innovation projects in the public hospitals

in Kenya it is assumed that if the project managers and the project team have all the required competences, would influence implementation of service delivery innovation projects in the public hospitals in Kenya.

### Control Theory

This theory will guide the study in establishing the relationship between monitoring and evaluation on implementation of service delivery innovation projects in the public hospitals in Kenya. Control theory, invented by Ouchi (1979) and Eisenhardt (1985) uses the notion of modes of control to describe all attempts to ensure that individuals in organizations act in a way that is consistent with organizational goals and objectives through well laid down communication channels (Kirsch, 1997). The concept of control is based on the premise that the controller and the control have different interests. These different interests will be overcome by the controller's modes of control (Tiwana, 2009). Project control may distinguish between formal and informal mechanisms. Formal modes of control are defined as Behaviour control and Outcome control. Behavior control consists of articulated roles and procedures and rewards based upon those rules. Outcome control is mechanisms for assigning rewards based on articulated goals and outcomes. The informal modes of control are carried out by the control modes labelled as clan and self. Clan are the mechanisms of a group sharing common values, beliefs, problems, and these mechanisms work through activities as hiring & training of staff, socialization etc. The control mode of the self is about individually defined goals and can be carried through the mechanisms of individual empowerment, self-management, self-set goals, etc. (Kirsch, 2007). In the context construction project management the project manager and the project teams have different interests. In order for the project manager to control cost and schedules during the project execution phase, he has to come

up with different monitoring and evaluation systems that ensure that teams are compliant. The control mechanisms and rules must also be aligned with the overall construction goals as well as the goals of individual teams as established through proper monitoring and evaluation systems. The above theory relates to establishing the relationship between project monitoring and evaluation and implementation of service delivery innovation projects in the public hospitals in Kenya

### Conceptual Framework

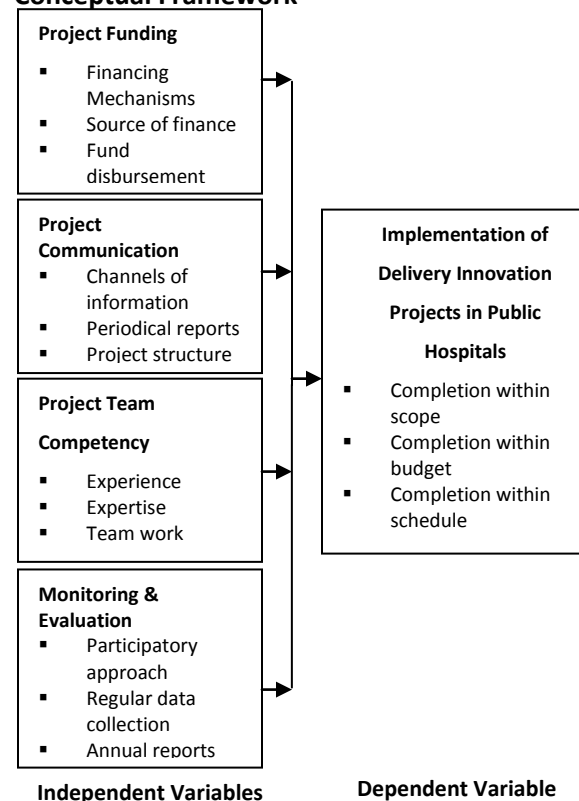


Figure 1: Conceptual Framework

### Project Funding

Although project delivery process does not have a stage called funding, budgetary constraints affect each stage of the process (Rahaman, 2011). The Right of Way to a project is not identified by a project that only fulfils the environmental process, only for the policy makers to disagree with the



chosen source of funding. Kaliba et al. (2009) reviewed the correlation between cost overruns and project delays and realized that a good agreement exists between the two factors

Adequate and timely funding is essential for project success. Inadequate funding and untimely funding may interfere with implementation schedule of projects. Brown, & Phua, (2011) identifies contractors' financial difficulties as major causes of delays in government sponsored construction projects. He further defines contractors' financial difficulties as the contractor not having sufficient funds to carry out the construction works. This includes payment for the materials, labourers' salaries and equipment to be used for the construction work. Thornton (2007), in his survey, found that slow collection, low profit margins and insufficient capital or excessive debt are the three major causes of financial difficulties among contractors. Slow collections topped the list in the years 2007 and 2005, in which the contractor received late payment from the client. This is supported by Akinsiku, Akintola, Ameh, & Ige, (2014) who found that delay in payment from the client would eventually cause financial difficulties to the contractor. Thus, most of the construction works cannot be carried out due to these financial difficulties. El-Behary (2013) found that the owners and consultants considered financing by contractor during construction as the top cause of delay in Egyptian building projects.

### **Project Team Competence**

Vijayasathy and Turk (2008) indicate that some of the factors that lead to project failure include lack of training and peer support, ignorance of approaches, lack of facilities for pair programming, individuals' resistance, and relying only on economic evaluation criteria. Another concern raised is managerial apathy and organizational

resistance to change (Vijayasathy & Turk, 2008). Similarly to success factors, Chow and Cao (2008) discuss failure factors in four dimensions, namely; organizational, people, process, and technical. Chow & Cao (2008), team members with high competence and expertise, team members with great motivation, and competent team members (Skills). Chow & Cao (2008) argue that lack of the necessary skill set, lack of team work, and resistance from groups or individuals are failure factors in delivering agile projects. Vijayasathy and Turk (2008) offer lack of peer support and individuals' resistance to agile as failure factors.

Competencies in project team also affect the implementation. Various projects are implemented in partnership with other stakeholders to enhance implementation capacity (El Arifeen, et al., 2013). Involvement of project implementing team in formulation of a project is key in its implementation is effective because it utilizes the individuals' abilities and ideas (Ngone, 2014). In many low- and middle-income countries, the overall level of health service-delivery performance is below target as result of poor human resource management (Berman, Pallas, Smith, Curry, & Bradley, 2011). Innovations in the area of health care should focus on the training of laypersons, the use of paramedical staff, and the improvement of staff quality, all of them having the objective of improving quality and availability of care (Bhattacharyya, Khor, McGahan, Dunne, Daar, & Singer, 2010). Innovations in health care extend the role of some professional staff to undertake extra duties (Zulu, Hurtig, Kinsman, & Michelo, 2015).

### **Project Communication**

Communication is a key issue for successful project implementation and management. It is specifically a challenging task for projects where a number of interdependent role players are needed to achieve the desired project outcomes (Abdulaziz *et al.*,

2015). Communication is very essential in project execution. It plays a vital role in all stages of construction such as design production, organization and management (Mehra, 2009). Statistics have shown that over 50% of projects in Africa are unsuccessful due to inappropriate communication method (Kasim & Usman, 2013). Various professionals in the construction industry must communicate effectively for any given project to be successful. During the course of project execution, information in the form of drawings, specifications and construction methods must be fully disseminated (Aishwi & Underwood, 2009).

Some professionals may not be able to understand some aspects of a project if little information are available thus leading into project failure. Ineffective communication system leads to demotivated workforce, design errors, slowdown in the entire job and failure in production (Topli & Ilyasu, 2014). Construction professionals should communicate throughout all construction stages. There is need for professionals within the construction industry to appropriately communicate with each other for the successful delivery of performance goals within the organization. Scope of work and details of construction are communicated by means of drawings, contract documents, addenda and specifications (Kasim & Usman, 2015).

### **Monitoring & Evaluation**

It is increasingly recognized that monitoring and evaluation of agile projects are indispensable management functions and they are therefore set by managers as preconditions (Hunter, 2009). He further argues that there is a growing interest within the project management in participatory approaches to monitoring and evaluation. It has been found that the participation of stakeholders improves the quality of projects in the world as well

as increasing the sense of national and local ownership in them; there is a greater likelihood that the project activities and their impacts will be well implemented. Stakeholder participation in M&E can strengthen partnership and teamwork at all levels and stages of project implementation.

Systemic and regular collection of data from projects will assist the project team to learn from experience and improve practices, allow for both external and internal accountability of the resources invested and the results realized as well as ensure planned activities are adhered to (O'Sullivan, 2004). Monitoring checks activities and progress against plans allowing documentation of project progress and this improves greatly the chances of project success and sustainability. Evaluation focuses on systematically and objectively assessing a phase of a project or the whole project after it is completed (Rossi, Lipsey, & Freeman, 2004). Evaluation of project phases allows detect deviation from plan in time and allow for timely rectification (Valadez & Bamberger, 1994). Project phase evaluation also allows assessing of relevance of the project to stakeholder needs, efficiency of the project team and use of resources, effectiveness of the interventions and also impacts being realized from the project or impacts anticipated, this allows the project manager analyze the expected implementation levels of the project (Junbeum, et al. 2007).

Evaluation, when participatory takes into consideration the opinion and suggestions of key stakeholders and enhances the factor of ownership (Mohan, 2001). When these stakeholders are involved in project evaluation, their worries are looked at and this allows for more appreciation of the project and more accountability (Lipman, 2004). Monitoring and evaluation generally allows for maximum implementation of plans as well as assessing the progress in time to allow for

redirection where necessary (O'Sullivan, 2004). This plays a key role in ensuring successful project implementation.

### **Implementation of Service Delivery Innovation Projects**

Varied and perceived complexity of service delivery innovation projects has been a reason for their poor implementation (Atun, 2012). The reasons for poor uptake of PMTCT, a highly cost-effective innovation in Africa, ranged from weak health systems, to poor attention given to the problem by health professionals, to low political commitment (Car, et al., 2012). An estimated 40% of health care equipment in low-income countries is out of service, compared with less than 1% in high-income countries (Perry & Malkin, 2011). Oxygen concentrators donated to Gambia could not be used due to incompatibility of electricity voltage (Howitt, et al., 2012). This shows low adoption and diffusion of innovations.

Studies in six countries of the presence of health workers in their assigned posts found that, on average, 35 percent of workers were absent at the time of an unannounced visit during official working hours. Most of these workers were employed and being paid by their governments, but many were not doing the workflow performance levels for health care-delivery systems as a whole means that performance indicator averages are below what could be attained and is actually being attained by other, comparable systems. In many low- and middle-income countries, the overall level of health service-delivery performance is not what it could be (Berman, Pallas, Smith, Curry, & Bradley, 2011). Innovation in health care service delivery that is on par with innovation in other aspects of the health care system is required. Although we can benefit from ongoing innovations in diagnostic technology, pharmaceuticals, surgical procedures, and medical devices, too often these are embedded in health

care service delivery processes that do not provide timely, patient-centred, safe, effective, efficient, coordinated, and equitable access to the expected benefits (Plsek, 2014).

Health-service delivery in Bangladesh used application and adaptation of community-based approaches and community health workers at scale; partnerships between the government and non-state organisations; and early and rapid adoption of innovation in the past four decades (El Arifeen, et al., 2013).

Innovation adoption is the decision to use an innovation. Innovation implementation, in contrast, is "the transition period during which [individuals] ideally become increasingly skilful, consistent, and committed in their use of an innovation (Klein & Knight, 2005). Implementation is the critical gateway between the decision to adopt the innovation and the routine use of the innovation" (Klein & Sorra, 1996, p. 1057). Implementing innovations is a challenging, high risk task for most organizations. (Sawang, 2008). Many organizations experience problems in the gap between making a decision to introduce a new idea and technology and putting the idea into practice. (Sawang, 2008)

Innovations not only in healthcare have to undergo a process of problem identification and idea generation, idea evaluation, development, first use, commercialization, and diffusion (Varkey et al., 2008). Each of these processes have challenges that affect the successful implementation of service delivery projects. Design and implementation of service delivery innovation projects should be focused on areas where innovation is presently absent, but urgently needed (El Arifeen, et al., 2013). Health innovations have been adopted and successfully diffused including in low- and middle-income countries to save many lives (Atun, 2012).

## **Empirical Review**

### **Project Funding**

Aiyetan, Smallwood, & Shakantu (2011) found that contractors' financial difficulties were the most important cause of construction delay in Nigeria. Kaliba et al. (2009) postulated that insufficient capital is one of the major causes of financial difficulties among contractors. Poor financial control by the contractor can lead to insufficient capital (Auma, 2014). Hence, the contractor will have excessive debt which causes them to face financial difficulties as they cannot pay back the debt. Mahdavinejad, & Molaei (2011) found that material shortages are due to poor materials planning, inefficient communication, unreliable suppliers and late delivery. Chirisa (2014) stated that poor planning is mistake number one in project management. This is reflected in the scenario in which poor materials planning from the contractor could lead to material shortage because the materials needed for construction may not be available within a certain time frame. This is due to mistakes in the planning stage relating to when the materials are expected to be used in the construction phase leading to project delays. Muchungu (2012) contends that financial issues, human resources conditions, site characteristics and design quality aspects to be factors influencing performance of contractors of government funded building projects in Kirinyaga County.

### **Project Communication**

Abdulziz et al.,(2016) did a study on the role of communication and coordination in project success. In this context, a two-stage case study of construction phase delay control for an oil and gas industrial project is presented. A process improvement methodology was carried out in the first stage and the root causes for the delays were

identified. The investigation results revealed that the scope of one item of work, piping, dominated a large portion of delays. It was found that piping packages were not processed smoothly due to four main causes: incomplete testing, frequent piping modifications, incomplete as-built drawings, and incomplete punch listing. Seventy percent of the delays were caused by incomplete testing activities and incomplete as-built drawings. The improvement study suggested establishing a new unit for piping test package control and coordination. The review process was improved and the dedicated control team was implemented for the second unit, resulting in a substantial drop in the number of delayed test packages (down from 48 to 8%) and punch list items (down from 3,075 to 2,371). The findings of the case study demonstrate the importance of communication and coordination in successful project management for complex projects. The case presented is an example of process improvement use for successful delay management.

### **Project Team**

Andawei (2002) reports on a study finding that motivational factors significantly influence the performance of workers. Chan et al., (2002) research also found out that project team commitment is one of the most important factors for project implementation. Darrington (2010) emphasized that motivation schemes on construction site workers should not be centred on monetary incentives because it destroys intrinsic motivation, which makes construction site workers be less productive. He proposed that intrinsic motivation should be encouraged so that parallel positioning of incentive structures with motivation can result in successful projects for the client and economic and psychological advantage to the contractor. Lewis (2003) pointed that a project manager needs to understand the individual desires

of each team member. To achieve a project environment where the majority of the members involved are motivated about the project, project managers have to be sensitive to the needs and wants of the team members.

### **Monitoring and Evaluation**

Monitoring and evaluation is a key component of project management and is one of the roles done by the project management office or the project manager. Citing (Thomson & Hoffman, 2003), (Kimani 2013) argued that evaluation should not be encouraged when a program is unstable, unpredictable and/or when it has not achieved a consistent routine as when those involved cannot agree about what the program is trying to achieve the funder and/or manager may refuse to include important and central issues in the evaluation. Hence complete involvement of all stakeholders is key in a project. Montgomery & Zint (2010), noted on First Tranche online blog (2012) that the success rate for projects with high levels of quality monitoring and evaluation (QME) was 93%, compared to a 3% success rate for those with low QME levels. The authors noted that effective supervision was necessary for project success. For an effective M&E, it is important that actors are allowed to specify the success determinants as it provide points of unity for adjustments, identify best practices, and encourages improvement of resources and capacities use.

### **RESEARCH METHODOLOGY**

The researcher used descriptive research design to determine the factors affecting implementation of service delivery innovations in the health sector. The population of this study comprised 70 service delivery innovation projects from eight public hospitals in Nairobi County.

The study adopted a census technique to collect primary data. The questionnaires were self-administered and distributed to the respondents and reasonable time given before they could be collected.

The Multiple Regression model that was developed on the analysis of the variable relationships was as follows:  $Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ ,

Where,

$Y_i$ = Implementation of service delivery innovation projects;

$\beta_0$ = constant (coefficient of intercept),  $\beta_1 \dots \beta_4$ = regression coefficient of four variables.

$X_1$ = Project Funding;

$X_2$ = Project Communication;

$X_3$ = Project Team Competences;

$X_4$ = M & E;

$\epsilon$  = Error term;

### **FINDINGS AND DISCUSSIONS**

#### **Implementation of Service Delivery Innovation Projects**

The study sought to examine the drivers of implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya attributed to the influence of project funding, project team competence, project communication and monitoring and evaluation. The study was particularly interested in three key indicators,

namely implementation within budget, schedule and scope, with all the three studied over a 5 year period, running from 2012 to 2016. Findings in Table 1 revealed improved implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya across the 5 year period running from the year 2012 to 2016. Implementation of projects within budget recorded low positive growth with a majority affirming to less than 10% in 2012 (38.7%) and 2013 (39.8%), to 10% in 2014 (30.9%) then more than 10% in 2015 (32.4%) and 2016 (30.4%). A similar trend was recorded implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya within scope, growing from less than 10% (32.8%) in 2012, to more than 10% in 2013 (28.3%), 2014 (28.5%) and 2015 (27.3%). implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya within schedule further recorded positive growth with a majority affirming to less than 10% in 2012 (38.9%) and 2013 (33.8%), to 10% in 2014

(22.5%) and 2015 (32.5%) then by more than 10% in 2016 (32.8%). It can be deduced from the findings that key implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya indicators had considerably improved as influenced by among other attributes, the influence of project planning, project communication, project contract management and project knowledge management. implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya in time, implementation of projects within budget and implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya within scope have particularly improved by at least 10 percent across most of the projects pointing to the significance of project planning, project communication, project contract management and project knowledge management in the implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya.

**Table 1: Implementation of Service Delivery Innovation Projects**

<b>Implementation within Budget</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Increased by less than 10%	38.7	39.8	30.9	32.4	30.4
Increased by 10%	32.8	28.3	28.5	27.3	28.5
Increased by more than 10%	28.7	32.1	40.3	40.9	41.5
<b>Implementation within Scope</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Increased by less than 10%	38.9	33.8	22.5	32.5	32.8
Increased by 10%	35.8	35.8	31.9	33.9	30.9
Increased by more than 10%	25.6	30.8	45.9	35.4	35.9
<b>Implementation within Schedule</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Increased by less than 10%	37.9	35.9	31.2	25.7	33.1
Increased by 10%	36.2	31.3	35.9	35.3	30.7
Increased by more than 10%	25.9	32.8	32.9	39	36.2

### Project Funding

The study sought to assess the influence of project funding on implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 2 presents the findings. The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement equivalent to a mean score of 1.0 to 2.5.

The study findings in Table 2 indicated that the respondents indicated to a moderate extent that there was adequate quality control costs in the projects (3.232); there was adequate purchase of

equipment costs in the project (3.567); there was adequate administration costs in the project (3.908); there was adequate record keeping on control of material costs in the project (3.219); the administration costs affect compliance of quality in the projects (3.290); the projects' purchase of materials costs lead to time and cost overruns (3.213); the projects' purchase of materials costs lead to time and cost overruns ( 3.213). The study findings corroborated with literature review by Kaliba *et al.* (2009) reviewed the correlation between project funding and project delays. Adequate and timely funding is essential for project implementation. Inadequate funding and untimely funding may interfere with implementation schedule of projects. Brown, & Phua, (2011) identifies financial difficulties as major causes of delays in government sponsored projects. The easy access to funds is a necessary tool in removing unnecessary barriers during implementation of the projects.

**Table 2: Influence of Project Funding on Implementation of Service delivery Projects**

Statement	Mean	Std
Are there adequate quality control costs in your project?	3.232	.678
Is there adequate purchase of equipment costs in your project?	3.567	.320
Are there adequate administration costs in your project?	3.908	.458
Do you have adequate record keeping on control of material costs in the project?	3.219	.220
Do administration costs affect compliance of quality in the projects?	3.290	.318
Does the projects' purchase of materials costs lead to time and cost overruns?	3.213	.468

### Project Team

The study sought to assess the influence of project team on implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 3 presented the findings. The scores

of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement equivalent to a mean score of 1.0 to 2.5.

Table 3 below presented the findings. The majority of respondents indicated to great extent with most statements posed that the team competency

enhance efficiency of the procurement process(3.236). The team competency reduce delayed payment (3.456); the team competency facilitated decision making in the projects (3.332); the team competency enhanced transparency levels in the management of the projects (3.109); team cohesion reduce procurement cycle in your project (3.902); the team cohesion enhance contract scope changes in the project (3.221); the leadership encourage up front planning efforts (3.098); the leadership that encourage up front planning efforts in your project (3.228); team commitment encourages intrinsic motivation in the implementation of the projects; the team commitment which encourages intrinsic motivation in the implementation of the projects (2.108). The study findings imply that project team influence implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya. The study findings corroborated with the findings of Andawei (2014) and McLeod et al. (2012) who found out that project team commitment is

one of the most important factors for project implementation. Darrington & Howell (2010), emphasized that motivation schemes on projects should not be centered on monetary incentives because it destroys intrinsic motivation, which makes construction site workers be less productive. He proposed that intrinsic motivation should be encouraged so that parallel positioning of incentive structures with motivation can result in successful projects for the client and economic and psychological advantage to the contractor. Ochieng & Price (2010) pointed out that a project manager needs to understand the individual desires of each team member. To achieve a project environment where the majority of the members involved are motivated about the project, project managers have to be sensitive to the needs and wants of the team members. Soham & Rajiv (2013) states that the management needs to be involved in the up-front planning efforts and effectiveness of communication, control system, management system and organizational culture.

**Table 3: Project Team**

Statements	Mean	Std. Dev
Does team competency enhance efficiency of the procurement process?	3.236	.456
How does team competency reduce delayed payment	3.456	.762
How does team competency facilitated decision making in your project	3.332	.112
How has team competency enhanced transparency levels in the management of the projects	3.109	.865
Does team cohesion reduce procurement cycle in your project?	3.902	.456
How does team cohesion enhance contract scope changes in your project?	3.221	.098
How does leadership encourage up front planning efforts?	3.098	.237
Do you have leadership that encourages up front planning efforts in your project?	3.228	.556
Do you have team commitment which encourages intrinsic motivation in the implementation of the projects?	2.108	.816



## Project Communication

The study sought to assess the influence of project communication on implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya in the study area. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 4 presented the findings. The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement equivalent to a mean score of 1.0 to 2.5.

The study findings in Table 4 the respondents indicated to a great extent that the project team has experience in interpretation of working drawings (3.226); The poor and distorted information slow down project implementation and lead to extra cost (3.765); The unclear channels of communication has slowed and culminated delay in project implementation (3.980); they do regular site meetings between the consultants and contractors

(3.258); There was regular review and adjustment of communication report (3.560); there were regular annual reports (3.335); There is information on work breakdown structure necessary for division of labour (3.255). The study findings implied that the project communication influence implementation of the service innovation projects in the public hospitals in Kenya. The study findings corroborated with literature review by Heldga (2008) confirmed that project communication is very important for the successful implementation of projects. During programme design and implementation, emphasis is placed on project communication so that the services provided can continue throughout the project. Abdulziz et al.,(2016) indicated that project communication and coordination in project success. In this context, a two-stage case study of construction phase delay control for project is presented. Communication is a key issue for successful project implementation and management. It is specifically a challenging task for projects where a number of interdependent role players are needed to achieve the desired project outcomes (Abdulaziz *et al.*, 2015). Communication is very essential in project execution. It plays a vital role in all stages of construction such as design production, organization and management (Mehra, 2009).

**Table 4: Project Communication**

Statement	Mean	Std
The project team has experience in interpretation of working drawings	3.226	.321
The poor and distorted information slow down project implementation and lead to extra cost	3.765	.906
The unclear channels of communication has slowed and culminated delay in project implementation	3.980	.460
We do regular site meetings between the consultants and contractors	3.258	.568
There is regular review and adjustment of communication report	3.560	.330
There are regular annual reports	3.335	.580
There is information on work breakdown structure necessary for division of labour	3.255	.560

## Monitoring & Evaluation

The study sought to assess the influence of monitoring and evaluation on implementation of service delivery innovation projects in public hospitals in Nairobi City County, Kenya in the study area. This section presented findings to statements posed in this regard with responses given on a five-point likert scale (where 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate Extent; 2 = Small Extent; 1= Very Small Extent). Table 5 presented the findings. The scores of 'Very Great Extent' and 'Great Extent' have been taken to represent a statement equivalent to mean score of 3.5 to 5.0. The score of 'Moderate Extent' has been taken to represent a statement moderately, equivalent to a mean score of 2.6 to 3.4. The score of 'Small Extent' and 'Very Small Extent' have been taken to represent a statement equivalent to a mean score of 1.0 to 2.5.

According to Table 5, with the grand mean of 3.456, the study established that majority of the respondents stated that the top management takes a leading role in management of the project (3.235); there is continuous evaluation of the status of the project (3.780); the project management encourage participation approach on running project activities (3.226); the participatory M & E encourage upfront planning efforts in the project (3.560); there are periodic reports generated and share on the status of the projects (3.098); the

project personnel continuously monitor their implementation of project activities (3.554). The study results show that monitoring and evaluation plays a very important role on implementation of service innovation projects in Kenya.

The study findings were in agreement with literature review by Valadez & Bamberger (2014) who indicated that the systemic and regular collection of data from projects will assist the project team to learn from experience and improve practices, allow for both external and internal accountability of the resources invested and the results realized as well as ensure planned activities are adhered to (O'Sullivan, 2014). Monitoring checks activities and progress against plans allowing documentation of project progress and this improves greatly the chances of project success and sustainability. Evaluation focuses on systematically and objectively assessing a phase of a project or the whole project after it is completed (Rossi, Lipsey, & Freeman, 2014). Evaluation of project phases allows detect deviation from plan in time and allow for timely rectification (Valadez & Bamberger, 2014). Project phase evaluation also allows assess relevance of the project to community needs, efficiency of the project team and use of resources, effectiveness of the interventions and also impacts being realized from the project or impacts anticipated, this allows the project manager analyze the expected implementation levels of the project (Junbeum, *et al.*,2007).

**Table 5: Monitoring & Evaluation**

Statement	Mean	Std
Does top management takes a leading role in management of the project?	3.456	.097
Is there continuous evaluation of the status of the project?	3.235	.876
Does the project management encourage participation approach on running project activities?	3.780	.543
Does the participatory M & E encourage upfront planning efforts	3.226	.009

Are there periodic reports generated and shared on the status of the projects?	3.560	.800
Do the project personnel continuously monitor their implementation of project activities?	3.554	.654

**Multiple Regression Analysis**

It is notable that there exist strong positive

relationship between the independent variables and dependent variable as shown by R value (0.799).

**Table 6: Model Summary**

Model	R	R <sup>2</sup>	Adjusted R2	Std. Error of the Estimate
1	.779	.607	.581	.008

**Analysis of Variance**

Based on the study results of the ANOVA Test or F-test in Table 7 obtained F-count (calculated) was 56.562 greater the F-critical (table) (15.908) with significance of 0.002. Since the significance level of

0.002 < 0.05 we conclude that the set of independent variables affect the implementation of service delivery innovation projects (Y-dependent variable) and this shows that the overall model was significant.

**Table 7: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	10.560	4	2.640	56.562	.002 <sup>a</sup>
Residual	15.906	55	.2892		
Total	23.117	59			

NB: F-Critical Value = 15.908

The results of multiple regression analysis obtained regression coefficients t value and significance level as indicated in Table 8. From the study findings on the regression equation established, taking all factors into account (independent variables) constant at zero implementation of service delivery innovation projects in public hospitals will be 7.990. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in project funding will lead to a 0.766 increase in implementation of service delivery innovation projects in public hospitals; a unit increase in project team will lead to a 0.720 increase in implementation of service delivery innovation projects, a unit increase in project

communication will lead to 0.588 increase in implementation of service delivery innovation projects and a unit increase in monitoring and evaluation will lead to 0.670 increase in implementation of service delivery innovation projects in public hospitals in Kenya. This infers that project funding contributed most to implementation of service delivery innovation projects in public hospitals. Based at 5% level of significance, project funding had a .000 level of significance; project team show a .002 level of significance, project communication show a .008 level of significance and monitoring and evaluation show a .005 level of significance hence the most significant factor was project funding.

**Table 8: Coefficient Results**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	$\beta$	Std. Error	$\beta$		
(Constant)	7.990	1.158		6.900	.000
X <sub>1</sub> _PF	.766	.156	.465	4.908	.000
X <sub>2</sub> _PT	.720	.147	.354	4.800	.002
X <sub>3</sub> _PC	.588	.184	.225	3.200	.008
X <sub>4</sub> _M&E	.670	.176	.245	3.808	.005

The general form of the equation was to predict implementation of service delivery innovation projects in public hospitals from project funding, project team, project communication and monitoring and evaluation is:  $(Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)$  becomes:  $Y = 7.990 + 0.766X_1 + 0.720X_2 + 0.588X_3 + 0.670X_4$ . This indicates that implementation of service delivery innovation projects in public hospitals = 7.990 + 0.766\* Project Funding + 0.720\*Project Team + 0.588\*Project Communication + 0.670\*Monitoring & Evaluation + 1.158.

**SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The study findings indicated to a moderate extent that there are adequate quality control costs in the projects. There is inadequate purchase of equipment costs in the project. There are adequate administration costs in the project. There is inadequate record keeping on control of material costs in the projects. The administration costs affect compliance of quality in the projects. The projects' purchase of materials costs lead to time and cost overruns. The projects' purchase of materials costs lead to time and cost overruns. Adequate and timely funding is essential for project implementation. Inadequate funding and untimely

funding may interfere with implementation schedule of projects

The study established that a majority of respondents indicated to a moderate extent with most statements posed as regards influence of project team on implementation of service delivery innovation projects. Majority particularly highly agreed that the team competency enhance efficiency of the procurement process and reduce delayed payment. The team competency facilitated decision making in the projects and enhanced transparency levels in the management of the projects. The project team cohesion reduces procurement cycle in your project and enhances contract scope changes in the project. The leadership encourage up front planning efforts and the team commitment encourages intrinsic motivation in the implementation of the projects.

The study sought to assess the influence of project communication on implementation of county government construction projects in Kenya. The study findings indicated to a great extent that the project team has experience in interpretation of working drawings. The poor and distorted information slow down project implementation and lead to extra cost. The unclear channels of communication has slowed and culminated delay in project implementation. They do regular site

meetings between the consultants and contractors. There is regular review and adjustment of communication report. There were regular annual reports. There is information on work breakdown structure necessary for division of labour. This indicates that project communication is important factor on the implementation of the county government funded construction projects.

The study sought to establish the influence of monitoring and evaluation on implementation of service delivery innovation projects in public hospitals in Kenya. The study findings indicated to a moderate extent that the project team has experience in interpretation of working drawings. The poor and distorted information slow down project implementation and lead to extra cost. The unclear channels of communication has slowed and culminated delay in project implementation. They do regular site meetings between the consultants and contractors. There is regular review and adjustment of communication report. There were regular annual reports. There is information on work breakdown structure necessary for division of labour.

The study sought to examine the drivers of implementation of service delivery innovation projects in public hospitals in Kenya, attributed to the influence of project funding, project team, project communication and M & E over a 5-year period, running from 2012 to 2016. Finish of the projects within schedule recorded a slow positive implementation. Finish of the projects within time further recorded a slow positive implementation. Finish of the projects within scope also recorded a slow positive implementation. From inferential statistics, a positive correlation is seen between each determinant variable and implementation of service delivery innovation projects in public hospitals in Kenya. The strongest correlation was established to be project funding. All the independent variables were found to have a

statistically significant association with the dependent variable at ninety-five level of confidence. Analysis of variance was further done to show whether there is a significant mean and all variables were found to be significant.

### **Conclusions of the Study**

Based on the study findings, the study concluded that implementation of service delivery innovation projects in public hospitals in Kenya was affected by the independent variables. The project funding followed by project team, project communication and monitoring and evaluation were the major factors that mostly affected implementation of service delivery innovation projects in public hospitals in Kenya.

The study concluded that project funding was the first important factors that influenced implementation of service delivery innovation projects in public hospitals in Kenya. The regression coefficients of the study showed that project funding had a significant influence on implementation of service delivery innovation projects in public hospitals in Kenya. This implied that increasing levels of project funding would affect the levels implementation of service delivery innovation projects in public hospitals in Kenya.

The study concluded that project team was the second important factors which influenced implementation of service delivery innovation projects in public hospitals in Kenya. The regression coefficients of the study show that project team has a significant influence on implementation of service delivery innovation projects in public hospitals in Kenya. This implies that increasing levels of project team would influence positively the levels implementation of service delivery innovation projects in public hospitals in Kenya.

The study concluded that project communication was the third most important factor which influence

implementation of service delivery innovation projects in public hospitals in Kenya. The regression coefficients of the study show that project communication has a significant influence on implementation of service delivery innovation projects in public hospitals in Kenya. This implies that increasing levels of project communication would influence positively the levels implementation of service delivery innovation projects in public hospitals in Kenya.

The study concluded that monitoring and evaluation influenced implementation of service delivery innovation projects in public hospitals in Kenya. The regression coefficients of the study show that project funding has a significant positive linear influence on implementation of service delivery innovation projects in public hospitals in Kenya. This implies that increasing levels of project funding would increase the implementation of service delivery innovation projects in public hospitals in Kenya.

### **Recommendations of the Study**

The study recommends for the enhancement of the project funding on implementation of the projects. There is need to have adequate quality control costs in the projects. There is need to have adequate purchase of equipment costs in the project and adequate administration costs in the project. There should be effective internal controls on the cost overruns. The administration costs should be compliant with the quality in the implementation of the projects.

There is need to enhance proper communication during the implementation of the projects. The poor and distorted information slow down project implementation and lead to extra cost. There should be clear channels of communication to facilitate and eliminate the delays project implementation. The project team should have

regular site meetings between the consultants and contractors, review and adjustment of communication reports. The information on work breakdown structure should be well understood to enhance the implementation of the projects.

Further, there is need for the project team competency to be enhanced to increase efficiency of the procurement process and reduce delayed payment in the projects. The project team competency facilitates decision making in the projects and enhance transparency levels in the implementation of the projects. The project team cohesion can also increase implementation of the project and enhance contract scope changes in the project.

The study recommends for the adequate M & E plans for continuous monitoring of project activities. The staff working on monitoring and evaluation should be dedicated to the function. The roles and responsibilities of monitoring and evaluation personnel should be specified at the start of the project. The top management should take a leading role in implementation of the projects and there should be a continuous evaluation of the status of the project. There should be a participatory M & E encourage upfront planning efforts in the project and there are periodic reports generated and share on the status of the projects. The project personnel should continuously monitor their implementation of project activities.

### **Knowledge Gained for Policy and Practice**

The study contributed the body of knowledge by examining the determinants of implementation of service delivery innovation projects in Kenya was greatly affected by project funding, project team, project communication, monitoring and evaluation. The study contributes to the existing literature in the field of project management by elaborating exiting theories, models and empirical studies on implementation of service delivery innovation

projects in Kenya. The study thus contributes to the existing knowledge in project management by reviewing theories and models that can be applied to improve implementation of service delivery innovation projects in the public hospitals in Kenya.

### **Areas for Further Studies**

The study was a milestone for further research in the field of project management in Africa and particularly in Kenya. The findings have demonstrated influence of project funding, project team, project communication and monitoring & evaluation on the implementation of service

delivery innovation projects in the public hospitals in Kenya. The current study should therefore be expanded further in future in order to determine other factors that affect the implementation of service delivery innovation projects in the public hospitals since the study established there could the remaining 37.90% is explained by the variables or other aspects outside the model. Further, the existing literature indicates that as a future avenue of research, there is need to undertake similar research in other private hospitals in Kenya and other countries in order to establish whether the explored factors can be generalized.

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