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**EXAMINING THE EFFECT OF RESULT BASED FINANCING ON HEALTH
WORKER MOTIVATION IN MAKUENI COUNTY, KENYA**

LEONARD CEDRIC MAKAU

MBA-HCM/110853



**A DISSERTATION SUBMITTED TO STRATHMORE UNIVERSITY BUSINESS
SCHOOL IN THE PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN
HEALTHCARE MANAGEMENT**

OCTOBER 2021

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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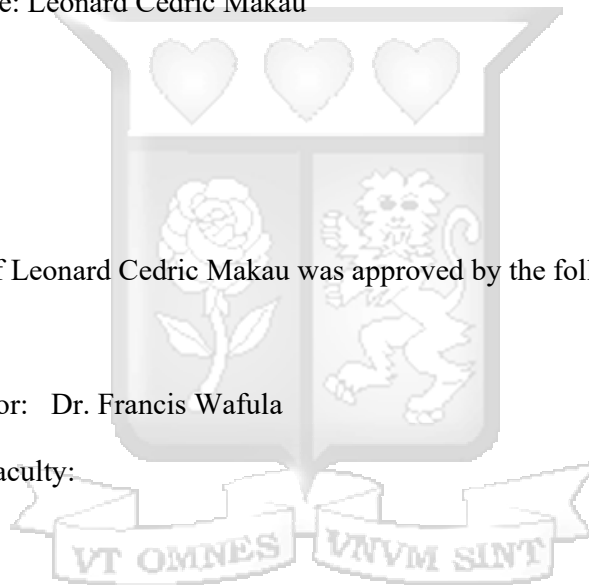
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Director, Office of Graduate Studies



DEDICATION

I dedicate this dissertation to my family and friends too for their unwavering support



ACKNOWLEDGEMENT

I thank almighty God for the gift of life. I thank the University for availing of this enriching course that will enable me to make a huge contribution to the corporate world. I also thank my family for encouraging me all the way. Special thanks to my supervisor Dr. Francis Wafula for the continuous criticism which has enabled this document to be an acceptable project that can be referred to by others in the years to come.



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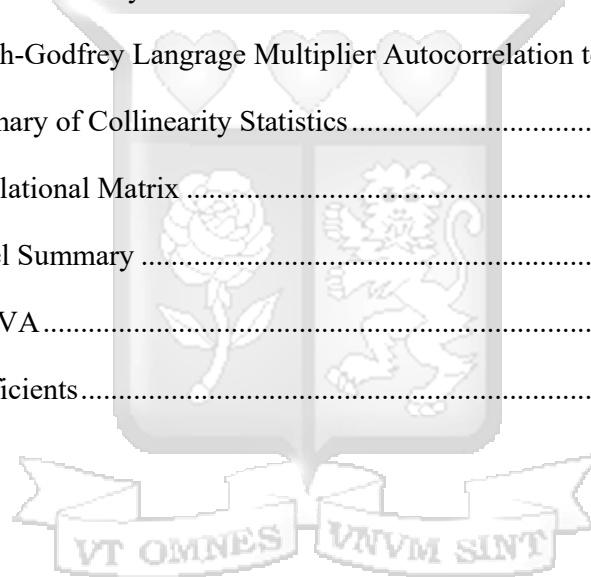
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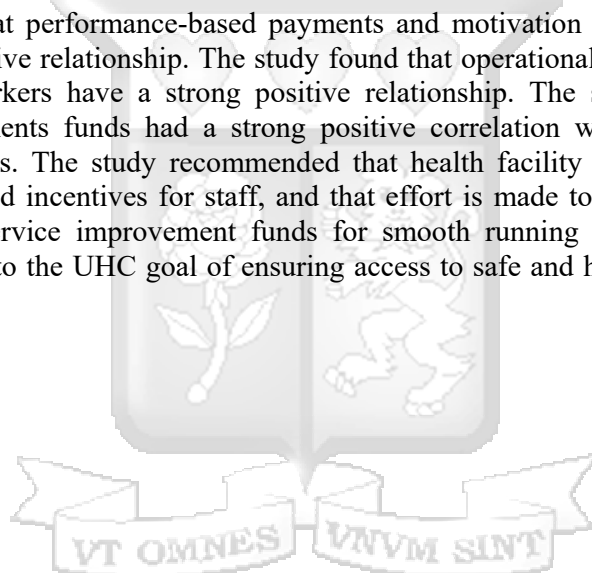
LIST OF ABBREVIATIONS

BTC	Belgian Development Corporation
DHIS	District Health Information System
HCWs	Health care workers
PBP	Performance-based payments
PHWs	Primary health workers
RBF	Result based financing
SPSS	Statistical Package for Social Sciences
WHO	World Health Organization



ABSTRACT

Calls for universal health coverage (UHC) have triggered renewed focus on strengthening primary health care (PHC) and improving health worker performance. In Kenya, health service delivery is impeded by the poor quality of service, inefficient use of resources and low health worker motivation among other factors. Result-based financing (RBF) has the potential to strengthen service delivery by improving motivation, quality and resource use. The RBF concept typically entails deploying some form of financial reward towards staff who achieve a certain level of performance or outcomes. Studies on RBF in low- and middle-income countries have given mixed results. This study looked at the effect of RBF on the motivation of PHC staff in Makueni County. Specifically, it sought to determine the effect of RBF, operational funds and service improvement funds on staff motivation. The study was conducted in the six sub-counties in Makueni County using a descriptive research design. Data was collected using a questionnaire, and descriptive and inferential statistical analyses were done. The study found a strong positive correlation between performance-based incentives and healthcare workers' motivation. Also, the study revealed that performance-based payments and motivation of healthcare workers had a strong positive relationship. The study found that operational funds and motivation of healthcare workers have a strong positive relationship. The study established that service improvements funds had a strong positive correlation with the motivation of healthcare workers. The study recommended that health facility management consider performance-linked incentives for staff, and that effort is made to ensure availability of operations and service improvement funds for smooth running of the facilities. This would contribute to the UHC goal of ensuring access to safe and high-quality healthcare services.



CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Universal Health Coverage (UHC) has become a policy priority at both the national and global levels. The goal of UHC is to ensure that every citizen has access to quality healthcare services that they need without getting into financial difficulties or, worse, pushed into poverty (World Bank, 2020). Health is also an essential part of the Sustainable Development Goals (SDGs). For example, the SDG 3.8 target aims to achieve universal health coverage, including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all (World Bank, 2020).

Despite substantial achievements during the millennium development goals (MDGs) era, many low- and middle-income countries (LMICs) still face challenges in establishing well-functioning health systems. Reasons include scarcity of supplies, limited infrastructure, shortage of qualified human resources (WHO, 2016), absence of incentives, dual practice, brain drain, and the lack of an enabling working environment (Hongoro & Normand 2016). Further, evidence shows that while spending on health through traditional input financing-based approaches has increased across most low-and middle-income countries, the increase rarely results in marked improvement in the services (World Health Organization, 2014). User needs and demands are far from met in most cases. Challenges include shortages in well-trained and adequately paid workforce, lack of well-maintained and equipped health facilities, robust financing mechanisms, and reliable health management information systems, which affects health worker motivation (Eldridge & Palmer, 2013). At the center of most challenges is the problem of health worker motivation, and misalignment between the objectives of the health system and incentives of the healthcare workers.

Results-based financing (RBF) is emerging as an important option towards achieving value for money. In principle, RBF programs seek to improve access, utilization and quality of health services by providing incentives to service providers or service users, or both (Musgrove, 2016). In its raw form, it entails a process where a funder pays a service provider upon achievement of agreed results. Additionally, Pearson (2011) explains that

result-based financing is seen as a way of solving the problem of poor alignment between the goals of the system and the individual through the use of incentives. Results-based financing can also be seen as a form of incentive where health providers are, at least partially, funded based on their performance to meet targets or undertake specific actions (WHO, 2016).

Renmans, Holvoe, Orach and Criel (2016) defines result-based financing as “an incentive scheme directed to health providers (facilities and/or health workers), but accompanied by a new level of autonomy of the health facility (e.g., to decide on the use of resources), increased monitoring, and a separation of functions between the purchaser, provider and/or the newly created verification officer of health services. RBF purportedly works by aligning the motivation of health workers with that of the health system, a reflection of principle-agent theory, (Bertone & Meessen, 2013).

According to Renmans, *et al.*, (2016) RBF comprises performance-based incentives, performance-based payments, operational funds and service improvement funds. Performance-based incentives (PBI) include both monetary and non-monetary incentives to encourage health-related actions or achievement of performance targets (Jian & Tian, 2012). Performance-based payment (PBP) is referred to as the transfer of money or material goods conditional upon taking a measurable action or achieving a predetermined performance target (Eichler, 2016). Operational fund is the money health care institutions board receives from the Government to run health institutions and to achieve the objectives specified in their charter. Operational funding of primary health facilities has a positive effect on service provision as well as improving the quality of care (Yates, 2013). Service improvement fund is a form of a grant which consists of providing finances to support independent projects for systematic and continuous actions that lead to measurable improvement in health care services and the health status of individuals and targeted patient groups. Service improvement funds are aimed at increasing resources at peripheral health facilities to provide adequate services and encouraging community involvement in the identification of health priorities (Hunter, 2017). All these factors of RBF can influence employees to work towards achieving organizational goals.

Health worker motivation is the extent an individual is willing to exert and maintain an effort towards the achievement of an organization’s goals (Willis-Schattuck *et al.*, 2018). Hongoro and Normand (2016) indicate that several themes characterize motivation and

these include financial aspects, career development, continuing education, health facility infrastructure, availability of resources, relationships with the management of the health facility, and personal recognition. Additionally, Adair (2016) indicates that worker motivation is influenced by working conditions or hygiene factors, including facility infrastructure and availability of resources; organizational support including supervision, training opportunities and professional promotion; and organizational structures and processes. Health workers can be motivated through results-based financing. Deussom and Jaskiewicz (2016) argue that performance-based financing systems can reinforce the accountability of services and compel staff to have a greater stake in meeting the facility's performance goals.

Improving health worker motivation is the foundation of result-based financing. Motivation is an individual's degree of willingness to exert and maintain an effort towards organizational goals, (Bertone & Meessen, 2013). Motivation has long been classified as intrinsic, or generated by internal forces (altruism, self-improvement), versus extrinsic, or generated by forces external to the self (recognition, rewards). In low-resource health systems where health workers experience low remuneration and challenging work environments (poor infrastructure, weak management, high workload), extrinsic motivation is at risk of being low and health systems may depend upon workers' intrinsic motivation to care for their community and a sense of duty to fulfill their role, (Lohmann, *et al.*, 2016).

Result-based financing (RBF) has been cautiously embraced by governments as a strategy to improve the delivery of health services in low- and middle-income countries, (Meessen, Soucat & Sekabaraga, 2016). Health systems in many LMICs over the last two decades have launched provider incentive programs. With support from the governments of Norway and the UK, the World Bank is managing the Health Results Innovation Trust Fund to pilot results-based financing (RBF) programs in more than 30 countries (Africa Health Forum, 2013). Most RBF programs aim to improve maternal and child health (MCH) services by offering incentive payments to participating health facilities (including their staff) based on their quantity and quality of health services (McCoy, Chand & Sridhar, 2015).

In the Sub-Saharan African countries, it is claimed that health sector-directed RBF programs can potentially act as a catalyst for reforming the whole public health sector

into an efficient outcome-based institution (Meessen, Soucat & Sekabaraga, 2016). It is this vast promise of RBF that makes it attractive to politicians and policy makers in low-income countries like Kenya. RBF is one of the strategies that the GoK has chosen to improve coverage and quality of health services, through a results-focused and motivated health workforce, to improve health outcomes for women and children.

The RBF approach adopted and implemented in Kenya was initially piloted in Samburu County in 2011 (GoK, 2015). The piloting focused on six reproductive and child health services before Kenyan health services were devolved. The piloting was funded by the World Bank. Based on the encouraging results yielded by this pilot project, the Government of Kenya decided to scale up RBF to 21 counties. Scaling up started in January 2016, once a national framework for the transfer of conditional grants was created. The Samburu PBF pilot was predicated on the assumption that linking incentives to performance will contribute to improvement in access, quality and equity of service outputs (Ministry of Health, 2013).

The main objective of the RBF Program in Kenya is to increase the delivery and utilization of high-impact maternal and child health interventions and to improve the quality of care at primary health facilities in the participating counties (Ministry of Health, 2013). An evaluation of the RBF in Makueni has shown, progressive increase in the utilization of key RBF output indicators, improvements in the average clinical quality scores for all of the key output indicators, improvements in the validation of data from the District Health Information System (DHIS), Improvements in facility management scores on infrastructure scores and Increases in the proportion of facilities holding regular meetings with the Health Facility Management Committees (Ministry of Health, 2018). It is against this background that the study sought to establish the effects of result-based financing on health worker's motivation at primary health facilities, Makueni County.

Since 2014, Makueni County has been offering its one million residents free healthcare across all its public facilities, including county and sub-county hospitals. It adds to the national government's free primary healthcare policy intending to provide seamless cover across all public health services. Thus, for an annual subscription of KSh500 per household, which covers parents and all their children under the age of 18 years (or up to 24 years in case of students), Makueni residents can access free primary healthcare at dispensaries and health centres courtesy of the national government, free treatment,

including inpatient care and ambulatory services, at the 13 levels 4 hospitals within the county paid for by the county government, and, if they're subscribed to NHIF, free care at referral facilities outside the county. The Level 4 hospitals provide free care and bill the county government, which also supplies them as well as the primary healthcare facilities with drugs, equipment and medical staff (Makueni County Report, 2019).

The challenges facing health care in Makueni County include; limited access to health care facilities, lack of adequate personnel and expertise to address the medical needs, poor infrastructure where most facilities do not have the proper facilities to handle the medical challenges, ironically the facilities that are highly equipped with specialized equipment do not have effective processes and personnel in place to execute the tasks, access to medical records and Healthcare Financing (Barasa, 2017).

1.2 Statement of the Problem

Poor quality of health services impedes progress toward improving both access to and use of essential public services (WHO, 2016). This is aggravated by the inefficient use of scarce resources such as manpower, medical equipment, and supplies (World Bank, 2020). Motivated and well-trained health workers are essential for high-quality service delivery (Buetow, 2017). In the Kenyan public health sector motivation affects staff performance, service delivery, and health system performance.

Performance-based incentives (PBI) refer to monetary and non-monetary incentives to encourage health-related actions or achievement of performance targets (Jian & Tian, 2012). Performance-based payment (PBP) is referred to as the transfer of money or material goods conditional upon taking a measurable action or achieving a predetermined performance target (Eichler, 2016). Operational fund is the money health care institutions board receives from the Government to run health institutions and to achieve the objectives specified in their charter (Yates, 2013). Service improvement fund is a form of a grant which consists of providing finances to support independent projects for systematic and continuous actions that lead to measurable improvement in health care services and the health status of individuals and targeted patient groups (Hunter, 2017).

Result-based financing (PBF) reforms aim to directly influence health worker behavior through changes to institutional arrangements, accountability structures, and financial incentives based on performance (WHO, 2016). It is still unclear whether RBF influences

extrinsic or intrinsic motivators; evidence suggests that RBF affects both. In Kenya, RBF has been used to incentivize health workers to improve health service delivery services (Kamau, 2016). The RBF model is designed to link financing to pre-determined results, with payments being made upon verification and confirmation of achievement of agreed results (Eldridge & Palmer, 2013).

Evidence on RBF remains scant across LMICs. However, the little evidence available suggests that RBF improves health worker satisfaction and motivation, with the staff reporting higher job satisfaction scores (Nguyen, 2015). Shen (2017) studied the effects of RBF on staff in Zambia and found that RBF led to increased job satisfaction and decreased attrition on a subset of measures, with little effect on motivation. Lohmann, Muula, Houliort and De Allegri (2018) aimed to find out whether results-based financing affects health workers' intrinsic motivation. Results suggested that RBF did not affect health workers' overall intrinsic motivation levels, with the intervention having had both positive and negative effects on psychological needs satisfaction.

In Makueni County, RBF has been used to try and address health system challenges that affect service delivery of health services. Therefore, this study sought to establish the effect of result-based financing mechanisms on the motivation of healthcare workers at primary healthcare facilities in Makueni County.

1.3 Objective of the Study

1.3.1 General Objective

To examine the effect of result-based financing mechanisms on the motivation of healthcare workers at primary healthcare facilities in Makueni County.

1.3.2 Specific Objectives

- i. To determine the effect of performance-based incentives on health workers' motivation at primary health facilities, Makueni County.
- ii. To assess the effects of performance-based payments on health workers' motivation at primary health facilities, Makueni County.
- iii. To examine the effects of operational funds on health workers' motivation at primary health facilities, Makueni County.

- iv. To establish the effects of service improvement funds on health workers' motivation at primary health facilities, Makueni County.

1.4 Research Questions

- i. What is the effect of performance-based incentives on health workers' motivation at primary health facilities, Makueni County?
- ii. What are the effects of performance-based payments on health workers' motivation at primary health facilities, Makueni County?
- iii. What are the effects of operational funds on health workers' motivation at primary health facilities, Makueni County?
- iv. What are the effects of service improvement funds on health workers' motivation at primary health facilities, Makueni County?

1.5 Significance of the Study

The study findings would inform the management of health facilities on the role of performance-based financing on health worker motivation. Evidence on this would allow facility managers to appreciate the role of the interventions, whether they are achieving the expected effects, and how they can be improved for higher impact.

The study findings may be important to the government and policy makers. It would provide insights on the effects of result-based financing on health worker's motivation. The policy makers might be able to devise policies that would encourage health facilities to adopt result-based financing. This would help in health workers motivation.

The study findings might also be important to policy makers and academicians. It may improve their understanding of the effects of result-based financing on health worker motivation. The study would add to the body of knowledge on result-based financing. Further, the study can be used as a reference for future related studies.

1.6 Scope of the Study

This study sought to establish the effects of result-based financing on health workers motivation at primary health facilities, Makueni County. Specifically, the study sought to determine the effects of performance-based incentives, performance-based payments, operational funds and service improvement funds on health workers motivation at

primary health facilities, Makueni County. The study was conducted in health facilities in Makueni County.

The study used questionnaires as the main instrument for collecting data. The study did not have much control over the respondents concerning the information that they filled in the questionnaires. The respondents were reluctant to give full information for fear that it could leak to their competitors. Data collection was limited to two weeks which was not sufficient. The study was conducted between February 2020 to August 2021.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the existing literature on the effects of result-based financing on health workers motivation at primary health facilities, Makueni County. In specific, the chapter reviewed the theoretical review, empirical review and conceptual framework.

2.2 Theoretical Framework

The primary purpose of the study was to examine in detail, the interplay between various PBF-related mechanisms and health worker motivation. For this reason, two theoretical views were identified to help explain the relationships in the context of what is known about motivation. These are the Self-Determination Theory and Herzberg's Two Factor Theory. The two theories are discussed briefly below.

2.2.1 Self-Determination Theory

Self-Determination Theory grew out of the work of psychologists Edward Deci and Richard Ryan, who first introduced their ideas in their 1985 book titled *Self-Determination and Intrinsic Motivation in Human Behavior*. They developed a theory of motivation that suggested that people tend to be driven by a need to grow and gain fulfillment. Self-Determination Theory suggests that people are motivated to grow and change by three innate and universal psychological needs (Deci and Ryan, 1985). The theory assumes that people are actively directed toward growth, gaining mastery over challenges and taking in new experiences are essential for developing a cohesive sense of self. Also, while people are often motivated to act by external rewards such as money, prizes, and acclaim (known as extrinsic motivation), self-determination theory focuses primarily on internal sources of motivation such as a need to gain knowledge or independence (known as intrinsic motivation).

According to the Self-Determination Theory, people need to feel the following to achieve psychological growth. Competence, people need to gain mastery of tasks and learn different skills. When people feel that they have the skills needed for success, they are more likely to take actions that will help them achieve their goals (Deci & Ryan, 2000). Connection or relatedness, people need to experience a sense of belonging and attachment to other people. Autonomy, people need to feel in control of their behaviors and goals.

This sense of being able to take direct action that will result in real change plays a major part in helping people feel self-determined (Deci and Ryan, 2010).

Ryan and Deci have suggested that the tendency to be either proactive or passive is largely influenced by the social conditions in which people are raised. Social support is key. Through relationships and interactions with others, people can either foster or thwart well-being and personal growth. Since result-based financing is a form of incentive for health workers, it would promote both intrinsic and extrinsic motivation to health workers. This theory focused mainly on intrinsic motivation therefore, Herzberg's Two Factor Theory was adopted to further explain the motivation of health workers.

2.2.2 Herzberg's Two Factor Theory

The important theory informing this work is Herzberg's Two Factor Theory. In 1959, Frederick Herzberg, a behavioral scientist proposed a two-factor theory or the motivator-hygiene theory. According to Herzberg, there are two factors that an organization can adjust to influence motivation in the workplace. The factors are motivators and hygiene factors. The presence of motivators causes employees to work harder. They are found within the actual job itself. The absence of hygiene factors will cause employees to work less hard. Hygiene factors are not present in the actual job itself but surround the job (Herzberg, 1959). Motivators are intrinsic while hygiene factors are extrinsic.

This theory was cited by Bassett-Jones and Lloyd (2013). Herzberg argued that staff members are motivated more by internal, rather than external factors, meaning that motivation is generated intrinsically. Intrinsic factors include work itself, achievement, responsibility, recognition, growth, as well as advancement. There are those factors that can be dissatisfying to the experience of employees and can affect extrinsic factors. Policies of the company, co-worker relationship, salary, and style of supervision are some of the important factors that may cause dissatisfaction (Bassett-Jones & Lloyd, 2013, Armstrong, 2010). Herzberg argued that doing away with factors that cause dissatisfaction necessarily result in satisfaction but can lead to a state of neutrality. Intrinsic factors are the only way through which motivation can take place. Michael (2010) and Samuel and Chipunza (2010) applied the use of this variable in establishing how motivational variables affect the retention of workers in SA. Studies by Kinnear and Sutherland (2011), Meudell and Rodham, (2010) and Maertz and Griffeth, (2012) found that external factors are the main motivational variables affecting retention of staff in a

company. Based on this evidence, it appears that both intrinsic and extrinsic factors play a huge role in employee retention.

According to Herzberg, different combinations of motivation can exist in a firm. For instance, high hygiene and high motivation, this is the ideal situation where employees are very motivated and barely have any complaints. In high hygiene and low motivation, employees have few complaints, but they're not motivated, they see their work simply as a paycheck. Low hygiene and high motivation, employees are motivated, their job is challenging, but they have complaints about salary or work conditions. Low hygiene and low motivation, employees are not motivated and have a lot of complaints. Therefore, high performance-based incentives, high performance-based payments, high operational funds and high service improvement funds will lead to high motivation of health workers.

Further, from the theory both intrinsic and extrinsic factors motivate employees. Therefore, the health facilities should use intrinsic and extrinsic factors to motivate the health workers. The variables of the study are extrinsic. From the theory, intrinsic motivations such as performance-based incentives, performance-based payments, operational funds and service improvement funds enhance the motivation of health workers.

2.3 Empirical Review

This section reviewed studies that have looked at results-based financing on motivation. These include literature on performance-based incentives and health workers motivation, performance-based payments and health workers motivation, operational funds and health workers motivation and service improvement funds and health workers motivation.

2.3.1 Performance-Based Incentive and Health Workers Motivation

Performance-Based incentive is an innovative, results-oriented approach that incentivizes providers based on their achievement of agreed-upon, measurable performance targets. Incentives include financial payments, bonuses, and public recognition. Similar incentives can also be used to motivate people to use services, to give birth at a facility, or to complete TB treatment, for example. PBF can increase the use and quality of health care services, stabilize or decrease the cost of these services, support the effective use of limited resources, and improve staff motivation, morale, and retention (Bertone, Lagarde & Witter, 2016). Salah (2016) indicated that PBI van is measured in terms of

performance-based promotion, performance-based bonus, performance-based recognition.

Wickramasinghe & Dabere (2012) studied the effects of performance-based financial incentives on work performance in technical-level employees in the private sector in Sri Lanka. The objective of the study was to investigate the effect of performance-based financial incentives on work performance. For the study, survey methodology was used and 93 technical-level employees who were subjected to a performance-based incentive scheme for at least two years in their firms responded. Regression analysis was used for data analysis. It was found that the design features of performance-based financial incentives schemes explain 51 percent of the variance in work performance. Six of the incentive schemes factors, including the goals of incentive scheme, employee participation in setting goals, incentive scheme type, and payout frequency have a significant positive impact on work performance. This study focused on the private sector in Sri Lanka while the current study focused on health facilities in Kenya.

Hur (2015) studied the impact of performance incentives on work and personal relationships. The study explored the role of incentives in shaping how employees think about their different social relationships. Results from one archival dataset, one-panel survey, and two experiments show that when employees are paid for performance, they prioritize spending time socializing with work colleagues at the sacrifice of spending time with friends and family. Employees who receive performance incentives perceive their work ties as highly instrumental in achieving their goals. This study focused on performance incentives and personal relationships while the current study focused on performance incentives and motivation of health workers.

Novianty and Evita, (2018) researched financial incentives and the impact on employee motivation in manufacturing firms. This study used the approach of research method with the approach of path analysis. Measurement of the research was using questionnaires with a semantic differential scale, while the population in the study consisted of 43 employees. The result of the research showed that the dimension of the research variable was valid and the variable of financial incentives relationship had a positive effect on employee motivation. This study focused on the motivation of employees in manufacturing firms while the current study focused on the motivation of health workers.

Ochieng (2012) studied the relationship between performance-based incentive pay and employee motivation in Barclays bank of Kenya branches in Nairobi city. The objective of the study was to examine the relationship between performances-based incentive pay and employee motivation in Barclays bank of Kenya branches within Nairobi City This study adopted a descriptive survey design. This study targeted 50 managers in the branches in Nairobi City. Primary data was collected using a semi-structured questionnaire. Data collected was analyzed by both descriptive techniques for the quantitative data while content analysis was used for qualitative data. The study findings indicated that Barclay Bank offered performance-based incentive pay. Pay influenced employee motivation of the bank to a great extent and the benefits were related to performance. This study focused on employee motivation in the bank while the current study focused on the motivation of health workers.

2.3.2 Performance-Based Payments and Health Workers Motivation

PBPs are financing payments based upon the achievement of specific, measurable events or accomplishments that are defined and valued in advance by the parties to the contract (Bhatnagar & George, 2016). Performance-based payment programs are made to motivate the employees for performing at their best. It is generally not a complete paying structure for the job rather it is integrated with the wage structure based upon the performance measures already formulated by the organizing system. These paying systems are also termed merit pay, variable pays or incentive pays. In merit pay systems performance is set as a standard and the employee moves upward and downward within the pay grade for the job. Whereas, in variable pay plans, performance is a factor that leads to an addition of reward to base pay or the base pay is lowered to create room for the performance reward (Lavy 2017).

Ye (2016) did a study on health worker preferences for performance-based payment schemes in a rural health district in Burkina Faso. The study aimed to explore healthcare providers' preferences for an incentive scheme based on local resources, in the Nona Health District. A qualitative and quantitative survey was carried out involving 94 healthcare providers within 34 health facilities. In addition, in-depth interviews involving a total of 33 key informants were conducted at health facility levels. Overall, 85% of health workers were in favor of an incentive scheme based on the health district's financial resources. Most health workers expressed a preference for financial incentives

and team-based incentives respectively. This study was conducted in Burkina Faso, the findings cannot be generalized to Kenya.

Bertone (2016) researched performance-based financing in the context of the complex remuneration of health workers in rural Sierra Leone. The study investigated the absolute and relative contribution of PBF to health workers' income and explored their views on PBF bonuses, in comparison to and interaction with other incomes. The results showed that in this setting PBF contributes about 10 % of the total income of health workers. Despite this relatively low contribution, their views on the bonuses are positive, especially compared to the negative views on salary. This is because PBF is seen as a complement, with less sense of entitlement compared to the official salary. This study was conducted in Sierra Leone, the findings cannot be generalized to Kenya.

Huillery and Seban (2013) studied the impact of fee-for-service schemes on health service utilization in the Democratic Republic of Congo. The study tested a fee-for-service scheme, a type of performance pay, at health facilities in the Democratic Republic of Congo to evaluate its impact on health service utilization. While fee-for-service facilities invested more effort in attracting patients, this increase did not translate into higher levels of service utilization or better health outcomes. Additionally, health workers in fee-for-service facilities became less intrinsically motivated and less satisfied with their jobs compared to their counterparts in fixed payment facilities. This study was conducted in DRC, the findings cannot be generalized to Kenya since the health systems are different.

Salim and Ismael (2016) studied the effect of performance-based payments on employee outcomes. The study was carried out to test the connection between performance-based pay against job satisfaction and organizational commitment. Employees at the Department of Fire and Rescue in Selangor and Putrajaya were chosen as the case for the study. The study demonstrated that participation and performance appraisal played an important role in determining employee job satisfaction and organizational commitment. This study focused on employee outcomes while the current study focused on employee motivation.

Mayumana (2017) did a review on the effects of payment for performance on accountability mechanisms in Pwani, Tanzania. The study examined the effect of payment for performance in Tanzania on internal and external accountability

mechanisms. The study entailed 93 individual in-depth interviews, 9 group interviews and 19 focus group discussion interviews. The study found that payment for performance had some positive effects on internal accountability, with increased timeliness of supervision and the provision of feedback during supervision, but no effect on supervision intensity. Pay for performance reduced the interruption of service delivery due to broken equipment as well as drug stock-outs, all linked to increased financial autonomy and responsiveness from managers. This study focused on PBP on accountability while the current study focused on PBP and employee motivation.

Mayumana (2017) study focused on payment for performance and accountability while the current study focus is on PBP on health worker motivation. Bertone (2016) focused performance-based financing on the remuneration of health workers in rural Sierra Leone while the current study focus is on performance-based payments and motivation of health workers in Kenya. Salim and Ismael (2016) focused performance-based payments on employee outcomes while the current study focused on performance-based payments and motivation of health workers.

2.3.3 Operational Funds and Health Workers Motivation

Operational funding is the money health care institutions board receives from the Government to run health institutions and to achieve the objectives specified in their charter. They are the funds used for the day-to-day operations of the organization (Lewis, 2014). Operational fund is a form of health care financing designed to meet the cost of all or most healthcare needs for instance medical funds (Bhatnagar & George, 2016). Khim (2014) studied job motivation of Cambodian primary health workers implementing performance-based financing. This study examined job motivation for primary health workers (PHWs) under a PBF reform in Cambodia and assessed the relationship between job motivation and income. A cross-sectional survey was conducted on 266 PHWs from 54 health centers in the 15 districts involved in the reform. The study found that income and the perception of a fair distribution of incentives were both strongly associated with higher job motivation scores. This study was conducted in Cambodia; the findings cannot be generalized to Kenya because the health systems differ.

Bhatnagar and George (2016) studied the motivating health workers up to a limit: partial effects of performance-based financing on working environments in Nigeria. This study aimed to understand changes in perceived motivation among health workers with the

introduction of PBF in Wamba district, Nigeria. The study used a qualitative research design. Health workers receiving PBF payments reported being ‘awakened’ by performance bonuses and improved working environments including routine supportive supervision and availability of essential drugs. They recounted being more punctual, hardworking and proud of providing better services to their communities. In comparison, health workers in non-PBF facilities complained about the dearth of basic equipment and lack of motivating strategies. However, health workers from both sets of facilities considered there to be a severe shortage of manpower resulting in excessive workload, fatigue and general dissatisfaction. This study was conducted in Nigeria; the findings cannot be generalized to Kenya because the health systems differ.

Elisabeth (2014) researched performance-based financing to strengthen the health system in Benin. This study analyzed and drew lessons from the experience of Belgian Development Agency (BTC)-supported PBF alternative approach. An exploratory, evaluation approach was adopted. The study found that PBF has contributed to strengthen various aspects of the health system and led to modest progress in utilization of health services, but noticeable improvements in healthcare quality. This study was conducted in Benin; the findings cannot be generalized to Kenya because the health systems differ.

Soeters, Peerenboom, Mushagalusa and Kimanuka (2011) studied the performance-based financing experiment improved health care in the Democratic Republic of Congo. This study was a performance-based payment experiment conducted in the Democratic Republic of Congo, which is one of the poorest countries in the world and has an extremely high level of child and maternal mortality. The study found that providing performance-based subsidies resulted in lower direct payments to health facilities for patients, who received comparable or better services and quality of care than those provided at a control group of facilities that were not financed in this way. This study was conducted in DRC; the findings cannot be generalized to Kenya because the health systems differ.

Soeters, Peerenboom, Mushagalusa and Kimanuka (2011) focused on performance-based financing experiment to improved health care while the current study focus is on performance-based financing experiment on health workers motivation. Bhatnagar and George (2015) studied the motivating health workers up to a limit in Nigeria. While the current study focus is on performance-based financing experiment on health workers

motivation in Kenya. Elisabeth (2014) study focused on PBF to strengthen the health system in Benin while the current study focus is on PBF on health worker motivation.

2.3.4 Service Improvement Funds and Health Workers Motivation

Service improvement fund is a form of grant which consists of providing finances to support independent projects for systematic and continuous actions that lead to measurable improvement in health care services and the health status of individuals and targeted patient groups. Service improvement funds aim to provide comprehensive primary healthcare services to an underserved area or population. Alhassan (2013) researched the association between health worker motivation and healthcare quality efforts in Ghana. The study examined the indicators of health worker motivation and assessed associations with quality care and patient safety in Ghana. The study was a baseline survey of 324 health workers in 64 primary healthcare facilities in two regions. Overall, staff motivation was low, although workers in private facilities perceived better working conditions than workers in public facilities. Strong positive associations were found between staff satisfaction levels and working conditions and the clinic's effort towards quality improvement and patient safety. This study was conducted in Ghana; the findings cannot be generalized to Kenya because the health systems differ.

Lohmann, Muula, Houfort and De Allegri (2019) studied how performance-based financing affected health workers' intrinsic motivation in Malawi. The study investigated whether and how PBF affected intrinsic motivation, using a mixed-methods approach. Results suggested that PBF did not affect health workers' overall intrinsic motivation levels, with the intervention having had both positive and negative effects on psychological needs satisfaction. To maximize positive PBF effects on intrinsic motivation, the results underline the potential value of explicit strategies to mitigate the unintended negative impact of unavoidable design, implementation, and contextual challenges, for instance by building autonomy support activities into PBF designs. This study was conducted in Malawi; the findings cannot be generalized to Kenya because the health systems differ.

Kande (2014) did an evaluation on how health worker motivation and performance in RBF arrangements hinged on strong and adaptive health systems. The study sought to provide an understanding of why staff working under RBF arrangements in Zimbabwe reported being satisfied. A qualitative study was conducted amongst health workers and

managers working at health facilities. Findings revealed that insufficient preparedness of people and processes for this change constrained managers and workers performance. Results based financing arrangements introduce explicit and tacit changes, including but not limited to, incentive logics, in the system. This study was conducted in Zimbabwe; the findings cannot be generalized to Kenya because the health systems differ.

Ojaka, Olango and Jarvis (2014) studied the factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. This study investigated factors influencing motivation and retention of HCWs at primary health care facilities in three different settings in Kenya - the remote area of Turkana, the relatively accessible region of Machakos, and the disadvantaged informal urban settlement of Kibera in Nairobi. Data were collected using structured questionnaires and a focus group discussion guide. In terms of work environment, inadequate access to electricity, equipment, transport, housing, and the physical state of the health facility was cited as most critical, particularly in Turkana. The working environment was rated as better in private facilities. Adequate training, job security, salary, supervisor support, and manageable workload were identified as critical satisfaction factors. Family health care, salary, and terminal benefits were rated as important compensatory factors.

Alhassan (2013) focused on health worker motivation and healthcare quality efforts in Ghana. The current study focus is on service improvement funds on health workers motivation in Kenya. Lohmann, Muula, Houfort and De Allegri (2019) focused on performance-based financing effect health workers' intrinsic motivation in Malawi. The current study focus is on service improvement funds on health workers motivation in Kenya. Ojaka, Olango and Jarvis (2014) focused on factors affecting motivation and retention of primary health care workers. The current study focused on service improvement funds on health workers motivation in Kenya.

2.4 Research Gaps

From the reviewed studies, the findings were mixed. For instance, Wickramasinghe & Dabere (2012) found that the design features of performance-based financial incentives schemes explain 51 percent of the variance in work performance. Novianty and Evita, (2018) found that the financial incentives relationship had a positive effect on employee motivation. Bertone (2016) found that PBF contributes about 10 % of the total income of health workers. Salim and Ismael (2016) found that participation and performance

appraisal played an important role in determining employee job satisfaction and organizational commitment.

In addition, some of the studies were focused on different industries, for instance, Ochieng (2012) studied the relationship between performance-based incentive pay and employee motivation in Barclays bank of Kenya branches in Nairobi city. Novianty and Evita, (2018) researched financial incentives and the impact on employee motivation in manufacturing firms. The studies were also conducted in a different context, for instance, rural locations. Wickramasinghe & Dabere (2012) studied the effects of performance-based financial incentives on work performance in technical-level employees in the private sector in Sri Lanka. Ye (2016) did a study on health worker preferences for performance-based payment schemes in a rural health district in Burkina Faso. Bertone (2016) researched performance-based financing in the context of the complex remuneration of health workers in rural Sierra Leone.

Finally, Kenya's healthcare service delivery model was only recently decentralized, meaning that some of the experiences from more national systems may not apply equally. This study sought to fill the conceptual and contextual gap by establishing the effects of result-based financing on health workers motivation at primary health facilities, Makueni County, one of 47 devolved government governance units in Kenya.

2.5 Conceptual Framework

The conceptual framework is a diagrammatic representation of the relationship between dependent and independent variables. The independent variables of the study are performance-based incentives, performance-based payments, operational funds and service improvement funds while the dependent variable is health workers motivation.

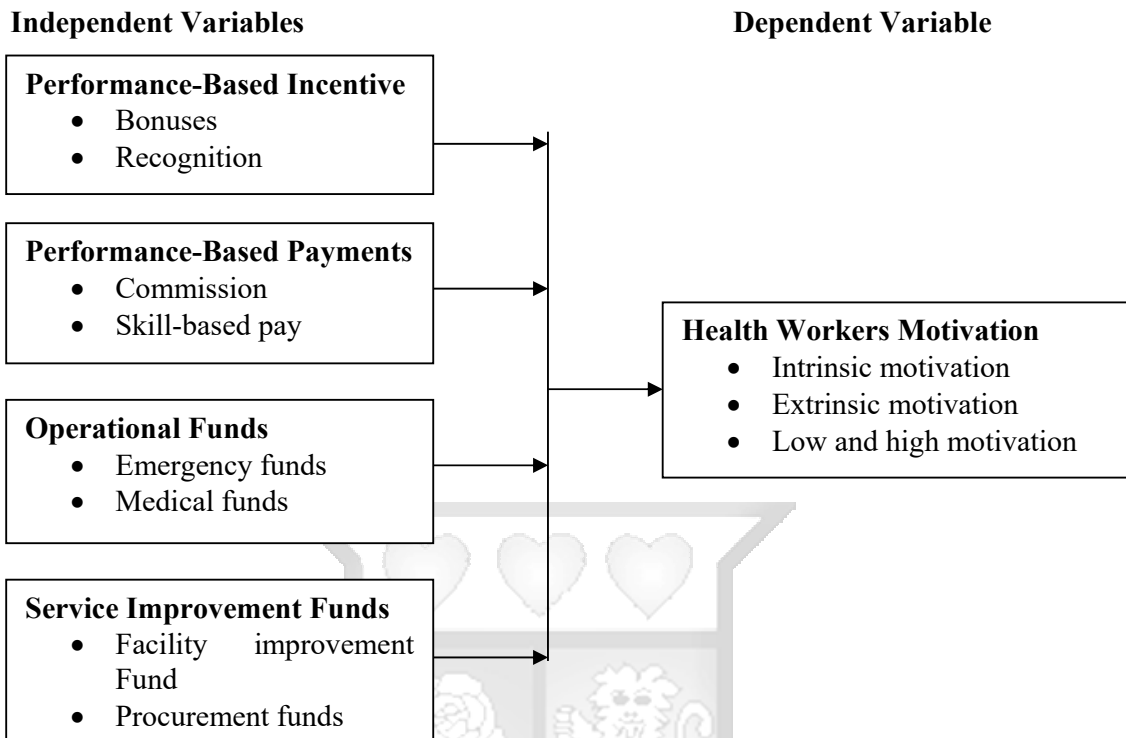
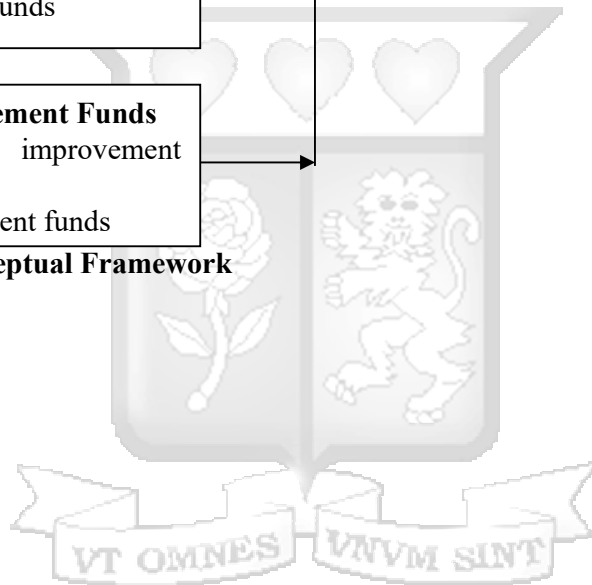


Figure 2.1: Conceptual Framework



2.6. Operationalization of Study Variables

This section is a table representation of the operationalization of variables. Operationalization refers to how variables are defined and measured as used in the study.

Table 2.1: Operationalization of study variables

Independent variables	Operational ability	Measurement	Supporting Literature
Performance-based incentive	Bonuses	Likert scale where; 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree	Ochieng (2012)
	Recognition		
Performance-based payments	Commission	Likert scale where; 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree	Salim and Ismael (2016)
	Skill-based pay		
Operational funds	Emergency funds	Likert scale where; 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree	Khim (2014)
	Medical funds		
Service improvement funds	Facility improvement	Likert scale where; 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree	Kande (2014)
	Fund Procurement funds		
Dependent variables			
Health workers motivation	Service Delivery	Likert scale where; 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree	Dieleman and Harnmeje (2016).
	Job Satisfaction		
	Retention		

2.7 Chapter Summary

The theories that explain the effects of result-based financing on health workers motivation have been reviewed. They include Self-Determination Theory and Herzberg's Two Factor. Empirical studies on performance-based incentives, performance-based payments, operational funds, service improvement funds and health workers motivation have been reviewed. The gaps that the study aimed to fill are identified. The conceptual frameworks showed the relationship between the study variables.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology, including the research design used, target population and sampling, and data collection and analysis.

3.2 Research Design

A descriptive research study was adopted in this study. A descriptive study is used to “describe” a situation, subject, behavior, or phenomenon. It is used to answer questions of who, what, when, where, and how associated with a particular research question or problem (Creswell, 2013). It attempts to gather quantifiable information that can be used to statistically analyze a target audience or a particular subject. Description study was used to observe and describe a research subject or problem without influencing or manipulating the variables in any way. Descriptive design was therefore suitable in this study because it helped in answering the research questions by describing, explaining and validating research findings. This design was also suitable for this study because it allows the use of quantitative methods of data collection.

3.3 Study Site

The study was conducted in Makueni which is of 47 Kenyan counties situated in the South-Eastern part of the country. The projected population for 2018 based on the 2009 census was 1,002,979 (488,378 males and 514,601 females). The population is served by a mix of public and private healthcare facilities totaling to 333 health facilities. Of the 333 facilities, approximately 70% are government-owned (Cyrus, 2018).

3.4 Target Population

This study was conducted in primary health facilities in Makueni County. According to the county report, there are 235 government primary health facilities in Makueni County (County Government of Makueni, 2020). The target population was health workers at the PHFs. There were roughly 1,247 health workers in Makueni in 2019 (Makueni County Report, 2019). This number was taken as the target population. The health workers were selected because they are the ones who can describe how they are motivated by PBF.

3.5 Sampling Technique and Sample Size

The study sample was drawn from 1,247 health workers at primary health facilities in Makueni. According to Mugenda (2013), a sample size of at least 10% of the population is appropriate for a study. Therefore, this study will use 25% of the target population. This is because this will be at least more than a quarter of the population.

$$= 1,247 * 25\%$$

$$= 312$$

The study sample size was 312 respondents. The simple random sampling method was adopted to select the study sample. This study used an online random number generator which assisted the researcher to randomly pick respondents. In a simple random sampling technique, every element has an equal chance of getting selected to be part of the sample. The simple random method was used because it's simple and lacks bias.

3.6 Data Collection Instruments

A survey questionnaire was the main data collection instrument. The questionnaire was developed in line with the study objectives. The questionnaire was structured into three main parts: part one - demographic information; part two - independent variables and the third part covered the dependent variable. The questionnaire was used because it allows the collection of large amounts of data. Using questionnaires is also quick and easy to collect results with online and mobile tools.

3.7 Data Collection Method

The questionnaires were administered by the researcher. Trained research assistants assisted in data collection. The questionnaires were emailed to the respondents due to the Covid 19. An introduction letter was obtained from the university. The study also sought permission from the management of the health facilities. The supervisors in the health facilities helped the researcher in identifying the target respondents. The respondents were approached and informed about the study objective. Those willing to participate in the study were given consent to sign. The researcher maintained a register of the questionnaires to ensure that the dispatched questionnaires are received after data collection. The researcher was available during data collection to clarify any issues that may arise. Data collection was for two weeks.

3.8 Pilot Test

A pilot test was conducted to determine the validity and reliability of the research instruments. It involves conducting an initial test of data collection instruments and processes to spot and eradicate errors. The pilot test was done in the neighboring Machakos County. The questionnaire was administered to thirty-one respondents who were not part of the actual study.

3.8.1 Validity of the Instrument

Validity determines whether the research truly measures that which it is intended to measure. There are different types of validity construct, criterion validities and content. Construct validity indicates the extent to which a measurement method accurately represents a construct and produces an observation, distinct from that which is produced by a measure of another construct. Criterion-related validity indicates the extent to which the instrument's scores correlate with an external criterion either at present or in the future. Content validity which was utilized in this study is a measure of how much information gathered utilizing a specific instrument answered the research questions. In the validation process of this study, copies of the questionnaire and copies of the research questions were given to experts in this field of research and the supervisors. These experts went through the research questions and the questionnaire carefully to ascertain the appropriateness and adequacy of the instrument. This helped in detecting questions that needed editing and those with ambiguities. The researcher made corrections in the questionnaire ready for data collection.

3.8.2 Reliability of the Instrument

Instrument reliability is the extent to which an instrument consistently measures what it is supposed to. Reliability is ensured by including numerous comparative items in a measure. Common measures of reliability include internal consistency, test-retest, and inter-rater reliabilities. Test-retest measures the correlation between scores from one administration of an instrument to another, usually within an interval of 2 to 3 weeks. Inter-rater reliability checks the degree of agreement among raters that is those completing items on an instrument. Internal consistency reliability looks at the consistency of the score of individual items on an instrument, with the scores of a set of items, or subscale, which typically consists of several items to measure a single construct.

Cronbach's alpha is one of the most common methods for checking internal consistency reliability.

Cronbach's Alpha which measures the internal consistency helped in establishing if a certain item within a scale measures the same construct. Cronbach alpha is a correlation coefficient between two sets of data. According to Cooper and Schindler (2008) reliability coefficient refers to the scores obtained on a test. A reliability coefficient of zero indicates that the test scores are unreliable. On the other hand, the higher the reliability of the coefficient, the more reliable or accurate the test scores. A reliability coefficient is a numerical value that can range from zero to one. For research purposes, tests with a reliability score of 0.7 and above were accepted as reliable.

3.9 Data Analysis and Presentation

Quantitative data was collected and analyzed by the use of descriptive statistics using SPSS (version, 23) and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through the use of SPSS (version 23) to communicate research findings. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open-ended questions.

The study conducted a correlation analysis to establish the strength of the relationship between the independent and the dependent variable. Correlation analysis helped to detect any chance of multicollinearity. Multiple regressions were done to establish the effects of result-based financing on health workers motivation at primary health facilities, Makueni County. Data were presented using tables, and pie charts to make them reader-friendly. In addition, a multiple regression was used to measure the quantitative data and was analyzed using SPSS too. The regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Were

Y is the dependent variable (Health Worker Motivation), β_0 is the regression constant, β_1 , β_2 , β_3 and β_4 are the coefficients of independent variables, X_1 is performance-based incentives, X_2 is performance-based payment, X_3 is operation funds and X_4 is service improvement funds. ANOVA was used to establish the level of significance of the established model. Quantitative data were presented through statistical tools such as frequency distribution tables, pie charts, bar graphs and in prose form for easy understanding. The study was interpreted the research findings from the evidence presented by the data collected. Conclusions were based on the findings.

3.10 Diagnostic Tests

3.10.1 Linearity Test

Linear regression needs the relationship between the independent and dependent variables to be linear. It is also important to check for outliers since linear regression is sensitive to outlier effects (Creswell & Plano-Clark, 2006). The linearity assumption can best be tested with scatter plots. A scatter plot is drawn using residuals and y values. Y values are taken on the vertical y-axis, and standardized residuals are then plotted on the horizontal x-axis. If the scatter plot follows a linear pattern (not a curvilinear pattern) that shows that the linearity assumption is met.

Analysis of Variance (ANOVA) test was also used to test for the linearity if

$F = \frac{R^2(k-1)}{(1-R^2)/(n-k)}$ is significant, then it is concluded that the linearity assumption holds.

3.10.2 Normality Test

One of the assumptions of a classical linear regression model is that the error term must be normally distributed with zero mean and a constant variance denoted as $\mu (0, \sigma^2)$. The error term is used to capture all other factors which affect dependent variable but are not considered in the model. However, it is thought that the omitted factors have a small impact and at best random. For OLS to be applied, the error term must be normal (Gujarati, 2004). To confirm whether the error term is normal or not, the study employed the Shapiro- Wilk test.

3.10.3 Autocorrelation

Autocorrelation refers to the correlation of a time series with its own past and future values. Autocorrelation is also sometimes called “lagged correlation” or “serial correlation”, which refers to the correlation between members of a series of numbers arranged in time. This study used the Wooldridge test for serial correlation to test for the presence of autocorrelation in the linear panel data. Serial autocorrelation is a common problem experienced in panel data analysis and has to be accounted for to achieve the correct model specification. According to Wooldridge (2002), failure to identify and account for serial correlation in the idiosyncratic error term in a panel model would result in biased standard errors and inefficient parameter estimates. The null hypothesis of this test was that the data has no serial autocorrelation. If serial autocorrelation is detected in the study data, then the feasible generalized least square (FGLS) estimation procedure was adopted.

3.10.4 Multicollinearity

Multicollinearity is common in time-series data since variables may be following a particular trend. Multicollinearity was tested in the study using a correlation matrix whereby the cut-off point for severe multicollinearity was 0.8 (Cooper & Schindler, 2008). Failure to account for perfect multicollinearity result into indeterminate regression coefficients and infinite standard errors while the existence of imperfect Multicollinearity results in large standard errors. Large standard errors affect the precision and accuracy of rejection or failure to reject the null hypothesis. During estimation, the issue was not lack of multicollinearity but rather its severity. A correlation coefficient greater than 0.8, thus indicated the presence of severe multicollinearity.

3.11 Ethical Considerations

Ethical clearance was also obtained from Strathmore University’s Internal Review Board before commencement of data collection. A research permit was also obtained from NACOSTI. The respondents were allowed to give information voluntarily without being coerced. The researcher guaranteed the members that the data was treated with the most extreme classification. This empowered them to give legit and consistent data. Therefore,

the name of the respondents did not show up anyplace on the information instrument except a code that was seen just by the analyst.



CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter covers data analysis, presentation and interpretation obtained from data collection. This chapter also presents background information of the respondents and findings of the analysis based on study objectives. To discuss the study findings inferential statistics and descriptive statistics were applied.

4.2 Response Rate

The study sample size was 312 health workers, who were all issued with questionnaires from which 282 filled in and returned the questionnaires making a response rate of 88%.

Table 4.1: Response rate

Category	Frequency	Percent
Response	282	88.0
Non-Response	30	12.0
Total	312	100.0

4.3 Reliability Analysis

The study used the Cronbach Alpha coefficient to determine the reliability of the questionnaire. Cooper and Schindler (2008) established the Alpha value threshold at 0.7, thus forming a benchmark for the study. From the findings in Table 4.2, performance-based incentives had an alpha value of 0.781, performance-based payments had an alpha value of 0.797, operational funds had an alpha value of 0.763 and service improvement funds had an alpha value of 0.790. This shows that all the variables are reliable.

Table 4.2: Reliability Analysis

Scale	Cronbach's Alpha	Number of Items
Performance-based incentive	0.781	7
Performance-based payments	0.797	7
Operational funds	0.763	7
Service improvement funds	0.790	7

4.4 General Information

4.4.1 Gender of Respondents

The respondents were asked to indicate their gender. The results were as presented in Figure 4.1.

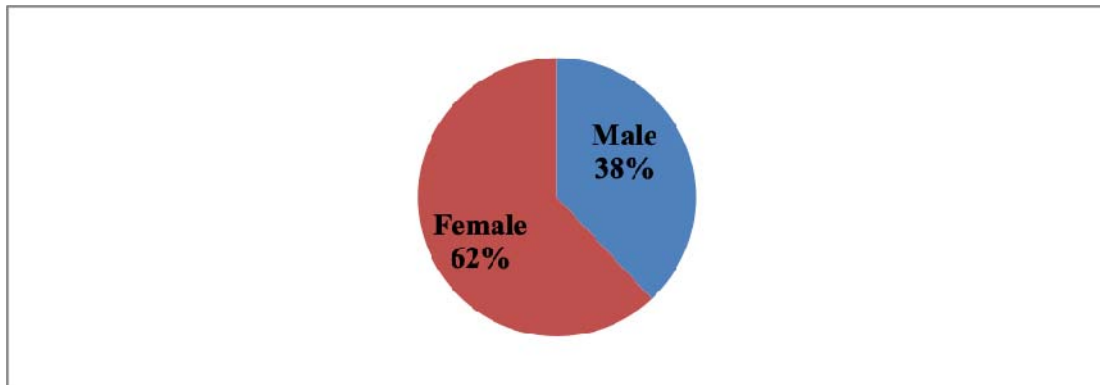


Figure 4.1: Gender of Respondents

From the findings, 62% of the respondents were female while 38% were male.

4.4.2 Age of Respondents

The study sought to determine the age of respondents the findings were as shown in Figure 4.2.

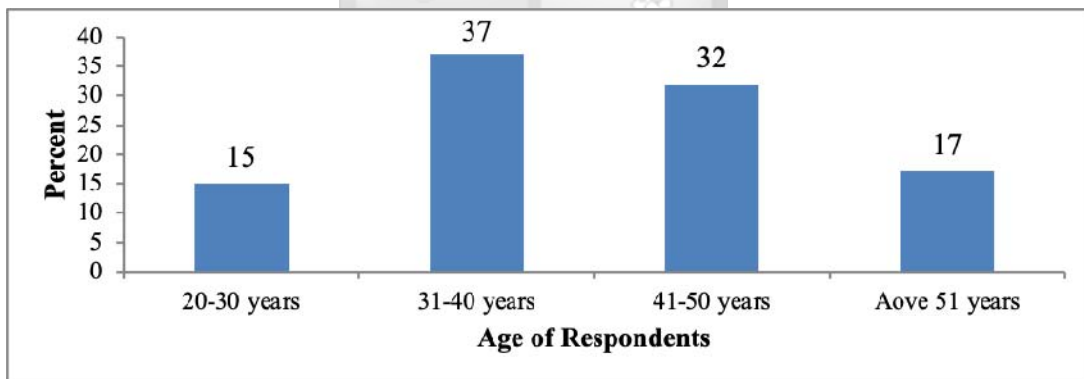


Figure 4.2: Age of Respondents

From the findings, 37% of the respondents were aged between 31-40years, 32% were aged between 41-50 years, 17% were above 51 years and 15% were aged between 2-30 years.

4.4.3 Respondents Level of Education

The study sought to determine the respondent's level of education. The results were as shown in Figure 4.3.

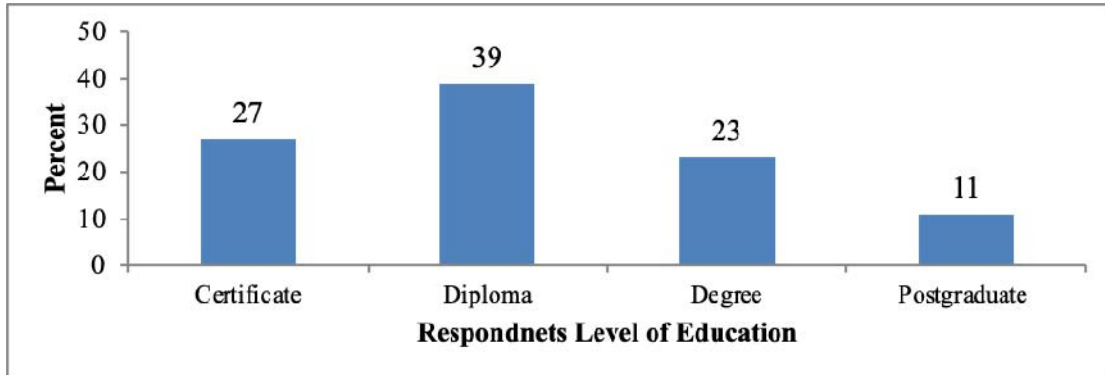


Figure 4.3: Respondents Level of Education

From the findings, 39% of the respondent's level of education was a diploma, 27% had a certificate, 23% had a degree and 11% level of education was postgraduate.

4.4.4 Respondents Length of Service

Respondents were asked to indicate the length of time they have been working in the health facility. The results were as shown in Figure 4.4.

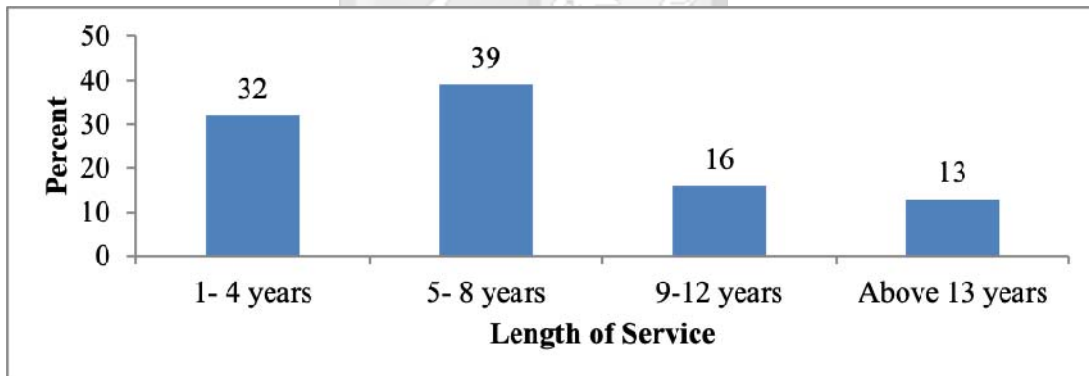


Figure 4.4: Respondents Length of Service

From the findings, 39% of the respondents indicated that they had served in the organization for a period between 5- 8 years, 32% had served for a period between 1-4 years, 16% had served for a period between 9-12 years and 13% had served for above 13 years.

4.4.5 Respondents Designation in the Organization

The respondents were requested to indicate their designation at the health facility. The results were as presented in Figure 4.5.

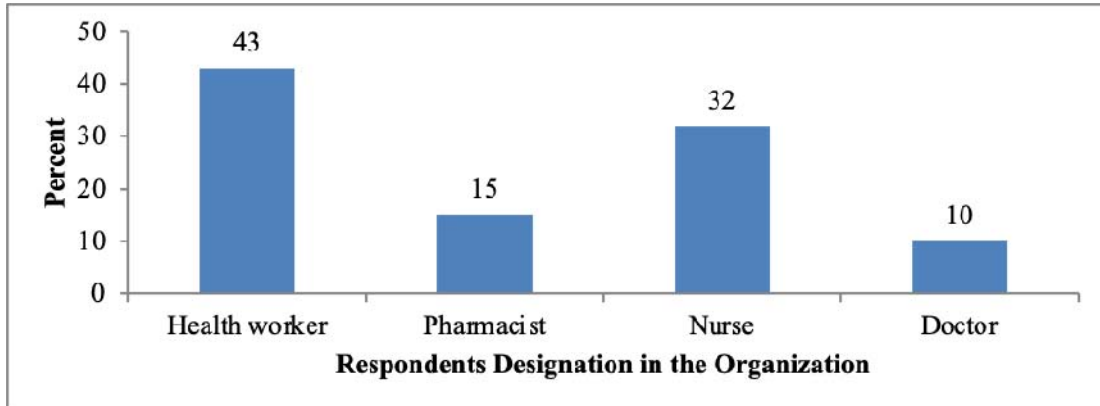


Figure 4.5: Respondents Designation in the Organization

From the findings, 43% of the respondents indicated that they were health workers, 32% were nurses, 15% were pharmacists and 10% were doctors. Therefore, most of the respondents and other various categories like pharmacists, nurses and medical doctors were well represented.

4.4.6 Type of Health Facility

The respondents were asked to indicate the type of health facility where they are working. Results were as shown in Figure 4.6

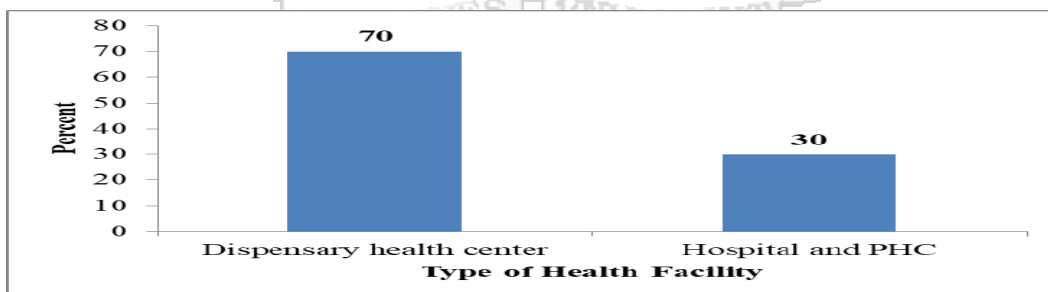


Figure 4.6: Type of Health Facility

From the findings, 70% of the respondents indicated the type of facility was health centers and 30% were hospitals.

4.5 Descriptive Statistics

Respondents were asked to indicate the level to which they agreed with some statements on the variables that were under study. Using the scale where 1- Strongly disagree, 2-

Disagree, 3- Neutral, 4- Agree, and 5- Strongly agree. The results are presented in subsections hereunder.

4.5.1 Performance-Based Incentive

Respondents were asked to indicate their level of agreement on the following statements about the effects of performance-based incentives on health workers motivation at primary health facilities, Makueni County. The findings are presented in Table 4.3

Table 4.3: Effects of Performance-Based Incentive on Health Workers Motivation

Statements	1	2	3	4	5	Mean	Std. Dev
The organization has an established system to reward employees based on their performance	15 (5%)	23 (8%)	35 (12%)	153 (54%)	56 (20%)	3.752	0.873
Rewarding employees based on their performance has helped in improving service delivery	17 (6%)	20 (7%)	33 (12%)	167 (59%)	45 (16%)	3.720	0.952
Health workers are provided with insurance premiums to ensure they feel safe while performing their duties	9	16	26	199	32	3.812	1.170
	(3%)	6%	9%	71%	11%		
Health workers are provided with bonuses to motivate them to work hard	18	25	30	170	39	3.663	0.968
	6%	9%	11%	60%	14%		
Rewarding employees based on their performance helps to stimulate professional commitment	11	15	24	184	48	3.862	1.076
	4%	5%	9%	65%	17%		
Health workers get professional and public recognition through special awards	14	24	36	156	52	3.738	0.886
	5%	9%	13%	55%	18%		
Health workers get reward for superior performance	10	19	27	185	41	3.809	1.074
	4%	7%	10%	66%	15%		

The respondents agreed that rewarding employees based on their performance helps to stimulate professional commitment (Mean=3.862, Std. Dev=1.076); health workers get a reward for superior performance (Mean=3.809, Std. Dev=1.074), health workers were provided with insurance premiums to ensure they felt safe while performing their duties (Mean=3.812, Std. Dev=1.170), health workers got professional and public recognition

through special awards (Mean=3.738, Std. Dev=0.886), the organization had an established system to reward employees based on performance (Mean=3.752, Std. Dev=0.873), rewarding employees based on performance had improved service delivery (Mean=3.720, Std. Dev=0.952) and health workers were provided with bonuses to motivate them to work harder (Mean=3.663, Std. Dev=0.968).

4.5.2 Performance-Based Payments

Respondents were asked to indicate their level of agreement with selected statements (Table 4.4) about the effects of performance-based payments on motivation at primary health facilities. Findings are shown in Table 4.4.

Table 4.4: Effects of Performance-Based Payments on Health Workers Motivation

Statements	1	2	3	4	5	Mean	Std. Dev
Paying employees based on their performance ensures that the contribution an employee makes is recognized with a tangible reward	8	16	21	192	45	3.887	1.129
	3%	6%	7%	68%	16%		
Paying employees based on their performance provides a direct incentive for employees to achieve defined work targets	11	15	23	183	50	3.872	1.072
	4%	5%	8%	65%	18%		
Paying employees based on their performance helps in rewarding high performance which assists in retaining staff	7	15	19	201	40	3.894	1.189
	2%	5%	7%	71%	14%		
Paying employees based on their performance is an effective way of dealing with poor performance	9	13	28	165	67	3.950	0.983
	3%	5%	10%	59%	24%		
Paying employees based on their performance helps to reward the best performers	6	17	25	159	75	3.993	0.968
	2%	6%	9%	56%	27%		
Employees are able to focus on what they need to do to improve if their performance is directly linked to pay	8	14	22	177	61	3.954	1.050
	3%	5%	8%	63%	22%		
Paying employees based on their performance helps to improve individual productivity and performance	10	18	26	191	37	3.805	1.115
	4%	6%	9%	68%	13%		

According to the table, respondents agreed that paying employees based on performance helped to reward the best performers (Mean=3.993, Std. Dev=0.968), employees focused on what they needed to do to improve performance if incentives were provided (Mean=3.954, Std. Dev=1.050), paying employees based on performance was an effective way of dealing with poor performance (Mean=3.950, Std. Dev=0.983), paying employees based on performance rewarding high performance and helped in staff retention (Mean=3.894, Std. Dev=1.189), paying employees based on performance ensured that their contributions were recognized (Mean=3.887, Std. Dev=1.129), paying employees based on performance provided a direct incentive to achieve targets (Mean=3.872, Std. Dev=1.072) and paying employees based on performance helped to improve individual productivity and performance (Mean=3.805, Std. Dev=1.115).

4.5.3 Operational Funds

Respondents were asked to indicate the level of agreement with statements about the effects of operational funds on health worker motivation at primary health facilities. Results are presented in Table 4.5.

Table 4.5: Effects of Operational Funds on Health Workers Motivation

Statements	1	2	3	4	5	Mean	Std. Dev
The organization provides funds for operations at the right time	13 5%	19 7%	32 11%	170 60%	48 17%	3.784	0.976
The right amount of funds for operations are provided to ensure smooth operations	16 6%	22 8%	35 12%	152 54%	57 20%	3.752	0.869
Funds for operations facilitates the achievement of organizational goals	9 3%	16 6%	29 10%	196 70%	32 3%	3.801	1.148
Availability of funds for operations gives health workers piece of mind to undertake their tasks	10 4%	18 6%	26 9%	199 71%	29 4%	3.777	1.170
Availability of funds for operations helps to sustain their day-to-day operations	12 4%	21 7%	30 11%	178 63%	41 4%	3.762	1.024
Funds for operations strengthens the dialogue between purchasers and providers as they, together with other stakeholders	8 3%	16 6%	25 9%	202 72%	31 3%	3.823	1.191
Funds for operations generates better data and information for performance monitoring	11 4%	19 7%	27 10%	182 65%	43 4%	3.805	1.055

The respondents agreed that operations funds strengthened the relationship between health workers and their leaders as shown by (Mean=3.823, Std. Dev=1.191), the funds generated better data and information for performance monitoring (Mean=3.805, Std. Dev=1.055), they (funds) facilitated the achievement of organizational goals (Mean=3.801, Std. Dev=1.148), operations funds were provided at the right time (Mean=3.784, Std. Dev=0.976), the funds gave health workers a piece of mind to undertake tasks (Mean=3.777, Std. Dev=1.170), such funds helped sustain their day-to-day operations (Mean=3.762, Std. Dev=1.024) and the right amount of funds for operations allowed smooth operations (Mean=3.752, Std. Dev=0.869).

4.5.4 Service Improvement Funds

Respondents were asked to indicate their level of agreement with statements about the effect of service improvement funds on health worker motivation. Findings are presented in Table 4.6.

Table 4.6: Effects of Service Improvement funds On Health Workers Motivation

Statements	1	2	3	4	5	Mean	Std. Dev
The health facility provides fund for improving services	14	24	36	168	40	3.695	0.953
	5%	9%	13%	6%	14%		
Availability of funds to improve services helps to adopt change due to the changes in health needs	11	28	34	174	35	3.688	0.991
	4%	10%	12%	62%	12%		
Availability of funds to improve services enables the health workers to serve patients better	8	19	26	194	35	3.812	1.134
	3%	7%	9%	69%	12%		
Availability of funds to improve services helps the health workers to work in a conducive work environment	10	21	28	181	42	3.794	1.046
	4%	7%	10%	64%	15%		
Availability of funds to improve services helps to cater to new health needs	12	18	30	196	26	3.730	1.149
	4%	6%	11%	70%	9%		
Availability of funds to improve services helps to improve the health facilities	12	24	29	186	31	3.709	1.077
	4%	9%	10%	66%	11%		
Availability of funds to improve services helps to acquire new equipment's for the health facility to enhance service delivery	15	20	26	161	60	3.819	0.939
	5%	7%	9%	57%	21%		

The respondents agreed that the availability of service improvement funds helped facilities acquire new equipment for enhancing service delivery (Mean=3.819, Std.

Dev=0.939), the funds enabled health workers to serve patients better (Mean=3.812, Std. Dev=1.134), they helped them work in a more conducive environment (Mean=3.794, Std. Dev=1.046), they catered for new needs (Mean=3.730, Std. Dev=1.149) and they improved the health facilities (Mean=3.709, Std. Dev=1.077). The health workers noted that the funds were provided by the health facility (Mean=3.695, Std. Dev=0.953) and that they helped the facilities adapt to changes as and when needed (Mean=3.688, Std. Dev=0.991).

4.5.5 Health Workers Motivation

Respondents were asked to indicate their level of agreement on the following statements about health workers motivation at primary health facilities, Makueni County. Findings were as presented in Table 4.7.

Table 4.7: Health Workers Motivation

Statements	1	2	3	4	5	Mean	Std. Dev
The health workers are able to provide quality services	8	12	19	175	68	4.004	1.056
	3%	4%	7%	62%	24%		
Health workers motivation improves their job satisfaction	7	17	23	159	76	3.993	0.973
	2%	6%	8%	56%	27%		
Health workers motivation improves their willingness to work in the organization for long	10	14	21	176	61	3.936	1.045
	4%	5%	7%	62%	22%		
Keeping health workers motivated helps the entire health system work smoothly	9	16	18	151	88	4.039	0.976
	3%	6%	6%	54%	31%		
Health workers motivation improves their willingness to exert and maintain an effort towards organizational goals	8	15	20	148	91	4.060	0.971
	3%	5%	7%	52%	32%		

From the findings, the respondents agreed that health workers motivation improved their willingness to exert and maintain an effort towards organizational goals (Mean=4.060, Std. Dev=1.045), keeping them motivated helped the health system work smoothly (Mean=4.039, Std. Dev=0.976) and they were better able to provide good quality services (Mean=4.004, Std. Dev=1.056). Health worker motivation improved job satisfaction

(Mean=3.993, Std. Dev=0.973) and willingness to continue working in the organization (Mean=3.936, Std. Dev=0.971).

4.6 Diagnostic Tests

The diagnostic tests that were performed include normality test, autocorrelation and multicollinearity.

4.6.1 Normality Test

In this study, the normal distribution of data was tested by use of the Shapiro Wilk Test. The findings were as shown in Table 4.8.

Table 4.8: Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Performance-based incentive	0.787	282	0.086
Performance-based payments	0.734	282	0.051
Operational funds	0.824	282	0.097
Service improvements funds	0.813	282	0.095

a. Lilliefors Significance Correction

The results of the analysis show that performance-based incentives had a p-value of $0.086 < 0.05$, performance-based payments had a p-value of 0.051 , operational funds had a p-value of 0.097 and service improvements funds had a p-value of 0.095 . This shows that all the variables were normally distributed and hence the data met the regression analysis assumption of normality of data.

4.6.3 Autocorrelation

Serial autocorrelation was tested using the Breusch Godfrey test and the findings were as presented in Table 4.9.

Table 4.9: Breusch-Godfrey Langrage Multiplier Autocorrelation test

Lags (p)	Chi ²	Df	Prob > chi ²
1	10.014	1	0.0016

Durbin-Watson d test was used to check for autocorrelation where the value of d lies between 0 and 4. If the value is 2 then we conclude that no autocorrelation, when it's 4 or close to 4 then there is negative autocorrelation if it's close to 1 and 0 then there is positive autocorrelation. From the findings, the p-value (0.0016), was less than the significance level (0.05), and hence we accepted the null hypothesis that there was no serial correlation among the variables 4.6.4 Multicollinearity

The study also carried out a multicollinearity test; the results were as shown in Table 4.10.

Table 4.10: Summary of Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance	VIF
Performance-based incentive	0.842	2.287
Performance-based payments	0.768	1.324
Operational funds	0.643	1.325
Service improvements funds	0.775	3.411

The variance inflation factor (VIF) was checked in all the analyses which is not a cause of concern. According to Sekaran and Bougie (2009), a VIF greater than 10 is a cause of concern as that would mean the presence of multicollinearity among independent variables. The Variance inflation factor (VIF) ranged from 1 to 4 and hence was not a cause of concern since it was greater than the cut-off of 0.1. Therefore, there was no multicollinearity among the independent variables in the study.

4.7 Inferential Statistics

The relationship between study variables was determined by computing inferential statistics. This study computed correlation and multiple regression analysis.

4.7.1 Correlation Analysis

The strength and direction of the relationship between two variables were determined by computing correlation analysis. The results were as presented in Table 4.11.

Table 4.11: Correlational Matrix

Variable		Motivation of healthcare workers'	Performance -based incentive	Performance -based payments	Operational funds	Service improvement funds
Motivation of healthcare workers'	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	282				
Performance-based incentive	Pearson Correlation	.786**	1			
	Sig. (2-tailed)	.000				
	N	282	282			
Performance-based payments	Pearson Correlation	.784**	.544**	1		
	Sig. (2-tailed)	.000	.000			
	N	282	282	282		
Operational funds	Pearson Correlation	.813**	.468	.369	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	282	282	282		
Service improvement funds	Pearson Correlation	.808**	.364	.284	.264	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	282	282	282	282	282
**. Correlation is significant at the 0.01 level (2-tailed).						

From the findings, performance-based incentive had a strong positive relationship with the motivation of healthcare workers' ($\beta=0.786$, $p=0.000$); performance-based payments and motivation of healthcare workers had a strong positive relationship ($\beta=0.784$, $p=0.000$); operational funds and motivation of healthcare workers had a strong positive relationship ($\beta=0.813$, $p=0.000$); service improvements funds had a strong positive correlation with the motivation of healthcare workers' ($\beta=0.808$, $p=0.000$). The relationships were considered significant since the p-value (0.000) was less than the selected level of significance (0.05).

4.7.2 Multiple Regression Analysis

4.7.2.1 Model Summary

A model summary was used to analyze the variation of the dependent variable due to the changes of independent variables. The study analyzed the variations of motivation due to

the changes of performance-based incentives, performance-based payments, operational funds and service improvements funds.

Table 4.12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.881	0.776	0.764	0.1172

From the findings in Table 4.12, R squared was 0.776 implying that there was 77.6% variation of health workers' motivation due to the changes of performance-based incentive, performance-based payments, operational funds and service improvements funds. The remaining 22.4% imply that other factors affect health workers' motivation which was not discussed in the study. R was the correlation coefficient that showed the relationship between the study variables. From the findings, the study found out that there was a strong positive relationship between the study variables as shown by 0.883.

4.7.2.2 Analysis of Variance

The analysis of variance ANOVA was used to determine whether the data used in the study was significant. Findings were as shown in Table 4.13.

Table 4.13: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.093	4	11.023	81.034	.001 ^b
	Residual	37.681	277	0.136		
	Total	81.774	281			

From the ANOVA statistics, the processed data (population parameters) had a significance level of 0.001. This showed that the data was ideal for concluding the population's parameter as the value of significance (p-value) was less than 5%. The F calculated was greater than F critical (81.034 > 2.404). This showed that performance-based incentives, performance-based payments, operational funds and service improvements funds significantly influenced the health workers' motivation.

4.7.2.3 Coefficients

The regression equation was

$$Y = 1.216 + 0.434X_1 + 0.461X_2 + 0.516X_3 + 0.511X_4$$

The equation revealed that holding performance-based incentive, performance-based payments, operational funds and service improvements funds constant, the variables would significantly influence health workers' motivation as shown by constant =1.216 as shown in Table 4.14.

Table 4.14: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.216	0.187		6.503	0.000
Performance-based incentive	0.434	0.159	0.391	2.730	0.005
Performance-based payments	0.461	0.140	0.408	3.293	0.003
Operational funds	0.516	0.125	0.486	4.128	0.001
Service improvements funds	0.511	0.132	0.474	3.871	0.002

The performance-based incentive was statistically significant to health workers' motivation as shown by ($\beta = 0.434$, $P = 0.005$). This suggests that at 95% confidence level, performance-based incentives had a significant positive relationship with health workers' motivation. This implies that a unit increase in performance-based incentive would result in to increase in wealth creation of health workers' motivation by 0.434 units.

Further, performance-based payments were statistically significant to health workers' motivation as shown by ($\beta = 0.461$, $P = 0.003$). This suggests that at 95% confidence level, performance-based payments had a significant positive relationship with health workers' motivation. This implies that a unit increase in performance-based payments would result in to increase in wealth creation of health workers' motivation by 0.461 units.

Operational funds were statistically significant to health workers' motivation as shown by ($\beta = 0.516$, $P = 0.001$). This suggests that at 95% confidence level, operational funds had a significant positive relationship with health workers' motivation. This implies that a

unit increase in operational funds would result in to increase in wealth creation of health workers' motivation by 0.516 units.

Service improvements funds were statistically significant to health workers' motivation as shown by ($\beta = 0.511$, $P = 0.002$). This suggests that at 95% confidence level, service improvements funds had a significant positive relationship with health workers' motivation. This implies that a unit increase in service improvements funds would result in to increase in wealth creation of health workers' motivation by 0.511 units.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary, conclusion and recommendations based on the study objectives. The study objective was to establish the effect of result-based financing on the motivation of healthcare workers at primary health facilities in Makueni County. Specifically, the study sought to determine the effects of performance-based incentives, performance-based payments, operational funds and service improvement funds on health workers' motivation at primary health facilities, Makueni County.

5.2 Summary of Findings

5.2.1 Performance-Based Incentive and Health Workers' Motivation

The study established that performance-based incentives had a strong positive relationship with healthcare workers' motivation ($\beta=0.786$, $p=0.000$). Also, performance-based incentive was statistically significant to health workers' motivation ($\beta = 0.434$, $P = 0.005$). The study also revealed that rewarding employees based on their performance helps to stimulate professional commitment (Mean=3.862, Std. Dev=1.076), health workers get a reward for superior performance (Mean=3.809, Std. Dev=1.074), health workers are provided with insurance premiums to ensure they feel safe while performing their duties (Mean=3.812, Std. Dev=1.170), health workers get professional and public recognition through special awards (Mean=3.738, Std. Dev=0.886), the organization has an established system to reward employees based on their performance (Mean=3.752, Std. Dev=0.873), rewarding employees based on their performance has helped in improving service delivery and health workers are provided with bonuses to motivate them to work hard.

The finding concurs with those of Wickramasinghe & Dabere (2012) who found that six incentive scheme factors, including the goals of incentive scheme, employee participation in setting goals, incentive scheme type, and payout frequency have a significant positive impact on work performance. Novianty and Evita, (2018) found that the financial incentives relationship had a positive effect on employee motivation. Hur (2015) indicated that employees who receive performance incentives perceive their work ties as

highly instrumental in achieving their goals. Ochieng (2012) revealed that pay influences employee motivation to a great extent and the benefits were related to performance.

According to self-determination individuals are concerned with motivation. The theory also notes that individuals motivation can be intrinsic or extrinsic. The Herzberg two factor theory also supports this, motivation can be intrinsic or extrinsic. Therefore, since the performance-based incentive is a form of extrinsic motivation, it would impact on health workers motivation.

5.2.2 Performance-Based Payments and Health Workers' Motivation

The study revealed that performance-based payments and motivation of healthcare workers had a strong positive relationship ($\beta=0.784$, $p=0.000$). It was also established that paying employees based on their performance helps to reward the best performers (Mean=3.993, Std. Dev=0.968), employees can focus on what they need to do to improve if their performance is directly linked to pay paying employees based on their performance is an effective way of dealing with poor performance (Mean=3.950, Std. Dev=0.983), paying employees based on their performance helps in rewarding high performance which assists in retaining staff, paying employees based on their performance ensures that the contribution an employee makes is recognized with a tangible reward, paying employees based on their performance provides a direct incentive for employees to achieve defined work targets and paying employees based on their performance helps to improve individual productivity and performance (Mean=3.805, Std. Dev=1.115).

The findings concur with Ye (2016) who indicated that most health workers express a preference for financial incentives and team-based incentives. Salim and Ismael (2016) found that participation and performance appraisal played an important role in determining employee job satisfaction and organizational commitment. Khim (2014) found that income and the perception of a fair distribution of incentives were both strongly associated with higher job motivation scores. Mayumana (2017) found that payment for performance had positive effects on internal accountability, with increased timeliness of supervision and the provision of feedback during supervision, but no effect on supervision intensity.

According to the self-determination theory, employees may be motivated by monetary rewards which is an extrinsic reward. Also, Herzberg noted that employees may be motivated by a factor like a salary. This implies that performance-based payments would influence the motivation of health workers.

5.2.3 Operational Funds and Health Workers' Motivation

The study found that operational funds and motivation of healthcare workers had a strong positive relationship ($\beta=0.813$, $p=0.000$). The study also found that funds for operations strengthen the dialogue between purchasers and providers (Mean=3.805, Std. Dev=1.055), together with other stakeholders, funds for operations generate better data and information for performance monitoring, funds for operations facilitate the achievement of organizational goals (Mean=3.801, Std. Dev=1.148), the organization provides funds for operations at the right time (Mean=3.784, Std. Dev=0.976), availability of funds for operations gives health workers piece of mind to undertake their tasks (Mean=3.777, Std. Dev=1.170), availability of funds for operations helps to sustain their day-to-day operations (Mean=3.762, Std. Dev=1.024) and the right amount of funds for operations are provided to ensure smooth operations (Mean=3.752, Std. Dev=0.869).

The findings concur with those of Elisabeth (2014) who found that PBF has contributed to strengthening various aspects of the health system and led to modest progress in the utilization of health services, but noticeable improvements in healthcare quality. Khim (2014) found that income and the perception of a fair distribution of incentives were both strongly associated with higher job motivation scores.

The self-determination theory explains that support plays a being role in people's well-being and personal growth. Therefore, by ensuring the availability of operational funds, employees would be able to conduct their tasks effectively. From Herzberg two factor theory, work itself and company policies are a form of motivation for employees, therefore ensuring operational funds availability would help employees to work much better. Since operational funds are a form of incentive for health workers, it would promote both intrinsic and extrinsic motivation to health workers.

5.2.4 Service Improvement Funds and Health Workers' Motivation

The study established that service improvements funds had a strong positive correlation with motivation of healthcare workers ($\beta=0.808$, $p=0.000$). Further, the availability of funds to improve services helps to acquire new equipment's for the health facility to enhance service delivery (Mean=3.819, Std. Dev=0.939), availability of funds to improve services enables the health workers to serve patients better (Mean=3.812, Std. Dev=1.134), availability of funds to improve services helps the health workers to work in a conducive work environment (Mean=3.794, Std. Dev=1.046), availability of funds to improve services helps to cater for new health needs (Mean=3.730, Std. Dev=1.149), availability of funds to improve services helps to improve the health facilities (Mean=3.709, Std. Dev=1.077), the health facility provides fund for improving services (Mean=3.695, Std. Dev=0.953) and availability of funds to improve services helps to adopt change due to the changes in health (Mean=3.688, Std. Dev=0.991).

The findings concur with those of Bhatnagar and George (2016) found that health workers receiving PBF payments reported being 'awakened' by performance bonuses and improved working environments including routine supportive supervision and availability of essential drugs. Lohmann, Muula, Houlfort and De Allegri (2019) suggested that PBF did not affect health workers' overall intrinsic motivation levels, with the intervention having had both positive and negative effects on psychological needs satisfaction.

The self-determination theory explains that support plays a being role in employee well-being. Therefore, ensuring the availability of service improvement funds would improve employees' service delivery since they would be able to serve their patients better. From Herzberg two factor theory, company policies are a form of motivation for employees, therefore ensuring the availability of service improvement funds would help employees to perform their tasks better. Since service improvement funds are a form of incentive for health workers, it would promote both intrinsic and extrinsic motivation to health workers.

5.3 Conclusions

The study found a strong positive correlation between performance-based incentives and healthcare workers' motivation. Also, performance-based incentives had a significant

positive relationship with health workers' motivation. Based on the findings, the study concludes that increasing performance-based incentives by a unit would lead to an increase in healthcare workers' motivation at primary health facilities in Makueni County.

The study revealed that performance-based payments and the motivation of healthcare workers had a strong positive relationship. Further, paying employees based on their performance helped to improve individual productivity and performance. Based on these findings, the study concludes that performance-based payments are positively related to health workers' motivation at primary health facilities in Makueni County.

The study found that operational funds and motivation of healthcare workers have a strong positive relationship. Also, operational funds were statistically significant to health workers' motivation. This study concludes that operational funds are positively related to health workers' motivation at primary health facilities in Makueni County.

The study established that service improvements funds had a strong positive correlation with the motivation of healthcare workers. Further, service improvements funds had a significant positive relationship with health workers' motivation. The study concludes that a unit increase in service improvements funds would result in to increase in the wealth creation of health workers' motivation at primary health facilities in Makueni County

5.4 Recommendations for Policy and Practice

The study found that there was a significant relationship between performance-based incentives and healthcare workers' motivation. The study recommends that the management of the health care facilities should determine the incentives that the health workers are interested in, instead of providing just any incentives. This would motivate the healthcare workers since they are provided with what they need.

The study revealed a significant relationship between performance-based payments and healthcare workers' motivation. Since most health care facilities rarely focus on performance-based payments, the study recommends that the management should incorporate performance-based payments in the health care system. This would help the

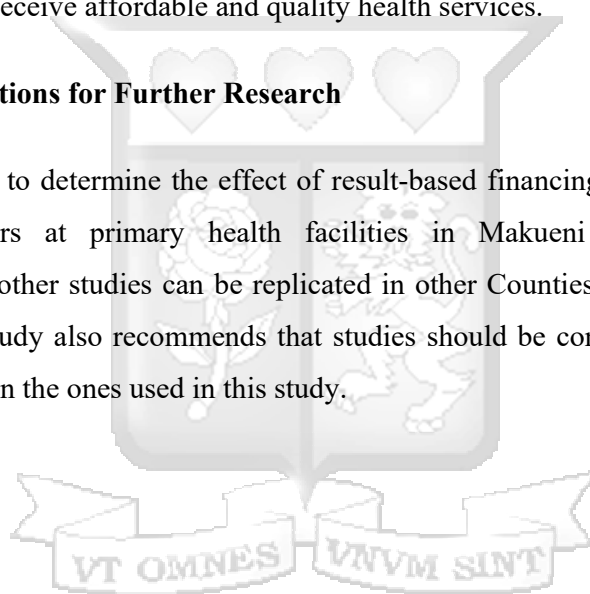
health care workers to work hard since they understand that their payment depends on their performance.

The study found a significant relationship between operational funds and healthcare workers' motivation. The study recommends that the healthcare leaders should ensure that there is a budget for operational funds and also the funds should be provided at the right time to ensure the smooth running of the health facilities.

The study revealed a significant relationship between service improvement funds and healthcare workers' motivation. The study recommends that the government should increase the funds for service improvement. This would ensure that a large number of communities can receive affordable and quality health services.

5.5 Recommendations for Further Research

This study sought to determine the effect of result-based financing on the motivation of healthcare workers at primary health facilities in Makueni County. The study recommends that other studies can be replicated in other Counties in Kenya to compare the results. The study also recommends that studies should be conducted to cover other variables other than the ones used in this study.



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APPENDICES

Appendix I: Introduction Letter

LEONARD CEDRIC MAKAU

Strathmore University

Dear Sir/Madam,

RE: QUESTIONNAIRE DATA COLLECTION

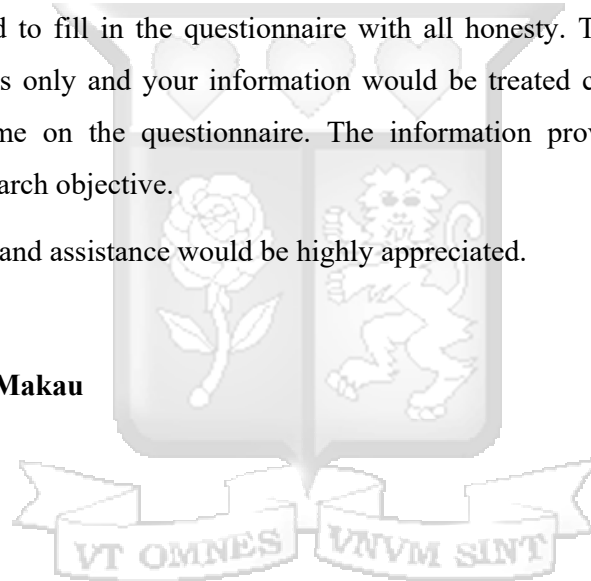
I am a Masters student at Strathmore University. Am conducting a study to investigate the **EFFECTS OF RESULT-BASED FINANCING ON HEALTH WORKERS MOTIVATION AT PRIMARY HEALTH FACILITIES, MAKUENI COUNTY.**

You are requested to fill in the questionnaire with all honesty. The study is meant for academic purposes only and your information would be treated confidentially. Do not indicate your name on the questionnaire. The information provided would assist in achieving the research objective.

Your cooperation and assistance would be highly appreciated.

Thank you.

Leonard Cedric Makau



Appendix II: Participant Information and Consent Form

EFFECTS OF RESULT-BASED FINANCING ON HEALTH WORKERS MOTIVATION AT PRIMARY HEALTH FACILITIES, MAKUENI COUNTY

SECTION 1: INFORMATION SHEET

Investigator: Leonard Makau

Institutional affiliation: Strathmore Business School (SBS)

SECTION 2: INFORMATION SHEET–THE STUDY

This study was carried out in partial fulfilment of the requirements for the award of the degree of Master of Business Administration. The study also aimed to add to the literature on the effects of result-based financing on health workers motivation.

The respondents were allowed to participate in the study at their own will. Those who agreed to participate filled in the questionnaire. The participants were allowed to withdraw from the study in case they feel uncomfortable. The expected number of participants is 303. The study was expected to take place in 2 weeks. The participants were identified from the health facilities in Makueni County.

The respondents were requested to participate in the study; those who are willing to take part in the study signed the consent form. The respondents were briefed on the purpose of the study and what was required of them when answering the questionnaire.

The study did not have any risks since it was purely for academic purposes.

The study was important to the management of the health facilities. They understood the importance of result-based financing on health workers motivation.

No one was coerced to participate in the study. Every participant did so at their own will. The study was voluntary. No penalties came as a result of non-participation. Those who discontinued their participation were not be penalized. You may skip questions that you don't feel comfortable answering.

The information would be available at the University database. Individuals willing to access the data would be able to do so from the school's online repository.

In case of further questions, you can contact;

Student's Name; Leonard E-mail Phone.....

Supervisor's Name at Strathmore Business School

E-mailPhone.....

For independent questions contact.

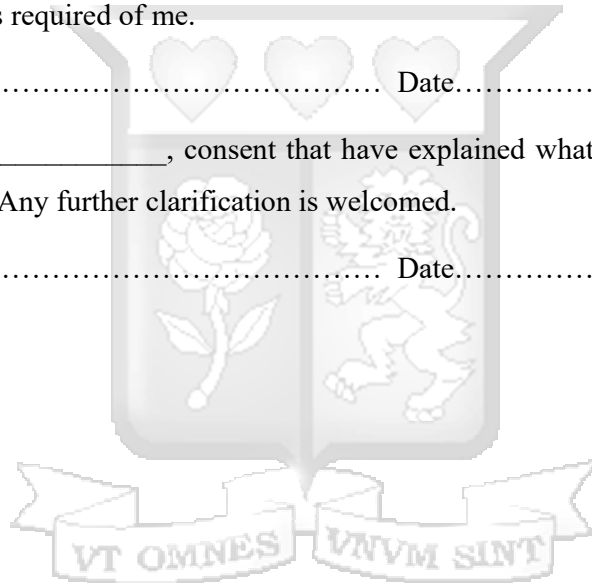
The Secretary–Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375

I, _____, agree to participate in the study since I understand what is required of me.

Signature Date.....

I, _____, consent that have explained what the study is all about to the participant. Any further clarification is welcomed.

Signature Date.....



Appendix III: Questionnaire

Section A: General Information

1. Name of the health facility
2. Kindly indicate your gender
 - Male
 - Female
3. Kindly indicate your age
 - 20-30 years
 - 31-40 years
 - 41-50 years
 - Above 51 years
4. What is your highest education level?
 - Certificate
 - Diploma
 - Degree
 - Post Graduate
5. How long have you been working in the health facility?
 - 1- 4 years
 - 5- 8 years
 - 9-12 years
 - Above 13 years
6. What is your designation in the health facility?
 - Health worker
 - Pharmacist
 - Nurse
 - Doctor

7. What is the type of your health facility?

Dispensary health Centre []

Hospital []

Section B: Performance-Based Incentive

8. Indicate your level of agreement on the following statements about the effects of performance-based incentives on health workers motivation at primary health facilities, Makueni County. 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5- strongly agree

Statements	1	2	3	4	5
The organization has an established system to reward employees based on their performance					
Rewarding employees based on their performance has helped in improving service delivery					
Health workers are provided with insurance premiums to ensure they feel safe while performing their duties					
Health workers are provided with bonuses to motivate them to work hard					
Rewarding employees based on their performance helps to stimulate professional commitment					
Health workers get professional and public recognition through special awards					
Health workers get a reward for superior performance					

9. Indicate other effects of performance-based incentives on health workers motivation at primary health facilities, Makueni County.

.....

Section C: Performance-Based Payments

10. Indicate your level of agreement on the following statements about the effects of performance-based payments on health workers motivation at primary health

facilities, Makueni County. 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5- strongly agree

Statements	1	2	3	4	5
Paying employees based on their performance ensures that the contribution an employee makes is recognized with a tangible reward					
Paying employees based on their performance provides a direct incentive for employees to achieve defined work targets					
Paying employees based on their performance helps in rewarding high performance which assists in retaining staff					
Paying employees based on their performance is an effective way of dealing with poor performance					
Paying employees based on their performance helps to reward the best performers					
Employees are able to focus on what they need to do to improve if their performance is directly linked to pay					
Paying employees based on their performance helps to improve individual productivity and performance					

11. Indicate other effects of performance-based payments on health workers motivation at primary health facilities, Makueni County.

.....

Section D: Operational Funds

12. Indicate your level of agreement on the following statements about the effects of operational funds on health workers motivation at primary health facilities, Makueni County. 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5- strongly agree

Statements	1	2	3	4	5
The organization provides funds for operations at the right time					
The right amount of funds for operations are provided to ensure smooth operations					
Funds for operations facilitate the achievement of organizational goals					

Availability of funds for operations gives health workers piece of mind to undertake their tasks					
Availability of funds for operations helps to sustain their day-to-day operations					
Funds for operations strengthens the dialogue between purchasers and providers as they, together with other stakeholders					
Funds for operations generate better data and information for performance monitoring					

13. Indicate other effects of operational funds on health workers motivation at primary health facilities, Makueni County.

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.....

Section F: Service Improvement Funds

14. Indicate your level of agreement on the following statements about the effects of service improvement funds on health workers motivation at primary health facilities, Makueni County. 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5- strongly agree

Statements	1	2	3	4	5
The health facility provides funds for improving services					
Availability of funds to improve services helps to adopt change due to the changes in health needs					
Availability of funds to improve services enables the health workers to serve patients better					
Availability of funds to improve services helps the health workers to work in a conducive work environment					
Availability of funds to improve services helps to cater for new health needs					
Availability of funds to improve services helps to improve the health facilities					
Availability of funds to improve services helps to acquire new					

equipment's for the health facility to enhance service delivery					
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15. Indicate other effects of service improvement funds on health workers motivation at primary health facilities, Makueni County.

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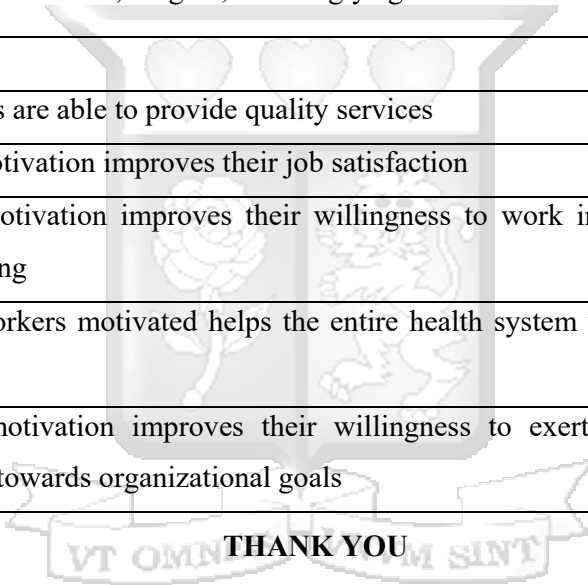
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Section G: Health Workers Motivation

16. Indicate your level of agreement on the following statements about health workers motivation at primary health facilities, Makueni County. 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5- strongly agree

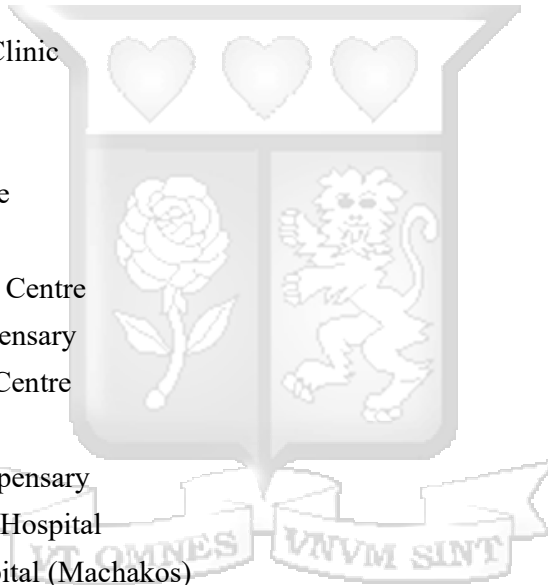
Statements	1	2	3	4	5
The health workers are able to provide quality services					
Health workers motivation improves their job satisfaction					
Health workers motivation improves their willingness to work in the organization for long					
Keeping health workers motivated helps the entire health system work smoothly					
Health workers motivation improves their willingness to exert and maintain an effort towards organizational goals					



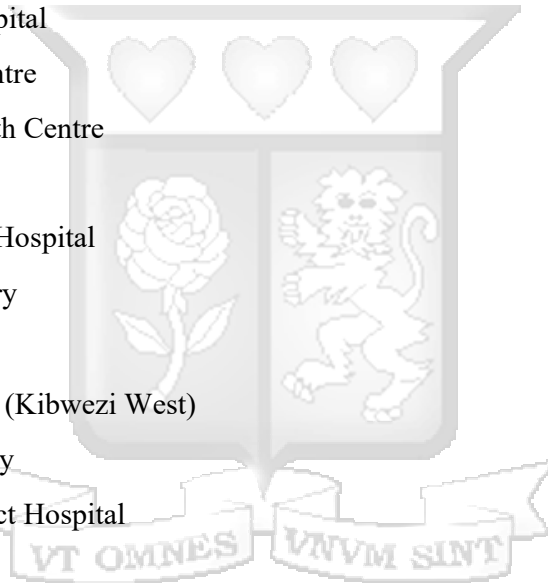
THANK YOU

Appendix IV: List of Health Care Facilities in Makueni County

Barazani Medical Centre
Becca Medical Clinic
Bliss GVS Healthcare Ltd Wote
Bosnia Dispensary
Capital Memorial Nursing Home
Dwa Health Centre
Ebenezer Dispensary
Ebenezer Dispensary
Emali Health Services
Emali Model Health Centre
Emali Nursing Home
Enzai Afya Medical Clinic
Enzai Dispensary
Kaliani Health Centre
Kalulini Health Centre
Kalungu Dispensary
Kambo Model Health Centre
Kambu Catholic Dispensary
Kathonzweni Health Centre
Kathyaka Dispensary
Kibwezi Catholic Dispensary
Kibwezi Sub-District Hospital
Kikoko Mission Hospital (Machakos)
Kilala Model Health Centre
Kilome Maternity & Nursing Home
Kilungu Sub-District Hospital
Kisau Sub-County Hospital
Kisayani Medical Clinic
Kithuki Health Centre
Kola Health Centre
Kunasini Health Centre
Kwa Kakulu Dispensary (Emali)
Kwakotoe Dispensary
Kwitu Medical Clinic Kinyambu
Kyambeke Dispensary



Kyau Dispensary
Kyenzenzeni Dispensary
Kyuasini Health Centre
Machinery Health Care Centre
Makasa Dispensary (Nguu)
Makindu District Hospital
Makindu Medical Centre
Makindu Nursing Home
Makueni Hospital Machakos
Matiku Dispensary
Matiliku District Hospital
Mavindini Health Centre
Mavinye Model Health Centre
Mbiini Dispensary
Mbooni Sub-District Hospital
Mbui-Nzau Dispensary
Mbuvo Health Centre
Mikuyuni Dispensary (Kibwezi West)
Mithumoni Dispensary
Mukuyuni Sub-District Hospital
Mutiluni Dispensary
Mwasangombe Dispensary
Ndovoini Nguumo Dispensary
Ndunguni Dispensary
Nduumoni Dispensary
Neo-Solutions Medical Centre
Ngwata Health Centre
Nthangu Dispensary
Nthogoni Health Centre
Nthunguni Dispensary (Kibwezi East)
Nzeveni Health Centre




Nziu Health Centre
Ponya Surgical and Nursing Home
Rapha Makueni Nursing Home
Sikh Temple Makindu Hospital
Sofya Healthcare
St Martin Health Care Services
Sultan Hamud Sub County Hospital
Tawa Sub-District Hospital
Tulimani Health Centre
Tumaini Maternity and Nursing Home
Tutini Dispensary
Usungu Dispensary
Uvete Dispensary
West Ngosini Dispensary




Appendix V: Introductory letter




Appendix VI: Research permit


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **538681** Date of Issue: **28/May/2020**


RESEARCH LICENSE




This is to Certify that Dr.. Leonard cedric makau of Strathmore University, has been licensed to conduct research in Makueni on the topic: Effects of Result Based Financing on Health Workers Motivation at Primary Health Facilities, Makueni County for the period ending : 28/May/2021.

License No: **NACOSTI/P/20/5097**

538681
Applicant Identification Number


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