THE RELATIONSHIP BETWEEN WORKING CAPITAL MANAGEMENT AND FINANCIAL PERFOMANCE OF PRIVATE HEALTH FACILITIES IN MOMBASA COUNTY

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A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

2018

DECLARATION

This research project report is my original work and has not been presented for a degree in any other University.

Sign…………………………………………….. Date……………………………………..

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This research project has been submitted for examination with my approval as the University Supervisor.

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ACKNOWLEDGMENT

I give thanks to the Almighty God through whom all blessings flow. I wish to acknowledge with gratitude, the contribution of my supervisor, Dr. Fredrick Ogilo without whom my work would have been an impossible task. His overwhelming support, guidance and advice were extremely encouraging. Special thanks to my Father in Law Dr. Ramadhan Suleiman Marjan. His encouragement and moral support proved very crucial.

Further appreciation goes to my family members and Africa Education and Development Trust for encouraging me to pursue further studies and helping in financing the course. My appreciation also goes to all the private health facilities that provided me with the required data.

DEDICATION

To my Parents, my Husband and my Son, Marjan Mustaqeem, I dedicate this work to you. They were inspirational and supportive in this venture.

ABSTRACT

The study required to establish the relationship between working capital management and profitability of private health facilities of Mombasa County. The study was a cross-sectional casual study where a change in one variable has an effect on another variable. It was a census population but a target population of 10 private health facilities was chosen. Data was collected from secondary sources that is, audited financial statements for a period of 5 years between 2012 and 2016.Quantitative data technique was used to determine the degree to which the main study variables are related. Regression and correlation analysis was used to establish the actual relationship between the sets of study variables. The ANOVA technique was used in the study to establish the effect of the model at 5% significant level. The dependant variable was financial performance while the independent variable being working capital management practices. The relationship of average collection period, consumable material used and average payment period with operating profit margin was analyzed in this study. The study applied both regression analysis and correlation using SPSS for identify effects on those products of profitability. Intercept from the research was 0.222 from the years. Independent values researched explain a substantial 94% of financial sector development in Mombasa county as shown by the adjusted R square (0.94).Correlation analysis shows that the health facilities profitability was characterized with values connecting to working capital. Positive association exists within profitability, collection of average period and Consumable material used. Average period of payment shows an opposite association with profitability. Study summarized there exist an important relationship within the performance in finance and working capital. Thus increase in profitability is shown by increase in Accounts payable while decreasing with increase in accounts receivable. The study recommends that efforts should be made constantly to ensure the consumables being purchased at the facilities are being used effectively so as to reap maximum profit.

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LIST OF ABBREVIATIONS

A.C.P:	Average Collection Period
A.P.P:	Average Payment Period
CCC:	Cash Conversion Cycle
C.M.U:	Consumable Material Used
MOH:	Ministry Of Health
NGO:	Non Governmental Organization
NHA:	National Health Accounts
NHIF:	National Health Insurance Funds
NWC:	Net Working Capital
O.P.M:	Operating profit Margin
O.C:	Overhead Cost
ROA:	Return on Assets
ROCE:	Return on Capital Employed
ROE:	Return on Equity
ROI:	Return on Investment
SOFP:	Statement of Financial Position
WCM:	Working capital management

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Working Capital management can be defined as the ability of a firm to be able to meet up its short term liabilities, financing requirements, maintaining an optimum balance between the Current Assets, Inventory and Current liabilities. With good planning and controlling of current assets and liabilities, this leads a firm to reducing its risk and inability to meet its short term obligation thus resulting to efficient working capital (Ejelly, 2004). Current assets is taken to mean those items in firm that can be converted in cash within a year if the firm runs smoothly whereas current liabilities are the debts of firm that have accrued within the year and needed to be offset within the year examples are overdraft.

This study anchored on the theories: Conservative Plan Theory, Moderate approach Theory and Aggressive Theory which was proposed by John Dollard, Neal Miller et al in. 1939 and further developed by Miller et al. in 1941 stated that it's a high-risk strategy of working capital financing wherein short-term finances are utilized not only to finance the temporary working capital but also a reasonable part of the permanent capital structure. These theories describe current assets and current liabilities in different ways. The theories centers on explaining that profitability and liquidity of a firm will be affected with the choice of either high risk high return or low risk low return .But a moderate approach will try to strike the balance between the two by having reducing the level of current assets as the same time not ignoring the risk of stock out (Bhattacharya, 1997). Effects of working capital on profitability of a firm are as well as important.

The department of health in Mombasa County has several functions of the office: They manage the following, Policy and legislation coming up with policies that are used collectively, Mombasa city council public health, Pharmacies, Promotion of primary health care, Cemeteries funeral parlors and crematoria, Licensing and control of undertakings that sell food to public, health services levy, Health centers whereby one can access the medical attention they require in terms of location and cost it caters for all the class. School of health where we have potential candidates can enroll to pursue the field of health, Public health inspectorate who go out in their daily routine to ensure that all the health facilities follow the rules and regulations that have been put in place, Emergency services where it has appointed team to oversee the health function as provided by the law (Aaron & Taylor, 2015).

1.1.1 Working Capital Management

Working capital can be defined as the capital of a business which is used in its day to day trading operations, calculated as the current assets less the current liabilities. Eljelly (2004) further went ahead to define efficient working capital whereby it involves planning and controlling of current liabilities and current assets in a way that eliminates the company to meet its short term obligation and to avoid excessive investment. Therefore the management should be in equilibrium about the case of working capital. According to Joshi (1994) working capital is a very critical area in the field of financial management. Short-term assets are those assets whose life expectations are planned to be decided within a financial year, and they are also said to be a firms current assets. Whereas short term liabilities are those obligations whose demand need to be met within a financial year. The aforementioned short -term assets and liabilities are vital components to the overall assets, and should therefore be meticulously and methodically investigated due to the pivotal part they play in the company's profitability, worth and risk. Efficient management of working capital confirms a firm has sufficient flow of cash that meets its short term debt obligation and operating expenses.

According to Chakraborty (2008) too much working capital leads to waste of cash hence the decrease in profitability. Sales activity in a firm can be maintained by improving on its working capital whereby increasing the profitability. These henceforth shows that any decision that will be made in a firm with regards to working capital will affect the firms either liquidity wise or profitability. At the same time the value of a firm is also important factor, to the shareholders and investors. Therefore the firm will need to strike balance between the two to increase the wealth of the shareholders. Need for establishing the effects of working capital on profitability and liquidity is as well important (Satyanarayana, 2011).

Working capital can be measured using the cash conversion cycle which is calculated by having of the accounts receivable and the inventory period summed then less the accounts payable. Cash Conversion cycle as an operating cycle is an ongoing liquidity measure developed by Gitman (1974).Main focus is on length of time between the raw materials and finished goods to sale of goods (Arnold,1998).With shorter cycle ,the firm will need fewer resources to tie up.

A lot of firms have their cash invested on working capital (Deloof, 2003).With the use of regression tests he made a finding that with the Belgians firms there exist a negative relationship between the gross operating income and the accounts payables, number of days in inventories and receivables. Thus it’s easy to say that the ways in which working capital is managed will always have a significant impact on the profitability of a firm. The period of time it takes between ordering and receipt of raw materials, for trade creditors to be paid, for finished goods held in stock to be sold. Assuming no time lag between the raising of sales and purchase orders and their execution the cash conversion cycle can be determined. Thus it will be better to minimize the number of days in inventories and accounts receivable.

1.1.2 Financial Performance

The term financial performance is explained severally depending on whether the goals of a firm are met or being met and is pertinent to the management of the financial risk. It is the procedure of analyzing the company outcome using the financial guidelines while at the same time contrasting other companies in the same industry (Eshna, 2012) financial performance of a firm makes it possible for decision makers to analyze the business plans. It further outlines the level to which the financial goals are achieved or being achieved. The issue of financial performance is very vital to some individuals of a company majorly the, shareholders, lenders, government, tax authorities financial institution. The individuals are able to answer their question and clear their conscience. That is why the exercise of evaluating the financial performance of a firm is very important, whereby it includes the utilization of financial statements (Gitman, 2009).

Financial Statements refer to a compilation of information arranged under a rational and coherent accounting routine. The main function of these statements is to impart a comprehension of some of the company's financial factors. As in the matter concerning Balance Sheet, it may indicate the financial status, and a sequence of actions as in the matter concerning an income statement. The above two indicates to an overall financial statement (Eshna, 2012).

The most commonly used measures of financial performance are the Return on assets (ROA) and the return on capital Employed (ROCE). The ROA is given by dividing the net income by average total assets. The ratio can also be represented as a product of the profit margin and the total assets turnover. ROCE on the other hand is a financial ratio that measures a company's profitability and the efficiency with which its capital is employed. ROCE is given as the earnings before interest and tax over the capital employed. A higher ROCE indicates more efficient use of capital (William, Maureen & Jung, 2005).

1.1.3 Relationship between Working Capital Management and Financial Performance

Shin and Soenen (1998), from their study of American manufacturing firm for a period of 1974-95 concluded that a negative relationship exists between cash conversion cycle and profitability. On the other hand a reverse relationship exists between cash conversion cycle and profitability this is from Kamath (1989).The relationship between working capital and financial performance it has shown dissimilarities across industries as others being positively related while others are negatively related.

According to Shalman and Cox (2006), financial component is divided into working capital requirement and Net liquidity balance. In that, a reduction in the time of receivable accounts will reduce the working capital requirement and net liquidity balance at the same time increase on value of cash. In the event of high sum of capital a short term guarantee of effective working capital is maintained. Therefore the effective management of working capital will influence both long and short term performances.

1.1.4 Private Hospitals in Mombasa County

Most of the private hospitals are owned by individuals for profit making others are non-profit organization which is meant for the community or being run by the community. They are funded by cash paying patients; also funds come from insurance companies, Governments through national health insurance program or by foreign investors. The hospitals profitability has been on the look due to the increased pressure on its profitability through working capital management.

Mombasa County is one of the leading counties in having registered care personnel e.g. doctors, nurses, pharmacist and dentist apart from Nairobi being the leading one .This was from a research conducted by Kenya National Bureau of Statistic in 2012. This has helped raise the status of the health facilities in Mombasa County to the high level as individual have confident that they will be attended to with competent staff.

Health sector being one of the major basic requirements to one's health, The government has been able to finance the operations of the hospitals by providing 60% of what is required which in other word result to health sector being under funded that is according to the Human development report (1999).The result of such under funding is implied by inefficiency of the systems in place and including lack of cost effectiveness in service delivery. This has made most of the leading hospital to go the private way by getting fund from Individual Investors, NGO's and also Insurers.

1.2 Research Problem

The management of current assets and liabilities of private health facilities have elevated the importance of effective working capital due to the increased financial pressures on their profitability. With efficient working capital, the management of current assets and current liabilities allows hospitals to reduce their holdings of current assets, such as inventory and accounts receivable, which earn no interest income and require financing with short-term debt. The resulting cash inflows can be reinvested in interest-bearing financial instruments or used to reduce short-term borrowing, thus improving the profitability of the organization Kenya Human development report (1999).

By using various variables for analysis, Working capital Management and Financial performance have shown there is significant relationship between the two from the recent literature. Most of the literature shows that there exist a negative relation between the working capital and financial performance of companies. However, research by Chowdry and Amin (2007) on pharmaceutical firms in Bhangladesh revealed a positive relation in working capital and financial performance. Narware (2004) had the common findings on the negative relation on the WCM and financial performance on the Indian National Fertilizer limited for 1990-91 to 1999-2000 but also had a positive relation at the same time. Further findings of his were that an increase in the profitability of the company was less than the proportion to decrease in working capital.

Snober (2014) on his research on the impact of working capital on firm's profitability, using Cement Industry listed in the Stock exchange of Karachi. Conclusion to the study was that there exist a negative relationship between the profitability measures and the degree of aggressiveness of working capital investment and financing policies. Positive effects have been identified on return on assets using the variables of cash conversion cycle and stock turnover ratio of the water companies in Garowe by Ugas (2017).Joseph and Simon (2016), tend to focus on working capital on the petroleum firms in Ghana where there are favorable net working capital for the firm and also the same favorable networking capital to total assets. In India Teclom being one of the major sectors, Jyoti and Uday (2016) focused on the Return on Assets of a firm and their results was that there exists a positive relationship with Average Payment Period. These is important for small growing firms and its survival decisions have been made which have effect in the Profitability and Investments of Company hence poor results in the Liquidity.

Afza and Nazir (2007) through cross-sectional regression models on working capital policies, profitability and risk of the firms, found a negative relationship between the profitability measures of firms and degree of aggressiveness on working capital investment and financing policies while Padachi (2006) found that high investment in inventories and receivables is associated with lower profitability similar to most recent study by Christopher and Kamalavalli, (2009), which focus on 14 corporate hospitals in India for the period 1996-97 to 2005-06. Similar studies done locally in Kenya have revealed relatively similar results. Biwott, (2011) found a significant negative relationship between net operating profit and the average collection period for a sample of Kenyan firms listed on Nairobi stock Exchange. Other studies done by Caffaso (2011), Kamula (2011), Kweri (2011), Mutungi (2010) and Bett (2009) have yielded similar results.

To be able to bridge the gap, companies need to put more effort on Working Capital management to be able to run the day to day operations to avoid being insolvent. Management of working capital is very important with primary concern on preservation of an adequate equilibrium in current assets and current liabilities, a working capital that is efficient permits Health sector to insure their financial responsibility and increase their profits. This is not the case as seen with our various health sectors in Kenya. The Topic has not been widely captured to the fullest to assist in capping down the Issue of Working capital. It's obviously seen that we are far behind with the Management of our own hospital since most of them are still under the government eye. Efficient management of working capital is therefore critical for the company's success and survival as the industry needs to be strengthening in order to enhance performance and contribution to the economic growth (Padachi, 2006). The rapid growth of health expenditure has brought the need for further research, to deal with these problems.

This in return will be able to bridge the gap of working capital in relation to the hospital since they manage a significant amount of working capital in operating expenses and accounts receivables and it will be interesting to see how these impacts on their performance. Thus the research will aim to fill the research gap by answering the question. What is the relationship between working capital and financial performance of Hospitals in Mombasa County?

1.3 Research Objective

To establish the relationship between working capital management policies and financial performance of Hospitals in Mombasa County

1.4 Value of the Study

By identifying the impact of profitability through managing working capital of the private hospitals from the study, the findings will add up to the body of knowledge. General framework will further be provided through the study to other researchers, professional and policy makers when it comes to guidance with future research, appraising the current business practices. Results of the study would be used to provide better understanding to the administration of the hospitals on how well they can be able to create efficient working capital management policies that would maximize the firm's profitability.

Lower operating cost is what is very vital for any service industry, thus the study will be beneficial to the private hospital in such a way by navigating them on ways to manage their working capital which leads to lower operating cost by the hospitals. The study will add to the body of knowledge in the financial discipline and forms the basis for further research in the health sector and effect of management on financial performance in other sectors as well.

The government as the regulator of the industry will be able to use the findings of the study in understanding factors that are important on the financial performance of different health sectors in Kenya. On the other hand the government will establish the modalities and regulatory measures that are needed to put in place to assist in improvement of the sector. Outcome from this study will help the government in identifying the importance of understanding correct mix of working capital which in turn helps in boosting financial performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter describes the theories used, determinants of working capital, empirical review, the summary of the literature and the research gap identified. Finally conceptual framework through which the study was conducted on.

2.2 Theoretical Review

Various theories have been considered on working capital management include the following: Conservative approach, Aggressive approach and the Moderate approach. Also it will look into the determinants of working capital which are as follows; Consumable material used, Accounts receivable, Inventory management and Accounts payables. The working capital of a firm is a mixture of its short term assets and liabilities.

Traditionally the Income statement focuses on the sales of product and its cost of goods sold however with service industry this is not the case. It needs the overall productivity and cost of that productivity. Some of the items to consider on the Income statement for service Industry are revenues related to professional services rendered, support staff, non-services items, Direct cost of professional service, direct cost of support staff, other direct cost, fixed and variable personnel related cost, Overhead and Profit before taxes (D.J Hoare 2015).

2.2.1 Conservative Plan Theory

The conservative plan theory is defined as the annual average loan multiplied by long-term rate of interest. It attempts to provide enough long term financing that cover all anticipated eventualities. This theory implies high investment in current assets and turnover ratio as low. This approach does not need short- term borrowing and may be in the long run be expensive because available funds may not be fully used in certain time horizon. On the other hand also high level of accounts receivables equate to relaxed credit terms which attract more customers' thus high sales and high profits. Fixed and some part of current assets are financed by long term funds since they are permanent and long-term services are very expensive hence lower risk return (Horne & Wachowitz, 1998).

The theory in relation to the topic explained how the strategy when employed leads to long-term sources of finance and hence there are all the chances that the rate of interest was high. Long term funds cannot be paid off when wished thus leading to unutilized funds which have cost of interest attached to it .higher carrying cost and holding cost which has direct impact on profitability. Rahemen & Bluementhal, 1994, stated that companies are required to utilize measures on working capital even if their profitability is positive

2.2.2 Aggressive Theory

The aggressive approach is a high-risk strategy of working capital financing wherein short-term finances are utilized not only to finance the temporary working capital but also a reasonable part of the permanent capital structure. Most companies that are operating in a stable economy are more certain about the future cash flows. Companies operating under aggressive working capital policy offer short term credit periods to customers, hold minimal inventory and thus a small amount of cash in hand. This policy in general increases risk of default for the firm (Afza, 2007)

The return associated with aggressive working capital is that it produces higher return on assets, as measured by indicators such as gross income divided by working capital. The study further tried to explain how the interest cost is minimized in this approach; leading to higher profitability obtained. However there is also its risky part: risk of default and bankruptcy increases as you adopt more of aggressive working capital. Similarly low level of current assets makes the utilization as very high. The firm finances all temporary current assets and some of its permanent current assets with short-term sources of financing (Heyman, 2008).

2.2.3 Moderate Approach

A moderate or balanced approach is a strategy of working capital financing wherein short term requirements are met with short-term debts and long-term requirements with long-term debt. Capital falls halfway between aggressive and conservative theory as stated by (Gitman, 1997). Here the level of Investment of currents assets is neither lean nor expensive. Long term funds are used to finance the investment in fixed assets and the permanent components of current assets investments. The moderate policy is less risky compared to aggressive but more risky than conservative. The firm can only resort to short term financing when seasonal and other temporary demands require it.

The fact that the theory bridges the gap between the conservative and aggressive approach, it was helpful in further explaining how Copeland & Khonry (1980) applied Capital Asset Pricing Model to develop a theory of credit extension. They argued that credit should be extended only if the expected rate of return on credit is greater than or equal to market determined required rate of return. (Soenen , 1993) in his findings showed that a shorter net trade cycles are most commonly associated with higher profitability. He explained that by carefully monitoring both the timing and magnitude of cash flows. (Peel & Wilson, 1996) noted that for small and growing business, an efficient working capital management is vital component of success and survival. They further suggested that smaller enterprises should adopt formal working capital management routines in order to reduce the probability of business closure as well as to enhance performance.

Nazir and Afza (2008) Suggested that enterprises can minimize risk and improve overall performance by understanding the role and drivers of working capital .It is therefore important to understand the components of working capital so as to have an optimal level of working capital The optimal level working capital is one in which a balance is achieved between risk and efficiency.

2.3 Determinants of Working Capital

Working capital management has various components that can be used in research to determine the WCM of a company or a firm. The below have been sampled as will be used to help with the research.

2.3.1 Cash Conversion Cycle

Padachi (2006) the theory of cash conversion cycle is a very important component in the working as it can be able to inclusively show case the time delay between the raw material was purchased and the time it will be converted into finished product for sale so as to bring the cash. Due to the importance of the component in working capital and the cash flow within a firm, the theory can be used to determine the amount of money required by a firm for to improve or boost their sales.

CCC = Consumables Materials + Trade receivables days − Trade payables days

Having known that cash is the most liquid asset in working capital, it would not be wise for a firm to hold a lot of cash in hand as it does not making a difference in the firm rather with time it losses it value. It has become a concern all over the world as the credit and cash of a firm needs to be squeezed thus threatening the survival of many. This is the source of the company’s working capital (Noriza & Nor, 2010).The investment of a company becomes complicated if it has its CCC extended the same applies to less resources required when the CCC is brief. Evidence from Arnold (2008) shows that high profitability will be experienced with extended CCC. This in the long run will cause high investment.

2.3.2 Accounts receivable

Padachi (2006) found out that lower profitability is associated with high investment in inventories and receivables. One should consider whether to have a credit policy. Additionally, one needs to establish sales terms. For a firm to meet its receivable collections for the month, a good and working system must be put up to follow accounts receivables. The follow up on the system will involve bringing into picture the state of the following features; balance brought forwards, all open invoices, and pulling of monthly statements to clients. Aging of receivables will be used to collect overdue accounts. The significant factors here are terms of payment, invoicing, credit control and cash management among other factors. The reduction in terms of payment and effective collection procedures improves cash flows. The Reduction in losses on receivables through systematic credit control increases profitability, while reduction in personnel costs through more efficient credit control and collection equally increases profitability.

2.3.3 Consumable Materials Used

According to Lazaridis and Tryfonidis (2006) Consumable materials when managed in proper ways will facilitate a profit maximization and enhancement of companies' growth. Consumables are dependent upon the demand as well as the supply chain delivery time. On the other hand service industry uses its consumables material to determine their efficiency. The management of this material will help a company to be able to maximize their profit as lot of their consumables should not go in wastage. This type of expenses is mostly looked at by the Investors to gauge the liquidity of the company. Thus it should be at minimal Firms should not follow one stocking policy for all items. Getting into the detailed understanding will help one identify the consumables for stocking norm required to manage these characteristics to ensure optimum efficiency.

2.3.4 Accounts Payable

Crucial decisions need to be made not only in managing cash, account receivables and Inventories but also in management of account payables (Lamberson, 1995).The objective of credit management practices is to attain longer credit terms from suppliers while optimizing on available terms of discounts. Paying bills is an integral part of any business. A solid accounts payable policy cannot only lead to improved cash flow but also to better relationships with vendors, suppliers and other creditors. The most important account payable practice is to make sure one is paying given the credit term. A good accounts payable policy is also good public relations policy. It is important to keep a line of communication open with all your Creditors.

2.3.5 Overhead Cost

There are other factors that do affect the profitability of a firm other than the above mentioned; this will be well represented by the error term from our equation. Some of the variables include items like Fixed cost those are cost that vary with production that is cost that won't occur if one is not involved in production, Overhead cost those are cost that do not vary with revenues that is they are bound to be incurred with the company whether revenues has taken place or not e.g. rent, electricity, salary (Jay Jenkins, 2018).

2.4 Empirical Review

According to Eljelly (2004) he clarified that an effective management of liquidity includes the planning and the control of both current assets and liabilities in a way that gets rid of the uncertainty of being unable to accomplish short terms responsibilities that are due, and prevents making extreme investments on the assets. According to (Deloof, 2003) he indicated that a lot of companies had a great sum of money invested in the working capital. We can hence expect that with this kind of management of the working capital, it will have an important effect on the company's profitability. Through the utilization of the regression analysis and correlation, an important adverse connection was discovered between gross operational income and the amount of days, the accounts receivables, the consumables, and the accounts payable of companies in Belgian.

An evaluation of the connection between working capital and the profitability of pharmaceuticals firms in India was done by (Chakraborty, 2008). He made an indication of the two different schools of thoughts on this particular matter; in one of them, the concept of working capital is not a factor for enhancing profitability and an adverse connection may exist between them. In the other, investments in the working capital is important in enhancing corporate profitability, and not before there is a least amount of investment of working capital, then products and sales cannot be well kept.

The cash conversion cycle had been widely used as a major component represents working capital. One of the earlier studies done by (Jose, Lancaster & Stevens, 1996) for the twenty-year period from 1974 through 1993 of 2,718 firms offers strong evidence that aggressive working-capital policies indicated by shorter cash conversion cycle enhance profitability. Results of empirical analysis show that there is statistical evidence for a strong relationship between the firm's profitability and its WCM efficiency. Since the 1960s, the increase of health expenditure has caused much concern all over the world. To reduce the cost of expenditure that has risen overtime, studies have been conducted to try to explain the rise in health expenditures and suggested what variables can be used. From the studies almost all have considered the demand function approach to specify their models. Specifically, health care expenditures are hypothesized to be a function of real per capita income and other non income variables. From the literature we have the non income factors being identified.

Filbeck and Krueger (2005) analyzed the efficient of working capital management practices using non-financial industries in the USA 32 of them. From their research conclusion were that different industries experience difference in their working capital over time. More to top up to the research was that the working capital practices change considerably within the firm across time. Similarities with the studies are done with Soenen (1993), Maxwell et al. (1998), Long et al (2001).

Pandey and Parera (1997) in their regional study in Sri Lanka, basing on their research on working capital management policies and practices provided and empirical evidence on the manufacturing companies. How the research was conducted using the questionnaires administered by the Chief financial officers of sample of the manufacturing firms listed in the Stock exchange of Colombo. Findings were that almost all the companies in Sri Lanka have informal working capital policies. The size of the company also plays an important role in the theory of working capital to be employed (Conservative, moderate or aggressive). Lastly the profitability of a firm is influenced methods of working capital and control.

In literature, the risk and return in different working capital policies is followed by long debate of their trade off (Pinches 1991, Brigham and Gapenski 2004, Gitman 2005). From the major two theories conservative approach is associated with lower return and risk whereas with aggressive is the opposite of higher returns and high risk. Working capital plays the role of determining the profitability of a firm at the same time also its liquidity position and in the long run the value of a firm (Smith, 1980).Greater investment in current assets is associated with lower risk, but the profitability at the same time will be lowered. Shin and Shoenen (1998) using firm listed in the US stock exchange at the time of 1974-1994 were able to analyze the relation between the working capital and the profitability of the firms. Conclusion to the study was that with reduction of the current assets of a firm this will equate to increase in the firms profitability.

With the period of 1992-1996 Deloof (2003) analyzed the Belgian firms. His findings were that the Belgium firms were in a position to improve their profitability as long as they reduce credit term period from their debtors and reducing inventories. Teruel and Solano (2005) agreed with the results by saying that managers can generate value by reducing the number of day's receivables and the inventories. With regards to the matter of the CCC it's also known that reduction in it will improve on the firms' profitability.

Rehman (2006) with the use of 94 Pakitsani firms listed in the Islamabad Stock Exchange investigated the impact of working capital in the profitability of a firm for the period 1999-2004. With Rehman he studied the various components of working capital like; Cash conversion Cycle, Average payment period, Average Collocation period and Inventory Turnover in days. His conclusion was that there exist a very strong negative relationship between the profitability of firms and the working capital. Up to an optimum level when the Cash conversion Cycle can be reduced to optimal level, managers can be able to create a positive value to their shareholder.

However, Afza and Nazir (2007) had a different opinion from their research when the conclude that a negative relationship exist between the profitability measures of a firm and that of the degree of aggressiveness of working capital from the 204 listed public companies in Karachi. These findings indicated that the firms with more aggressive working capital may not be in a position to produce more profit, thus proving the depressing relationship of working capital policy and profitability. Another study with the two (Afza and Nazir, 2007) was that of comparing the major two theories that is aggressive theory and that of conservative approach theory. Using the various analysis techniques, (least significant Difference, ANOVA) form firms listed in Karachi for the period1998-2003, Summary of the findings was that using the ordinary least regression , was that negative relationship between the profitability measures of firms and the degree of aggressiveness of working capital investment and financing policies.

2.5 Summary of Literature Review and Research Gap

This research gap on working capital and financial policies is compounded mostly in Kenyan situation where there is still lack of information about the connection amid working capital and financial performance. Studies outside Kenya have concluded that there exists a negative relationship between working capital management and financial performance of companies. However, further studies have revealed that factors affecting working capital management are varied and quite a number of them including nature of the Industry, demand of Industry, nature of the Business and Production Cycle. There are studies that have been done in particular industries and context that have yielded different results. (Ganesan ,2007) analyzing the working capital management efficiency of firms from telecommunication equipment industry found evidence that even though "day's working capital" is negatively related to the profitability,

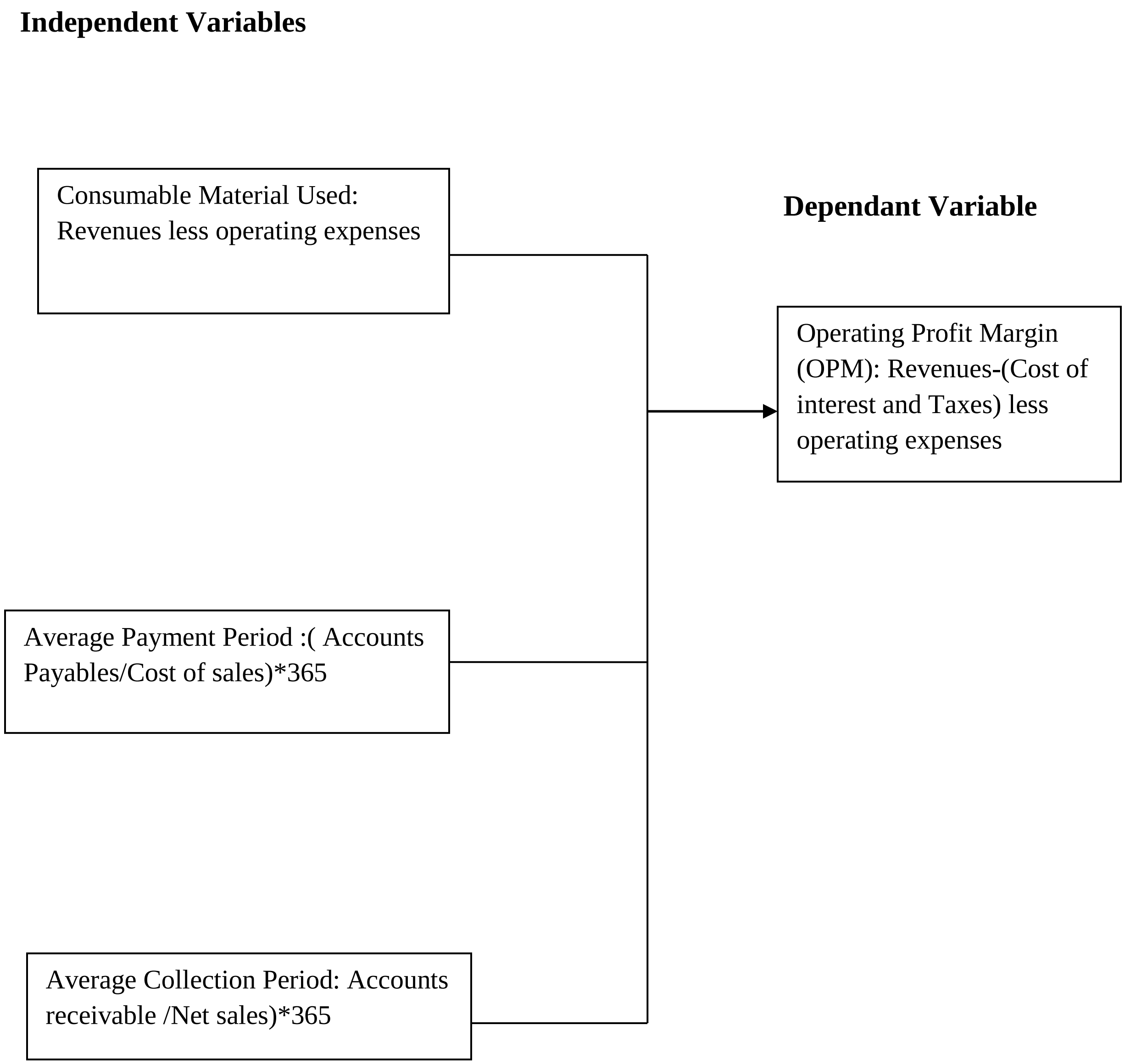
As earlier noted, the issue on Working Capital has been widely studied. However, largely missing from literature is the focus on health sector and specifically on Hospitals in Kenya that are in significantly different industry setting compared to industries where studies have already been done locally.

Research gap by seeking to find out the relationship between working capital management the literature review permits us to come to the conclusions. The latest studies identify the importance of health system uniqueness such as provisions for service, financing health parameters and tool for providing payment. Lack of data has made the ability to test these variables is incomplete. This implies that some vital variables may be absent in the analysis and therefore concern should be exercised in the explanation of the results. It is also worth noting that although income is positively related to health care expenditure, the conclusion regarding income elasticity is not clear.

2.6 Conceptual Framework

Conceptual framework as explained by Miles and Huberman (1994) as either graphically or in narrative form, the main issues to be studied. It covers the main aspects or features of a study and their relationship. The study will undertake the issues of identifying key variables that influence that influence working capital management. The ratios relating to working capital management include components such as return on assets, cash conversion cycle, accounts receivable periods, accounts payable periods, consumable materials and leverage. All the variables have a relationship that ultimately affects the working capital management. The negative relationship between on return on investment and working capital is of the view that time lag between purchases of raw materials and collection of sales of finished goods can be too long and that decreasing this lag increases profitability.

Working capital policies affects the business as follows: Decision made by the management will have impact on the sales, purchases and levels of cash. Assets and liabilities should be monitored and coordinated to keep operation cost to a minimum. Purchase policy affects accounts payable, cash and level of stock. Creditors play a vital role in cash therefore should be monitored effectively whereas sales policy affects the level of cash, stock and accounts receivables. Created when a firm offer credit terms to customers but management should be able to employ the 5C's of the credit i.e. Condition, character, capital, collateral and capacity.


Independent Variables
Consumable Material Used: Revenues less operating expenses
Dependant Variable
Operating Profit Margin (OPM): Revenues-(Cost of interest and Taxes) less operating expenses
Average Payment Period :(Accounts Payables/Cost of sales)*365
Average Collection Period: Accounts receivable /Net sales)*365

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The Chapter describes the methodology and research design that was used in conducting the study. The steps included; research design, target population, data collection, analyzing data and presentations. How the data was interpreted and analyzed.

3.2 Research Design

The design for this study was a cross-sectional casual study in which the financial data was gathered from the financial statements of the private hospitals for the last five year period. When one variable causes a change in another variable, a casual relationship exists. Thus, the type of relationship was investigated by experimental research proved that; a change in one variable will affect the other variable.

3.3 Population of the Study

A population is defined as a collection or set of interest items in research and it represents a group that you wish to infer conclusion regarding your findings. The target population of study comprised of the 10 major private health facilities in Mombasa County, since it was a census study. The health facilities had to be in practice basically from 2012 to 2018. The data collected was able to justify the need for the project study.

3.4 Data Collection

The study was conducted by the use of Secondary data, to meet the target. The Information was retrieved from records office of the hospital ranging from 2012-2016. All the information was collected from annual reports of hospitals and published books of accounts i.e. their Statements of comprehensive Income, Statements of financial Position and Cash Flow.

3.5 Data Analysis

The information gathered was analyzed through the quantitative data technique to determine the degree to which the main study variables are related. Regression and correlation analysis was used to establish the actual relationship between the sets of study variables.

3.6 Analytical Model

The ANOVA technique was used in the study to determine the effect of the model at 5% level of significance. Quantitative analysis of data was used since it well suits secondary data (Leavy , 2004) .The financial ratios for both the independent and the dependent variables was computed through Excel to get the results. Data was analyzed using correlation and regression analysis was used for conclusions

The following multivariate regression model was used

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Where Y=Operating Profit Margin

X_1= Average Collection Period

X_2= Average payment Period

X_3= Consumables Materials Used

β_0= Constant term,

β_0-------β_4= will be use to measure the dependent variable (Y) to unit change in the predictor

Variables

ε =is the error term for all variables influencing performance

Significance tests: at 95% confidence level or at 5% degree of significance.

Table 3.1 Operationalization of Research Variable

VARIABLE	**MEASUREMENT**
Average Payment Period	(Accounts Payables/Cost of Sales)*365
Consumable Material Used	Revenue-Operating Expenses
Average Collection Period	(Accounts Receivable/Net Sales)*365
Operating Profit Margin	Revenues-(Cost of Income and Taxes) less Operating Expenses.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter covers the data analysis and findings of the research. The data collected was analyzed and interpreted in relation with the study that is to determine whether there exist a relationship between working capital management and financial performance of private health facilities. The data used was secondary which was obtained from the published financial statements of the private health facilities. The data is summarized and presented in table form. Analysis was done using regression and ANOVAs techniques.

4.2 Characteristics of Study variables

4.2.1 Descriptive Statistics

Using the data above the mean and standard deviation was computed foe each variable and tabulated as below:

Table 4.1 Descriptive Statistics

	MEAN	STANDARD DEVIATION	VARIANCE
OPM	0.7080	0.0978	0.0010
ACP	28.6640	1.1388	1.2969
APP	43.164	4.0316	16.2538
CMU	0.0362	0.0040	0.0000

Source: Research data 2018

From the above table, the mean of operating profit margin was 0.708 with standard deviation of 0.0978. The mean ratio of consumable material used was 0.0362 with standard deviation recorded was at 0.004.The mean ratio for average payment period was 43.164 with standard deviation of 4.0316. The mean ratio of average accounts payable was 28.6640 with standard deviation of 1.1388.

4.3 Regression Analysis

To survey the correlation amidst working capital Management and financial performance in the health sector in Mombasa County, regression analysis was performed. The dependent variable being the financial performance whereas the independent variable was working capital management: Average Accounts payable, Average payment period and Consumable material used. This was demonstrated using the below table. Data comprise of 5 year period as from 2012-2016.

Table 4.2 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.992	0.985	0.94	0.024185
a. predictors: (Constant) CCC, APP,CMU b. dependent variable OPM				

Source: Research findings (2018)

Table 4.3 demonstrates that the coefficient of correlation (R) is positive at 0.992. This implies solid positive interrelationship exists between health sector and the financial sector in Mombasa

County. The co-efficient determination (R^2) demonstrates 98.5% of the variations in financial sector development are influenced by health sector variables. This leaves 1.5% of the variation to be influenced by other factors. The coefficient of multiple determinations (adjusted R^2) indicates the percentage proportion of variations of the dependent variable clarified collectively by the independent variables. Results indicate 94% of the financial sector development in Kenya can be ascribed to the joint influence of the indicator variables.

Table 4.3 ANOVA

ANOVA[b]					
Model	Sum of Squares	DF	Mean Squares	F	Sig.
Regression	0.038	3	0.013	21.785	0.156
Residual	0.001	1	0.001		
Total	0.038	4			

a. Predictors: (Constant), ACPs, APP, CMU

b. Dependent Variable: OPM

Source: Research findings (2018)

Table 4.3 represents the analysis of variance. The significance as demonstrated by the p-value is 0.156 which is > 0.05 implying that the independent variables are not good predictors of the dependant variable. However, the regression relationship demonstrates significance in anticipating the effects of working capital on financial sector in health facilities. F calculated at 5%level of significance was 21.785.This is quite high the F critical, thereby indicating that the general regression model was indicative.

Table 4.4 Regression Coefficients

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std.Error	Beta	T	Sig.
Constant	0.222	0.31		0.716	0.604
ACP	0.006	0.012	0.074	0.5	0.698
APP	-0.002	0.003	-0.090	-0.666	0.616
CMU	23.266	3.516	0.942	6.617	0.095
a. Dependant Variable: OPM					

Source: Research findings (2018)

Regression Model derived from the table 4.4was as below

$$\mathbf{Y= \quad 0.222+0.006X_1-0.002X_2+23.266X_3}$$

Where:

Y= Operating Profit Margin measured using revenue less taxes and Interest less operating expenses.

X_1= Average Collection Period given as Accounts receivable over net sales times 365 days

X_2= Average Payment Period calculated as the Accounts Payable over the cost of sale times 365 days

X_3= Consumable material used given by revenues less operating expenses

The above regression equation has demonstrated that, holding all factors constant at zero the financial performance of private health sector will be 0.222.The findings also indicate that holding all independent variables constant: A unit increment in the ratio of consumable material used would prompt to a 23.66 rise in the scores of financial sector development in health sector. A unit increment in the ratio of average collection period used would prompt to a 0.006 rise in the scores of financial sector development in health sector. A unit decrement in the ratio of average payment period used would prompt to a 0.002 fall in the scores of financial sector development in health sector. Overall, the ratio of consumable material used had the greatest impact on the financial performance in the health sector.

4.4 Discussion of Results

The objective of this study was to establish a significant relationship between working capital and financial performance of private health facilities in Mombasa County. From the regression model, the study revealed that working capital affects the financial sector of health facilities. Consumable material used, average collection period payable they influenced the health sector profitability positively. Whereas the Average payment period has influenced the health sector negatively. The study established the intercept of 0.222 for all the years. The independent variables that were studied, explain a substantial 94% of the financial sector development in Mombasa County as represented by the adjusted R^2 (0.94). This hence implies that the independent variables contributes to 94%of the financial sector development, while random variations and different variables not contemplated in this study contributes 6% to the financial sector development in Mombasa County.

The study established the coefficient for the ratio consumable material used was 23.66, meaning that it positively and significantly influence the financial sector in the health facilities of Mombasa County. This relation indicates that if consumables within the sector are managed efficiently they are likely to make more profits.

Average Payment period and Profitability**:** The study established the coefficient for the ratio average payment period used was -0.002, meaning that it negatively and significantly influence the financial sector in the health facilities of Mombasa County. Average Payment period indicates a negative relationship with profitability from the study. Creditor's always show a negative relationship with the operating profit margin (Arunkumar and Ramanan, 2013). This negative relationship between the two implies that longer periods for payment leads the health facilities to a low level of profitability and vice versa.

Average Collection Period and Profitability**:** The study established the coefficient for the ratio average collection period used was 0.006, meaning that it positively and significantly influence the financial sector in the health facilities of Mombasa County. The research findings indicated that there is a positive relationship between average collection period and profitability. This means that as average collection period increases, the health facilities level of profitability also increases.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter has summarized the findings and makes conclusions based on the specific objective of this study that is to determine if there exist a relationship between the working capital management and financial performance of health sector. Also includes in the study is recommendations for improvement, limitation of the study and further research.

5.2 Summary of Findings

The study used the determinant consumable material to establish the relationship between the working capital management and financial performance on the private health sector. From the findings it shows there is an increase in consumables material used over the years. The highest peak recorded at 0.041 in 2016 while it started with 0.031 in 2012. This could be as a result of the resources being purchased and put into action since a lot of services is taking place. The consumable material used had mean of 0.0362 with a standard deviation of 0.004. The ANOVA interpretation was a unit increment in the ratio of consumable material used would prompt to a 23.66 rise in the scores of financial sector development in health sector.

The determinant of Average collection period used to establish the relationship between working capital and financial performance in the private health sector showed a positive relationship between the two. Having its mean recorded at 28.66 while standard deviation being 1.13. Over the years its trend has been Up and down. The highest period was in 2015 with 30.1 and lowest ratio of 27.14 in 2012.The ANOVA interpretation was that a unit increment in the ratio of average collection period used would prompt to a 0.006 rise in the scores of financial sector development in health sector.

Lastly the Average payment period had a negative influence on the relationship between the working capital management and financial performance from the study. Their trend was up and down over the year's reason being having credit terms that are not fully adhered to thus affecting operations. The mean being at 43.16 with standard deviation of 4.03.Since the variables had ups and down the highest period was in 2013 with 49.25 with lowest period in 2015 at 39.3. The ANOVA interpretation was a unit decrement in the ratio of average payment period used would prompt to a 0.002 fall in the scores of financial sector development in health sector.

5.3 Conclusions

From the research the findings were that positive relationships in profits exist with working capital management. Deloof (2003) argued that relationship between working capital management and profitability is to some extent a consequence of profitability affecting working capital management and not vice versa. From the conclusion of the study it implies that profitability increases with increase in inventory and average accounts payables while decreasing with increasing accounts receivables. The negative relationship of accounts receivables and profitability is explained by firms waiting for longer hours to be paid their bills. Decline in revenues are can result in a negative relation between the cash conversion cycle and profitability.

Emery (1984) sees that marketable securities are less more profitable than trade credit. Trade Credit has been explained well from Finance based model (Schwartz, 1974) that firma able to obtain funds at low cost will offer trade credit to firms facing higher fiancé terms. The model is further explained with studies from Deloof and Jerges (1996) that Belgian firms with a shortage of cash automatically reduce the investment in accounts receivables.

5.4 Recommendations

From the basis of study from the research it has been conclude that profitability can be improved in a number of ways. It has acknowledged the fact that different firms have their profitability being determined with various factors. Factors vary in degree of influence and profitability. However, at the end to maintain efficiency and effectiveness on profitability of a firm, management should be able to work on their working capital. The Health facilities should be able to negotiate with their creditors for longer credit period and at the same time increase their debtor's collection. The value for the shareholders can be created by the managers by reducing the number of days for accounts receivables.

5.5 Limitation of the Study

As private health facilities, it still remains closed up sector with very minimal to financial regulations and disclosure requirements. Due to that they were hesitant to provide the financial records due to fear of unknown. Thus made it a hard task to collect the secondary data required. Others had a long bureaucracy which made the data almost impossible to collect and in others had to close without their submitted record due to time schedule.

5.6 Suggestions for Further Research

The study was a survey of the private health facilities in Mombasa County and I recommend that further studies be carried out in industries and sectors not yet researched to provide uniqueness of each industry. Further research should be done on why there is a positive relationship between working capital and profitability of the private health sector. Need for further research is required to find out as to what brings about this kind of relationship.

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APPENDICES

Summary of Variables for the Study period

	2012	2013	2014	2015	2016
OPM	0.58	0.64	0.72	0.79	0.81
CMU	0.031	0.034	0.036	0.039	0.041
ACP	27.14	29.4	28.5	30.1	28.18
APP	39.87	49.25	44.6	39.3	42.8

RAW DATA

OPM	CMU	ACP	APP	O.C
0.08	30.11	30.88	58.52	1.34
0.07	33.3	47.98	71.01	1.34
0.08	37.77	58.84	65.14	1.34
0.07	19.87	54.92	58.12	1.34
0.07	16.17	53.25	63.04	1.34
0.05	16.96	50.58	63.91	3.26
0.05	17.02	42.62	59.28	3.26
0.02	44.29	3.69	41.22	3.26
0.11	47.34	18.31	37.35	3.26
0.11	49.13	16.45	35.66	3.26
0.14	51.68	28.04	33.08	20.76
0.17	48.64	35.19	30.59	20.76
0.2	46.26	41	28.19	20.76

0.21	47.55	41.07	27.7	20.76
0.22	47.34	18.31	37.35	20.76
0.23	47.17	44.78	26.1	31.45
0.24	47.01	46.16	25.51	31.45
0.02	5.19	18.72	56.14	31.45
0.03	16.1	16.83	54.54	31.45
0.05	17.22	30.97	57.3	31.45
0.07	19.46	28.21	56.06	15.81
0.07	25.89	46.11	69.27	15.81
0.07	31.53	57.27	63.61	15.81
0.07	14.3	53.59	56.81	15.81
0.07	12.63	52.13	61.96	15.81
0.05	13.89	49.65	63.02	28.02
0.05	14.38	41.78	58.49	28.02
0.07	9.4	22.85	59.83	28.02
0.04	29.56	20.97	58.23	28.02
0.06	29.62	34.12	60.2	28.02
0.08	30.07	30.87	58.5	31.56
0.07	33.27	47.97	71	31.56
0.08	37.75	58.83	65.13	31.56
0.07	19.84	54.91	58.11	31.56
0.07	16.15	53.24	63.04	31.56
0.05	16.95	50.57	63.9	10.96

0.05	17.01	42.61	59.28	10.96
0.02	9.42	22.87	59.85	10.96
0.04	29.62	20.99	58.25	10.96
0.06	29.67	34.13	60.22	10.96
0.08	30.11	30.88	58.52	28.4
0.07	33.3	47.98	71.01	28.4
0.08	37.77	58.84	65.14	28.4
0.05	16.96	50.58	63.91	28.4
0.05	17.02	42.62	59.28	28.4
0.13	51.48	3.71	44.59	34
0.17	48.58	35.12	30.52	34
0.2	46.18	40.95	28.13	34
0.21	47.47	41.02	27.65	34
0.22	47.27	43.07	26.77	34

List of Health Facilities

1. Mombasa Hospital
2. Pandya Memorial Hospital
3. Agakhan Hospital Mombasa
4. Alfarooq Hospital
5. MEWA Hospital
6. Jocham Hospital
7. Sayyida Fatima Hospital
8. Bomu Hospital
9. Memon Hospital
10. Nyali Healthcare