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# EFFECTS OF WORKING CAPITAL MANAGEMENT ON FINANCIAL PERFORMANCE OF PRIVATE MEDICAL FACILITIES IN MOMBASA COUNTY

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### ABSTRACT

The objective of the study was to assess the effects of working capital on financial performance of private medical facilities in Mombasa County. The study specific objectives were to analyze the impact of cash conversion cycle on financial performance of private medical facilities, to assess the impact of accounts receivables on financial performance of private medical facilities, to analyze the impact of accounts payable on financial performance of private medical facilities and to examine the impact of accounts accruals on financial performance of private medical facilities. The financial performance of many business entity is pegged on efficient management of its current resources, given that the core business activities of a firm operations is impacted by management plan and decisions on trade off for the company working capital elements. These categorically consist of inventory, accounts payable, accounts receivables, cash conversion cycle and accounts accrual. Relevant working capital management theories that relate to aspect of working capital were used. These included theory of Keynesian liquidity preference, Cash Conversion Cycle Theory, pecking order theory, Free Cash Flow Theory and theory of credit. Mombasa County had a registered number of 148 private medical facilities as per the county government report of 2017. The study sample size were 37 respondents from private medical facilities in Mombasa County, this was a represented 25% of the target population. The study adopted a descriptive research design, data was analyzed using SPSS to yield analysis of demographic data. From the analysis, a response rate of 86% was attained. The regression equation showed a strong relationship between financial performance to accounts accrual and accounts receivables while accounts payable and cash conversion cycle had a negative significance relationship.

*Key terms:* Account Payable, Account receivable, Bad debts, Cash management, Financial Performance, Inventory management, Liquidity, Medium Enterprise, Profitability, Working capital

#### INTRODUCTION

According to Mohanty, (2013), defined working capital is the flow of ready funds necessary for the working of a concern of day to day business operations. It comprises of funds invested in current assets, which in the ordinary course of business can be turned into cash within a short period without undergoing diminishing in value and without disruption of the organization. In a global context, working capital is a vital element in any organizational setting that requires cogent financial attention, proper planning and management competency Alu, (2012). This has seen companies like Apple, Nokia and Sony to continuously strengthen their financial model. A positive working capital indicates the ability of the business to pay off its short term obligations at most when request comes from suppliers but a negative working capital indicates the inability of the business organization to pay short term obligations. As such, excessive working capital indicates an accumulation of idle current assets, which do not contribute in generating income for the firm during the operating period. Inadequate working capital on the other hand harms the credit worthiness and the day-today activities of firms, which may lead to insolvency Singh and Asress, (2010).

Working capital management is concerned with short-term investment and financing decision of an entity and is a major business requirement and a significant part of SMEs finance Sajjad, (2012). WCM covers the planning and controlling activities of companies regarding their current assets and current liabilities in a manner that guarantees their ability their current obligations to meet satisfactorily as well as a maximum return on their precious investment in these floating assets. The ultimate goal of working capital management is to ensure that firms are able to continue their operations with sufficient cash flow that will service their long-term debts and satisfy both maturing

short-term obligations and upcoming operational expenses Alu, (2012). WCM more so in manufacturing sector is used as an optimization tool to make the most profitable use of liquid funds while maintaining a minimum level of liquidity to cover possible unexpected short-term expenditures Peri, (2015). Efficient working capital management involves planning and controlling of current assets and current liabilities in a manner to strike a balance between liquidity and profitability Uchenna, (2012). An improper management of working capital components that is, accounts receivable, accounts payable and inventories will result to financial difficulties and constraints in the firms continued operations and consequently the market value of the firm will also suffer Mohamad, (2010). The ultimate objective of any firm is to maximize shareholders wealth and maximizing shareholders wealth can be achieved when a firm maximizes its profit. A firm that wishes to maximize profit must strike a balance between current assets and current liabilities and hence keeping abreast of the liquidity and profitability trade-off Uchenna, (2012). SMEs financial performance reflects the final outcome of business operations thus a well designed and implemented working capital management is expected to contribute positively to the creation of firm's value and foster strong financial а performance.

Financial performance is described as a subjective monetary measure of on the way different firms use their tangible and intangible resources they control to generate income revenues. Various sector present unique ways of assessing their overall financial health over a given period of time, this can be significantly compared in the same industry like health sector or compare the sectors in aggregation (Pandey, 2010). The Kenyan health sector has evidently gone through different regulations and financing those that are accredited to accept National Hospital Insurance Fund NHIF patients. Given that, the sector contributes immensely to the socioeconomic wellbeing of a healthier workforce and citizens in Kenya and the rest of the world.

Private medical facilities provide unique and quality medical attention compared to public ones. Such exceptional and specialized health services range from client and operations involved. Though some incurs risk as a result of defaults from clients and cost of acquiring equipment's, highly skilled personnel in medical and technical fields. Private medical facilities ability to meet their financial goals and overcome risks in the economy hinges on their capacity to create profit or value for their shareholders. A well developed and quality and cost oriented hospitals are deemed to operate in a sustainable business environment (Ahmed, 2010).

The health sector industry' ability to continue to operate in ever-changing competitive and risky environment marred with unqualified staffs, illegal health facilities, high compensation for qualified and few medical practitioners, non-compliance to quality health standards. These make the operating environment for private medical facilities to be in unpredictable performance in the process of creating profit or value for their shareholders. A well-developed and evolved medical industry is a boom for economic development as it provides long- term and short-term health services and products to promote a healthy work force with high productivity in the economy (Charumathi, 2012).

According to Nirajini and Priya, (2013), financial performance is a measure of capital structured in a firm that comprises of debt and equity. The health sector, performance is normally expressed in general growth of the business by setting up modern infrastructure, increased in provision of affordable and quality medical services, recognition from the local communities within the county and profitability to meet and sustain work force in the system.

There are many ways to measure financial performance, though all measures should be taken in aggregation. Line items such as revenue from operations of the hospitals, operating income or cash flow from operations can be used, as well as total number of patient's visits in a year. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt. Other measures of financial performance include liquidity, solvency, profitability, debt repayment capacity and financial efficiency of the firm (Priya, 2013).

These financial measures can be classified as profit performance measures and investment performance measures. Profit performance includes the profits measured in monetary terms. Simply, it is the difference between the revenues and expenses. These two factors, revenue and expenditure are in turn influenced by firm-specific characteristics, industry features and macroeconomic variables (Bonanza, 2010). A firm's financial performance, in the view of the shareholder, is measured by how better off the shareholder is at the end of a period, than he was at the beginning and this can be determined using ratios derived from financial statements; mainly the balance sheet and income statement, or using data on stock market prices (Saliha, 2011).

These ratios give an indication of whether the firm is achieving the owners' objectives of making them wealthier, and can be used to compare a firm's ratios with other firms or to find trends of performance over time. According to Saliha, (2011), states that an adequate performance measure ought to give an account of all the consequences of investments, on the wealth of shareholders. The main objective of shareholders in investing in a business, is to increase their wealth. Thus the measurement of performance of the business must give an indication of how wealthier the shareholder, has become as a result of the investment over a specific time.

There are indeed many different ways to measure financial performance, but all measures should be taken in aggregation. Some of the indicators of financial performance are return on equity liquidity ratios, asset management ratios, profitability ratios, leverage ratios and market value ratios. Carreta and Farina (2010), argue that use of financial performance could still be justified on the grounds that it reflects what managers actually consider to be financial performance and, even if this is a mixture of various indicators like accounting profits, productivity, and cash flow. Financial performance is determined by the following indicators; profit, revenues, fees, budget, costs or expenditure and stock market indicators. Proxies for the financial performance of stock market also include the accounting measure of performance, return on equity (ROE) and return on asset (ROA) as identified by First Rand Banking Group (2006).

Mombasa County is the second largest city with an estimate of a total population of 1.2 million according to Kenya National Bureau of Statistics (KNBS, 2016). The County is made up of the following six sub counties: Mvita, Kisauni, Nyali, Likoni, Changamwe and Jomvu. The city is the home to several industries which include: Food Processing, Manufacturing, Mining (Cement), Fishing, Motor Vehicle Assembly, Wholesale and Retail Trade (Kenya Open Data, 2011). The rest is predominantly agricultural in the fields of coconut, sisal. Some of the widely known private medical facilities in the county are Pandya Memorial Hospital, Agha Khan Hospitals, Mombasa Hospital and many more. Mombasa has a cosmopolitan population, with the Swahili people and Mijikenda

predominant. Other communities include the Akamba and Taita, a significant population of Luo and Luhya peoples from Western Kenya are also present. The major religions practiced in the city are Islam, Christianity and Hinduism. Over the centuries, many immigrants and traders have settled in Mombasa, particularly from the Middle East, Somalia Indian sub-continent and the rest of the world who came mainly as traders and skilled craftsmen.

Successful management of firm's operation rely heavily on the ability of financial managers to effectively manage the components of working capital. This is aimed at promoting management decision on the wellbeing of a firm. Lowering production costs and maintaining sales revenue increases profits, thus providing more cash for working capital management Will (, 2005). Many Private medical facilities in Mombasa County and the rest of Kenya have had a significant setback in managing their working capital that has resulted to collapse of some of them. This has also led to government and other stakeholder's intervention by pumping in more financial resources or changing the management structure to revive their survival more so those allied to public sector.

Working capital is a crucial decision on multiple aspects, including managing account payables and account receivables, preserving a certain level of inventories and the investment of accessible cash to enhance day to day running of the firm Mohamad, (2010). However, most financial managers place much premium on other long-term financial decisions, particularly investments and capital structure decisions.

According to a study by Madhou, (2011) in the pursuit of running the day to day business of a firm, top managers fail to pay attention to the management of working capital. As such, most of the working capital decisions are delegated to junior managers of the firm and are rarely factored in when major decisions undertaken by the CEOs. In Kenya, Government regulation on medical practices remains a precondition for public hospitals, thus less emphasis is given to private medical facilities. The sector ought to have strong policies and ensure key and basic infrastructure are in place. Given that there exist public private partnership in the sector. Most of the medics' institutions are recognized by the government and patients seeking basic medical attention can as well be eligible. The medical insurance cover that is National Hospital Insurance Fund (NHIF). On one hand costs of designing and enforcing regulatory policies to address the specific challenges of medical institutions are substantial (Hartaska and Mersland, 2009).

However, the Kenyan private medical facilities are marked by rising competition and quality supply of medical facilities over the accounting period, this continues to have a depressing effect on quality and lack of drugs in public wing. Moreover, several studies have been carried out locally, regionally and internationally on the impact of working capital management on financial performance of different firms. For instance, globally studies by Hoang (2015), Mansoori and Muhammad (2012) obtained varied results on the relationship between working capital and financial performance. Regionally, studies by Alu (2012), Padachi (2006) and Agyemang (2013) also examined the effect of various working capital components on profitability. Local studies by Makori (2013) and Muturi et al (2015) also examined the impact of working capital management on the profitability of various firms in Kenya. However, the above studies concentrated on different sectors hence their findings cannot be generalized to the private medical facilities in Mombasa County. As such, in Kenya, there exist few studies on the effect of working capital management on the financial performance in the medical sector. Though, little has been done on analyzing the effects of working capital management on financial performance of private medical facilities in Mombasa County and thus why the research becomes necessary in assessing the impact of average collection period, cash conversion cycle and average payment period to financial performance.

#### **Objectives of the study**

- To find out the effects of cash conversion cycle on financial performance of private medical facilities
- To assess the effects of accounts receivable on financial performance of private medical facilities.
- To evaluate the effects of accounts payable on financial performance of private medical facilities.
- To examine the effects of accounts accruals on financial performance of private medical facilities

# RELATED LITERATURE

# Theoretical Framework

This consisted of concepts plus their definitions on the theories and paradigms used in the research on Working capital management.

#### Keynesian Liquidity Preference Theory

The theory of Keynesian liquidity preference was first developed by a renowned economist John Keynes in 1936 with key foundation on working capital management. The theory states that holding all other factors constant, rational investors will have a preference for liquid investments as opposed to illiquid investments and will seek a premium for investments that will take longer to mature. Thus the liquidity is regarded as the expediency of holding cash. In a hospital environment, a firm or an individual will opt to hold money for three various reasons at a given time (Bitrus, 2011). Relating the theory to working capital management aspects of cash as an asset to the business, hospitals will hold cash or inventory to meet their day to day business transactions, they will have cash backup for speculative motive in the future like to invest, they will have cash as a precautionary motive in that happen they can manage, anything and compensation motives to meet the obligation of their employees in the payroll.

The Keynesian liquidity preference theory is applicable to the study given the need to have available liquidity to support day to day activities of the hospitals which cannot be ignored in the firm level. Though, Gakure (2012), noted a there exists a significant negative relationship between a firm's liquidity and its financial performance. Businesses have to ensure they minimize the total cost of liquidity and cost of illiquidity, WCM objective being enhancing both liquidity and financial performance (Pandey, 2010).

# Cash Conversion Cycle Theory by Richard and Laughlin 1980

Richard and Laughlin (1980) noted that by ascertaining the period taken to use cash to purchase productive resources and when the funds are recovered through inflows in form of revenue and profits, financial managers can establish appropriate WCM policies. The authors further noted that a movement towards a longer cash conversion cycle could be detrimental as it needs immense cash commitment at the expense of having optimal balance between liquidity and profitability.

By analyzing the period that elapses from the time a firm spends cash on specific items, to the time it

receives revenues in the form of sales, it is possible to find out it takes to convert cash outflow into an inflow. Richard and Laughlin (1980) explained that a movement towards a longer cash conversion period results in an expanded level of commitment in investing in current assets, though the financial capabilities of the firm may expand at a higher rate.

Modern theories offer three alternative strategies of working capital management, that is, conservative working capital management policy, aggressive working capital management policy and moderate working capital management policy. The literature contains an extensive debate on the risk/return trade-off among different working capital management policies (Gitman, 2005; Moyer et al., 2005; Brigham & Ehrhardt, 2004). While more aggressive working capital management policies are associated with higher returns and risk, conservative working capital management policies offer both lower risk and returns.

Mathur (2003) describes the working capital management policies divisions as Conservative policy, Aggressive policy and Moderate policy. Under the conservative policy, the company may prefer to hold rather heavy cash and bank balance in current account or investments in readily marketable securities, meanwhile with higher stocks of raw materials and finished goods, in the preparing for reducing the risks for out of the stock and loss of sales. Aggressive or restrictive working capital management policy may result in disproportionately big losses by risks of stock outs and the consequential loss of production as well as losing sales and negatively influencing the profitability of the company. A moderate policy, the level of working capital management will be moderate, neither too high nor too low, but just right.

An approach to aggressive working capital

management policy of liquidity management results in a lower cash conversion cycle by reducing the inventory period and the accounts receivable period while stretching the accounts payable period. Aggressive asset management leads to the capital being minimized in current assets versus long-term investments. This would result in higher profitability but greater liquidity risk. As an alternative, a more conservative policy places a larger amount of capital invested in liquid assets, but at the sacrifice of some profitability. Aggressive financing policies "utilize higher levels of normally lower cost short-term debt and less long-term capital. Although lowering capital costs also mean an increase of the risk of short-term liquidity problem". Weinraub & Visscher (1998). Following the Mathur (2003) definition, the three major components of current assets are accounts receivable, inventories and cash and equivalents. Current liabilities include primarily the accounts payable and debt due in less than one year. Shin & Soenen (1998) emphasizes that working capital management is the result of the time interval between the paying for the purchase of raw materials and the collecting for the sale of the finished goods, therefore the method(s) in which working capital management is managed can have an important impact on both the liquidity and profitability of the firms. The investment in working capital management involves carrying costs and shortage costs, so the firms have to find the tradeoff between them. According to Brealey et al (2004) explains if firms collect earlier on their receivables from their customers, the cost invested in the receivables through interest could be saved and used in business operations. The firm also forgoes the earnings of interest when it holds idle cash balances rather putting the money into use. The cost of holding inventory includes opportunity cost of capital, storage and insurance costs as well as the risk of spoilage or inventories become out of the date. All of these carrying costs urge firms to hold current assets to a minimum level. Carrying costs discourage large investments in current assets, however, too low a level of current assets likely make firms to deal with shortage costs. If the firm runs out of inventory of raw materials, it may lose sales. If the firm runs out of cash, it may have to access expensive external financing. The firm may also maintain too low level of accounts receivable. If the firm tries to minimize accounts receivable by restricting credit sale, it may lose customers. In terms of accounts payable, Petersen & Raijan (1997) explain that accounts payable are firms" borrowing from its supplier. The level of accounts payable is interpreted as the credit extended to firms by its suppliers and the firm's demand for funds. "The firm's accounts payable are a function both of the supply of trade credit and how long the firm takes to repay the debt".

#### The Pecking Order Theory

The pecking order theory is based on the idea of asymmetric information between managers and investors. It predicts that firms' financing deficit and information asymmetry are the main determinants of securities issuance and therefore, firms use external financing only if internal funds are not sufficient to finance the firms' growth opportunities and the information asymmetry cost is low. If external funds are needed, the pecking order theory predicts that firms will issue the safest security possible, given that the cost of financial distress is ignored (Cortei, 2011). A safe security is defined as one unaffected by the revelation of managers' inside information. This implies that firms will first issue debt and then equity.

#### Free Cash Flow Theory

Jensen (1986) argued that there is a difference in interests between managers and shareholders regarding excess cash flows. Managers would often want to retain the excess cash flow and invest it in value reducing projects, such as negative net present value projects. Capital structure is one of the means of controlling managerial behavior. A major problem for shareholders is how to force managers to pay out cash flows rather than retain them. Using debt reduces cash flow available to managers for spending and forces them to pay out future cash flows. However, shareholders cannot force the payment of dividends and therefore the theory predicts that announcements of CEOs has a negative effect on stock returns and performance since it increases the free cash flow available for poor spending. An empirical prediction of the free cash flow theory is that the change in performance following the equity issue is negatively related to the existing free cash flow. The theory also predicts that as long as the number of positive-NPV opportunities is limited, these firms will experience a decline in operating performance subsequent to issuing equity.

# Theory of Credit

This theory, first suggested by Emery in nineteen eighty four, he proposes that credit rationed firms use more trade credit than those with normal access to financial institutions. The central point of this idea is that when a firm is financially constrained the offer of trade credit can make up for the reduction of the credit offer from financial institutions. In accordance with this view, those firms presenting good liquidity or better access to capital markets can finance those that are credit rationed. Several approaches have tried to obtain empirical evidence in order to support this assumption. For example, Nielsen (2012), using small firms as a proxy for credit rationed firms, finds that when there is a monetary contraction, small firms react by increasing the amount of trade credit accepted. As financially unconstrained firms are less likely to demand trade credit and more prone to offer it, a negative relation between a buyer's access to other sources of financing and trade credit use is expected.

#### Miller-Orr Cash Management Model

This model was derived by Miller and Orr (1966) in an attempt to produce a more realistic approach to cash management over Baumol's model. The model manages to achieve a reasonable degree of realism while not being too elaborate. It assumes that the net cash flows are uniformly distributed with zero value of mean and standard deviation. The firm sets the lower limit as per its requirements of maintaining cash balance and upper limit as the control limit as well as its return point. If cash balance reaches the upper limit, the firm buys sufficient securities to return the cash balance to a normal level called the return point.

When cash balances reach a lower limit, the firm sells securities to bring the balance back to return point (Pandey, 2008). Cash must also be maintained at an ideal level. It may also result to increased cost due to mishandling, waste and theft. Too much or inadequate level of cash balances mean cash is not properly utilized. Inadequate level of cash balance for example can lead to stoppage in business operations (Padachi, 2006). A company may be profitable but with no liquid cash which can to operations interruptions. The company can also be forced into winding up by its creditors.

#### Baumol's Cash Management Model

The model was designed to minimize the sum of opportunity cost associated with holding cash and trading costs associated with converting other to cash. The procedure is very similar to the EOQ Model for inventory size but it deals with different variables. It assumes that the firm holds a portfolio of marketable securities which can easily be converted into cash (Baumol, 1952). According to this model, cash is assumed to start from a replenishment level, and then declines smoothly to a value zero.

In Baumol model, the financial manager has to decide on the repartition of liquid funds between cash and marketable securities (Pandey, 2008). Once again, there is a trade-off which constitutes the basis for the calculation. Yet, this trade-off is related to the opportunity costs of holding cash which increase along with the cash level and the trading costs which are incurred with every transaction and which decrease when the cash level increases (Cornett et al. 2009). The opportunity costs represent the interest forgone for funds which are held in cash instead of being invested. The trading costs correspond to fixed costs which are incurred when a company decides to either buy or sell marketable securities (Pandey, 2008). If a company decides to maintain a low cash level it will have to carry out many transactions leading to high trading costs but low opportunity costs because there are little idle cash funds. If it maintains a high level of cash, the firm's opportunity costs will be higher due to the relatively large amount of uninvested cash but the trading costs will decrease since only a few transactions will be necessary (Pandey,

2008). Despite the fact that Baumol's cash management is an important tool in management, it suffers from a number of short comings; first, the model assumes that the firm has a constant, perfectly disbursement rate for cash. In reality, disbursement rates are much more variable and unpredictable; secondly, the model assumes that no cash will come in during the period in question. Since most firms hope to make more money than they pay out, and usually have cash inflows at all times, this assumption is obviously at odd with what we see. Finally, the model does not allow for any safety stock of extra cash to buffer the firm against unexpectedly high demand for cash (Cornett et al. 2009).

#### **Conceptual Framework**

# Cash Conversion cycle

- Cash budget preparation
- Cash balance determination
- Cash budget review
- Cash Conversion cycle
- Financial PlanningCash flow

projections

#### Accounts Receivable

- Debtors collection period
- Bad debts
- Credit policy

#### Accounts payable

- Accounts payable . period
- Payables policyInventory cycle

#### Accounts accruals

- Poor management
- Payment policy
- Pro rata policy
  - \_\_\_\_\_

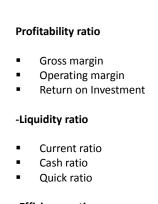
Independent variables

# Dependent variable

#### Figure 1: Conceptual Framework

# **Cash Conversion cycle**

The cash conversion cycle approach was developed by Richards and Laughlin (1980). They defined the cash conversion cycle as the net time interval between actual cash expenditures on a firm's purchase of productive resources and the ultimate recovery of cash receipts from product sales, establishes the period of time required to convert one dollar of cash disbursement back into a dollar of cash inflow from a firm's regular course of



**Financial Performance** 

# -Efficiency ratioDebtors turnover

- Inventory turnover
- Working capital turnover

operations. The CCC comprises the sum of the inventory conversion period and the receivables collection period, minus the payables deferral period. The inventory conversion period and the receivables collection period combined are defined as the operating cycle (Pandey, 2010). The CCC theory suggests that a cash conversion cycle analysis should be used to supplement the traditional but static liquidity ratio analysis because it provides dynamic insights. The Cash Conversion Cycle (CCC) is used as a comprehensive measure of working capital management as it shows the time lag between expenditure for the purchases of raw materials and the collection of sales of finished goods. The longer the cycle, the larger the funds blocked in working capital management (Padachi, 2006). The cash conversion cycle analysis provides more explicit insights for managing a firm's working capital management position in a manner that will assure the proper amount and timing of funds available to meet a firm's liquidity needs. In addition, the cash conversion cycle analysis provides more explicit insights for managing a firm's working capital management position in a manner that will assure the proper amount and timing of funds available to meet a firm's liquidity needs (Peri, 2015). Cash conversion cycle indicates the efficiency of management of current assets hence a shorter time of cash conversion allows the firms to generate more sales from the amount invested, which shows that the business utilized its resources for generating maximum profit (Asress, 2011).

#### Accounts Receivable

Accounts receivable management contributes to the realization of the basic financial obligation of many institutions and more so the private medical facilities. This forms the vibrant tool that help to achieve the vision and mission of the institutions (Michalski, 2012).

Private medical facilities overall objective may be realized through the effective way of managing the account receivables, this is executed to focus on the risk and uncertainty of the receivables who directly impacts on the financial performance of the mention or involved institutions. The accounts receivables have a direct impact on the business operation as they may pose operational risk to the organization. According to Michalski (2012) due to change in the level of accounts receivables in the nonprofit organization increases the net working capital management level and influences on the cost of managing and holding the accounts receivables.

Pike and Cheng (2001) maintain that given a significant investment in accounts receivables by most large firms, credit management policy choices and practices may have important implications on corporate value and that successful management of resources will often lead to higher corporate profitability. Hence, there should be a guided flexibility introduced in managing a firm's customers (debtors) credit extension policy.

# Accounts payable

Accounts payable are the clients who are willing or have supplied materials and services to the specified business entity on credit terms. Thus the credit management method is effected by collecting and controlling of the payments from the customers (Pandey, 2010). Based on the concept of accounts strategies are adopted payables, in the organizations or private medical facilities to ensure that they maintain an effective level of credit and management of the payables accounts. This entails day to day duty of credit analysis, credit classification, ratings and reporting to the decision making arm in the organization (Gill, 2010). According to Padachi, (2011), a sound credit policy is the blueprint for how the company communicates

with and treats it's most valuable asset, the customers. Gill, (2010), proposes that a credit policy creates a common set of goals for the organization and recognizes the credit and collection department as an important contributor to the organization's strategies. If the credit policy is correctly formulated, carried out and well understood at all levels of the financial institution, it allows management to maintain proper standards of the bank loans to avoid unnecessary risks and correctly assess the opportunities for business development.

#### Accounts accruals

Accounts different accruals represents the component that reflects on the information relating to future cash flows and aggregate earnings. Disaggregating the accruals into the change of account receivables, change in accounts payables, depreciation, amortization, change in inventory and cash conversion cycle significantly impact the accrual accounting and financial performance of many institutions. The cash flow and accrual components of current earnings have substantially more predictive ability for future cash flows than several lags of aggregate earnings (Priya, 2013).

Several studies have documented that the accrual component of working capital management and its implication to financial performance is less persistent than the cash flow components of earnings. A new evidence indicating that temporary accounting distortions are a significant contributing factor to the lower persistence of the accrual component of earnings. From the analysis it is clearly evidenced that lower persistence of accruals extends to accruals that are unrelated to revenue growth and that extreme accruals are systematically associated with alleged cases of earnings manipulation (Krueger, 2005).

### **Financial Performance**

The financial performance of a firm is greatly impacted by the working capital management decisions, firm size, and corporate governance.

WCM decisions play an essential function in determining the firm's financial performance. Numerous studies on WCM impact on financial performance have indicated that there is a link between WCM and financial performance. Company executives can create value for shareholders by efficiently managing working capital (Krueger, 2005). This can be achieved by putting in place proper credit policies, inventory turnover levels, and appropriate payment periods, and in general, efficient management of the CCC at large (Filbeck & Krueger 2005). Howarth and Westhead (2003) proposed that WCM has to be managed efficiently since it plays a big role towards the key strategy of any firm which is to create value for its shareholders. Efficient WCM decisions ensure minimum costs and risks to the firm and that cash is trapped in the business cycle for a short time resulting in increased revenues hence financial performance.

Debt financing can be used by a company to fund its operations and growth, hence increasing its returns and financial performance. This is done with the expectation that the cost of obtaining the debt will be lower than the income generated from the use of the funds. A company's leverage is the ratio of its capital structure represented by debt financing. Modigliani-Miller Theorem (1958) proposes that the value of a firm is not significantly influenced by the debt-to-equity ratio in a perfect market where there are no taxes and same interest rates. Modigliani and Miller (1963) changed the no-tax assumption to account for corporate taxes. Leverage gives a company a tax shield since interest payments are not taxable and therefore leverage can be associated with higher returns and financial performance (Jensen, 1986). Leverage can be used

as a tool to align managerial actions towards improving financial performance of firms as there will be heightened scrutiny from shareholders and financial analysts. However, with leverage, if interest rates rise a company's financial performance and future cash flows will fluctuate greatly hence become unpredictable.

To determine the size of a firm, a close look at the quantity and diversity of the firm's production capacity and ability or look at the quantity and diversity of services the firm can provide at a given time to its clients. Based on economies of scale, the size of a firm will dictate profitability as larger firms will benefit from lower costs of producing commodities. A number of studies examining on the effects of firm size on the level of profitability have yielded mixed findings. Ozgulbas et al. (2006) found positive results indicating that large-scale firms had better performance over small-scale firms in a study which examined the impact of firm size on the performance of companies listed at Istanbul Stock Exchange within a period of 6 years (2000-2005).

#### METHODOLOGY

The study consisted of both qualitative and quantitative approaches. The qualitative approach was concerned with subjective assessment of attitudes, opinions and behavior while the quantitative techniques were used to present numerical data.

The data to be collected was analyzed using standard statistical software and presented in pictorial presentations.

The regression equation;  $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$ : Whereby: Y = Financial Performance; ROA = Net Income/Average Total Assets. $<math>\beta 0 = Constant term$  X1 = Cash conversion cycle X2 = Accounts Receivable X = Accounts Payable X4 = Accounts Accrual $\epsilon := Error term$ 

#### **RESEARCH FINDINGS**

Impact of working capital management on financial performance of private medical facilities Table 1: Impact of working capital management on financial performance

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	3	9.4	9.4	9.4
	Disagree	6	18.8	18.8	28.1
Valid	Neither Agree nor Disagree	6	18.8	18.8	46.9
vallu	Agree	3	9.4	9.4	56.3
	Strongly agree	14	43.8	43.8	100.0
	Total	32	100.0	100.0	

Referring to the above table, majority of the respondents were in support to the statement that working capital management has a great impact on financial performance of private medical facilities. This was evidenced by 43.75% strongly agreed, 9.4%

agreed, 18.75% were neutral while a total of 28.125 disagreed.

#### **Cash Conversion Cycle and Financial Performance**

The researcher requested the respondents in the private medical facilities to indicate the extent to which they thought that the cash conversion cycle as an aspect of working capital management impacted on the financial performance. The decision was based on the firms maintains records of average time it takes to convert stocks into cash, the firm maintained a material and resource planning system, the firm paid upfront for imported medical materials, the firm had an overdraft facility **Table 2: Cash Conversion Cycle and Financial Performance** 

with a financial institution, cash conversion was estimated within 365 days, most of the cash for the firm was held in stock, the firm had a working budget and cash balance was determined on day to day basis. From the analysis, there was a strong support to the statement relating to firms maintains records of average time it took to convert stocks into cash with a mean of 3.81 while cash conversion was estimated within 365 days had a least mean of 2.28 as shown in the table below.

	Ν	Minim	Maxim	Mean	Std. Deviation
		um	um		
Cash conversion is estimated within 365 days	32	1	5	2.28	1.198
Cash balance is determined on day to day basis	32	1	5	2.41	1.411
Most of the cash for the firm is held in stock	32	1	5	2.75	1.164
The firm maintains a material and resource planning system	32	1	5	2.84	1.347
The firm has a working budget	32	1	5	2.84	1.110
The firm pays upfront for imported medical materials	32	1	5	2.94	1.162
The firm has an overdraft facility with a financial institution	32	1	5	3.19	1.030
The firms maintains records of average time it takes to convert stocks into cash	32	1	5	3.81	1.230
Valid N (listwise)	32				

# Accounts Receivables Practices and Financial Performance

The author wanted to analyze the respondent's decision on statement relating to account receivables and how it impact on the financial performance of private medical facilities. The decision was based on the fact that the firm debtors collection period policy on accounts due, the firm is sometimes charged for interest to those who default payment in stipulated time, some hospitals clients have posted bad debts, the firm has credit

policy on services and products rendered, the firm categorizes on their receivables for settlements and accounts receivables are settled all within a financial year. From the respondent's feedback, statement relating to the firm sometimes charges for interest to those who default payment in stipulated time had the highest mean response of 3.63 while accounts receivables are settled all within a financial year had a lowest mean of 2.81 as shown in the below table in ascending approach.

	N	Minimum	Maximum	Mean	Std. Deviation
Accounts receivables are settled all within a financial year	32	1	5	2.81	1.401
The firm categorizes on their receivables for settlements	32	1	5	2.84	1.417
The firm debtors collection period policy on accounts due	32	1	5	3.12	1.601
Some hospitals clients have posted bad debts	32	1	5	3.22	1.362
The firm has credit policy on services and products rendered	32	1	5	3.53	1.218
The firm is sometimes charged for interest to those who default payment in stipulated time	32	1	5	3.63	1.476
Valid N (listwise)	32				
Accounts Payable Practices and Financial Performance		•	or interest by /ith a mean res		

# **Table 3: Accounts Receivables Practices and Financial Performance**

# Performance

The respondents were asked to rate their level of agreement or disagreement to the statement relating to account payables and how it impact on the financial performance of private medical facilities. From the analysis, most of the respondents agreed that their firm is sometimes

e d tit very strongly as a factor in the enhancement of account payables. The respondents agreed that the hospitals evaluates on the capacity of the payables with a least support (mean response: 2.78). The range of the respondents are shown in the below table.

#### **Table 4: Accounts Payable Practices and Financial Performance**

	Ν	Minimum	Maximum	Mean	Std.
					Deviation
Hospitals evaluates on the capacity of the payables	32	1	5	2.78	1.313
Hospitals have separate categories of payables	32	1	5	3.00	1.344

The firm receives cash discounts and credit facilities from its suppliers	32	1	5	3.03	1.379
Hospitals debt has been written off by some of its suppliers in the past	32	1	5	3.16	1.322
The firm is sometimes unable to pay its suppliers on time	32	1	5	3.16	1.194
The firm is sometimes charged for interest by its suppliers for late payment	32	1	5	3.19	1.378
Valid N (listwise)	32				

#### **Accounts Accruals and Financial Performance**

The researcher requested the respondents in the private medical facilities to indicate the extent to which they thought that the accounts accruals as an aspect of working capital management impacted on the financial performance of private medical facilities. Their views were ranked based on the indicated level of support. From the analysis, majority of the respondents did support the fact that the firm has determined optimal payment policy for expenses with a highest mean score of 3.84 while statement relating to some accruals are combined to be settle at once had a lowest rating with a mean score of 2.34, the range of respondents are summarized below in the table.

#### **Table 5 Accounts Accruals and Financial Performance**

	Ν	Minimum	Maximum	Mean	Std. Deviation
Some accruals are combined to settle at once	32	1	5	2.34	1.335
The firm keeps accurate on the list of accrued expenses	32	1	5	2.41	1.241
Accruals have short term positive impact on business performance	32	1	5	2.63	1.289
The firm has a defined management policy on accruals	32	1	5	2.84	1.417
The firm reviews its payment policy on accruals	32	1	5	3.03	1.231
The firm has determined optimal payment policy for expenses	32	1	5	3.84	.987
Valid N (listwise)	32				

#### **Financial Performance of Private Medical Facilities**

The respondents were asked to indicate their support or non-support level on statement relating to financial performance of private medical facilities in the region. Form the data presented, it was evident that most of the respondents do support the point relating to the firm return on investment increased. This had a highest mean score of 3.50 followed by the fact that an increase in gross profit margin with a score of 3.13. The hospital having posted low debtors turnover was second last with a mean of 2.69 while the lowest support level was directed on the fact that the firm posted a reduction in operational costs with a mean of 2.63.

# **Table 6: Financial Performance of Private Medical Facilities**

	Ν	Minimum	Maximum	Mean	Std. Deviation
The firm posted a reduction in operational costs	32	1	5	2.63	1.238
The hospital posted low debtors turnover	32	1	5	2.69	1.355
The firm has recorded an increase in gross profit margin	32	1	5	3.13	1.338
The firm Return on Investment increased	32	1	5	3.50	1.078
Valid N (listwise)	32				

### Validity and Reliability

The construct validity can be inferred from the fact that all regressors were significant and the overall regression model, as indicated in the ANOVA table was also significant. To measure the reliability of the data collection instruments, an internal consistency technique Cronbach's alpha was computed using SPSS. The table below indicates that the research instrument was reliable since the data obtained from all the independent variables had a Cronbach's alpha of greater than 0.7. This means that the research data had a relatively high internal consistency.

### **Table 7: Reliability Analysis**

Independent Variable	Cronbach's Alpha	Comments	
Cash Conversion Cycle	0.750	Acceptable	
Accounts Receivables Practices	0.841	Acceptable	
Accounts Payable Practices	0.932	Acceptable	
Accounts Accruals	0.842	Acceptable	

#### **Inferential Analysis**

To compute on the strength between the dependent variable and the independent variables, the researcher conducted several forms of inferential analysis. This involved use of coefficient of determination, analysis of variance ANOVA and multilinear regression analysis.

# **Coefficient of Determination**

The coefficient of determination was computed to measure how well the study's data was suited for **Table 8: Coefficient of Determination** 

the statistical model that was used for main analysis. The table below shows that the coefficient of determination (R<sup>2</sup>) was 0.755. This R<sup>2</sup> suggests a relatively goodness of fit of the study data to the OLS regression model. 75.5% of variability in the level of financial performance can be explained by variations in Accounts Accruals:, Cash Conversion Cycle, Accounts Payable Practices and Accounts Receivables Practices. The remaining 24.5% of variability can be attributed to other factors which were not included in the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869ª	.755	.719	.49479

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.869 <sup>ª</sup>	.755	.719	.49479

a. Predictors: (Constant), Accounts Accruals:, Cash Conversion Cycle, Accounts Payable Practices , Accounts Receivables Practices

b. Dependent Variable: Financial performance

#### Analysis of Variance

In testing the significance of the overall model, the study used the ANOVA F –Test. From the given figure below the p-value is 0.000 and F 20.814. This

#### **Table 9: Analysis of Variance**

implies that the model is statistically significant in estimating the effect of Accounts Accruals:, Cash Conversion Cycle, Accounts Payable Practices , Accounts Receivables Practices on financial performance.

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	20.382	4	5.096	20.814	.000 <sup>b</sup>
1	Residual	6.610	27	.245		
	Total	26.992	31			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Accounts Accruals:, Cash Conversion Cycle, Accounts Payable Practices , Accounts Receivables Practices

#### **Regression Analysis**

Multiple regression analysis was conducted to determine the relationship between financial **Table 10: Regression Analysis** 

performance and the four independent variables as shown in the table below.

Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
	(Constant)	.383	.409		.936	.357
	Cash Conversion Cycle	104	.155	082	674	.406
1	Accounts Receivables Practices	.569	.141	.645	4.028	.000
	Accounts Payable Practices	172	.120	211	-1.432	.164
	Accounts Accruals:	.566	.122	.570	4.632	.000

a. Dependent Variable: Financial performance The regression coeffients in the above table established that taking all the independent variables (Accounts Accruals:, Cash Conversion Cycle, Accounts Payable Practices , and Accounts Receivables Practices) to be constant, the level of

absorption of financial performance will be at 0.383. The findings also shows that a unit improvement in account receivables practices will lead to a 0.569 increase in financial performance of medical facilities; a unit improvement in account

accruals will lead to a 0.566 increase in financial performance while cash conversion cycle and accounts payable will lead to a 0.104 and 0.172 decrease in financial performance of private medical facilities respectively.

The general regression equation can be written as:

#### Y = β0 + β1X1 + β2X2 + β3X3 + β4X4 + ε:

Whereby:

Y= 0.383 - 0.104X1 + 0.569X2 - 0.172X3 + 0.566X4 +  $\epsilon$ Y = Financial Performance 0.383 = Financial Performance in absence of the explanatory factors.  $\beta 0$  = Constant term X1 = Cash conversion cycle -0.104 = Coefficient of X1 X2 = Accounts Receivable 0.569 = Coefficient of X2 X 3 = Accounts Payable -0.172 = Coefficient of X3 X4 = Accounts Accrual 0.566 = Coefficient of X4

#### CONCLUSSION

Referring to the study computation and findings, it was clearly evident that financial performance of private medical facilities in Mombasa depended on the effective working capital management put in place. Accounts receivable was positively related to financial performance thus it was advisable to manage receivables very well in the business and the accounts accruals. Working

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capital management revolves around balancing on the current assets and current liabilities in the business within a financial year. Private medical facilities relied heaving on strong financial position to be able to manage their worthy and sophisticated infrastructures plus the human resources. They should emphasize on building a stable financial back up by reworking on their current assets and liabilities.

#### Recommendations

The study clearly heighted on the effect of working capital management on financial performance of private medical facilities. The objectives were emphasized on cash conversion cycle, accounts payable, accounts receivables and accounts accruals. The analysis recommends that the managers in the medical institutions should revise different aspects of working capital to maintain a tradeoff between the current obligation that is short term and long term. Accruals need to be managed well as they impact on business performance.

#### **Suggestions for Further Studies**

The following are some of the areas that further research may be focused:

- Similar study done on the same topic focusing on both public and private medical facilities in Kenya.
- A study should be undertaken on analyzing the impact of human resource capitalization on financial performance of medical facilities.

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