Effect of Cash Management on Financial Performance of Level Three and Four Public Hospitals in Meru County

Kimathi Doreen Kanana [1], Susan Kambura [1], Nancy Rintari [1]*

[1] Kenya Methodist University P.O Box 267, 60200, Meru, Kenya

*Correspondence email: dorrykims@gmail.com

Abstract

The Level three and four public hospitals focus on the provision of healthcare activities based on the recommendations of MOH. The financial success of hospitals is critical to the economic development of the country because it improves the quality of life, which in turn promotes economic growth by reducing poverty. The purpose of this study was to ascertain the effect of cash management on financial performance of Level three and Four Hospitals in Meru County. The study was grounded on the cash conversion cycle theory. Descriptive survey design, which allowed the researcher to explain the variables of the study was adopted. The target population comprised fifty-three officers from all the surveyed fifty-three Level three and four Hospitals in Meru County. Questionnaires were utilized. Census method was adopted to enlist all the 53 healthcare officers. Data was analyzed using SPSS version 29. Both descriptive and inferential statistics were used in analyzing data, and results displayed in tables and explanations. Regression analysis was utilized to determine the association between the variables. The study found out a statistically significant ($p<0.05$) and positive correlation coefficient of 0.820, signifying that cash management techniques impacted the financial performance of Meru County's Level Three and Four Hospitals. Additionally, the study found out that gross profit had a mean of 4.6 and standard deviation of 0.647; a net profit of 3.72, and a standard deviation of 1.02; and ROA of 3.32 and standard deviation of 1.335. The study concluded that the high expenditures that the hospitals incur affects the distribution of financial resources. Thus, the study recommends immediate policy intervention measures from the management to ensure that institutional financial resources are appropriately used, and more revenue sourcing channels are developed. This would ensure that the hospital has enough revenue to cater for the expenditures.

Keywords: *Cash management, Financial performance*

1.0 Introduction

The overall performance of financial operations is a crucial factor in any enterprise (Isanya & Atieno, 2023). Financial management provides information of how the corporate entity accomplished the financial goals, and how the profit from operations was gained (Berikova et al., 2022).Financial performance is an assessment of an enterprise's holistic financial well-being over a certain duration of time, measured in terms of its ability to meet both operational and financial goals. Therefore, measuring financial performance requires evaluating a company's activities and policies in terms of money (Robinson, 2020).

A hospital is viewed to be financially sound when it makes use of its core assets prudently (Morara & Sibindi, 2021). According to Al-Abass (2018), profitability is formed from two words: "profit" and "ability." Profit is a firm's overall income or return, while ability is the influence that the organization uses to achieve profit and the efficiency by which the management earns this profit by optimizing all accessible assets. One of the instruments at the disposal of a business for producing profits is good working capital management.

Every hospital must perform well financially in order to develop and survive, as money is the lifeblood of every business. The hospital industry in America is experiencing shock waves due to rising healthcare prices and escalating competition. Americans spent $2,700 on healthcare on average in 1990. Since the 1980s, this has steadily increased by an average of 11%; that is, double the degree of inflation. By the year 2030, the average healthcare cost per person is anticipated to be $6,000. According to Dabiri (2017), hospital expenses account for 40% of the entire health care budget, up from $101 billion in 1980 to $252 billion in 1990. Poor financial results or an insufficient amount of funding worsen financial strain, limiting the capacity of Czech Republic hospitals to survive and thrive (Blažková&Dvouletý, 2018). The number of resources under a company's control changes depending on its financial performance, which can enhance subsequent performance.

Regionally, Nigerian hospitals are facing challenges that have crippled their ability to achieve the requisite financial performance due to intense competition, increased company efficiency, and pricing pressure (Tanko et al., 2021). Therefore, financial solidity and the effectiveness of managing current assets are significantly impacted by working capital management. Adequate liquidity echelons are necessary to guarantee that businesses can cater for their short-term monetary requirements. Additionally, executives need to make sure that extra money is not used for working capital (Akbar et al., 2021). A corporation's ability to sustain liquidity determines how long it can remain functioning.

In Kenya, over 4,700 health institutions make up the nationwide network that delivers health services, with roughly 51% of them belonging to the public sector. The following medical facilities are included in the public health sector: dispensaries, health centres, sub-county hospitals, referral hospitals and health clinics. As one moves up the healthcare hierarchy, from level one to level four to the referral level, and finally to the national levels, health services become more integrated. Kenyatta National Hospital in Nairobi and Moi Referral and Teaching Hospital in Eldoret are the two national referral hospitals.

The MOH and other relevant government ministries get budgetary allocations from the

GOK, which in turn is used to fund the health sector. However, due to macroeconomic factors like slow growth, the national debt, and inflation, which frequently have an impact on health allocations, tax revenues are unreliable sources of healthcare financing. The widespread absence of proper medications and pharmaceuticals, the lack of employees, and the inadequate upkeep of facilities, vehicles, and equipment are all symptoms of the health budget shortages. In order to close the funding disparity amid real budgets and the extent of assets required to pay activities in the public health sector, the GOK has followed a cost-sharing policy for the past 20 years.

> *"The paper concluded that cash management techniques significantly impacted the financial performance of Meru County's Level Three and Four Hospitals"*

Statement of the Problem

Health is a devolved function in Kenya, following the promulgation of the 2010 constitution. The health function was devolved to the county governments in the year 2013. Since then, the public health sector has suffered drawbacks as a result of poor working conditions in hospitals, persistent strikes by the health workers, delayed funding by the national government and lack of hospital supplies among others. The scope of performance in healthcare undoubtedly includes not just the patient's quality of care but also its impact on the family, community, and the country at large.

From the time the health sector was transferred to the county governments, public hospitals have performed poorly due to inefficiencies that lead to subpar service delivery and low levels of patient care quality (Nguru & Ireri, 2022). In accordance with the Kenyan 2010 Constitution, Vision 2030, Kenya Health Policy Framework 2011–2030, and the Big Four Agenda, the Kenyan government wishes to increase healthcare access and quality through enhancing the efficiency of public hospitals.

Financial performance of Kenya's public hospitals has been a source of worry despite the high NHIF coverage (Barasa et al., 2018). As such, this study aimed to assess the effects of cash management on the financial performance of Level three and four public Hospitals in Meru County.

Purpose of the Study

The purpose of the study was to establish the effects of cash management on the financial performance of Level three and Four Hospitals in Meru County, Kenya.

Literature Review

One of the most important components of an organization's operational finance strategy is the Cash Conversion Cycle (CCC). It examines how long it takes a company to turn cash flows from resource inputs. Gaining a greater comprehension of this idea provides the basis for analyzing and enhancing a company's financial efficiency. The cash conversion cycle basically assesses how well a business uses its short-term resources. It measures the interval between a business's cash payment to suppliers of goods and its cash receipt from clients. A corporation is generally considered to be healthier when its cash conversion cycle is lower. By accelerating customer payments

and delaying supplier payments, businesses strive to shorten the cash conversion cycle. If a corporation has a dominant market position and can dictate the terms of its contracts with suppliers, it may be able to postpone payments, making the cash conversion cycle negative (Brennan, 2001).

Wanyoike and Kalundu (2022) examined the manner in which methods of managing cash affected financial results of businesses in the Kenyan town of Nyeri. The registered SMEs in Nyeri town served as the study's target population. It used a descriptive research approach. Self-administrated semi-structured survey was employed to collect data from a sample size of sixty-two licensed businesses operating in Nyeri town. Analysis of data was done using inferential and descriptive statistics utilizing the social sciences statistical program (SPSS). The findings of the study showed that use of technology and cash management had a big impact on the financial stability SMEs' in Nyeri.

Umukoro et al. (2021) investigated the link between cash flow and efficiency in the Nigerian banking system. Four banks registered on the Nigeria securities were polled. Data was collected from the yearly filings and accounts of the sampled banks. Results indicated that operational cash flow has a significant and favorable link with efficiency in the Nigerian banking industry. However, the relationship between investing and lending cash flow was shown to be weak and negative.

Kanwal (2020) studied the link between firm performance and cash flow in the Tokyo Stock Exchange's electric appliances sector. The results showed a substantial negative connection between cash flows and effectiveness of the firm. In Vietnam, the impact of banking relationships on corporate performance was studied by Tam et al.,

2020. Results showed that assets had a negative link with returns on assets, while cash flow had a negative link with businesses and return on equity. Dakhlallh (2020) examined the relationship between Iranian stock returns and the cash flow measurements of performance of the firm. The findings revealed unfavorable link amid cash flow and company efficiency. In addition, earnings-based metrics were more closely associated with stock returns and serve as a proxy for enterprise performance. The outcomes showed a critical and unfavorable link between cash flow and performance of the company. Further, earning-based indicators were more closely linked to stock returns and more accurately represented performance of the company in some businesses with high accruals than cash flow measures.

2.0 Materials and Methods

This study adopted a descriptive survey research design. The target population was 53 officers from all the fifty-three level three and four hospitals in Meru County. The study selected the 53 officers through census method, in which all the 53 medical practitioners were enlisted in the study without excluding any. Primary data was collected using a closed-ended questionnaire. A pilot test was conducted in Tharaka Nithi hospital, where 6 respondents (10%) were selected. Reliability was measured through Cronbach alpha, which was above 0.7. Content, face and criterion validities were also measured. Data was analyzed using SPSS version 29, and results presented using both descriptive statistics such as frequencies, percentages, mean and standard deviation, as well as inferential statistics. Data was presented using tables and explanations.

Kanana, Kambura and Rintari

3.0 Results and Discussion

Response rate

Regarding the response rate, the total numbers of respondents who successfully filled the questionnaires and returned were 41 (77.36%) from the targeted population of 53 participants. According to Leavy (2020), a 77.36% response rate is deemed suitable for analysis. Based on these results, it can be inferred that the response rate was adequate, boosting confidence in the ability to generalize. It provided as the basis for the analysis and findings in this thesis as well.

Data Reliability Assessment

The reliability test was conducted using Cronbach's Alpha. A reliable indicator of data generalization that provides an estimate free of bias is Cronbach's Alpha (Somekh & Lewin, 2020). The aim of this investigation was to evaluate the validity of the data that was gathered in Tharaka Nithi County in order to measure the study variables. The research surveyed 10% (6 hospitals) of the targeted population of 53. A Cronbach Alpha score of more than 0.7 is considered appropriate for reliability assessment in a research project. The test results are shown in Table 1.

Table 1

Cronbach Alpha for Reliability Assessments

Variables	Number of items	Cronbach Alpha Values
Cash management (CM)	7	0.932
Financial performance (FP)	5	0.866

All the variables had Cronbach alpha values more than 0.7, as shown in Table 1. Based on the findings, it was concluded that the assessed constructs possessed sufficient reliability for the ensuing analytical phases, as each Cronbach Alpha value exceeded 0.7.

Respondents' characteristics

The study sought to ascertain the age, gender, and educational attainment of the respondents. The results are displayed in Table 2.

Table 2

Demographic information

Demographic information		Frequency (n)	Percentage (%)
Gender of the Respondent	Male	18	43.9
	Female	23	56.1
	Total	**41**	**100**
Age	21-30 Years	08	19.5
	31-40 Years	24	58.5
	41 – 50 years	09	22.0
	Over 50 years	00	00.0
	Total	**41**	**100**
Level of Education	Bachelor	16	39.0
	Masters	05	12.2
	Others	20	48.8
	Total	**41**	**100**

Kanana, Kambura and Rintari

Table 2 provides the demographic information of the respondents. Findings indicate that most of the participants [n=23, (56.1%)] were female, while male accounted for [n=18, (43.9%]. According to this gender distribution, there were more female than male employed in the health sector in level three and four hospitals in Meru County, Kenya. This shows that the health sector is more focused on women. The investigation also discovered that most of the participants (n=24, or 58.5%) were in the 31–40 age range. This indicates that the public healthcare workforce is sufficiently developed and possesses the essential exposure and experience to lead the industry to new heights. The results also reveal that students made up most of the participants with the highest level of education, masters, accounting for [n=16, (39.0%)]. Those with others qualifications accounted for [n=25, (61.0%)].

Financial Performance of Level Three and Four Public Hospitals

The study collected secondary data from financial reports to examine the gross profit, net profit, and Return on Assets as a measure of assessment of financial performance of Level Three and four public hospitals in Meru County. Table 3 provides the results.

Table 3

Financial Performance

Financial Performance Metrics	Mean	Std Dev
Gross Profit	4.6	.647
Net Profit	3.72	1.02
ROA	3.32	1.335

According to Table 3, the gross profit had a mean of 4.6 and standard deviation of 0.647; Net profit had a mean of 3.72 and standard deviation of 1.02; and ROA had a mean of 3.32 and standard deviation of 1.335. The results mean that after getting profits, there were high expenditures that the hospitals were incurring which affected the resources ploughed back into hospital's assets.

Influence of Cash management on financial performance

To assess the influence of cash management on financial performance of Level three and Four Hospitals in Meru County, the researcher tested various aspects of cash management as displayed in Table 4;

Table 4

Effect of cash management on financial performance

Statements	N	Mean	StdDev
There are various modes of payment in this hospital	41	4.22	.988
The modes of payment used in this hospital are convenient to patients	41	4.12	1.229
There are proper banking practices in our hospital	41	4.35	.789
Managers in this hospital adhere to cash budgets	41	4.61	.494
There is timely surrender of impress in this hospital	41	4.32	.789
Average	41	4.32	.858

Kanana, Kambura and Rintari

According to Table 4, the average [mean=4.32, std. dev = 0.858]. The respondents agreed that there is an influence of cash management on financial performance. Moreover, cash management was rated highest [mean=4.61, std. dev. =0.494] as indicated in the statement that "Managers in this hospital adhere to cash budgets", implying that adherence to the hospital budget can help improve financial performance. This outcome agrees with results of Afrifa and Tingbani (2018) who assessed the association amongst working capital management and SMEs' effectiveness. From 2004 to 2013, a total of 802 British-listed small and medium-sized firms have been included in the Alternate Investment Market. The investigation used a panel data regression analysis. The findings of the study show how crucial cash flow is to the health and profitability of SMEs. The results indicate that WCM has a considerable detrimental impact on SME financial results. The findings also indicate that cash flow-constrained SMEs, enhancing their performance by lowering (raising) working capital investment.

Similarly, between 2001 and 2014, Osadune and Ibenta (2018) investigated sampled Nigerian enterprises. The investigation employed the unit root test, OLS, co-integration test, and Granger causality test at a 10% significance level for its empirical analysis. The findings demonstrated a long-term equilibrium connection among liquidity and a business' financial performance. There was, however, no link between a firms' financial success and liquidity. In India, for instance, a study on the relationship between increased firm value and stock liquidity indicated a direct causal relationship between stock liquidity and company value (Kotha, 2018).

Relationship between Cash Management and Financial Performance

After descriptive analysis of data on the variables was analyzed to determine how cash management affects financial performance, correlation analysis was done. Table 5 presents bivariate correlation results between cash management and financial performance of Level three and Four Hospitals in Meru County, Kenya.

Table 5

Bivariate Correlation analysis results

Variables		Financial Performance	Cash Management
Financial Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	41	
Cash Management	Pearson Correlation	.820**	1
	Sig. (2-tailed)	.000	
	N	41	41

As per Table 5, a statistically significant ($p<0.05$) strong positive correlation coefficient of 0.820 was noted; hence concluding that cash management techniques significantly impacted the financial performance of Level Three and Four Hospitals in Meru County. Therefore,

the null hypothesis was rejected. This means that on overall, cash management is positively related to financial performance of Level three and Four public hospitals in Meru County. This finding agrees with the findings of Koech et al. (2021) who examined the cash management procedures

Kanana, Kambura and Rintari

used by insurance companies. They discovered that increased transparency enhances financial performance.

4.0 Conclusion

A robust positive correlation coefficient of 0.820 was observed, indicating a statistically significant ($p<0.05$) connection between cash management and financial management. As a result, the alternate hypothesis; that is, cash management techniques significantly impact the financial performance of Meru County's Level Three and Four Hospitals, was accepted and the null hypothesis rejected. This indicates that the financial success of Meru County's Level Three and Four Hospitals is often positively correlated with cash management methods. The results indicated that after getting profits, there were high expenditures that the hospitals incurred, thereby affecting

the ploughing back of financial resources into hospital's assets.

5.0 Recommendations

The study recommends immediate policy intervention measures to ensure that institutional financial resources are appropriately used, and more revenue sourcing channels are developed. This would ensure that the hospital has enough resources to cater for the expenditures and have enough earnings to retain. Additionally it is recommended that the head of finance in level four and five hospitals in Meru County should continuously communicate payment terms to the clients in a timely manner as this will ensure payment adherence. This will ensure that the hospital has enough resources to cater for expenditures and to retain.

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Kanana, Kambura and Rintari

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