



# Evaluating Financial Management Competency in Primary Healthcare Managers of Kondoa, Iramba, and Sumbawanga District Councils, Tanzania

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DOI: <https://dx.doi.org/10.4314/ajhs.v36i3.9>

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## Abstract

### BACKGROUND

Examining the financial managerial competency of primary healthcare facility managers is very important. Despite its importance, empirical investigation is limited in this area. To contribute empirical evidence on this subject this study looked at Tanzania's public primary healthcare facility managers.

### MATERIALS AND METHODS

The study was conducted in Kondoa, Iramba and Sumbawanga District Councils in Tanzania. This research adopted a cross-sectional research design. A census sampling strategy was employed to obtain primary data from 102 public primary healthcare facility managers. The Statistical Product and Service Solution (SPSS) Version 25 was used to analyse the data.

### RESULTS

Findings reveal that slightly more than half (57.85%) of managers were competent whereas (42.15%) of them were less competent in acting on the financial statements. In monitoring financial performance (47.53%) were less competent and (52.47%) were competent. Also, in developing budgets following organisational objectives, (50.97%) were less competent and (49.03%) were competent. Additionally, in managing budgets by organisational objectives, (45.09%) were less competent and (54.91%) were competent. Furthermore, in establishing and maintaining the organisation's insurance contracts and financial relationships, (53.92%) were less competent and (46.08%) were competent.

### CONCLUSIONS

Nearly half of the facility managers in selected Tanzanian District Councils demonstrated competence in financial statement analysis, performance monitoring, budget development, and managing insurance contracts and financial relationships.

### RECOMMENDATIONS

This study recommends improving the financial managerial competency of facility managers in all areas of financial management roles as a key area of investment in efforts to improve the management of primary healthcare facilities.

**Keywords:** Financial Management Competency, Primary Healthcare Facility Managers

[Afr. J. Health Sci. 2023 36 (3): [265-274]

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## Introduction

Assessing the financial managerial competency of primary healthcare facility managers is very important [1, 2]. Enhancing financial management competency improves healthcare facilities and overall health system performance.[3, 4, 5]. The understanding of healthcare managers' financial managerial competency also provides knowledge and empirical evidence in this area.

The available empirical evidence on health managers' competency to manage financial matters is limited. A study by [6] informed that health managers were not well prepared to perform their financial managerial roles. Similarly, it has been suggested that Nursing Managers' knowledge and skills of financial management were ineffectively developed, resulting in their failure to understand the financial management jargon and the overall financial performance of their departments [3]. Moreover, poor financial and accounting skills were reported by managers working in public and private hospitals in Central Java and Yogyakarta [4].

A study by [7] analyzed the managerial competencies of different levels of healthcare managers using a questionnaire developed by the EPOS health management group. A total of 61 managers from different cadres were interviewed and mid-level managers scored lowest (57.2%) in the "information and financial management" domain[7]. Moreover, in the study by [8], the financial capabilities and skills of the state and local public health workforce were assessed and administrators, managers and executives tended to have advanced levels of financial skills proficiency. However, newly appointed managers and supervisors were more likely to account for a skills gap.

A South African study investigated the financial management practices of nurse managers in five

different health districts and these nurse managers lacked the skills and competencies in financial planning, monitoring, and decision-making [5]. these results were mirrored in a Ghanaian study [9], the nurse managers had a moderate level of knowledge and skills.

Limited evidence on the financial managerial skills of health managers in LMICs has been provided by earlier scholarly works [3, 4, 6, 10, 5]. Similarly, a study by [11] revealed the prevalent unmet financial management needs in public health in the context of LMICs. Moreover, [12] reported a limited study of financial management competency in healthcare. This highlights the paucity of empirical research on financial management expertise at the primary healthcare level in LMICs [12, 15, 16,17] and this matter remains open for debate among researchers, policymakers and practitioners in the LMICs [13, 12].

There are significant knowledge gaps concerning the financial management skills of healthcare managers in LMICs, which need to be investigated [14, 12] and this applies to Tanzania as well [13]. This research paper aims to address the questions related to the financial managerial skills of primary healthcare facility managers. The study aims to contribute to the existing empirical evidence and knowledge about these skills in low and middle-income countries (LMICs) such as Tanzania.

## Methodology

### Study settings

We selected Kondoa, Iramba, and Sumbawanga District Councils based on their star rating assessment performance categories [13, 18].

### Research design

The study adopted a cross-sectional design. A survey on managerial competency was carried out at primary health facilities and the managers were



interviewed. the variables of interest were later statistically analysed [19]. The descriptive research design was specifically chosen to accurately demonstrate the characteristics of the financial managers [20].

### **Framework for measuring financial managerial competency**

In the current study, the Management Competency Assessment Project (MCAP) framework was adapted to measure the financial managerial competency of primary healthcare facility managers. In the MCAP framework, the financial managerial competency domain with the following constructs was assessed: the ability to develop a budget, manage the budget and monitor financial performance by analyzing financial data. Also, the framework includes: interpreting and acting upon financial statements, developing budgets according to organizational objectives, managing budgets according to organizational objectives, and establishing and maintaining the organization's insurance contracts and financial relationships [21].

The MCAP framework used closed-ended questions with a seven-point Likert scale to assess the levels of managerial competency of facility managers. The scale is interpreted as follows: (1) Not competent: Facility managers do not understand the requirements of their role and are unable to meet them. (2) Novice: Facility managers can demonstrate only minor aspects of their role. (3) Advanced beginner: Facility managers can demonstrate some, but not all, of the required aspects of their role. (4) Competent with occasional guidance: Facility managers can generally demonstrate their role, but guidance is occasionally required. (5) Competent without guidance: Facility managers can generally perform their role independently but may lack extensive experience. (6) Proficient: Facility managers can always

use their role appropriately and have extensive experience. (7) Superior expertise: Facility managers can always use their extensive experience from various management roles at the management level appropriately in their role and transfer this competence to others [21].

Thereafter, the overall scale with two levels was further categorised and the scores from 1 to 4 (less than five) were considered less than fully competent and the scores from 5 to 7 (five or higher) were considered fully competent [21]. The scale was selected because it enabled self-assessment in the most diverse levels of competencies due to the wide range of possibilities and it has been successfully applied in assessing the health managerial competency in Iran, China and Australia [21, 22].

### **Pilot study**

The questionnaire was pre-tested in the pilot study [23, 7]. The pre-test intended to assess the ability of the adapted questionnaire to collect reliable data that answers research questions. The questionnaire was pre-tested to ten primary healthcare facility managers according to Mugenda which is between (1% and 10%) of the sample size [24].

### **Sampling technique and sample size**

To select respondents for the quantitative survey, we used a census approach with every single unit in a sampling frame (population) having an equal chance of being selected [25]. 115 operating public-owned dispensaries located in Kondo, Iramba and Sumbawanga District Councils [20] were selected. In the field visit, the research team found that three primary healthcare facility managers were on leave: one on official leave, one on maternity leave, and one on sick leave. The other two primary healthcare facility managers were out of



the facility and six dispensaries were not geographically accessible, hence 102 dispensaries were successfully visited and the sample size was 102.

### **Data collection**

A survey was used to collect primary quantitative data from healthcare facility managers. self-administered questionnaires were distributed to primary healthcare facility managers and data relating to the financial managerial competency of primary healthcare facility managers was collected [26].

### **Data analysis**

The quantitative data were analyzed using Statistical Product and Service Solution (SPSS) version 25. Descriptive statistics were means and standard deviations used to present data.

### **Techniques to minimize biases**

The bias was minimized by clearly explaining the purpose of the study to the respondents. To eliminate the possibility of self-bias, the evaluation criteria for financial management competency levels were carefully selected. These criteria were measured on a seven-point Likert scale ranging from "not competent" to "superior expert". By providing clear and specific evaluation constructs and criteria, primary healthcare facility managers were able to accurately assess their financial management skills. This approach helped to reduce self-bias by ensuring that the evaluation was objective and measurable. The clarity and specificity of the evaluation criteria made it easier for managers to interpret the results and identify areas where they needed to improve [27]. Furthermore, accountability guidance such as superior expert that tested the primary healthcare facility managers' ability to teach others on a specific competency also reduced self-bias [28].

### **Ethical consideration**

The ethical clearance was granted by the University of Dodoma, The

approval was presented to the Kongwa, Kondo, Iramba and Sumbawanga District Councils, which approved the study in their administrative areas. Verbal consent was obtained from the heads of the primary healthcare facility. Respondents were informed that participation is voluntary and they had the right to withdraw from the study at any time without consequences. They were also assured of confidentiality and anonymity was also maintained in this study [29].

### **Results**

In this study, the financial management competency dealt with primary health facility managers' ability to interpret and act upon financial statements, develop budgets according to organizational objectives, and manage budgets in conjunction with the objective of the health facility monitoring financial performance by analyzing a variety of financial data.

### **Discussion**

#### **Interprets and acts upon financial statements**

The mean competency score of 4.8 was observed in interpreting and acting upon financial statements (Table 1). The results imply that primary health facility managers are generally less than competent in interpreting and acting upon financial statements. Also, the result aligns with findings in the study by [30] who reported that nurse managers in the public sector were usually silent in responding to financial matters. Evidence suggests that this could be attributed to the lack of knowledge of finances. This view is supported by [3] who reported that the financial skills of nurse managers are not well developed which leads to nurses' managers being unable to comprehend the finance jargon. Moreover, in the health department, finance officers testified to the need for more enhancement in their skills to interpret and communicate financial

data [11]. The similarity of the results could be attributed to the similarity of the study setting.

### Monitor financial performance by analyzing a variety of financial data

The result further reported the mean score competency of 4.7 in monitoring financial performance by analyzing a variety of financial data (Table 1). The same was observed among nurse managers working with selected public hospitals in KwaZulu-Natal province, South Africa, they did not possess the necessary financial management skills and competencies to manage the healthcare financial situation [5]. The study by [31] found that nurse managers need to improve their financial knowledge and understanding of healthcare costs. Also, this view was supported by [3], who testified that the financial skills of nurse managers are not well developed and therefore, nurses' managers cannot take ownership of their department's financial performance. Furthermore, the necessity for the development of the capability to evaluate the organization's financial status

was conveyed by the finance officers in the health department [11]. The respondents were nurse managers, and this may have caused similar results observed.

### Develops budgets in accordance with organizational objectives

The results further revealed a mean score of 4.5 was reported in developing budgets in accordance with the organizational objectives (Table 1). Similarly, low ratings were observed for 'managing finance issues and cost containment' with a mean competency of 2.11 among the physicians working in management positions in different healthcare organisations in the private sector in Amman, Jordan [32]. In addition, the lack of financial planning skills and competencies among nurses in South Africa has also been reported [5]. Additionally, nurse managers in Ghana reported having a moderate level of knowledge and skills in financial management [9]. Also, the need for more improvement in their knowledge of budgets was reported by finance officers in the health department [11].

**Table 1:**  
Summary of statistics for financial management competence indicators

Statement	Not competent	Basic novice	Adv beginner	Comp, guidance	Comp, no guidance	Proficient	Super Expert	M (SD)
Interprets financial statements	1 (0.98)	9 (8.82)	8 (7.84)	25 (24.51)	22 (21.57)	22 (21.57)	15 (14.71)	4.8 (1.5)
Monitors performance by analysing financial data	1 (0.99)	6 (5.94)	12 (11.88)	29 (28.71)	21 (20.79)	23 (22.77)	9 (8.91)	4.7 (1.4)
Develops budgets	2 (1.96)	11 (10.78)	14 (13.73)	25 (24.51)	18 (17.65)	18 (17.65)	14 (13.73)	4.5 (1.6)
Manages budgets	2 (1.96)	8 (7.84)	13 (12.75)	23 (22.55)	21 (20.59)	19 (18.63)	16 (15.69)	4.7 (1.6)
Maintains insurance contracts	2 (1.96)	5 (4.90)	11 (10.78)	37 (36.27)	14 (13.73)	24 (23.53)	9 (8.82)	4.6 (1.4)
Overall Financial	1 (0.98)	3 (2.94)	14 (13.73)	23 (22.55)	31 (30.39)	21 (20.59)	9 (8.82)	4.7 (1.3)





Equally, physicians working in management positions in different healthcare organisations in the private sector in Amman, Jordan showed that much training is needed in the area of 'financing management and in preparing the annual budget' [32]. The comparable empirical evidence in this area was potentially attributed to the similar duties and responsibilities of the respondents who were clinicians.

### **Manages budgets in accordance with organizational objectives**

A mean competency score of 4.7 was revealed in managing budgets by organizational objectives (Table 1). Similar findings reported that physicians working in management positions in different healthcare organisations in the private sector in Amman, Jordan showed that in the area of 'financing management and preparing the annual budget', training was needed [32]. Similarly, nurses demonstrated to be unprepared to manage the budget [33]. Furthermore, finance officers in the health department have conveyed the need for further improvement in their knowledge of budgets [11].

### **Establishes and maintains the organization's insurance contracts and financial relationships**

A mean score of 4.6 was observed in establishing and maintaining the organization's insurance contracts and financial relationships (Table 1). Primary healthcare managers working in Timor-Leste were reported as not competent in solving financial management problems related to their jobs [34]. Also, poor documentation and record keeping of cash flow with significant discrepancies in funds were revealed in some health facilities in Tanzania [35]. Similarly, financial and accounting managers working with public and private hospitals operating in central Java and Yogyakarta

were found to be less competent in their fields [20]. The explanation of why results were analogous was potentially contributed by the similar developing countries context that respondents were working.

### **Overall financial managerial competency of primary health facilities**

The overall results indicate that (40.2%) of the primary health facility managers considered themselves as less than fully competent, meaning that, (40.2%) of the primary health facility managers needed assistance in performing their managerial duties and responsibilities related to financial management competency indicating they would not perform optimally if they without assistance, and which could affect insurance reimbursement, purchase of medicines, financial reporting thereby increasing operational costs. The rest, (59.8%) of the primary health facility managers considered themselves as fully competent, and that they did not need any kind of assistance in performing their duties and responsibilities related to the indicators within financial management competency (Table 1).

Comparable findings revealed that the lowest score was in the "financial management" domain at (57.2%) among mid-level hospital managers in Astana [36]. Other domains were auditing, poor documentation and record keeping of cash flow with significant discrepancies in funds revealed in some facilities [35]. Similarly, financial and accounting managers working with public and private hospitals operating in Central Java and Yogyakarta were found to be less competent in their fields [4], this was also reflected in nursing managers working in selected public hospitals in the KwaZulu-Natal area of South Africa. The nurses lacked the requisite financial management



abilities and competency to manage current healthcare financial scenarios. [5]. Equally, physicians working in management positions in different healthcare organisations in the private sector in Amman, Jordan showed that much training is needed in the area of financing management [32]. The relatedness of the findings could be due to the similarity of study designs and data collection methods.

Also, research consistently indicated unit nurse leaders lack financial management training[16]. In addition, the majority of nurse managers generally rely on and accept financial guidelines for their jobs from financial managers, chief executive officers and head office [30]. Furthermore, [30] reported that numerous healthcare organisations continue to discover that financial management is one of the key deficiencies of their nursing managers. Likewise, nurses have been documented to possess moderate financial competencies [9].

### **Implications of the study**

Findings imply that almost half of the primary healthcare facility managers perform their financial management duties with limited competency. This necessitates on-the-job training related to hospitals and healthcare financial management to impart appropriate knowledge, skills and abilities for efficiency in performing their financial managerial duties and responsibilities. This presents an opportunity to improve healthcare services and meet rising public demand backed by competent health managers.

### **Limitations and future research directions**

The current study is limited to the primary level of healthcare, so we suggest that future research should include healthcare facilities at secondary, tertiary and national levels to increase the study population heterogeneity. Furthermore, the

current study is limited to public health institutions, so it would be important the interrogate financial management competency at district-designated, teaching, private and faith-based hospitals. The inclusion of various primary healthcare institutions will improve understanding and generalize the financial management competencies of healthcare managers[15].

### **Conclusion**

According to the study's findings, among selected Tanzanian District Councils, around 50% of primary healthcare facility managers were competent in financial management, including acting on financial statements, monitoring performance, budgeting, and maintaining insurance contracts. Moreover, we conclude that primary healthcare facility managers were least competent in developing budgets according to organizational objectives, while most were competent in interpreting and acting upon the financial statements.

### **Recommendation**

There is a need to improve the financial managerial competency of the primary healthcare facility managers, in all areas of their financial management roles, and more emphasis should be on the areas of developing budget according to organizational objectives in which most were least competent. Improving the teaching curriculum of healthcare providers by introducing formal managerial education but as this implementation is being waited upon, having on-the-job training is crucial as most of the primary healthcare facility managers are not very competent in performing their financial managerial duties and responsibilities.

**Conflict of interest statement:** None.

**Financial support:** This research was supported by Mbeya University of Science and Technology, as part of PhD study scholarship.



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