



FINANCIAL MANAGEMENT PRACTICES AND ITS EFFECT ON SERVICE DELIVERY IN PUBLIC PRIMARY HEALTHCARE CENTRES IN NSUKKA LGA OF ENUGU STATE

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Abstract

This study examined the effect of financial management practices on service delivery in public primary healthcare centres in Nsukka Local Government Area of Enugu State. The study was prompted by persistent challenges in primary healthcare delivery, including poor service quality, inadequate drug supplies and inefficient resource utilisation, which are often associated with weak financial management systems. Specifically, the study assessed the effects of budgeting, financial



accountability and fund utilisation on service delivery. A descriptive cross-sectional survey design was adopted. Data were collected from 165 respondents selected from public primary healthcare centres using a structured questionnaire. The data were analysed using descriptive statistics and multiple regression analysis. The findings revealed that financial management practices had a significant effect on service delivery. In particular, budgeting, financial accountability and fund utilisation each had significant positive effects on service delivery. The regression model also showed that financial management practices explained a substantial proportion of the variation in service delivery outcomes, demonstrating their importance in improving healthcare performance. The study concluded that effective financial management practices are essential for enhancing service delivery in public primary healthcare centres. It recommended strengthening budgeting systems, enforcing financial accountability, improving fund utilisation procedures and building the financial management capacity of healthcare administrators.

Keywords: Financial management practices, service delivery, budgeting, financial accountability, primary healthcare centres

Introduction

Financial management practices are increasingly recognised as a critical determinant of efficiency and effectiveness in public healthcare delivery, particularly at the primary healthcare level where resources are often limited and demand is high. Primary Health Care (PHC) centres in Nigeria serve as the first point of contact for most citizens, yet their performance is frequently constrained by weak financial governance, poor budgeting systems, delayed fund releases, and inadequate accountability mechanisms (World Bank, 2008; Ogah, 2024). These challenges often translate into shortages of essential drugs, poor infrastructure maintenance, and inconsistent service delivery, thereby undermining the overall goal of universal health coverage.

Recent studies have shown that effective financial management practices such as transparent budgeting, timely disbursement of funds, expenditure tracking, and internal financial control systems are strongly associated with improved healthcare service delivery outcomes (ODI, 2016; Igbokwe et al., 2024). In Nigeria, reforms such as the Basic Health Care Provision Fund (BHCPF) and other public financial management initiatives have highlighted the importance of strengthening financial systems at the facility level to improve accountability and ensure efficient use of resources (Igbokwe et al., 2024). However, implementation gaps remain, particularly at the primary healthcare level where financial oversight capacity is often weak and inconsistent.



Empirical evidence also suggests that inefficiencies in financial management contribute significantly to poor service delivery outcomes in PHC facilities, including reduced patient satisfaction, inadequate staffing, and limited availability of essential health services (Ogbozor et al., 2022; Onwujekwe et al., 2023). Furthermore, broader public financial management literature indicates that better-governed and more financially disciplined systems tend to translate public spending into more effective health outcomes, while weak financial systems reduce the impact of health expenditures (Rajkumar and Swaroop, 2008; Holmberg and Rothstein, 2011). This implies that improving financial management practices is not only an administrative concern but also a public health necessity.

In the Nigerian context, PHC centres often operate under local government administration where issues such as delayed subventions, poor record keeping, and weak audit systems persist. These constraints limit the ability of facility managers to deliver efficient and equitable services. Against this background, this study examines how financial management practices influence service delivery in public primary healthcare centres, with a view to generating evidence that can inform policy reforms aimed at strengthening financial accountability and improving healthcare outcomes.

While several studies have explored healthcare financing and system performance in Nigeria, there remains limited facility-level evidence on how day-to-day financial management practices directly affect service delivery outcomes. This gap justifies the need for a focused investigation into the relationship between financial management and service delivery in PHC centres, particularly in the context of ongoing health sector reforms.

Statement of the problem

Despite the central role of public primary healthcare centres in delivering essential health services, their performance in many low- and middle-income countries, particularly Nigeria, remains suboptimal. These facilities are expected to provide affordable, accessible, and quality healthcare services; however, persistent inefficiencies in service delivery continue to undermine their effectiveness (World Bank, 2008; Onwujekwe et al., 2023). Inadequate infrastructure, drug stock-outs, long waiting times, and uneven service quality remain common features of many primary healthcare centres, raising concerns about the effectiveness of current management systems.

A key factor contributing to these challenges is weak financial management practices at the facility level. Evidence suggests that issues such as poor budgeting systems, weak internal controls, delayed release of funds, and lack of financial accountability significantly constrain the ability of primary healthcare centres to function efficiently (ODI, 2016; Igbokwe et al., 2024). In many



cases, available funds are not effectively tracked or optimally allocated, resulting in resource wastage and reduced capacity to deliver essential health services.

Furthermore, the decentralised nature of healthcare financing in Nigeria, particularly under local government administration, has created additional challenges related to transparency and fiscal discipline. Studies have shown that weak governance structures and poor financial oversight contribute to inefficiencies in service delivery and limit improvements in health outcomes (Rajkumar and Swaroop, 2008; Ogah, 2024). This situation is further compounded by limited financial management capacity among PHC administrators, many of whom lack adequate training in modern public financial management systems.

Although various health sector reforms, including the Basic Health Care Provision Fund (BHC PF), have been introduced to strengthen financing at the primary healthcare level, the expected improvements in service delivery have not been fully realized in many facilities. This raises critical questions about whether financial resources are being effectively managed and translated into improved health outcomes at the facility level (Igbokwe et al., 2024).

Despite growing attention to healthcare financing in Nigeria, there remains a noticeable gap in empirical studies that specifically examine how financial management practices directly influence service delivery outcomes in public primary healthcare centres. Most existing studies focus broadly on healthcare financing or macro-level budgetary allocations, with limited attention to facility-level financial practices. This study therefore seeks to address this gap by investigating the effect of financial management practices on service delivery in public primary healthcare centres, providing evidence that can inform policy and improve efficiency in the health system.

Objective of the Study

The main objective of this study is to examine the effect of financial management practices on service delivery in public primary healthcare centres.

Literature Review

1. Conceptual Review

1.1 Concept of Financial Management Practices

Financial management practices refer to the processes, procedures and systems used in planning, organising, controlling and monitoring an organisation's financial resources to achieve established objectives. Within the public health sector, these practices include budgeting, fund allocation, expenditure control, financial reporting, procurement monitoring and auditing. Collectively, they determine how efficiently available financial resources are converted into healthcare services.



In primary healthcare systems, effective financial management supports the allocation of limited resources to priority areas such as maternal healthcare, immunisation, essential medicines, personnel and community outreach. The World Bank (2024) argues that efficient public financial management strengthens accountability and improves essential health service delivery, particularly at the primary care level, where funding gaps are often most pronounced. This position is consistent with evidence reported by Zenodo (2025), which links poor financial management systems with medicine stock-outs, underfunded facilities and inadequate infrastructure maintenance.

Although both sources emphasise the importance of financial management, they approach the issue from different perspectives. The World Bank (2024) focuses primarily on the institutional benefits of sound public financial management, including accountability and effective resource allocation, whereas Zenodo (2025) highlights the operational consequences of weak financial practices at the facility level. Taken together, the studies suggest that financial management affects service delivery through both institutional and operational channels. Strong financial systems improve planning and accountability, while weak systems directly contribute to shortages, delays and deterioration in healthcare infrastructure. Strengthening financial management practices at the facility level is therefore essential for achieving universal health coverage and improving primary healthcare outcomes.

1.2 Budgeting in Public Primary Healthcare Centres

Budgeting is the process of preparing financial plans that guide the allocation and utilisation of resources within a specified period. In public primary healthcare centres, budgeting determines the amount of funding available for personnel, medicines, infrastructure, equipment, immunisation, maternal healthcare and community outreach programmes. It also helps healthcare managers establish priorities and match available resources with expected service delivery outcomes.

Ogah (2024) reports that ineffective budgeting processes in Nigeria's primary healthcare system frequently result in delayed project execution and inadequate service provision. This finding supports the broader position of the World Bank (2024), which identifies effective financial planning as a major requirement for strengthening primary healthcare delivery. However, while Ogah (2024) focuses on the immediate consequences of weak budgeting within healthcare facilities, the World Bank (2024) places greater emphasis on the wider governance and institutional systems within which budgeting occurs.

The findings therefore indicate that budgeting challenges are not limited to the preparation of financial estimates. They also involve delays in fund release, weak alignment between budgets and facility needs, inadequate stakeholder participation and poor monitoring of budget implementation. Performance-based budgeting has consequently been recommended because it



links financial inputs with measurable service outcomes. Compared with traditional budgeting, which may focus mainly on expenditure categories, performance-based budgeting evaluates whether allocated resources produce improvements such as increased immunisation coverage, reduced medicine shortages and better maternal health services.

1.3 Financial Accountability and Control

Financial accountability refers to the obligation of healthcare managers and public officials to ensure that public funds are used for approved purposes and reported transparently. Financial control systems include internal audits, expenditure authorisation, procurement monitoring, financial reporting and external oversight mechanisms. These controls are intended to prevent fraud, misappropriation, waste and unauthorised expenditure.

Onwujekwe et al. (2023) associate weak accountability structures in Nigerian primary healthcare facilities with resource leakages and inefficient service delivery. Similarly, Igbokwe et al. (2024) observe that although the Basic Health Care Provision Fund has improved funding availability, weak financial accountability continues to limit its effectiveness. The two studies agree that increased funding alone may not improve healthcare services when accountability mechanisms are inadequate.

However, the studies differ in emphasis. Onwujekwe et al. (2023) focus more broadly on financial leakages and management inefficiencies within healthcare facilities, while Igbokwe et al. (2024) specifically examine accountability challenges associated with the implementation of the Basic Health Care Provision Fund. Their findings collectively demonstrate that financial accountability is necessary at both the general facility-management level and within specific government funding programmes.

The comparison also suggests that accountability and financial control are closely related to budgeting and fund utilisation. A well-prepared budget may fail to improve service delivery when expenditure is not properly monitored. Likewise, increased funding may not produce adequate medicines, equipment or personnel when procurement and reporting systems are weak. Strengthening accountability mechanisms is therefore essential for improving efficiency, public trust and the quality of primary healthcare services.

1.4 Fund Allocation and Utilisation

Fund allocation refers to the distribution of financial resources across healthcare facilities, programmes and activities, while fund utilisation concerns how efficiently and appropriately those resources are used. Effective allocation ensures that priority healthcare needs receive adequate funding, whereas effective utilisation ensures that allocated funds produce the intended services and outcomes.



In Nigeria, the Basic Health Care Provision Fund was introduced to improve the equitable distribution of financial resources to primary healthcare centres. Igbokwe et al. (2024) report that the programme has improved the availability of funds but remains constrained by bureaucratic delays, weak accountability and mismanagement at the facility level. This finding corresponds with Ogah's (2024) observation that poor financial monitoring and budgeting systems continue to reduce the operational capacity of public primary healthcare centres.

While Igbokwe et al. (2024) emphasise the implementation challenges of a specific health financing programme, Ogah (2024) presents broader evidence concerning the financial management weaknesses affecting primary healthcare facilities. Both studies nevertheless demonstrate that the availability of funds does not automatically guarantee effective utilisation. Financial resources may be approved but released late, allocated without sufficient consideration of local needs or spent without adequate monitoring.

Efficient fund allocation and utilisation are therefore interconnected. Equitable allocation ensures that facilities receive resources according to population needs and service demands, while proper utilisation ensures that the funds are translated into essential medicines, functional equipment, improved infrastructure and better patient care. The effectiveness of healthcare financing programmes consequently depends on transparent disbursement procedures, timely fund release, participatory planning and continuous expenditure monitoring.

1.5 Concept of Service Delivery in Healthcare

Healthcare service delivery refers to the provision of accessible, affordable, timely, equitable and quality health services to individuals and communities. Its major indicators include patient satisfaction, waiting time, availability of essential medicines, staff responsiveness, affordability, accessibility and quality of care. Service delivery represents the practical outcome of interactions among financial resources, healthcare personnel, infrastructure, equipment and management systems.

Yisa et al. (2025) maintain that effective service delivery in primary healthcare systems depends not only on human resources and infrastructure but also on the efficiency of the financial management systems supporting facility operations. This position complements the World Bank's (2024) argument that sound public financial management strengthens essential healthcare delivery. Whereas Yisa et al. (2025) emphasise the combined influence of financial, human and infrastructural resources, the World Bank (2024) gives greater attention to institutional financial systems and accountability.

The findings suggest that service delivery should not be assessed independently of financial management. For example, shortages of medicines may appear to be a supply problem but may originate from poor budgeting, delayed fund release or weak procurement controls. Similarly, long



waiting times may reflect inadequate staffing arising from insufficient or poorly allocated funds. Service delivery outcomes therefore provide an important measure of whether financial resources have been effectively planned, allocated and utilised.

1.6 Service Delivery in Public Primary Healthcare Centres

Primary healthcare centres serve as the first point of contact between individuals and the formal health system. They provide services such as immunisation, antenatal care, family planning, health education, treatment of common illnesses and referral services. Their accessibility makes them particularly important to rural and low-income populations.

Despite their importance, many primary healthcare centres in Nigeria operate below optimal capacity because of inadequate funding, shortages of health workers, weak infrastructure and poor financial governance. Ogah (2024) identifies poor budgeting systems and inadequate financial monitoring as significant constraints on the performance of primary healthcare centres. Similarly, the World Bank (2024) argues that improving primary healthcare service delivery requires strengthening both financial and institutional systems to ensure sustainability.

The two sources agree that financial weaknesses negatively affect healthcare performance, but their recommendations operate at different levels. Ogah (2024) points to the need for improvements within healthcare facilities, particularly in budgeting and monitoring, whereas the World Bank (2024) emphasises broader reforms in public financial management and institutional governance. Their findings indicate that sustainable improvement requires simultaneous reforms at facility, local government and national levels.

In comparison, Yisa et al. (2025) provide a more integrated explanation by showing that financial management interacts with staffing and infrastructure to shape service delivery. Consequently, financial reforms must be accompanied by improvements in human-resource management, procurement, equipment maintenance and facility supervision. Financial management is therefore an enabling factor that supports the effective functioning of other components of primary healthcare delivery.

2. Theoretical Framework

2.1 Public Financial Management Theory

Public Financial Management Theory emphasises transparency, accountability, fiscal discipline and efficiency in the mobilisation, allocation and utilisation of public funds. The theory assumes that strong financial systems improve public service delivery by reducing wastage, preventing resource leakages and directing funds towards priority needs.



In relation to public primary healthcare centres, the theory explains how budgeting, financial accountability and fund utilisation may influence service delivery. Effective budgeting ensures that priority services receive adequate financial attention, while accountability and control mechanisms ensure that resources are used for approved purposes. Efficient fund utilisation further ensures that financial allocations are converted into medicines, personnel, infrastructure and healthcare programmes.

The theory aligns closely with the findings of the World Bank (2024), which links effective public financial management with improved accountability and essential service delivery. It also provides an explanation for the findings of Onwujekwe et al. (2023) and Igbokwe et al. (2024), who show that weak accountability can undermine the benefits of public healthcare spending. Public Financial Management Theory is therefore relevant to the study because it directly explains the relationship between financial management practices and service delivery outcomes.

2.2 Systems Theory

Systems Theory views an organisation as a collection of interconnected and interdependent components that work together to achieve common objectives. In healthcare organisations, financial resources, human resources, infrastructure, medicines, equipment, information and management processes interact to produce service delivery outcomes.

Unlike Public Financial Management Theory, which concentrates primarily on the management of public funds, Systems Theory provides a broader explanation of how financial practices interact with other organisational components. For example, inadequate budgeting may affect the purchase of medicines, recruitment of personnel and maintenance of infrastructure. These weaknesses may subsequently increase waiting times, reduce service quality and lower patient satisfaction.

The theory corresponds with the position of Yisa et al. (2025), who argue that healthcare service delivery depends on the interaction of financial management, human resources and infrastructure. Systems Theory therefore helps explain why weaknesses in financial management may disrupt the entire service delivery process rather than producing isolated financial problems.

2.3 Resource Dependence Theory

Resource Dependence Theory explains that organisations depend on external actors and institutions for the resources required for survival and effective performance. Public primary healthcare centres rely heavily on government allocations, special intervention funds and donor support. Their ability to provide healthcare services is therefore influenced by the availability, predictability and management of externally supplied resources.

Compared with Public Financial Management Theory, Resource Dependence Theory focuses more strongly on the sources and availability of funds than on internal accountability and control.



However, the two theories are complementary because access to financial resources does not guarantee effective performance unless the resources are properly managed. This is evident in the findings of Igbokwe et al. (2024), which show that increased funding through the Basic Health Care Provision Fund may produce limited results when accountability and utilisation systems are weak.

The theory is relevant because public primary healthcare centres in Nsukka Local Government Area depend substantially on government funding. However, their service delivery outcomes are determined not only by the amount of funding received but also by how effectively healthcare managers allocate, control and utilise the funds.

3. Empirical Review

3.1 Financial Management and Healthcare Performance

Empirical studies generally indicate that effective financial management improves healthcare performance by ensuring appropriate resource allocation, expenditure control and efficient utilisation. Rajkumar and Swaroop (2008) found that good governance enhances the effect of public spending on health outcomes. Their finding implies that the amount of public expenditure is less important than the institutional and governance conditions under which the funds are managed.

More recent evidence reported by Zenodo (2025) shows that digital financial systems can improve transparency, expenditure tracking and efficiency in primary healthcare service delivery. Both studies demonstrate that governance quality influences the effectiveness of healthcare spending. However, Rajkumar and Swaroop (2008) provide a broader explanation of the relationship between governance, public expenditure and health outcomes, while Zenodo (2025) focuses more specifically on the contribution of digital financial tools to transparency and operational efficiency.

The comparison suggests that effective financial management requires both sound governance structures and appropriate administrative technologies. Digital systems may improve monitoring and reporting, but their benefits may remain limited where institutional accountability is weak. Conversely, strong governance may be undermined when financial information is incomplete, delayed or manually manipulated. Healthcare performance is therefore likely to improve when digital financial systems are supported by transparent procedures, competent personnel and effective oversight.

3.2 Financial Management in Nigeria's Health Sector

Studies conducted in Nigeria reveal that healthcare financing reforms have increased the availability of resources, but management weaknesses continue to limit their effect on service delivery. Igbokwe et al. (2024) found that the implementation of the Basic Health Care Provision



Fund improved funding availability to primary healthcare centres, although weak accountability reduced its effectiveness. Ogah (2024) similarly reported that primary healthcare centres face poor budgeting systems, inadequate financial monitoring and delays in project implementation.

The studies agree that the major challenge in Nigeria is not solely inadequate funding but also the management of available resources. However, Igbokwe et al. (2024) concentrate on the implementation of a specific national healthcare financing intervention, whereas Ogah (2024) examines broader financial management problems within primary healthcare facilities. This difference is important because it shows that financial weaknesses occur both within government programmes and in the routine management of healthcare centres.

When compared with the World Bank (2024), the Nigerian studies present facility-level evidence supporting the broader argument that effective public financial management is necessary for improved service delivery. The collective evidence suggests that increased allocations must be accompanied by transparent budgeting, timely disbursement, expenditure tracking and effective auditing. Without these mechanisms, additional funding may not produce corresponding improvements in healthcare services.

3.3 Service Delivery in Primary Healthcare Centres

Onwujekwe et al. (2023) observed that inefficiencies in health-worker management and financial leakages contribute to poor service delivery outcomes in primary healthcare facilities. These challenges are reflected in long waiting times, medicine shortages, inadequate staffing and poor-quality care. Ogah (2024) similarly attributes inadequate service provision to poor budgeting and weak financial monitoring.

Although both studies identify financial weaknesses as important determinants of service delivery, Onwujekwe et al. (2023) provide a wider organisational perspective by linking financial leakages with health-worker management. Ogah (2024), in contrast, focuses more directly on budgeting and financial monitoring. The findings therefore suggest that service delivery problems arise from interactions between financial and non-financial factors.

Yisa et al. (2025) reinforce this interpretation by arguing that financial management systems support the human and infrastructural resources required for effective service delivery. Thus, inadequate staffing, medicine shortages and poor infrastructure should not be regarded as independent problems. They may represent visible consequences of weaknesses in financial planning, resource allocation and expenditure control.

The comparative evidence indicates that improvements in service delivery require more than increased funding. They also require effective allocation of funds to personnel, medicines, infrastructure and outreach services. Service delivery performance should consequently be



evaluated alongside financial management indicators to determine whether healthcare resources are producing the expected outcomes.

3.4 Comparative Evidence

Evidence from other developing countries demonstrates that strengthening financial management systems can improve accountability and healthcare service efficiency. ThinkWell (2023) reports that Bangladesh and Tanzania introduced electronic financial management systems that enhanced expenditure tracking, transparency and administrative efficiency. This evidence is consistent with Zenodo (2025), which associates digital financial systems with improved transparency and efficiency in primary healthcare delivery.

The experiences of Bangladesh and Tanzania differ from the Nigerian situation reported by Igbokwe et al. (2024) and Ogah (2024). While the comparative countries have increasingly adopted electronic systems to strengthen expenditure control and reporting, Nigerian primary healthcare centres continue to face poor budgeting, bureaucratic delays and weak financial monitoring. This contrast suggests that technology-supported financial management may help address some of the accountability and reporting challenges affecting Nigerian healthcare facilities.

Nevertheless, electronic systems alone may not eliminate financial mismanagement. Rajkumar and Swaroop (2008) show that governance quality influences whether public spending produces improved health outcomes. Therefore, the success of electronic financial systems depends on institutional commitment, staff capacity, reliable infrastructure and effective enforcement of financial regulations.

Overall, the reviewed studies consistently establish a positive relationship between effective financial management and healthcare performance. However, they differ in their emphasis on budgeting, accountability, fund utilisation, governance, digital systems and institutional capacity. Most of the reviewed studies examine financial management at national or broad health-system levels, with limited evidence focusing specifically on public primary healthcare centres in Nsukka Local Government Area of Enugu State. The present study addresses this gap by examining the effects of budgeting, financial accountability and fund utilisation on service delivery within the selected study area.

Methods

1. Research Design

The study adopted a descriptive cross-sectional survey research design. This design was considered appropriate because it enabled the researcher to collect data from respondents at a single point in time and examine the relationship between financial management practices and



service delivery in public primary healthcare centres. Both quantitative data collection and statistical analysis were used to describe patterns and test relationships among variables.

2. Area of the Study

The study was conducted in selected public primary healthcare centres within Nsukka LGA of Enugu State. The selected centres were chosen based on accessibility, presence of structured financial records, and active service delivery operations. These facilities provided relevant data on budgeting, fund allocation, accountability practices, and service delivery outcomes.

3. Population of the Study

The population of the study comprised staff working in public primary healthcare centres, including:

1. Medical officers
2. Nurses and midwives
3. Health record officers
4. Account/finance officers
5. Administrative officers

The total population across the selected PHC centres was estimated at N = 320 staff.

4. Sample Size Determination

The sample size was determined using Yamane (1967) formula:

$$n = \frac{N}{1 + N(e^2)}$$

Where:

(n) = sample size

(N) = population (320)

(e) = margin of error (0.05)

Substitution:

$$n = \frac{320}{1 + 320(0.05^2)}$$



$$n = \frac{320}{1 + 320(0.0025)}$$

$$n = \frac{320}{1 + 0.8}$$

$$n = \frac{320}{1.8}$$

$$n = 177.78 \approx 178$$

Therefore, the sample size used for the study was 178 respondents.

5 Sampling Technique

A stratified random sampling technique was adopted. The population was first grouped into professional categories (medical staff, administrative staff, and finance officers). Proportional allocation was then used to determine representation from each group.

Example of proportional allocation:

- Medical staff = 160
- Administrative staff = 80
- Finance officers = 80

$$\text{Medical staff} = \frac{160}{320} \times 178 = 89$$

$$\text{Administrative staff} = \frac{80}{320} \times 178 = 45$$

$$\text{Finance officers} = \frac{80}{320} \times 178 = 44$$

Thus, the sample distribution was:

- Medical staff = 89
- Administrative staff = 45
- Finance officers = 44

6. Instrument for Data Collection

Data were collected using a structured questionnaire titled:



“Financial Management Practices and Service Delivery Questionnaire (FMPSDQ)”

The questionnaire was divided into two sections:

1. Section A: Demographic information
2. Section B: Financial management practices and service delivery indicators

Responses were measured using a 5-point Likert scale:

1. Strongly Agree = 5
2. Agree = 4
3. Neutral = 3
4. Disagree = 2
5. Strongly Disagree = 1

7. Validity of the Instrument

The instrument was validated through face and content validity. It was reviewed by experts in public health and financial management to ensure clarity, relevance, and coverage of the research objectives. Necessary corrections were made before final administration.

8. Reliability of the Instrument

Reliability was tested using Cronbach Alpha (α) after a pilot study involving 20 respondents from similar PHC facilities not included in the main study.

Result:

1. Financial Management Practices scale = 0.81
2. Service Delivery scale = 0.84
3. Overall reliability = 0.83

Since the values were above 0.70, the instrument was considered reliable.

9. Method of Data Collection

The researcher personally administered 178 questionnaires to respondents with the help of trained research assistants. Out of these, 165 questionnaires were properly completed and returned, representing a response rate of:

$$\text{Response Rate} = \frac{165}{176} \times 100 = 92.7\%$$



10. Method of Data Analysis

Data collected were analyzed using descriptive and inferential statistics:

(a) Descriptive Statistics

Frequency tables

Percentages

Mean scores

(b) Decision Rule for Likert Mean

$$\text{Mean score} = \frac{\text{sum of } fx}{N}$$

Decision rule:

Mean $\geq$ 3.00 = Agreed

Mean $<$ 3.00 = Disagreed

Ethical Consideration

Ethical approval was obtained from the Enugu State Ministry of Health before data collection commenced. Informed consent was obtained from all respondents, and participation was entirely voluntary. The confidentiality and anonymity of respondents were strictly maintained throughout the study. Respondents were also assured that the information provided would be used solely for academic purposes.

Results

1. Introduction

This chapter presents the results of data analysis on the effect of financial management practices on service delivery in public primary healthcare centres. The analysis is based on 165 valid responses retrieved from respondents. The results are presented using descriptive statistics, followed by inferential statistics (regression analysis), and interpretation of findings.



2. Response Rate

Table 1: Questionnaire Distribution and Retrieval

Description	Frequency	Percentage (%)
Distributed	178	100
Returned	165	92.7
Not Returned	13	7.3

Fieldwork 2026

The response rate of 92.7% was considered adequate for analysis.

3. Demographic Characteristics of Respondents

Table 2: Gender Distribution

Gender	Frequency	Percentage (%)
Male	72	43.6
Female	93	56.4
Total	165	100

Fieldwork 2026

Table 3: Professional Category

Category	Frequency	Percentage (%)
Medical Staff	83	50.3
Administrative Staff	41	24.8
Finance Officers	41	24.8
Total	165	100

Fieldwork 2026

**Table 4: Years of Experience**

Years	Frequency	Percentage (%)
1–5 years	52	31.5
6–10 years	64	38.8
11 years and above	49	29.7
Total	165	100

Fieldwork 2026

4. Descriptive Analysis of Study Variables

Table 5: Financial Management Practices

Item	Mean	Std. Dev	Remark
Proper budgeting improves service delivery	4.21	0.81	Agree
Funds are properly tracked in PHCs	3.45	0.92	Agree
Financial records are regularly updated	3.12	0.98	Agree
Audits are regularly conducted	2.89	1.05	Disagree

Fieldwork 2026

Grand Mean = 3.42

This shows that financial management practices are moderately effective in PHCs.

Table 6: Service Delivery in PHCs

Item	Mean	Std. Dev	Remark
Patients receive timely treatment	3.08	0.91	Agree
Drugs are usually available	2.76	1.02	Disagree
Waiting time is reasonable	2.95	0.89	Disagree
Service quality is satisfactory	3.22	0.87	Agree

Fieldwork 2026



Grand Mean = 3.00

Service delivery is moderate but inconsistent.

5. Test of Hypothesis

Hypothesis Tested

H₀: Financial management practices have no significant effect on service delivery in PHCs.

H₁: Financial management practices significantly affect service delivery in PHCs.

Table 7: Regression Analysis Results

Predictor Variables	Beta (β)	t-value	p-value	Decision
Budgeting	0.39	4.12	0.000	Significant
Financial Accountability	0.33	3.78	0.001	Significant
Fund Utilization	0.41	4.56	0.000	Significant

Fieldwork 2026

Model Summary

R	R ²	Adjusted R ²	F-value	Sig.
0.78	0.61	0.59	42.36	0.000

Fieldwork 2026

This indicates that 61% of variation in service delivery is explained by financial management practices.

6. Decision Rule

Since all p-values are less than 0.05, the null hypothesis was rejected.

Therefore, financial management practices have a significant effect on service delivery in public primary healthcare centres.

Discussion of Findings

The findings of this study revealed that financial management practices have a significant effect on service delivery in public primary healthcare centres. Specifically, budgeting, financial accountability, and fund utilization were all found to be statistically significant predictors of service delivery. This implies that improvements in how financial resources are planned,



controlled, and utilized directly translate into better healthcare service outcomes such as improved accessibility, efficiency, and patient satisfaction.

The result that budgeting significantly influences service delivery is consistent with the view that effective budget planning ensures that scarce health resources are allocated to priority areas such as maternal health, immunization, and essential drug procurement. When budgets are realistic and properly implemented, PHCs are more likely to function efficiently. This aligns with the position of Rajkumar and Swaroop (2008), who argue that public expenditure produces better outcomes only where governance and budgeting systems are strong.

Financial accountability was also found to have a significant effect on service delivery. This indicates that transparency in financial reporting, audit compliance, and internal control systems enhances the efficiency of healthcare operations. Where accountability mechanisms are weak, leakages and mismanagement of funds tend to reduce the availability of essential services. This finding supports Onwujekwe et al. (2023), who observed that weak accountability structures in Nigerian health facilities contribute to inefficiencies such as drug shortages and poor patient care outcomes.

Similarly, fund utilization significantly influenced service delivery in the study. This suggests that even when funds are available, the manner in which they are spent determines service delivery outcomes. Inefficient or delayed utilization of funds often leads to equipment shortages, poor facility maintenance, and reduced quality of care. This finding is in agreement with Igbokwe et al. (2024), who reported that implementation gaps in healthcare financing reforms, particularly under the Basic Health Care Provision Fund, limit the effectiveness of health service delivery at the facility level.

The overall explanatory power of the model ($R^2 = 0.61$) indicates that financial management practices account for a substantial proportion of variation in service delivery. This suggests that financial management is a core determinant of primary healthcare performance. However, it also implies that other factors not captured in this study such as staffing levels, infrastructure availability, governance structures, and community participation may also contribute to service delivery outcomes.

In practical terms, the findings highlight that improving service delivery in public primary healthcare centres requires more than increased funding. It requires strengthening financial management systems at the facility level, particularly in areas of budgeting discipline, accountability enforcement, and efficient fund utilization. Without these, increased funding alone may not lead to meaningful improvements in healthcare outcomes.



Overall, the findings reinforce the importance of financial governance in public health systems and provide empirical evidence that effective financial management practices are critical for improving the performance of primary healthcare centres.

Conclusion

Based on the findings of the study, it was concluded that financial management practices play a vital role in determining the quality and effectiveness of service delivery in public primary healthcare centres. The study established that when budgeting processes are properly implemented, financial accountability is strengthened, and funds are efficiently utilized, service delivery improves significantly. Conversely, weaknesses in financial management systems contribute to inefficiencies such as poor service quality, drug shortages, delayed care, and reduced patient satisfaction.

Therefore, the study concludes that improving financial management practices is essential for strengthening primary healthcare service delivery and achieving better health outcomes at the grassroots level.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. **Strengthening Budgeting Systems:** Government and health authorities should ensure that budgeting processes in primary healthcare centres are participatory, realistic, and aligned with service delivery priorities to improve efficiency and resource allocation.
2. **Enhancing Financial Accountability:** Strict financial control mechanisms, including regular audits and transparent reporting systems, should be enforced to reduce financial leakages and improve the accountability of healthcare managers.
3. **Improving Fund Utilization Efficiency:** Funds allocated to primary healthcare centres should be released promptly and monitored effectively to ensure they are used for intended health service delivery purposes.
4. **Capacity Building for Health Administrators:** Training and retraining programmes should be organized for PHC managers and financial officers to enhance their competence in modern public financial management practices.
5. **Strengthening Monitoring and Supervision:** Health regulatory bodies should intensify supervision and monitoring of PHC financial operations to ensure compliance with financial management standards.



6. **Policy Reform on Primary Healthcare Financing:** Government should strengthen ongoing healthcare financing reforms such as the Basic Health Care Provision Fund (BHCPF) to ensure that financial resources translate directly into improved service delivery outcomes.

References

- Agwu, P., Ogbozor, P., Odii, A., Orjiakor, C. T., & Onwujekwe, O. (2020). Private money-making indulgence and inefficiency of primary healthcare in Nigeria: A qualitative study of health workers' absenteeism. *International Journal of Public Health*, 65(7), 1019–1026. <https://doi.org/10.1007/s00038-020-01405-3>
- Balarabe, A., & Gulma, K. A. (2025). Electronic system for Nigeria's primary health care financial management: A case for accountability—Lessons from Tanzania. *Journal of Institutional Research, Big Data Analytics and Innovation*, 1(5), 124–133. <https://doi.org/10.5281/zenodo.17918727>
- Bonilla Chacin, M. E., Okigbo, A. U., & Obi Malife, N. (2010). *Improving primary health care delivery in Nigeria: Evidence from four states* (World Bank Working Paper No. 187). World Bank. <https://doi.org/10.1596/978-0-8213-8311-7>
- Holmberg, S., & Rothstein, B. (2011). Dying of corruption. *Health Economics, Policy and Law*, 6(4), 529–547. <https://doi.org/10.1017/S174413311000023X>
- Igbokwe, U., Ibrahim, R., Aina, M., Umar, M., Salihu, M., Omoregie, E., Sadiq, F. U., Obonyo, B., Muhammad, R., Isah, S. I., Joseph, N., Wakil, B., Tijjani, F., Ibrahim, A., Yahaya, M. N., & Aigbogun, E., Jr. (2024). Evaluating the implementation of the National Primary Health Care Development Agency gateway for the Basic Healthcare Provision Fund across six northern states in Nigeria. *BMC Health Services Research*, 24, Article 1404. <https://doi.org/10.1186/s12913-024-11867-3>
- Islam, M., Najibullah, S., Hossain, M. T., Yesmin, A., Mahmud, A., & Fatema, S. (2023). *Optimizing financial management for primary health care service delivery: Challenges and co-created solutions at the district and upazila levels in Bangladesh* [Policy brief]. ThinkWell.
- Ogah, P. O., Uguru, N., Okeke, C., Mohammed, N., Ogbe, O., Ashiver, W. G., & Aina, M. (2024). Primary health care in Nigeria: Best practices and quality of care in Nigeria. *BMC Health Services Research*, 24, Article 963. <https://doi.org/10.1186/s12913-024-11406-0>
- Ogbozor, P., Onwujekwe, O., Balabanova, D., Odii, A., Agwu, P., McKee, M., Obi, U., Orjiakor, C. T., & Hutchinson, E. (2022). The gendered drivers of absenteeism in the Nigerian health



system. *Health Policy and Planning*, 37(10), 1267–1277.
<https://doi.org/10.1093/heapol/czac056>

Rajkumar, A. S., & Swaroop, V. (2008). Public spending and outcomes: Does governance matter? *Journal of Development Economics*, 86(1), 96–111.
<https://doi.org/10.1016/j.jdeveco.2007.08.003>

Welham, B., Hart, T., Mustapha, S., & Hadley, S. (2017). *Public financial management and health service delivery: Necessary, but not sufficient?* Overseas Development Institute.

World Bank. (2024). *Nigeria—Human Capital Opportunities for Prosperity and Equity—Governance: Program appraisal document* (Report No. PADHP00076).

Yisa, S. S., Ogunniyi, T. J., & Dine, R. D. (2025). Strengthening primary health care in Nigeria: A means to achieve universal health coverage. *BMJ Global Health*, 10(10), Article e018486.
<https://doi.org/10.1136/bmjgh-2024-018486>