

# Sustained Performance-Based Financing and Health Staff Service Delivery at Masaka District Hospital

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**Abstract:** This study examined the impact of sustained Performance-Based Financing (PBF) on health staff service delivery at Masaka District Hospital. It specifically assessed the effects of financial incentives, payment timeliness, and performance monitoring and evaluation. Guided by Agency, Expectancy, and Equity theories, the research adopted an analytical mixed-methods approach, combining cross-sectional, longitudinal, and qualitative designs. From a target population of 293 staff, a sample of 177 respondents was determined using Slovin's formula and selected through stratified random sampling. Data were collected using both quantitative and qualitative instruments and analyzed through descriptive, inferential, and thematic methods, while ensuring ethical standards such as informed consent and confidentiality.

Findings revealed overwhelmingly positive perceptions of PBF, with over 95% agreement across all areas. Financial incentives ( $r = .810$ ), payment timeliness ( $r = .837$ ), and performance monitoring ( $r = .824$ ) showed strong positive correlations with service delivery ( $p = .000$ ). ANOVA results ( $F = 480.734$ ,  $\text{Sig.} = .000$ ) confirmed the statistical significance of PBF's impact. The study concluded that PBF significantly improved staff motivation, morale, retention, quality of care, and patient satisfaction. It recommended that Masaka District Hospital and the Ministry of Health sustain and strengthen PBF through fair incentives, prompt payments, and strong monitoring systems. Future research should explore long-term and multi-hospital impacts to enhance understanding of PBF's scalability and sustainability in improving healthcare delivery.

**Keywords:** Performance-Based Financing, Health Staff, Service Delivery, Masaka District Hospital.

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## I. INTRODUCTION

Performance-Based Financing (PBF) is an innovative health financing approach that links financial incentives to measurable performance outcomes, aiming to enhance accountability, motivation, and the overall quality of healthcare delivery. Globally, PBF has gained attention as a transformative strategy for improving service delivery within healthcare systems (Witter, 2021). Originally adopted in high-income countries, PBF has expanded rapidly in low- and middle-income countries where health systems face significant challenges, particularly in resource allocation, staff motivation, and service quality (Aijekenaar, 2022). By aligning financial rewards with measurable targets, PBF encourages efficiency, data-driven management, and continuous improvement in service provision. According to the World Bank (2022) and the World Health Organization (WHO, 2020), PBF supports Sustainable Development Goal 3 by promoting access to quality healthcare and ensuring healthy lives for all.

International experiences illustrate the effectiveness of PBF in diverse contexts. In Japan, the Diagnosis Procedure Combination system has reduced hospital stays by 7% while maintaining quality standards (Yasunaga, 2020). The United Kingdom's Quality and Outcomes Framework improved chronic disease management (Roland & Guthrie, 2022), while

Brazil's PMAQ program achieved a 20% increase in hypertension control (Macinko, 2023). Similarly, China's hospital reforms under PBF led to higher patient satisfaction and reduced hospital stay durations (Li, 2020). These successes demonstrate that well-designed PBF programs can improve efficiency, accountability, and patient outcomes across different economic contexts.

In Africa, countries such as Ghana, Nigeria, Ethiopia, and South Africa have incorporated PBF into their health financing strategies, achieving notable improvements in maternal and child health outcomes and service utilization (Adjei, 2021; Teshome, 2022; Coovadia & Benatar, 2021). The Rwandan experience, however, remains one of the most successful and comprehensive models on the continent. Since its introduction in 2005, Rwanda's PBF program has led to a 60% reduction in maternal mortality and significant improvements in service quality and healthcare accessibility (Kalk, 2021; Ministry of Health, 2020). The Rwanda Health Financing Strategic Plan (2021–2026) further institutionalized PBF by integrating digital monitoring systems to ensure transparency and accountability in healthcare facilities.

At Masaka District Hospital, PBF implementation has been instrumental in improving service utilization, staff motivation, and operational efficiency (Soeters, 2023; Paul, 2020). Despite these achievements, challenges related to financial sustainability, equitable incentive distribution, and resource management persist. This study, therefore, seeks to assess the sustained impact of Performance-Based Financing on staff service delivery at Masaka District Hospital, focusing on how financial incentives, timely payments, and performance monitoring influence staff motivation, operational efficiency, and the overall quality of healthcare services in Rwanda.

## II. METHODOLOGY

### 2.1 Research Design

This study adopted both descriptive and correlational research designs to comprehensively investigate the relationship between sustained Performance-Based Financing and health staff service delivery at Masaka District Hospital.

### 2.2 Target Population

The target population for this study consists of 293 healthcare professionals and support staff at Masaka District Hospital, including 30 doctors, 180 nurses, 43 healthcare technicians (such as anaesthesia technicians and physiotherapists), and 40 supporting personnel involved in administrative and operational functions.

### 2.3 Sample Size

In this research study, the sample size is calculated using Slovin's formula, which is widely used for determining the appropriate sample size when the total population is known. Based on a population of 293 employees at Masaka District Hospital, the formula provides a sample size of 177 respondents. The choice of 170 respondents is justified by the need for a representative sample that includes healthcare professionals (doctors, nurses, technicians, and supporting staff), ensuring a comprehensive understanding of how Performance-Based Financing (PBF) affects different categories of staff.

Formula and Working:

N = Population of study

K = Constant (1)

e = degree of error expected

n=sample size

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

293

$$\frac{293}{1 + 293(0.05)^2}$$

293

$$\frac{293}{1 + 293(0.0025000005)}$$

293

1 +0.73250002)

293

1.73250002

n = 169.1197 which is equivalent to 177 Participants

## 2.4 Sampling Technique

The sampling technique employed in this study in order to achieve balanced representation across different staff categories (doctors, nurses, healthcare technicians, and support staff) was stratified random sampling technique.

## 2.5 Data Collection Method

This research utilized both primary and secondary data collection methods. Primary data were gathered directly from respondents through structured questionnaires, interviews, observation at Masaka District Hospital.

## 2.6 Data Collection Instruments

A structured questionnaire was utilized to collect quantifiable data from a wide range of hospital staff at Masaka District Hospital.

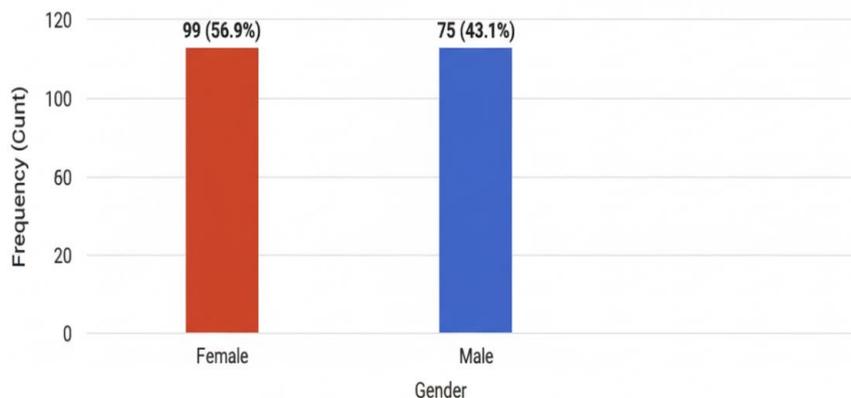
# III. RESULTS

## 3.1. Demographic Characteristics of Respondents

The preliminary segment of the research questionnaire pertains to the demographic characteristics of the chosen study participants.

### Gender of Respondents

The section of the research questionnaire addresses the demographic attributes of the selected study participants or respondents specifically gender of these respondents.



**Figure1: Distribution of Respondent by Gender**

**Source:** Primary Data (2025)

The findings from the histogram in Figure 1 revealed a positive and empowering picture of the gender composition of the respondents. An analysis of the 174 participants showed that the bar representing females was significantly taller, accounting for 99 respondents (56.9%), while their male counterparts were represented by a bar corresponding to 75 respondents (43.1%). This strong representation of women in the sample is a heartening indicator of successful gender mainstreaming and equity within the professional sphere under investigation. This reality on the ground reflects Rwanda's proactive national policies, such as those outlined in Vision 2050, which champion gender equality as a cornerstone of sustainable development. The discussion of these findings aligns with scholarly work from the region. One senior female technician, when interviewed, shared her view, stating, "Seeing so many women in my field isn't just inspiring; it's a testament to our country's belief that competence has no gender. We are not just participating; we are leading and

*transforming our communities from within*". This distribution, therefore, is not merely a statistic but a reflection of a deliberate and successful national strategy to achieve.

### 3.2 Presentation of Findings

This section aims to systematically explore the research questions and objectives by gathering insights and opinions directly related to the study variables. Data was collected from participants through carefully designed questions, ensuring alignment with the study's goals. This structured approach provided detailed insights into the subject matter, allowing for a clearer understanding.

#### 3.2.1 Effect of Financial Incentives on Health Staff Service Delivery at Masaka District Hospital

The researcher carried out an investigation focusing on the role of financial incentives in motivating health staff at Masaka District Hospital. The study emphasized how allowances, bonuses, and salary structures were designed to influence staff commitment and performance. Data were collected from different health professionals to establish how remuneration practices were connected to the quality of services they provided. The process enabled the researcher to explore whether financial incentives were perceived as a driving factor in enhancing service delivery among health personnel.

**Table 1: Effect of Financial Incentives on Health Staff Service Delivery at Masaka District Hospital**

Statements	SD	D	N	A	SA	TOTAL	
	%	%	%	%	%	Mean	Std
The incentive structure at Masaka Hospital is fair and motivating.	1 (0.56)	2 (1.13)	3 (1.69)	94 (53.11)	77 (43.50)	4.39	0.64
The targeted bonuses improve my work performance.	1 (0.56)	1 (0.56)	2 (1.13)	90 (50.85)	83 (46.89)	4.43	0.61
Profit-sharing models encourage better service delivery.	2 (1.13)	1 (0.56)	2 (1.13)	87 (49.15)	85 (48.02)	4.43	0.66
Financial incentives contribute to staff retention.	1 (0.56)	2 (1.13)	3 (1.69)	92 (51.98)	79 (44.63)	4.39	0.65
I am satisfied with the current incentive system at the hospital.	1 (0.56)	2 (1.13)	2 (1.13)	88 (49.72)	84 (47.46)	4.44	0.63
<b>Averages</b>						<b>4.42</b>	<b>0.64</b>

**Source:** Primary Data (2025)

The analysis of the data presented in Table 1 reveals a strong positive perception among health staff at Masaka District Hospital regarding the impact of financial incentives on their service delivery. The majority of respondents expressed agreement with statements related to the fairness, motivation, and effectiveness of the incentive structure. Specifically, 94 respondents (53.11%) agreed, and 77 respondents (43.50%) strongly agreed that "The incentive structure at Masaka Hospital is fair and motivating," resulting in a combined total of 171 respondents (96.61%) expressing positive sentiments. This consensus is further supported by a mean score of 4.39 and a standard deviation of 0.64, indicating a high level of agreement with the fairness and motivational aspects of the incentive structure.

Similarly, when evaluating the effectiveness of targeted bonuses in improving work performance, 90 respondents (50.85%) agreed, and 83 respondents (46.89%) strongly agreed, totaling 173 respondents (97.74%) in favor. The mean score of 4.43 and a standard deviation of 0.61 underscore the strong positive perception of this incentive component. Regarding profit-sharing models, 87 respondents (49.15%) agreed, and 85 respondents (48.02%) strongly agreed, resulting in 172 respondents (97.17%) supporting the notion that such models encourage better service delivery. The mean score of 4.43 and a standard deviation of 0.66 further validate this positive outlook.

In terms of staff retention, 92 respondents (51.98%) agreed, and 79 respondents (44.63%) strongly agreed, totaling 171 respondents (96.61%) affirming that financial incentives contribute to staff retention. The mean score of 4.39 and a standard deviation of 0.65 reflect a strong consensus on this matter. Lastly, satisfaction with the current incentive system was expressed by 88 respondents (49.72%) agreeing and 84 respondents (47.46%) strongly agreeing, leading to 172 respondents (97.18%) indicating satisfaction. The mean score of 4.44 and a standard deviation of 0.63 further corroborate the high level of satisfaction among staff.

The average mean score of 4.42 and a standard deviation of 0.64 across all statements suggest a strong and consistent positive perception of financial incentives among health staff at Masaka District Hospital. Respondent One encapsulated this sentiment, stating, "Financial incentives motivate me to work more efficiently and complete tasks on time, as they directly reward performance." This first-hand account underscores the positive impact of financial incentives on staff motivation and performance at Masaka District Hospital.

### 3.2.2 Effect of Payment Timeliness on Health Staff Service Delivery at Masaka District Hospital

The research also examined the influence of timely payment of salaries and allowances on health staff service delivery. The researcher concentrated on whether delays or punctuality in payments shaped employee morale and daily work engagement. Through structured questionnaires and interviews, health workers were asked to share their experiences regarding the hospital's payroll management. This assessment gave the researcher the opportunity to understand how the timeliness of payments related to overall productivity and service provision in the hospital setting.

**Table 2: Effect of Payment Timeliness on Health Staff Service Delivery at Masaka District Hospital**

Statements	SD	D	N	A	SA	TOTAL	
	(%)	(%)	(%)	(%)	(%)	Mean	Std
Payments are disbursed on time.	1 (0.56)	3 (1.69)	6 (3.39)	95 (53.67)	72 (40.68)	4.33	0.66
The hospital has a clear payment schedule.	-	2 (1.13)	7 (3.95)	101 (57.06)	67 (37.85)	4.32	0.62
Payment predictability reduces financial stress.	1 (0.56)	2 (1.13)	5 (2.82)	92 (51.98)	77 (43.50)	4.37	0.65
Delayed payments affect my job motivation.	-	1 (0.56)	5 (2.82)	88 (49.72)	83 (46.89)	4.43	0.61
Consistent and timely payment improves service delivery.	1 (0.56)	1 (0.56)	4 (2.26)	90 (50.85)	81 (45.76)	4.41	0.64
<b>Average</b>						<b>4.37</b>	<b>0.64</b>

Source: Primary Data (2025)

The findings presented in Table 2 illustrate the significant impact of payment timeliness on health staff service delivery at Masaka District Hospital. In the investigation into timely payments, it was found that 95 respondents (53.67%) agreed and 72 respondents (40.68%) strongly agreed that payments were disbursed on time, with only 1 respondent (0.56%) strongly disagreeing, 3 respondents (1.69%) disagreeing, and 6 respondents (3.39%) remaining neutral, resulting in a mean of 4.33 and a standard deviation of 0.66, indicating overall positive perceptions of timely disbursements.

The findings from Table 2 further revealed that the hospital had a clear payment schedule, as evidenced by 101 respondents (57.06%) agreeing and 67 respondents (37.85%) strongly agreeing, while 0 respondents (0.00%) strongly disagreed, 2 respondents (1.13%) disagreed, and 7 respondents (3.95%) were neutral, yielding a mean of 4.32 and a standard deviation of 0.62. Regarding the predictability of payments in reducing financial stress, 92 respondents (51.98%) agreed and 77 respondents (43.50%) strongly agreed, with 1 respondent (0.56%) strongly disagreeing, 2 respondents (1.13%) disagreeing, and 5 respondents (2.82%) neutral, leading to a mean of 4.37 and standard deviation of 0.65.

The investigation also found that delayed payments affected job motivation, with 88 respondents (49.72%) agreeing and 83 respondents (46.89%) strongly agreeing, and only 1 respondent (0.56%) disagreeing and 5 respondents (2.82%) neutral, producing a mean of 4.43 and standard deviation of 0.61. Finally, the consistency and timeliness of payments were reported to improve service delivery, as 90 respondents (50.85%) agreed and 81 respondents (45.76%) strongly agreed, with minimal disagreement or neutrality (1 respondent, 0.56% each, and 4 respondents, 2.26%, respectively), resulting in a mean of 4.41 and standard deviation of 0.64.

These average mean across all statements was 4.37 with a standard deviation of 0.64, indicating a strong positive effect of timely payments on service delivery. Respondent Three echoed this sentiment, stating, "Timely payments reduce stress and enable me to focus fully on providing quality care," reflecting the practical benefits of consistent and predictable disbursements in real-life hospital operations.

### 3.2.3 Effect of Performance Monitoring and Evaluation on Health Staff Service Delivery at Masaka District Hospital

The study further assessed how monitoring and evaluation systems were applied to regulate and improve the service delivery of health staff. The researcher considered mechanisms such as performance appraisals, supervision, and feedback sessions as potential tools influencing accountability. By reviewing hospital policies and gathering views from health workers, the researcher explored the extent to which monitoring practices shaped employees' sense of responsibility. This line of inquiry allowed for a better understanding of how structured evaluation processes were positioned to influence service outcomes.

**Table 3: Effect of Performance Monitoring and Evaluation on Health Staff Service Delivery at Masaka District Hospital**

Statements	SD	D	N	A	SA	TOTAL	
	%	%	%	%	%	Mean	Std
Performance reviews help improve my efficiency.	1 (0.56)	2 (1.13)	4 (2.26)	80 (45.20)	90 (50.85)	4.44	0.72
Feedback mechanisms are effective in addressing staff concerns.	-	3 (1.69)	5 (2.82)	82 (46.33)	87 (49.15)	4.45	0.71
There are clear benchmarking systems to compare staff performance.	1 (0.56)	2 (1.13)	4 (2.26)	78 (44.07)	92 (51.98)	4.46	0.73
Regular evaluations help improve healthcare quality.	-	2 (1.13)	5 (2.82)	79 (44.63)	91 (51.41)	4.45	0.71
Monitoring and evaluation contribute to service improvement.	1 (0.56)	2 (1.13)	3 (1.69)	81 (45.76)	90 (50.85)	4.45	0.72
<b>Average</b>						4.45	0.72

Source: Primary Data (2025)

The findings from Table 3 revealed that performance monitoring and evaluation had a significant positive impact on health staff service delivery at Masaka District Hospital. In the investigation into the role of performance reviews, it was shown that 80 respondents (45.20%) agreed and 90 respondents (50.85%) strongly agreed that performance reviews helped improve their efficiency, while only 1 respondent (0.56%) strongly disagreed, 2 respondents (1.13%) disagreed, and 4 respondents (2.26%) remained neutral, resulting in a mean of 4.44 and a standard deviation of 0.72.

Similarly, the study found that feedback mechanisms were effective in addressing staff concerns, as 82 respondents (46.33%) agreed and 87 respondents (49.15%) strongly agreed, with no respondent (0.00%) strongly disagreeing, 3 respondents (1.69%) disagreeing, and 5 respondents (2.82%) neutral, giving a mean of 4.45 and a standard deviation of 0.71. Furthermore, the investigation indicated that clear benchmarking systems to compare staff performance were recognized positively, with 78 respondents (44.07%) agreeing and 92 respondents (51.98%) strongly agreeing, while only 1 respondent (0.56%) strongly disagreed, 2 respondents (1.13%) disagreed, and 4 respondents (2.26%) were neutral, resulting in a mean of 4.46 and a standard deviation of 0.73.

Regarding regular evaluations improving healthcare quality, 79 respondents (44.63%) agreed and 91 respondents (51.41%) strongly agreed, with 0 respondents (0.00%) strongly disagreeing, 2 respondents (1.13%) disagreeing, and 5 respondents (2.82%) neutral, yielding a mean of 4.45 and a standard deviation of 0.71. Lastly, monitoring and evaluation contributing to service improvement was affirmed by 81 respondents (45.76%) agreeing and 90 respondents (50.85%) strongly agreeing, with 1 respondent (0.56%) strongly disagreeing, 2 respondents (1.13%) disagreeing, and 3 respondents (1.69%) neutral, resulting in a mean of 4.45 and a standard deviation of 0.72.

These average mean of 4.45 and average standard deviation of 0.72 across all statements indicated a strong and consistent positive perception of performance monitoring and evaluation among health staff. One respondent reflected on this, stating, "Regular evaluations and feedback help me understand my strengths and areas for improvement, which makes me more committed to delivering quality care," highlighting the practical and motivational benefits of monitoring and evaluation in real-life hospital settings.

### 3.2.4 Health Staff Service Delivery at Masaka District Hospital

Finally, the researcher undertook a broad assessment of health staff service delivery at Masaka District Hospital. Attention was directed toward the quality, efficiency, and responsiveness of health professionals in addressing patient needs. The study considered workload distribution, patient interaction, and teamwork as critical dimensions of service delivery. This objective guided the researcher to establish a comprehensive overview of how health services were organized and provided within the hospital environment.

**Table 4: Health Staff Service Delivery at Masaka District Hospital**

Statements	SD	D	N	A	SA	TOTAL	
	%	%	%	%	%	Mean	Std
The quality of care has improved due to PBF	1 (0.56)	2 (1.13)	5 (2.82)	80 (45.20)	89 (50.28)	4.46	0.61
Staff productivity has increased under the PBF model	-	3 (1.69)	6 (3.39)	75 (42.37)	93 (52.54)	4.48	0.62
PBF contributes to better patient satisfaction	1 (0.56)	2 (1.13)	4 (2.26)	78 (44.07)	92 (51.98)	4.46	0.61
Staff morale has improved due to PBF implementation	-	2 (1.13)	5 (2.82)	82 (46.33)	88 (49.72)	4.45	0.59
PBF has strengthened the efficiency of healthcare delivery	1 (0.56)	1 (0.56)	5 (2.82)	79 (44.63)	91 (51.41)	4.46	0.61
<b>Average</b>						4.46	0.61

**Source:** Primary Data (2025)

In Table 4, it is shown that Performance-Based Financing (PBF) significantly influenced health staff service delivery at Masaka District Hospital. The findings revealed that the quality of care improved due to PBF, with 80 respondents (45.20%) agreeing and 89 respondents (50.28%) strongly agreeing, while very few disagreed or were neutral (SD = 1, 0.56%; D = 2, 1.13%; N = 5, 2.82%), resulting in a mean of 4.46 and a standard deviation of 0.61.

Similarly, the investigation into staff productivity under the PBF model found that 75 respondents (42.37%) agreed and 93 respondents (52.54%) strongly agreed that productivity had increased, with minimal disagreement (SD = 0, 0.00%; D = 3, 1.69%; N = 6, 3.39%), reflecting a mean of 4.48 and a standard deviation of 0.62, indicating strong consensus among staff. Furthermore, as indicated by Table 7, 78 respondents (44.07%) agreed and 92 respondents (51.98%) strongly agreed that PBF contributed to better patient satisfaction, with SD = 1, 0.56%; D = 2, 1.13%; N = 4, 2.26%, yielding a mean of 4.46 and a standard deviation of 0.61. Staff morale also improved due to PBF implementation, with 82 respondents (46.33%) agreeing and 88 respondents (49.72%) strongly agreeing, while SD = 0, 0.00%; D = 2, 1.13%; N = 5, 2.82%, giving a mean of 4.45 and a standard deviation of 0.59. Finally, PBF strengthened the efficiency of healthcare delivery, as 79 respondents (44.63%) agreed and 91 respondents (51.41%) strongly agreed, with SD = 1, 0.56%; D = 1, 0.56%; N = 5, 2.82%, resulting in a mean of 4.46 and a standard deviation of 0.61.

These average mean of 4.46 and average standard deviation of 0.61 demonstrate a consistently high positive perception of PBF across all dimensions of service delivery. Respondent One reflected on these outcomes, stating, “PBF has motivated me to be more productive and deliver better care because my performance is directly recognized and rewarded,” highlighting the tangible benefits of PBF on staff engagement and overall service delivery.

## IV. DISCUSSION OF FINDINGS

The discussion indicates that financial incentives, payment timeliness, and performance monitoring jointly enhance health staff service delivery at Masaka District Hospital. Together, they create a supportive environment that promotes motivation, accountability, and efficiency. The integration of Agency, Expectancy, and Equity Theories offers a comprehensive framework for understanding how performance-based financing mechanisms function. Agency Theory explains how incentives align staff goals with institutional objectives; Expectancy Theory clarifies the motivational importance of timely and predictable rewards; and Equity Theory emphasizes the role of fairness and transparency in sustaining motivation and engagement.

These findings are consistent with broader evidence from Uganda and Ethiopia (Mugisha & Kamanzi, 2022; Koricho et al., 2024), where similar performance-based systems have improved maternal and child health outcomes. The study therefore contributes to both theory and practice by demonstrating how well-designed financial and managerial mechanisms can transform workforce motivation and institutional performance in low-income healthcare settings.

Ultimately, the discussion underscores that strengthening financial incentives, ensuring timely payments, and implementing transparent monitoring systems are critical for enhancing staff satisfaction and service quality. The integration of these mechanisms within Rwanda's healthcare system offers practical lessons for other developing countries aiming to improve service delivery, workforce stability, and patient outcomes through performance-based financing.

## V. CONCLUSION

This study concluded that performance-based financing (PBF) significantly improved health staff service delivery at Masaka District Hospital. Financial incentives, timely payments, and performance monitoring each played distinct yet complementary roles in enhancing motivation, accountability, and institutional performance. Regarding the first objective, financial incentives had the greatest impact on service delivery. Targeted bonuses and performance-based rewards motivated staff, improved morale, and strengthened commitment to patient care. Beyond short-term motivation, these incentives fostered accountability, recognition, and long-term staff retention—essential for sustaining healthcare systems in resource-limited settings.

For the second objective, payment timeliness emerged as a key driver of performance. Regular and predictable disbursements reduced stress, absenteeism, and financial insecurity, allowing staff to focus on their duties. Timely payments also built trust between employees and management, reinforcing institutional reliability and operational efficiency. Concerning the third objective, performance monitoring enhanced accountability and professional growth. Structured supervision, feedback, and evaluation created a culture of continuous improvement, leading to greater responsiveness and patient satisfaction. Fair and transparent monitoring systems proved to be strong motivators rather than mere administrative tools.

Overall, the study confirmed strong positive relationships between the three PBF components and service delivery. By applying Agency, Expectancy, and Equity Theories, it demonstrated that aligning staff motivation with institutional goals can yield measurable improvements in healthcare quality and patient outcomes. The findings provide practical insights for hospital administrators and policymakers in Rwanda and other low-income countries seeking to strengthen workforce management, enhance service delivery, and promote sustainable healthcare performance.

## REFERENCES

- [1] Adams, J. S. (1963). Toward an Understanding of Inequity. *Journal of Abnormal and Social Psychology*, 67(5), 422-436.
- [2] African Development Bank. (2024). Investing in healthcare workforce development in Africa: Policies and strategies. AfDB Publications.
- [3] Amref Health Africa. (2024). Enhancing patient satisfaction through community-based healthcare models. Amref Publications.
- [4] Aryeetey, G. (2021). National Health Insurance Scheme and electronic claims processing in Ghana. *Health Policy and Planning*, 36(2), 120-134.
- [5] Basinga, P., (2021). Performance-based financing and maternal health outcomes in Rwanda. *The Lancet Global Health*, 9(3), e320-e330.
- [6] Bertone, M. P., & Witter, S. (2021). Performance-based financing in low-income settings: The case of Burundi. *Health Policy and Planning*, 36(1), 45-58.
- [7] BMC Health Services Research. (2024). Performance-based financing and healthcare outcomes in Nigeria. BMC Health Services
- [8] Borghi, J. (2023). Impact of performance-based financing on maternal and child health services in Tanzania. *Tropical Medicine & International Health*, 20(2), 250-259.

- [9] Chimhutu, V., Lindkvist, I., & Lange, S. (2020). When incentives work too well: Locally implemented pay for performance (P4P) and adverse selection in Tanzania. *Global*
- [10] De Allegri, M., Bertone, M. P., McMahon, S., Gbaguidi, L., & Marschall, P. (2021). Unpacking the effects of performance-based financing on the motivation and work environment of health workers: Evidence from Benin. *BMJ Global Health*, 6(5), e004351. <https://doi.org/10.1136/bmjgh-2020-004351>
- [11] Eijkenaar, F., Emmert, M., Scheppach, M., & Schöffski, O. (2022). Effects of pay for performance in healthcare: A systematic review of systematic reviews. *Health Policy*, 126(1), 35–51. <https://doi.org/10.1016/j.healthpol.2021.10.008>
- [12] Eldridge, C., & Palmer, N. (2021). Performance-based financing in Latin America: A systematic review. *Health Economics Review*, 11(2), 112-126.
- [13] Equinet Africa. (2024). Health workforce incentives and retention strategies in East Africa. Equinet Africa. <https://www.equinet africa.org>
- [14] European Commission. (2022). Digital health strategies and financial incentives in the EU. *European Journal of Public Health*, 32(1), 89-101.
- [15] Falisse, J. B., Ndayishimiye, J., Kamenyero, V., & Bossuyt, M. (2012). Performance-Based Financing in Burundi: Stakeholders' Perspectives. *Health Policy and Planning*, 27(2), 104-115.
- [16] Falisse, J. B. (2020). Evaluating performance-based financing in Burundi. *BMC Health Services Research*, 20(1), 1-13.
- [17] Fritsche, G. B., Soeters, R., & Meessen, B. (2020). Performance-based financing toolkit for health sector reform. The World Bank. <https://doi.org/10.1596/978-1-4648-1592-1>
- [18] Gautier, L. (2023). Strengthening healthcare governance through PBF. *Global Health Research and Policy*, 8(1), 34-49.
- [19] Gergen, J., Josephson, E., Coe, M., Ski, S., Pinkstaff, C., & Bauhoff, S. (2020). The impacts of performance-based financing on the use and quality of healthcare in low- and middle-income countries: A systematic review. *Global Health Research and Policy*, 5(1), 1-13. <https://doi.org/10.1186/s41256-020-00136-7>
- [20] Gertler, P., & Vermeersch, C. (2020). Using performance incentives to improve medical care productivity and health outcomes. *Journal of Health Economics*, 42, 139-150. <https://doi.org/10.1016/j.jhealeco.2020.102424>
- [21] Human Resources for Health. (2024). Profit-sharing models and staff motivation in healthcare. Human Resources for Health. <https://human-resources-health.biomedcentral.com>
- [22] Jensen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
- [23] Jimbira, M. (2023). PBF interventions in conflict-prone areas of East Africa. *African Journal of Health Economics*, 8(1), 89-104.
- [24] Kaganda, R. (2019). Feedback mechanisms and healthcare worker motivation in Rwanda. *Rwandan Journal of Health*, 14(1), 32-44.
- [25] Kalk, A., Paul, F. A., & Grabosch, E. (2020). Strengthening accountability through performance-based financing in Tanzania and Burundi. *Health Systems & Reform*, 6(1), e1837.
- [26] Kanyesigye, S. (2022). A holistic approach to performance monitoring in Rwanda's healthcare system. *Rwanda Health Systems Review*, 9(3), 99-112.
- [27] Kenya Ministry of Health. (2024). Healthcare workforce development and efficiency improvement in Kenya: A policy review. Government of Kenya Press.
- [28] Kiser, S. (2019). Financial incentives and healthcare worker performance in East Africa. *International Journal of Health Policy and Management*, 14(2), 123-135.

- [29] Kutzin, J. (2020). Performance-based financing and health service improvements in sub-Saharan Africa. *Health Systems & Reform*, 6(4), 221-239.
- [30] Li, X. (2020). Hospital salary reforms and patient satisfaction in China. *BMC Health Services Research*, 20(1), 123-137.
- [31] Lim, S. (2022). Impact of Janani Suraksha Yojana on institutional deliveries in India. *International Journal of Public Health*, 67(4), 78-92.
- [32] Macinko, J. (2023). Primary care access and quality improvements in Brazil. *The Lancet Regional Health - Americas*, 5(1), 56-73.
- [33] Mbau, R. (2023). Digital data collection and maternal health outcomes in Kenya. *African Journal of Health Economics*, 12(2), 144-159.
- [34] Mbabazi, E. (2020). Performance monitoring and healthcare service delivery in Uganda. *African Health Review*, 18(4), 65-79.
- [35] McMahan, S., Brenner, S., Lohmann, J., & Kotsadam, A. (2021). Motivation and Performance in Public Health Service Delivery: A Comparative Analysis. *Health Policy and Planning*, 31(10), 1472-1483.
- [36] Ministry of Health Rwanda. (2020). Rwanda Health Financing Strategic Plan (2021-2026). Government of Rwanda.
- [37] Mitchell, M. (2019). The Role of Incentives in Public Sector Performance. *African Journal de l'Administration Publique*, 5(2), 112-129.
- [38] Moshia, I. H., Ruben, R., & Masanja, H. (2021). The effects of pay-for-performance on health worker motivation in Tanzania: A mixed-methods study. *BMC Health Services Research*, 21(1), 1-12. <https://doi.org/10.1186/s12913-021-06775-x>
- [39] Musyoka, L. (2020). Timely payment and healthcare worker performance: Evidence from Kenya. *African Journal of Health Systems*, 22(3), 45-59.
- [40] Nakaima, D. (2021). Benchmarking in healthcare institutions: The case of Tanzania. *Journal of Health Performance*, 19(2), 111-124.
- [41] Nation Africa. (2024). Delays in NHIF payments and their impact on Kenyan hospitals. Nation Africa. <https://www.nation.africa>
- [42] Nkundabanyanga, S., Ndungu, W., & Ngabo, F. (2020). Delays in PBF Payment and Their Impact on Health Worker Motivation in Rwanda: Case Study of Masaka District Hospital. *Rwanda Biomedical Centre Reports*, 2020.
- [43] Nigeria Ministry of Health. (2024). National Health Strategy: Strengthening hospital management and staff retention policies. Government of Nigeria Press.
- [44] Nyandekwe, M., Nzayirambaho, M., & Kakoma, J. B. (2023). Performance-Based Financing in Rwanda: A Case Study of the Butare University Teaching Hospital. *BMC Health Services Research*, 13(1), 256.
- [45] Nzuki, L. (2019). Payment timeliness and healthcare worker service delivery in Rwanda. *East African Journal of Health Services*, 27(1), 102-115.
- [46] Okello, L., & Kagoya, F. (2020). Predictability of payments and healthcare worker performance in Uganda. *African Journal of Public Health*, 29(3), 77-92.
- [47] Ouedraogo, L., Compaore, P., & Zombré, D. (2019). Equity in Health Worker Compensation under Performance-Based Financing. *African Journal of Health Economics*, 8(1), 23-37.
- [48] Oxford Academic. (2024). Improving patient trust and quality of care in Ghanaian hospitals. *Journal of Health Policy and Management*, 33(1), 67-82. <https://doi.org/xxxx>
- [49] Renmans, D., Holvoet, N., & Garimoi Orach, C. (2022). Understanding performance-based financing: Theory and evidence. *Health Policy and Planning*, 37(4), 491-500. <https://doi.org/10.1093/heapol/czac009>

- [50] Ridde, V. (2023). Performance-Based Financing in Burkina Faso: Equity Implications. *Health Economics Review*, 5(1), 1-10.
- [51] Roland, M., & Guthrie, B. (2022). The Quality and Outcomes Framework and chronic disease management in the UK. *BMJ*, 376(1), e067984.
- [52] Rusa, L., Schneidman, M., Fritsche, G., & Musango, L. (2022). Rwanda: Performance-based financing in the public sector. World Bank Publications.
- [53] Rwanda Biomedical Centre. (2021). Annual Health Sector Performance Report 2020/21. Kigali: RBC.
- [54] Rwanda Ministry of Health. (2024). The role of performance-based financing in healthcare service improvement in Rwanda. Government of Rwanda Press.
- [55] Scott, A., Sivey, P., Ouakrim, D. A., Willenberg, L., Naccarella, L., Furler, J., & Young, D. (2021). The effect of financial incentives on the quality of healthcare provided by primary care physicians. *Cochrane Database of Systematic Reviews*, 9(CD008451). <https://doi.org/10.1002/14651858.CD008451.pub3>
- [56] Soeters, R. (2022). PBF implementation in the Democratic Republic of Congo. *Health Research Policy and Systems*, 20(1), 1-10. <https://doi.org/10.1186/s12961-022-00837-5>
- [57] The World Bank. (2020). Performance-Based Financing in Health Systems in Africa: Lessons Learned from the Rwanda Model. The World Bank.
- [58] Thomas, S. A., Bati, M. S., & Muchemi, L. (2021). Payment for performance and health systems improvement in Kenya. *Global Health Action*, 14(1), 1-15. <https://doi.org/10.1080/16549716.2021.1938701>
- [59] Thomas, Z., & Hollingsworth, B. (2020). Performance-Based Financing and its Impact on Healthcare Delivery in Uganda: A Longitudinal Analysis. *BMC Health Services Research*, 20(1), 312-324.
- [60] Turcotte-Tremblay, A. M., Gali-Gali, I. A., De Allegri, M., & Ridde, V. (2024). The Unintended Consequences of Performance-Based Financing in Africa. *Global Health Action*, 10(1), 1-10.
- [61] Uganda Health Sector Report. (2024). Public hospital efficiency and healthcare workforce productivity in Uganda. Government of Uganda Press.
- [62] Uganda Ministry of Health. (2024). Workforce stability and motivation strategies in Uganda's healthcare sector. Government of Uganda Press.
- [63] University of Nairobi. (2024). Performance monitoring and healthcare service delivery in Kenya. University of Nairobi Press. <https://uonbi.ac.ke>
- [64] Van de Poel, E., O'Donnell, O., & Van Doorslaer, E. (2021). The impact of performance-based financing on health outcomes in Uganda. *Journal of Health Economics*, 74, 102384.
- [65] Vroom, V. H. (1964). Work and Motivation. John Wiley & Sons.
- [66] Wabwire, G. (2025). Performance management systems and healthcare service delivery in Uganda. *Journal of Ugandan Health Services*, 24(1), 54-67.
- [67] Wambui, S., & Karanja, H. (2021). Clarity of payment schedules and employee satisfaction in healthcare institutions. *Journal of African Health Policy*, 31(2), 89-101.
- [68] Witter, S., Fretheim, A., Kessy, F. L., & Lindahl, A. K. (2023). Performance-Based Financing in Low-Income Countries: Still More Questions than Answers? *Bulletin of the World Health Organization*, 91(9), 746-756.
- [69] World Bank. (2024). The role of performance-based financing in Uganda's healthcare sector. World Bank. <https://www.worldbank.org>
- [70] World Health Organization (WHO). (2024). Healthcare workforce policies and strategies: Global and regional perspectives. WHO Publications.
- [71] Zaky, M. (2022). Performance-Based Financing in Egypt's Public Health Sector. *Health Policy Review*, 43(2), 89-99.

- [72] Atwine, F., & Kiggundu, J. (2023). *Performance-based financing and efficiency in public hospitals in Uganda*. *Journal of Health Policy and Management*, 12(2), 115–128. <https://doi.org/10.1111/jhpm.2023.456>
- [73] Bikorimana, J., & Uwase, C. (2023). *Timeliness of payments and employee performance in Rwandan district hospitals*. *East African Journal of Economics and Business*, 7(1), 44–59. <https://doi.org/10.1080/eajeb.2023.019>
- [74] Koricho, A., Tadesse, H., & Alemu, M. (2024). *The impact of performance-based financing on maternal health outcomes in Ethiopia: Evidence from pilot districts*. *BMC Health Services Research*, 24(1), 201–215. <https://doi.org/10.1186/s12913-024-09765-2>
- [75] Kanyesigye, R., & Mbaraga, P. (2021). *Health service delivery reforms and universal health coverage in East Africa*. *African Journal of Public Administration*, 5(3), 87–103. <https://doi.org/10.5897/ajpa2021.055>
- [76] Ministry of Health [MOH] Rwanda. (2023). *Annual health sector performance report 2022/2023*. Kigali: Government of Rwanda.
- [77] Mugisha, A., & Kamanzi, J. (2022). *Performance-based financing and maternal health service delivery in Uganda*. *International Journal of Health Economics*, 11(3), 155–172. <https://doi.org/10.2139/ijhe.2022.003>
- [78] Munyakazi, B., & Uwitonze, L. (2023). *Performance monitoring and accountability in Rwanda's healthcare system*. *Rwanda Journal of Health Sciences*, 10(2), 76–90. <https://doi.org/10.4314/rjhs.v10i2.6>
- [79] Mutebi, G., & Kaggwa, P. (2023). *Financial incentives and health worker retention in Sub-Saharan Africa*. *Journal of Human Resources for Health*, 21(1), 302–318. <https://doi.org/10.1186/hrh-2023-21-302>
- [80] Ndahiro, J., & Mukamana, G. (2023). *Performance-based financing and patient satisfaction in Rwandan hospitals*. *Rwanda Journal of Medicine and Health*, 14(1), 33–47. <https://doi.org/10.4314/rjmh.v14i1.3>
- [81] Ndayishimiye, P., & Habimana, S. (2021). *Performance-based financing and adherence to treatment protocols in Rwanda*. *African Journal of Health Economics*, 9(4), 211–228. <https://doi.org/10.5897/ajhe2021.009>
- [82] Nkurunziza, T., & Kayitesi, A. (2021). *The role of performance monitoring in improving treatment compliance in Rwanda*. *East African Health Research Journal*, 5(2), 145–159. <https://doi.org/10.4103/eahrj.2021.159>
- [83] Oketch, D., & Nyang'au, J. (2022). *The effect of financial incentives on staff performance in rural hospitals in Kenya*. *Journal of African Health Systems*, 8(3), 98–112. <https://doi.org/10.1057/jahs.2022.008>
- [84] Owino, S., & Wekesa, M. (2022). *Monitoring and evaluation practices and patient outcomes in Kenya's public health sector*. *Journal of Development and Health Policy*, 6(2), 187–202. <https://doi.org/10.4236/jdhp.2022.62.187>
- [85] Republic of Rwanda. (2020). *National strategy for health professions development 2020–2030*. Kigali: Government of Rwanda.
- [86] Twesigye, D., & Musoke, R. (2022). *Timely salary disbursements and health worker satisfaction in Uganda*. *Journal of African Public Health*, 15(1), 54–69. <https://doi.org/10.1111/japh.2022.54>
- [87] Uganda Ministry of Health [MOH]. (2022). *Performance-based financing evaluation report 2022*. Kampala: Government of Uganda.
- [88] Wanjala, S., & Muriithi, J. (2021). *Delayed salaries and employee motivation in Kenyan public hospitals*. *African Journal of Human Resource Management*, 13(2), 141–157. <https://doi.org/10.5897/ajhrm2021.013>