



FINANCING MANAGEMENT PRACTICES AND SUSTAINABLE PERFORMANCE OF GERIATRIC CARE SERVICES: A CASE STUDY OF KING FAISAL HOSPITAL, KIGALI, RWANDA (2020–2025)

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Article DOI: <https://doi.org/10.36713/epra29173>

DOI No: 10.36713/epra29173

ABSTRACT

This study examined the effect of financing management practices on the sustainable performance of geriatric care services at King Faisal Hospital, Kigali, Rwanda, over the 2020–2025 period. A concurrent mixed-methods design with a dominant quantitative strand was adopted. A census of 22 staff and stakeholders directly involved in financing and delivering geriatric care completed the main questionnaire, while 98 elderly patients or family caregivers completed a patient-satisfaction survey. Data were analysed using descriptive statistics, Pearson correlation, simple regression, multiple regression and thematic analysis. Sustainable performance was moderate to good: quality of service delivery recorded the highest staff mean ($M = 3.47$), followed by long-term viability ($M = 3.42$), operational efficiency ($M = 3.33$), and financial sustainability ($M = 3.21$). All four financing practices had significant positive bivariate effects on their corresponding performance dimensions. Financing identification and resource mobilization had the strongest effect on financial sustainability ($r = .857$, $R^2 = .735$, $p < .001$). In the exploratory combined model, the four practices explained 70.5% of overall sustainable performance, $F(4,17) = 10.144$, $p < .001$; only financing partnership and stakeholder engagement remained independently significant ($B = .998$, $p = .013$). The study recommends a ring-fenced geriatric budget, systematic resource-needs assessment, stronger financing partnerships, expanded insurance coverage, and continued investment in service quality.

KEYWORDS: Financing Management Practices; Geriatric Care; Sustainable Performance; Financial Sustainability; Stakeholder Engagement; Rwanda

1. INTRODUCTION

Population ageing is increasing the clinical and financial pressure on health systems, particularly in settings where geriatric services are still developing. Older adults often present with multiple chronic conditions, functional limitations and complex care needs that require coordinated, multidisciplinary services. These needs can increase hospitalization, staffing and treatment costs, making sustainable financing central to the continuity and quality of geriatric care.

In Rwanda, geriatric care is emerging within a health system that is simultaneously pursuing universal health coverage and responding to a growing burden of non-communicable diseases. King Faisal Hospital, Kigali, provides specialized care to older patients, but the sustainability of these services depends on how financing is identified, mobilized, allocated, monitored and supported through partnerships. The source dissertation reports that geriatric care at the hospital remains a relatively young service line and lacks a dedicated, ring-fenced financing mechanism.

Previous research has addressed health financing, hospital performance and integrated geriatric care, but there is limited Rwanda-specific evidence on how financing-management practices jointly shape the financial, operational, quality and long-term dimensions of geriatric care performance. This study therefore examined financing management as an integrated managerial capability affecting the sustainable performance of geriatric care services at King Faisal Hospital.

1.1 Problem Statement

A widening mismatch exists between the rising cost of caring for older patients and the capacity of health-financing systems to sustain that care. In Rwanda, health-financing reforms have expanded coverage, but there is no dedicated financing mechanism for geriatric care. At King Faisal Hospital, increasing demand for older-person services creates pressure on financial planning, resource allocation and long-term continuity. Yet empirical evidence remains limited on which financing practices most strongly support sustainable



geriatric care. Without such evidence, hospital managers and policymakers risk relying on short-term or fragmented financing arrangements that may not sustain service quality over time.

1.2 Study Objectives

1. To examine the effect of financing identification and resource mobilization on the financial sustainability of geriatric care services.
2. To assess the effect of financing allocation and budgeting on the operational efficiency of geriatric care services.
3. To evaluate the influence of financing monitoring and control on the quality of geriatric care service delivery.
4. To determine the effect of financing partnership and stakeholder engagement on the long-term viability of geriatric care services.

2. LITERATURE REVIEW

2.1 Financing Management Practices and Sustainable Performance

Financing management in healthcare involves planning, mobilizing, allocating, monitoring and controlling financial resources so that services can be delivered efficiently and maintained over time. In geriatric care, financing decisions must respond to high service intensity, chronic disease management, multidisciplinary staffing, specialized infrastructure and the need for continuity across care settings. Sustainable performance therefore extends beyond short-term cost control and includes financial sustainability, operational efficiency, quality of service delivery and long-term viability.

2.2 Theoretical Foundation

The study draws on Resource-Based View Theory, Resource Dependency Theory, Stakeholder Theory, the Project Management Triangle and Sustainability Theory. The Resource-Based View explains how internal financial, managerial and technical capabilities can support efficient service delivery and quality. Resource Dependency Theory emphasizes the need to mobilize and diversify external funding sources when organizations cannot internally generate all the resources required for survival. Stakeholder Theory highlights the importance of government, insurers, patients, development partners and hospital management in sustaining services. The Project Management Triangle explains the trade-offs among cost, time and quality, while Sustainability Theory frames performance as a multidimensional outcome that must be maintained over time.

2.3 Empirical Review

Evidence from healthcare and geriatric settings indicates that financing sustainability improves when institutions diversify funding sources, systematically assess resource needs and reduce dependence on uncertain revenue streams. Bhattacharyya et al. (2024) emphasized the importance of workforce and service-coverage strategies in resource-constrained geriatric and palliative care, while Kachumi et al. (2025) linked diversified financing and financial-management capability to organizational sustainability.

Budgeting and resource allocation are equally important because geriatric services depend on appropriate staffing, medicines, equipment and multidisciplinary care pathways. Ijadi Maghsoodi et al. (2022) found that structured acute-care pathways for older patients can improve outcomes and efficiency. Management-accounting evidence also shows that financial information and budgeting systems can support better performance in healthcare organizations (Macinati & Anessi-Pessina, 2014).

Monitoring and internal financial controls contribute to accountability and service quality by linking expenditure to performance. Gordon et al. (2023) emphasized the role of internal controls in financial accountability, while Capezuti et al. (2013) demonstrated the importance of sustainable business models for improving hospital care for older adults. Partnerships also matter because geriatric services frequently depend on government, insurance, donor and community support. Stakeholder engagement can therefore reduce financing uncertainty and support long-term service continuity.

2.4 Research Gap

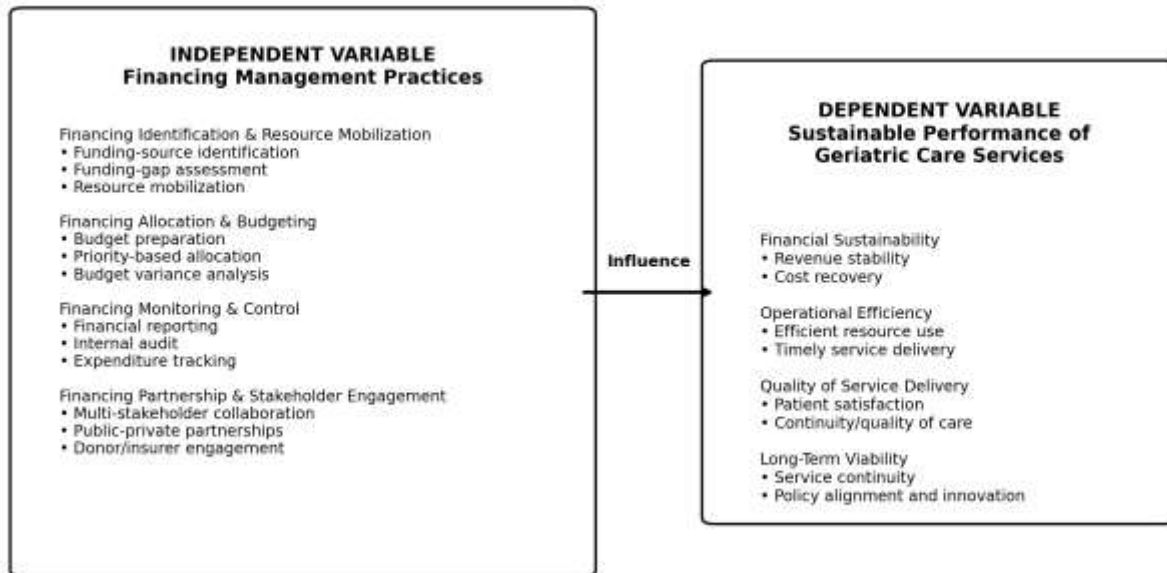
Much of the available evidence focuses either on general hospital financial management or on clinical models of geriatric care. Few studies integrate resource mobilization, budgeting, financial monitoring and stakeholder partnerships within one model of sustainable geriatric performance, and the gap is particularly evident in Rwanda. This study addresses that gap by linking four financing-management practices to four corresponding dimensions of sustainable geriatric-care performance at King Faisal Hospital.

2.5 Conceptual Framework

The conceptual framework treats financing management practices as the independent variable and sustainable performance of geriatric care services as the dependent variable. Financing management is represented by four dimensions: financing identification and resource mobilization; financing allocation and budgeting; financing monitoring and control; and financing partnership and stakeholder

engagement. Sustainable performance is represented by financial sustainability, operational efficiency, quality of service delivery and long-term viability.

Figure 1. Simplified Conceptual Framework



Source: Adapted from the study conceptual framework (2026)

3. METHODOLOGY

The study used a concurrent mixed-methods design with a dominant quantitative strand. The setting was King Faisal Hospital, Kigali, a tertiary referral hospital providing specialized geriatric care. The main quantitative population consisted of all 22 staff and stakeholders directly involved in planning, financing, delivering, monitoring or evaluating geriatric care. Because this population was small and fully accessible, a census approach was used.

All 22 staff/stakeholder questionnaires were completed and retained, producing 100% census coverage. In addition, 98 elderly patients aged 60 years and above or their family caregivers completed a patient-satisfaction questionnaire through convenience/consecutive recruitment during the data-collection period. Qualitative information was obtained through key-informant interviews to explain financing challenges and practical experiences.

Quantitative data were analysed using descriptive statistics, Pearson correlation, simple regression and an exploratory four-predictor multiple regression model. All hypothesis tests used a 5% significance level. Given the small staff census ($N = 22$), the combined model was interpreted cautiously, with attention to effect sizes, confidence intervals and multicollinearity. Qualitative interview data were coded thematically and used to triangulate the quantitative findings. Ethical clearance and formal research authorization were obtained before data collection.

4. FINDINGS AND DISCUSSION

4.1 Sustainable Performance of Geriatric Care Services

Staff respondents rated the sustainable performance of geriatric care services from moderate to good. Quality of service delivery received the highest mean ($M = 3.47$), followed by long-term viability ($M = 3.42$), operational efficiency ($M = 3.33$) and financial sustainability ($M = 3.21$). Patient evidence reinforced the positive quality assessment: 99.1% of elderly patients or caregivers were satisfied or very satisfied, with a composite patient-satisfaction mean of 4.80 out of 5.

Performance Dimension	Mean	Interpretation
Financial sustainability	3.21	Moderate
Operational efficiency	3.33	Moderate
Quality of service delivery	3.47	Agree / strongest
Long-term viability	3.42	Agree



4.2 Hypothesis Results

All four financing-management practices showed positive and statistically significant bivariate effects on their corresponding dimensions of sustainable performance. Financing identification and resource mobilization produced the strongest relationship with financial sustainability ($r = .857$, $p < .001$), accounting for 73.5% of its variation. Financing allocation and budgeting had a moderate positive effect on operational efficiency ($r = .548$, $p = .008$; $R^2 = .300$). Financing monitoring and control positively influenced quality of service delivery ($r = .578$, $p = .005$; $R^2 = .334$). Financing partnership and stakeholder engagement had a moderate-to-strong effect on long-term viability ($r = .642$, $p = .001$; $R^2 = .412$).

Financing Practice	Performance Outcome	r	R ²	B	p	Decision
Identification & resource mobilization	Financial sustainability	.857	.735	.575	<.001	Reject H01
Allocation & budgeting	Operational efficiency	.548	.300	.552	.008	Reject H02
Monitoring & control	Quality of service delivery	.578	.334	.698	.005	Reject H03
Partnership & stakeholder engagement	Long-term viability	.642	.412	.789	.001	Reject H04

4.3 Combined Effect on Sustainable Performance

The four financing-management practices were also entered together in an exploratory multiple regression model. The model produced $R = .839$, $R^2 = .705$ and adjusted $R^2 = .635$, indicating that the practices jointly explained 70.5% of the variation in overall sustainable performance. The overall model was statistically significant, $F(4,17) = 10.144$, $p < .001$.

Predictor	B	SE	t	p	VIF
Financing identification & resource mobilization	-.107	.313	-.343	.736	9.34
Financing allocation & budgeting	-.381	.261	-1.458	.163	3.35
Financing monitoring & control	.223	.332	.673	.510	7.43
Financing partnership & stakeholder engagement	.998	.360	2.771	.013	6.94

Only financing partnership and stakeholder engagement remained independently significant in the combined model ($B = .998$, $p = .013$). The other coefficients were not significant after shared variance was controlled. The relatively high VIF values, reaching 9.34, indicate substantial multicollinearity among the four practices, so the combined coefficients should be interpreted cautiously. The stronger bivariate effects and weaker unique effects suggest that the financing practices function as interdependent parts of a broader financing-management system rather than as completely separate mechanisms.

4.4 DISCUSSION

The strongest bivariate result was the relationship between financing identification/resource mobilization and financial sustainability. This supports Resource Dependency Theory because geriatric care is more financially secure when the hospital identifies diverse funding sources, assesses funding gaps and mobilizes resources before service interruptions occur.

Budgeting and allocation were significantly related to operational efficiency, but the source study identified the absence of a dedicated geriatric budget line as a practical constraint. This limits budget preparation, variance analysis and expenditure tracking for the service.



Monitoring and control also showed a significant relationship with service quality, indicating that strong financial governance can support consistent service delivery.

The most important combined-model result was the dominance of financing partnership and stakeholder engagement. Collaboration with government, insurers and development partners appears especially important for whether geriatric care can remain viable over time. This finding is consistent with Stakeholder Theory and reinforces the need to move beyond ad hoc reimbursement toward formal, long-term financing relationships.

5. CONCLUSION

The study concludes that financing management practices significantly influence the sustainable performance of geriatric care services at King Faisal Hospital. Resource mobilization strengthens financial sustainability, budgeting contributes to operational efficiency, monitoring and control support service quality, and partnership-driven financing strengthens long-term viability. Although geriatric care is clinically strong and highly valued by patients, its sustainability is constrained by the absence of a dedicated financing architecture. Financing partnership and stakeholder engagement emerged as the strongest unique predictor when the practices were considered jointly.

6. RECOMMENDATIONS

- King Faisal Hospital should establish a dedicated, ring-fenced budget line and cost centre for geriatric care to improve budget preparation, variance analysis and expenditure tracking.
- The hospital should institutionalize periodic resource-needs assessments, funding-gap analyses and a long-term financial plan for geriatric services.
- Financing partnerships should be broadened beyond insurance reimbursement through public-private partnerships, donor engagement, resource pooling and formal collaboration with government agencies.
- King Faisal Hospital, the Ministry of Health and insurers should progressively strengthen coverage of geriatric-specific needs, including rehabilitative, long-term and home-based care.
- Financial-literacy and resource-mobilization training should be provided to geriatric-care staff so that clinical advocacy is matched by stronger financial stewardship.
- Appointment access, waiting time, infrastructure maintenance and equipment replacement should remain priorities for consolidating the service-quality gains identified by patients.
- Future research should replicate the study across multiple hospitals and use longitudinal or audited financial data to strengthen generalizability and causal interpretation.

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