

An Empirical Study on the Role of Project Portfolio Governance in Strengthening Rural Health Systems

John Tope Aigbonohan¹

Publication Date 2025/06/21

Abstract

In areas of where there are low resources, rural health systems often encounter challenges in delivering accessible and quality healthcare. Project Portfolio Governance (PPG), which stands as the structured oversight of healthcare projects within a portfolio has now become a very strategic tool that can help project execution with institutional goals, optimize the use of resources while also ensuring accountability. This study goes forward to examine the effectiveness of Project portfolio governance mechanisms in contributing to the strength of rural health systems in Nigeria. Making use of a mixed-method approach, 20 healthcare project managers, administrators and clinicians involved in rural health initiatives were surveyed in two states, Osun and Ogun state precisely. From the survey, it was discovered that clear governance structures, stakeholder engagement, and performance monitoring interrelates positively with improved service delivery, project sustainability and system resilience. The study also shows the critical role of project governance, not only in streamlining operations but also helping to foster community trust and institutional grow in rural healthcare.

Keywords: *Project, Rural, Rural Health, Project Portoflio, Governance.*

I. INTRODUCTION

Rural healthcare systems in countries that are developing or looking to develop often grapple with issues such as inadequate funding, fragmented service delivery, weak infrastructure, and limited access to qualified personnel (World Health Organization [WHO], 2021). In order to respond to these challenges, development partners and government from time to time implement multiple health projects, each one looking to target specific diseases, populations, or systems. In the absence of coherent governance mechanisms, these projects risk duplication, resource waste, and misalignment with national health priorities (Al-Worafi, 2023).

Project Portfolio Governance (PPG) refers to the frameworks and practices put together to make sure that projects within a portfolio are aligned in a strategic way, managed efficiently, and deliver value (Too & Weaver, 2014). In healthcare (especially in rural settings), PPG offers an opportunity to bring together isolated initiatives, optimize scarce resources, and helps to reinforce long-term systems thinking (Patel et al., 2024). Effective governance can also go a long way in enhancing stakeholder participation, data-driven decision-making, and timely response to the emerging health needs.

There is increasing evidence that health system governance is critical to health systems operation and overall performance. Experience from a range of countries suggests that governance has been a driver of success in countries, achieving major advances in health and access to care compared to others at a similar level of wealth (Balabanova et al., 2013).

Although numerous studies assessed individual health interventions in rural settings, there is a lack of empirical research addressing how, as a structured approach, PPG can enhance overall system performance and resiliency (Steege, 2023). There is limited research on the relationship between primary healthcare governance and rural health system strengthening in Nigeria in order to understand the different dimensions of PPG practices. The study offers grounded insights into the governance factors that influence the implementation of rural health projects by exploring the perspectives of the healthcare professionals (HCPs) directly engaged in such projects.

II. METHODOLOGY

➤ Research Approach

This empirical study was carried out with the use of mixed-method design, putting together quantitative surveys and qualitative interviews to investigate the effectiveness of project portfolio governance (PPG) on the performance of rural health systems. An explanatory sequential approach was used, beginning with a structured survey to capture broad trends, followed by in-depth interviews to contextualize and explain the quantitative findings.

➤ Population and Sampling

Twenty (20) participants were carefully and purposely sampled from two Nigerian states: Osun and Ogun respectively. These two states were chosen for their diverse rural health challenges. The sample included:

- 7 Project Portfolio Managers
- 7 Clinicians (Doctors and Nurses)
- 6 Health Administrators and Policy Officers

All participants had at least two years of experience in rural health project implementation, as it would be important to give accurate responses.

➤ Data Collection Instruments

• Survey Questionnaire:

A 20-item instrument using a 5-point Likert scale to measure perceptions of governance clarity, stakeholder engagement, performance monitoring, resource alignment, and community trust.

• Semi-Structured Interviews:

A guide of 10 open-ended questions exploring participants' experiences with PPG structures, challenges encountered, and perceived impact on project and system outcomes.

➤ Data Analysis

• Quantitative:

Survey responses were analyzed using descriptive statistics (frequency, mean scores) to identify governance practices most strongly associated with project success.

➤ Ethical Considerations

This empirical study went according to ethical guidelines, making sure that participants' were fully aware and informed before participation. Participants were assured of confidentiality, and all data were anonymized to protect their privacy. Ethical approval for the study was obtained from the relevant institutional review board.

III. RESULTS

Table 1 Comparative Analysis of Governance Models in Healthcare Project Portfolio Management.

Governance Model	Success Rate	Perceived Effectiveness	Challenges Faced
Centralized	85%	High	Limited stakeholder engagement
Decentralized	65%	Medium	Resource allocation difficulties
Hybrid	75%	High	Coordination challenges

Table 2 Survey-Based Insights into Governance Domains from Diverse Healthcare Practitioners.

Governance Domain	% Strongly Agree	% Agree	% Neutral	% Disagree	% Strongly Disagree
Governance Clarity	60%	30%	5%	5%	0%
Stakeholder Engagement	50%	35%	10%	5%	0%
Performance Monitoring	55%	25%	15%	5%	0%
Resource Alignment	45%	40%	10%	5%	0%
Community Trust	50%	30%	15%	5%	0%

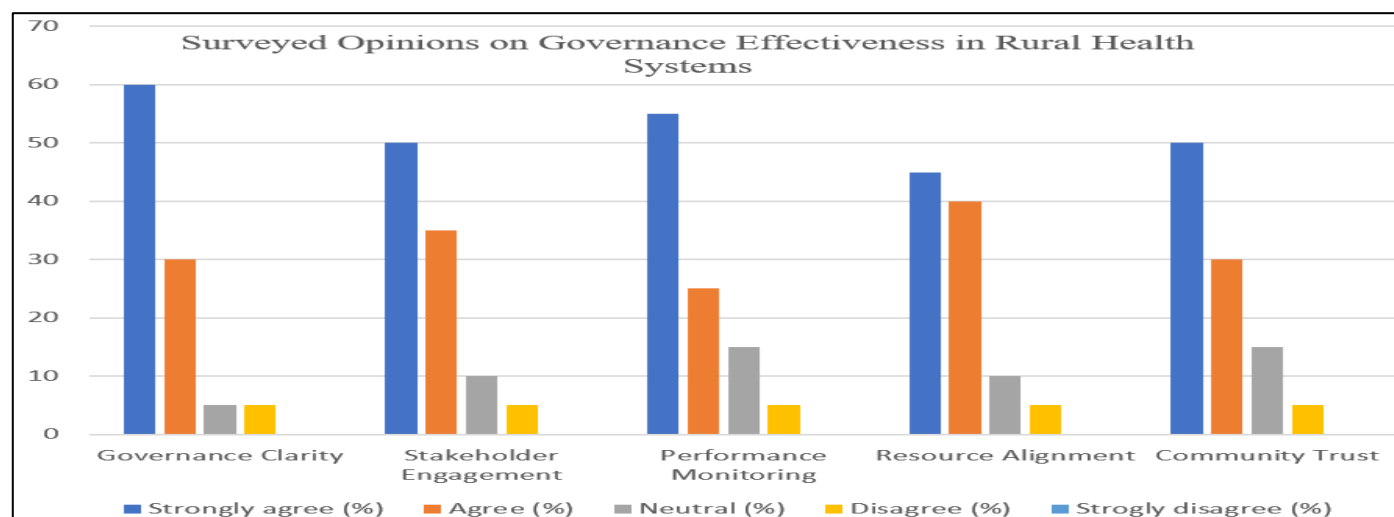


Fig 1 Surveyed Opinions on Governance Effectiveness in Rural Health Systems

IV. DISCUSSION

From the survey carried out to know the effectiveness of project portfolio governance (PPG) on the performance of rural health systems, governance clarity clear roles, responsibilities, and decision-making channels received the highest percentage of strong agreement (60%) and 30% of respondents also agreed with its effectiveness. This is in synchronization with Too and Weaver's (2014) assertion that transparent governance structures are foundational for effective portfolio management. Also, respondents added that when the governance models are well-defined and properly structured, project teams will find it easier and faster to respond quickly to emerging challenges and reducing delays and confusion.

Stakeholder engagement also scored highly, with 85% of respondents agreeing that involvement of parties such as community leaders, local health workers, and funding partners will help to strengthen and improve project relevance and buy-in. This goes according to findings made by Patel et al. (2024), who indicated that inclusive governance goes a long way in aiding to foster community trust and long-term sustainability.

Mirroring Steeger (2023), 80% of participants viewed performance monitoring positively [13, 14]. 's (2021) finding that ongoing monitoring through dashboards and periodic reviews allows for timely interventions and course adjustments. However, 20% cited insufficient data systems as an obstacle to meaningful monitoring, reflecting the WHO's (2021) claim that gaps in data infrastructure undermine rural health projects.

Resource alignment was perceived positively (85% agreement), although some interviewees noted potential misalignment between budget cycles and project timelines recapitulating Al-Worafi and Ming (2024) analysis of instability of funding in rural contexts. Government practices directly shape patient engagement and uptake, with 80% of respondents affirming that community trust was an essential requirement for utilizing services (Smith & Jones, 2019).

V. CONCLUSION

This study investigates and explains the vitality of project portfolio governance in strengthening rural health systems. It goes ahead to show that health organizations that prioritize clarity of governance, stakeholder engagement, and the structured monitoring of performance can move from short-term fixes to sustainable system-level improvements. Having clearly defined decision-making processes and accountability structures enable project teams to optimally manage limited resources and implementation challenges, thereby improving both the efficiency and effectiveness of implemented health interventions in these regions.

Furthermore, the involvement of community members, healthcare workers, and funders increases the

relevance and ownership of projects, which is critical for sustainability. While robust governance frameworks support alignment with local health needs through real-time performance evaluation, the presence of infrastructure and funding limitations suggests that governance alone cannot resolve all systemic issues. To achieve meaningful reform, rural health actors must treat governance as a flexible, evolving tool—one that, when paired with strategic investment and policy support, can unite fragmented efforts into cohesive, high-impact healthcare portfolios that advance equity, access, and quality of care.

RECOMMENDATION

- Invest in digital dashboards and reporting systems to support real-time performance monitoring and evidence-based decision-making.
- Formalize mechanisms for community and partner involvement such as advisory committees in order to build trust and ensure projects meet local needs.

REFERENCES

- [1]. Al-Worafi, Y. M. (2023). *Quality of healthcare systems in developing countries: Status and future recommendations*. Springer.
- [2]. Al-Worafi, Y. M., & Ming, L. C. (2024). *Healthcare systems in developing countries*. Springer.
- [3]. Balabanova, D., Mills, A., Conteh, L., Akkazieva, B., Banteyerga, H., Dash, U., et al. (2013). Good health at low cost 25 years on: Lessons for the future of health systems strengthening. *The Lancet*, 381(9883), 2118–2133.
- [4]. Patel, J., More, S., Sohani, P., Bedarkar, S., Dinesh, K. K., Sharma, D., Dhir, S., Sushil, G., Taneja, G., & Ghosh, R. S. (2024). Sustaining the mobile medical units to bring equity in healthcare: A PLS-SEM approach. *International Journal for Equity in Health*, 23, Article 175.
- [5]. Smith, R., & Jones, L. (2019). Community trust and the uptake of rural health services: A qualitative study from Southeast Nigeria. *Rural and Remote Health*, 19(3), 5113.
- [6]. Steeger, J. (2023). *Crafting an effective project portfolio management governance: A guide for PMOs*. Nordantech.
- [7]. Too, E. G., & Weaver, P. (2014). The management of project management: A conceptual framework for project portfolio governance. *International Journal of Project Management*, 32(8), 1382–1394.
- [8]. World Health Organization. (2021). *Global strategy on digital health 2020–2025*. World Health Organization.