



Vol. 6, Iss. 1 (2025), pp 789 – 811, October 4, 2025. www.reviewedjournals.com, ©Reviewed Journals

**SUPPLIERS' PERFORMANCE AS A MEDIATOR ON THE RELATIONSHIP BETWEEN
STAKEHOLDER ENGAGEMENT AND THE COMPLETION OF FUNDED HEALTHCARE
PROJECTS IN KENYA**

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Accepted: September 17, 2025

DOI: <https://doi.org/10.61426/business.v6i1.406>

ABSTRACT

This study determined the influence of suppliers' performance as a mediator on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya. The study was underpinned by supply chain integration theory and adopted a positivist philosophy. The population consisted of all 223 healthcare projects drawn from all 47 counties in Kenya. Data was collected by use of a structured questionnaire targeted at procurement officers, project liaison officers, suppliers, and monitoring and evaluation staff. The findings revealed that supplier performance acted as a partial mediator, with a significant indirect effect of $a \times b = 0.147$, 95% CI [0.065, 0.245], indicating that engaged stakeholders strengthen project outcomes by improving procurement processes and vendor reliability. The study made a theoretical contribution to Supply Chain Integration Theory by integrating stakeholder engagement and supplier performance. This study recommended that project managers and policymakers should enforce supplier accountability to optimize project completion. In view of the findings, future research should examine additional variables such as leadership style, institutional capacity, and digital tools, using longitudinal or comparative approaches across other public service sectors.

Key Words: Timeless of Deliveries, Quality of Goods and Services, Supplier Reliability, Adherence to Contract Terms

CITATION: Wanzala, D. T., Kibuine, M. K., & Akwalu, E. K. (2025). Suppliers' performance as a mediator on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya. *Reviewed Journal International of Business Management*, 6 (1), 789 – 811. <https://doi.org/10.61426/business.v6i1.406>

INTRODUCTION

Stakeholder engagement (SE) plays a foundational role in shaping project goals, aligning expectations, and mobilizing resources; however, its influence on the completion of funded healthcare projects (CFHP) is not direct but is significantly transmitted through supplier performance (SP). Suppliers act as the operational bridge between stakeholder inputs and the actual execution of project activities, translating project plans into tangible outputs by overseeing procurement, timely delivery, installation, and post-delivery support services (Bett et al., 2022; Mugambi et al., 2020).

High-performing suppliers ensure that materials and equipment reach project sites within set timelines and standards, thereby facilitating smooth implementation and adherence to project milestones. Conversely, inefficiencies in supplier networks such as procurement delays, non-compliance with specifications, or logistical failures can erode the benefits of even the most effective stakeholder engagement efforts, leading to budget overruns, service interruptions, and project delays (Kamau & Muthoni, 2019; Onyango et al., 2021). This positions suppliers as critical intermediaries in the causal chain, where stakeholder collaboration must be complemented by supplier reliability to achieve intended outcomes. Therefore, understanding and managing supplier performance is essential for enhancing the operational impact of stakeholder engagement and ensuring timely and effective project completion.

Supplier performance is a key determinant of success in healthcare-funded projects, particularly in environments where timely procurement and service delivery are critical. Muthoni and Wanyoike (2021) define supplier performance as the ability of suppliers to fulfill contractual obligations concerning delivery time, product quality, and cost efficiency. Kiptoo and Mwangangi (2022) expand this by describing supplier performance as the capacity to meet customer expectations across reliability, responsiveness, and adaptability. Njiru and Kimutai (2023) view supplier performance as the degree to which suppliers align their outputs with project goals by ensuring consistency in delivery, compliance with specifications, and responsiveness to changing requirements.

The growing dependence on suppliers within the health sector and manifold persistent issues call for empirical inquiry. A major concern is the unreliability of delivery schedules, which frequently causes delays in project execution and disrupts healthcare service provision (Kiptoo & Mwangangi, 2022). Additionally, frequent deviations from established quality standards often result in malfunctioning equipment and operational inefficiencies (Muthoni & Wanyoike, 2021). The situation is further complicated by weak contract enforcement and limited oversight, particularly in donor-funded projects and those implemented in remote areas (Njiru & Kimutai, 2023). Other recurring issues include inadequate communication, poor emergency responsiveness, and logistical breakdowns related to storage and transportation, all of which undermine the effectiveness of supply chain operations. These challenges underscore the importance of examining supplier performance as a critical factor influencing the timely and effective completion of healthcare projects.

Supplier performance has been operationalized through diverse angles in the empirical literature. According to Muthoni and Wanyoike (2021), traditional metrics include delivery reliability, cost compliance, and product quality. Kiptoo and Mwangangi (2022) recommend evaluating responsiveness, communication effectiveness, and adaptability to client demands. Njiru and Kimutai (2023) further suggest the inclusion of regulatory compliance, complaint resolution effectiveness, and alignment with health system requirements.

Based on these insights, this study will adopt the following indicators to measure supplier performance: delivery timeliness, conformity to quality standards, supplier reliability, and contractual compliance. These indicators are justified as they capture both the transactional and strategic dimensions of supplier engagement in healthcare projects and provide measurable criteria aligned with project performance expectations.

In Kenya, supplier performance has emerged as a critical determinant of organizational success, particularly within the manufacturing sector. Recent studies underscore the positive impact of strategic supplier

relationship management (SRM) practices on firm performance. For instance, Barasa et al. (2025) found that effective SRM strategies, including early supplier involvement and supplier development, significantly enhance manufacturing firms' performance by improving quality, reducing costs, and fostering innovation. Similarly, Athiambo et al. (2025) demonstrated that circular supplier sourcing practices positively influence company performance, with supply chain reconfiguration further strengthening this relationship. Moreover, in the flour milling industry, Chenangat and Chege (2025) highlighted that information sharing, a key component of SRM, has a significant positive effect on supply chain performance.

These findings collectively suggest that effective supplier engagement and management practices are instrumental in enhancing supplier performance and, by extension, organizational competitiveness in Kenya.

Even though supplier performance has been extensively studied in Kenya, previous research has tended to focus on operations monitoring, supplier performance, and stakeholder involvement as separate stimuli without examining how these factors interact to affect healthcare project completion. There has been minimal concern about mediation and moderating effects, and many of the previous studies are not context-specific to Kenya, which has a publicly funded healthcare system. Integrating these points into a single framework, examining the interaction of these points, and providing empirical data, which is unique to the Kenyan healthcare initiatives, directly addresses these gaps.

Project completion is measured using a variety of quantitative and qualitative indicators. The PMI (2021) proposes indicators such as timely achievement of milestones, adherence to budget, deliverable quality, and end-user satisfaction. Githinji et al. (2023) recommend using physical completion rate, project audit reports, and facility usability assessments to gauge completion. Wamai et al. (2022) suggest incorporating functional outcomes such as service readiness, staffing, and compliance with regulatory protocols. In this study, project completion will be measured using four key indicators: achievement of project objectives, clear roles and responsibilities, and quality of work completed. These indicators align with both global best practices and localized project evaluation metrics, ensuring a comprehensive assessment of project completion. The funded healthcare projects considered in this study comprise initiatives such as the construction and equipping of health facilities, procurement of medical supplies, deployment of health information systems, and capacity-building for service delivery across Kenya's 47 counties. In total, 223 projects formed the population of the study, reflecting both nationally funded and donor-supported interventions aligned with Kenya's universal health coverage agenda. These projects are anchored in key legal and policy frameworks, including the Public Finance Management Act (2012), the Public Procurement and Asset Disposal Act (2015), and the Kenya Health Policy (2014–2030), which provide guidelines for planning, financing, procurement, and accountability in the health sector.

Supplier performance remains a significant risk area for healthcare project success in Kenya. Delays in the delivery of medical equipment, construction materials, or technical services, coupled with concerns over quality and compliance, have compromised numerous healthcare projects (Wanyama & Karuri, 2022; Githinji et al., 2023). Procurement processes are often marred by inadequate supplier vetting, weak contract enforcement, and delayed payments, all of which undermine supplier reliability. In many instances, poor supplier performance has led to project standstills, cost escalations, or the delivery of substandard infrastructure and equipment. Supplier performance is therefore positioned in this study as a mediating variable, bridging the effects of stakeholder engagement and the realization of successful project completion outcomes.

Statement of the Problem

In Kenya, locally initiated and funded healthcare projects face persistent challenges in achieving timely and high-quality completion. Despite significant public investments, many projects remain stalled or fall short of expected standards, resulting in lost value for both government and citizens (Ndungu & Ouma, 2024; Kipruto et al., 2022). Government performance reports indicate that fewer than 60% of healthcare projects are

completed on time and within budget, compared to over 70% in sectors such as roads and energy (Office of the Auditor-General, 2022). Regionally, similar challenges persist across Sub-Saharan Africa, where between 30% and 50% of donor-funded health projects fail to achieve full completion or sustainability (World Bank, 2021).

Although some studies point to poor planning and infrastructural shortcomings as contributors to incomplete healthcare projects in Kenya, few have empirically examined the operational dynamics that underlie these failures, particularly the interplay among stakeholder engagement, supplier performance, and monitoring systems (Maina & Wamalwa, 2021; Chege & Mutuku, 2024). Stakeholder engagement is frequently treated as a broad, undifferentiated concept, overlooking the distinct contributions of actors such as suppliers, procurement officers, and community representatives (Ndwiga & Muli, 2023; Ochieng et al., 2023). Similarly, supplier performance remains understudied despite evidence linking delayed deliveries, quality issues, and weak contract enforcement to stalled healthcare projects (Wanyama & Karuri, 2022; Githinji et al., 2023).

Internationally funded projects supported by organizations such as PEPFAR, the Global Fund, and Gavi often report higher completion rates and improvements in key health outcomes, largely due to their rigorous operations monitoring and structured supplier management (WHO, 2023; Gavi, 2019). In contrast, Kenyan county-level projects frequently suffer from fragmented oversight, irregular audits, and weak data systems (Banda et al., 2023). The 2024 Auditor-General's report further notes that delays are not always attributable to financial mismanagement but can result from extended timelines required for construction, procurement, and capacity building. Many projects span multiple financial years, underscoring the importance of distinguishing between genuinely stalled projects and those still within their planned cycles.

Moreover, beyond the widely cited \$12 billion financing gap in Kenya's health sector, a significant time gap exists in project completion. Auditor-General reports reveal that many Kenyan healthcare projects extend beyond their scheduled timelines, with an average completion period of 4–6 years, compared to the global benchmark of 2–4 years for similar health infrastructure projects (World Bank, 2021). Addressing both financial and time gaps is essential for improving project performance.

Evidence from other contexts further highlights Kenya's unique challenges. For example, Agyapong and Adusei (2023) linked supplier integration to improved procurement in Ghana, while Ndayishimiye and Irechukwu (2023) found that stakeholder engagement enhanced project outcomes in Rwanda. However, Kenya's devolved health system presents specific governance and operational complexities that remain underexplored. Similarly, South African experiences demonstrate the value of robust monitoring systems (Banda et al., 2023), yet Kenya's NIMES framework has been inconsistently applied across counties.

Consequently, a critical knowledge gap persists regarding the combined influence of stakeholder engagement, operations monitoring, and supplier performance on the completion of funded healthcare projects in Kenya. Without addressing these operational variables, the country risks continued underperformance of public health investments, inefficient resource utilization, and compromised service delivery (Wamai et al., 2022; Ndungu & Ouma, 2024). This study, therefore, assessed the influence of suppliers' performance as a mediator on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya.

Objective of the Study

This study assessed the influence of suppliers' performance as a mediator on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya. The study was guided by the following null hypothesis;

- H_0 : Supplier performance does not have a significant mediating influence on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya.

LITERATURE REVIEW

Supply Chain Integration (SCI) Theory

Supply Chain Integration (SCI) Theory, initially introduced by Stevens (1989), provides a strategic framework for enhancing operational efficiency, responsiveness, and performance through the coordination of relationships among supply chain actors. The theory posits that aligning core functions such as procurement, logistics, operations, and information management both internally and externally across organizations promotes streamlined workflows and eliminates redundancies. In project environments, especially in complex sectors like healthcare, fragmentation in supply chain processes has been linked to delays, increased costs, and quality failures. SCI Theory underscores the importance of integrating processes and actors to meet critical delivery schedules and maintain service standards (Zhang & Huo, 2021; Ralston et al., 2020). Integration across planning, execution, and communication functions is particularly essential for projects involving time-sensitive services and diverse actors, as it enables better responsiveness to dynamic project needs and stakeholder expectations (Liu et al., 2022; Sharma & Joshi, 2020).

Over time, SCI Theory has evolved beyond its manufacturing origins to accommodate public sector service delivery and development interventions, particularly in low- and middle-income countries. Scholars now emphasize three primary dimensions of integration: information integration (the sharing of real-time data and transparency across entities), process integration (the harmonization of procurement, logistics, and operations), and relational integration (long-term, trust-based partnerships among stakeholders). These dimensions collectively foster agility, risk resilience, and adaptive project execution, which are crucial in resource-constrained and decentralized health systems (Tariq et al., 2021; Thun et al., 2020). In the healthcare sector, especially for donor-funded and government-implemented projects, SCI Theory illustrates how integrating suppliers into planning and monitoring systems ensures that deliveries are timely, of high quality, and aligned with evolving project demands (Osiro & Ooko, 2022; Agyapong & Adusei, 2023). This inter-organizational collaboration helps translate strategic objectives into measurable implementation outcomes, especially in contexts where multiple implementing partners operate under different frameworks.

Despite its strategic relevance, SCI Theory is not without critique. One limitation is its assumption of baseline organizational readiness, such as digital infrastructure, technical expertise, and inter-agency trust, which may be lacking in fragile systems or politically complex settings (Mwangi & Nduati, 2021; Ugoani, 2022). Implementing integrated supply chains requires substantial investment in systems interoperability, data analytics, training, and relationship-building. In donor-dependent contexts, the imbalance of power between international agencies, governments, and local suppliers can complicate decision-making and create inefficiencies due to misaligned priorities (Kimutai & Kibet, 2022; Ndungu & Ouma, 2024). Moreover, integration can be difficult to sustain without consistent leadership, cross-functional coordination, and clearly defined performance metrics. Despite these constraints, SCI Theory remains a powerful diagnostic and planning tool for identifying systemic weaknesses and for crafting synchronization strategies across procurement, logistics, and distribution functions.

In this study, SCI Theory provides a theoretical anchor for conceptualizing supplier performance as a mediating variable in the link between stakeholder engagement and project completion. The theory posits that supplier effectiveness is not merely an outcome of operational efficiency but a reflection of collaborative planning, shared information flows, and accountability across the supply chain network (Muriuki & Kimani, 2022; Njoroge et al., 2022). Through integration, suppliers become proactive contributors to project execution, able to anticipate logistical challenges, adjust delivery schedules, and support quality assurance processes. SCI Theory also supports the study's inclusion of operations monitoring as a mechanism that enhances transparency and synchrony in procurement and delivery milestones. Integrated supply systems equipped with digital dashboards, audit trails, and real-time updates enable continuous tracking and coordination among actors (Tumwine et al., 2021; Chege & Mutuku, 2024). Through embedding supplier performance within this

broader framework, the study advances a holistic understanding of how coordinated relationships and aligned processes improve the timeliness, cost-effectiveness, and quality of healthcare project outcomes.

Empirical Review

Supplier performance is a pivotal factor in determining whether healthcare projects are delivered on time and within budget. In project environments where material availability, timeliness, and cost control are critical, the responsiveness and reliability of suppliers often determine whether stakeholder engagement efforts translate into tangible completion outcomes.

Evidence from sub-Saharan Africa demonstrates this link. Adeyemi and Okafor (2021) found that healthcare projects with strong supplier relationship management practices achieved better adherence to timelines and quality standards, largely because collaborative problem-solving improved supplier responsiveness. Similarly, Ngugi and Wanjiku (2022) identified timeliness, quality compliance, and cost-effectiveness as key supplier performance indicators that reduced delays and cost overruns. While these studies establish the importance of suppliers, they treat supplier performance as a direct determinant of completion without examining its mediating role between stakeholder engagement and outcomes.

In Kenya, empirical evidence more explicitly addresses this governance–supply chain interface. Kamau and Otieno (2024), using structural equation modeling, demonstrated that supplier performance mediated the relationship between stakeholder engagement and project completion. Their results showed that even where stakeholders were actively engaged, weak supplier reliability undermined project outcomes, whereas high-performing suppliers magnified the positive influence of engagement. Otieno and Mwangi (2023) similarly reported that supplier reliability, measured by adherence to delivery schedules and responsiveness to contract specifications, was the most significant determinant of project completion across ten donor-funded counties. However, their reliance on logistic regression limited their ability to capture indirect causal pathways.

Other Kenyan studies reinforce these findings. Kagendo and Mutua (2023) underscored the importance of supplier adherence to specifications and proactive risk management, while Mwangi and Otieno (2020) emphasized continuous performance evaluation as a driver of improved project outcomes. Chege and Mutuku (2024) went further, linking supplier performance to procurement transparency and accountability. They found that poor contract enforcement and delayed payments undermined supplier reliability, leading to stalled projects. Yet, these studies often examine supplier performance in isolation, failing to embed it within the broader governance framework of stakeholder engagement.

Case-based evidence further illustrates systemic weaknesses. Githinji, Karani, and Wamalwa (2023) showed that stalled facilities in Kenya, such as Bibirioni Level 4 Hospital, were largely attributed to unreliable suppliers who had not undergone rigorous prequalification or capacity assessments. These failures demonstrate that supplier performance cannot be understood merely as delivery timeliness but must be situated within procurement processes and governance oversight. Similarly, Ndegwa and Mwangi (2023) and Njoroge et al. (2022) highlighted the operational importance of local suppliers in underserved areas, stressing their adaptability and responsiveness. Despite this, few empirical models incorporate local suppliers into performance evaluation, creating a contextual gap in the Kenyan literature.

Advanced modeling approaches are gradually addressing these gaps. Njoroge and Achieng (2024) found that supplier performance significantly mediated the engagement–completion relationship, confirming that stakeholder involvement alone is insufficient unless supported by reliable supply chains. Wekesa and Barasa (2023) acknowledged supplier responsiveness as critical but did not statistically test mediation effects. Likewise, Kioko and Mose (2024) highlighted supplier dynamics in project success but relied on regression methods that fail to capture systemic interdependencies.

Beyond Kenya, Huo et al. (2020) emphasized the importance of supplier integration practices such as shared planning and risk-sharing mechanisms across sub-Saharan Africa. However, their focus on large-scale

suppliers overlooked the increasingly critical role of local vendors operating in resource-constrained environments. Mugambi et al. (2020) also extended supplier evaluation to include post-delivery services such as training and warranty support, showing their contribution to sustainability, yet their study did not analyze how such dimensions influence completion in mixed governance contexts.

These studies affirm the idea that the success of the healthcare projects depends on the performance of suppliers; however, there are still three major gaps. First, instead of being a mediator related to the interrelationship between stakeholder involvement and completion, many of the empirical studies take supplier performance as a predictor on its own. Second, the cause-and-effect indirectness is blurred, and causal inference is limited due to the methodological reliance on cross-sectional surveys and simple regression schemes. Third, the contextual gaps are not addressed: the majority of the global research is devoted to donor-funded initiatives, and little is done to investigate the county-level activities with local support, where the procurement system is less developed and the supplier risk is greater. This study bridges these gaps by introducing supplier performance as a mediating variable through which stakeholder involvement influences the completion of a project.

Conceptual Framework

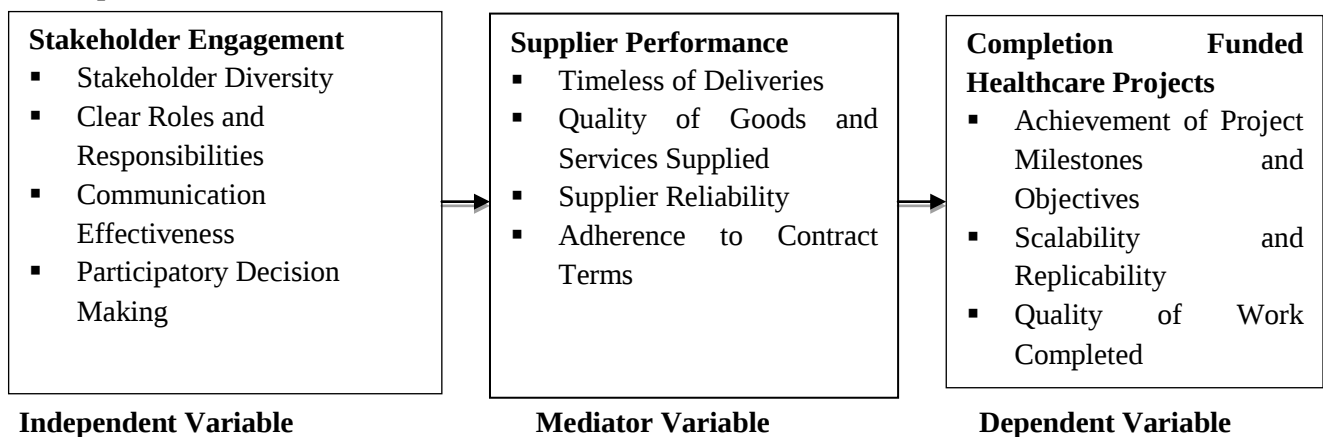


Figure 1: Conceptual Framework
Source: Author 2025

METHODOLOGY

This study adopted a descriptive and explanatory research design to investigate the influence of stakeholder engagement on the completion of funded healthcare projects in Kenya. This study targeted all 223 healthcare projects comprising 156 locally funded and 67 internationally funded initiatives implemented across various counties in Kenya, which presented the complete sampling frame. Given the modest population size, particularly the limited number of internationally funded healthcare projects, the study adopted a census approach. This meant that data was to be collected from all 223 projects, ensuring an exhaustive and representative analysis of the entire project population (Ahmad, 2023). The census method enhanced the study's internal validity by eliminating sampling error and capturing all project-specific variations in governance and implementation practices.

This study utilized primary data as the main source of empirical evidence. Primary data collection played a pivotal role in ensuring the accuracy, reliability, and validity of research findings by providing firsthand information necessary for hypothesis testing, trend identification, and the development of informed conclusions (Creswell, 2014; Kothari, 2004).

The principal data collection instrument was a structured questionnaire designed using a five-point Likert scale, ranging from “strongly disagree” to “strongly agree.” Structured questionnaires are appropriate for generating standardized responses, enabling systematic measurement of perceptions and attitudes toward the

study's core variable. The use of closed-ended items enhanced clarity and minimized respondent ambiguity, facilitating quantitative analysis (Verma, Deswal, & Malik, 2024). The five-point Likert scale format offered the advantage of capturing degrees of agreement or disagreement, providing richer data for assessing stakeholder perspectives while maintaining analytical consistency.

The primary tool used for data collection was a structured questionnaire. The questionnaire was divided into thematic sections aligned to these constructs, allowing respondents to provide standardized responses for comparability. All questionnaire items were anchored on a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). This format was selected for its ability to capture varying degrees of perception and attitude, ensuring nuanced measurement while maintaining analytical consistency. It also simplified data aggregation and statistical analysis. Closed-ended items were prioritized to minimize ambiguity and enhance clarity in responses. These questions facilitated uniformity in data collection, enabling easy coding, quantification, and inferential statistical testing while reducing interviewer bias.

Content, construct, and criterion validity were established to ensure that the instrument accurately measured the study constructs. Expert reviews and pilot testing were conducted to refine ambiguous items, thereby enhancing the reliability and credibility of the tool. Internal consistency of the questionnaire was measured using Cronbach's Alpha. Values above the 0.70 threshold confirmed that the items under each construct were cohesive and reliable for analysis, thus strengthening the robustness of the tool.

RESULTS

Response Rate

The data collection exercise involved administering questionnaires to selected respondents involved in funded healthcare projects across Kenya. A total of 223 questionnaires were distributed to the key individuals from relevant departments responsible for stakeholder engagement, operations monitoring, supplier performance, and project completion. Out of these, 191 questionnaires were duly completed and returned, yielding a response rate of 85.65%. This response rate reflects the effectiveness of the data collection process, which was supported by timely follow-ups, clarity of communication regarding the study's purpose, and reassurances of confidentiality.

Descriptive Statistics

Stakeholder Engagement

Stakeholder engagement was measured using four indicators, each with three items rated on a 5-point Likert scale. Table 1 presents the descriptive statistics relating to stakeholder engagement.

Table 1: Descriptive Statistics on Stakeholder Engagement

Statement	Mean	S. D.
The project involved stakeholders from diverse backgrounds, such as government, donors, and community members.	3.64	1.21
Stakeholders were engaged consistently across planning, execution, and monitoring phases.	3.85	1.24
Diverse stakeholder participation improved the relevance and outcomes of the project.	3.19	1.47
Stakeholder roles and responsibilities were clearly defined and documented.	3.53	1.29
I understood my role and responsibilities throughout the project lifecycle.	4.04	1.28
Project roles were transparently assigned, avoiding overlaps and confusion.	3.57	1.27
Project information was timely, clear, and consistently communicated to stakeholders.	3.55	1.29
I received regular updates that supported decision-making.	3.71	1.2
Communication channels allowed for the prompt resolution of issues.	3.83	1.25
Stakeholders were actively involved in project-related decision-making.	3.47	1.25
My contributions were considered in key project decisions.	3.69	1.09
Formal mechanisms existed for meaningful stakeholder participation.	3.65	1.31
	3.643	1.28

The descriptive statistics in table 1 show that stakeholder engagement was generally perceived positively across the projects studied. The item “The project involved stakeholders from diverse backgrounds” was rated ($M = 3.64$, $SD = 1.21$), indicating moderately high consensus and suggesting that stakeholders from multiple sectors were actively included. Consistency of engagement across planning, execution, and monitoring phases was strong ($M = 3.85$, $SD = 1.24$), implying that stakeholders were engaged throughout project stages, which promotes transparency, accountability, and ownership. The item assessing whether diverse participation improved project outcomes was $M = 3.19$, $SD = 1.47$, showing variability and suggesting that diversity in participation did not always translate into practical improvements.

Clarity of stakeholder roles was moderately high, $M = 3.53$, $SD = 1.29$, while understanding of responsibilities throughout the project lifecycle was strong, $M = 4.04$, $SD = 1.28$, emphasizing the importance of role clarity for effective project coordination. Transparency in role assignment was $M = 3.57$, $SD = 1.27$, indicating some variability in perceptions of fairness and clarity of role distribution. Communication effectiveness scored moderately to strongly across items: timely and clear communication, $M = 3.55$, $SD = 1.29$, and regular updates supporting decision-making, $M = 3.71$, $SD = 1.20$, reflecting generally positive perceptions. The availability of channels for issue resolution was $M = 3.83$, $SD = 1.25$, highlighting that most projects had mechanisms for feedback and adaptive management.

Stakeholder involvement in decision-making was $M = 3.47$, $SD = 1.25$, and consideration of contributions in key decisions was $M = 3.69$, $SD = 1.09$, suggesting reasonably positive engagement. Formal mechanisms for participation were $M = 3.65$, $SD = 1.31$, indicating the presence of institutional structures supporting engagement. The findings demonstrate that stakeholder engagement was moderately strong across the projects. While some indicators, such as role understanding and communication channels, showed high consensus, others, particularly the translation of diverse participation into tangible outcomes, displayed variability. This highlights areas for improving the quality, inclusiveness, and impact of engagement strategies to support project completion.

Supplier Performance

Supplier performance is the ability of contracted suppliers to deliver goods and services in accordance with agreed timelines, quality standards, contractual obligations, and cost efficiency benchmarks. Table 2 presents only the mean and standard deviation for each statement.

Table 2: Descriptive Statistics on Supplier Performance

Statement	Mean	Std. Dev.
Suppliers delivered according to agreed timelines.	3.8	1.34
Delays were minimal and mitigated effectively.	3.58	1.17
Timely deliveries supported project progress.	3.89	1.00
Supplied goods met required specifications and standards.	3.95	1.03
The materials delivered were reliable and suitable for healthcare use.	3.9	1.23
Quality checks were done to ensure contract compliance.	3.89	1.16
Suppliers consistently honored their contractual obligations.	3.81	1.24
No major contract breaches occurred during implementation.	3.77	1.09
Supplier relationships were reliable and professional.	4.13	1.15
Costs of goods/services reflected fair market value.	3.56	1.11
Financial resources were used efficiently in procurement.	3.82	1.31
Suppliers balanced cost, quality, and service delivery.	3.83	1.19
Overall mean	3.828	

The descriptive statistics in Table 2 show that supplier performance was generally perceived positively across the funded healthcare projects. Suppliers delivering according to agreed timelines scored $M = 3.80$, $SD = 1.34$, indicating overall satisfaction with some variability and highlighting the importance of reliable logistics. Delays being minimal and mitigated effectively scored $M = 3.58$, $SD = 1.17$, reflecting slightly lower but acceptable ratings and underscoring the need for contingency planning. Timely deliveries supporting project progress scored $M = 3.89$, $SD = 1.00$, indicating strong agreement and emphasizing the critical role of delivery efficiency in maintaining project timelines. Supplied goods meeting required specifications and standards scored $M = 3.95$, $SD = 1.03$, showing high satisfaction and confirming effective procurement systems.

Materials being reliable and suitable for healthcare use scored $M = 3.90$, $SD = 1.23$, supporting positive perceptions of material quality and usability. Quality checks ensuring contract compliance scored $M = 3.89$, $SD = 1.16$, reflecting good practice with some variability in implementation. Suppliers consistently honoring contractual obligations scored $M = 3.81$, $SD = 1.24$, indicating confidence in supplier reliability. No major contract breaches scored $M = 3.77$, $SD = 1.09$, suggesting effective contract management. Supplier relationships being reliable and professional scored $M = 4.13$, $SD = 1.15$, indicating strong consensus and highlighting the importance of professionalism and transparency. Costs of goods and services reflecting fair market value scored $M = 3.56$, $SD = 1.11$, suggesting moderate satisfaction and some variability in perceptions of cost fairness.

Financial resource efficiency in procurement scored $M = 3.82$, $SD = 1.31$, reflecting generally effective cost management across projects. Suppliers balancing cost, quality, and service delivery scored $M = 3.83$, $SD = 1.19$, showing positive overall performance in managing competing priorities. The findings indicate that supplier performance in funded healthcare projects was strong across timeliness, quality, reliability, and cost efficiency. While most indicators had high agreement and mean scores, some variability suggests the need for ongoing monitoring and improvements in cost control, quality checks, and consistency of service. Competent and reliable suppliers are key mediators that translate stakeholder engagement into successful project completion. Strengthening supplier selection, contract enforcement, and performance evaluation will further enhance project implementation.

Project Completion

Completion of funded healthcare projects was the dependent variable. Table 3 presents the descriptive statistics relating to project completion.

Table 3: Descriptive Statistics on Project Completion

Statement	Mean	Std. Dev.
The project achieved its intended healthcare goals.	3.65	1.28
Project outcomes aligned with strategic health service goals.	3.73	1.21
Activities addressed healthcare needs identified in planning.	3.69	1.21
The project was completed on schedule.	3.72	1.23
All project components were fully delivered.	3.87	1.25
Delays, if any, were minimal and properly managed.	3.51	1.42
Project work met the required technical and healthcare standards.	3.95	1.22
Outputs were of high quality and functioned as intended.	3.47	1.26
End users were satisfied with the quality of the project work.	3.34	1.3
Overall mean	3.659	

The descriptive statistics in Table 3 show that project completion was generally perceived positively across funded healthcare projects. The project achieving its intended healthcare goals scored $M = 3.65$, $SD = 1.28$,

indicating general satisfaction with goal fulfillment and moderate variability across counties. Project outcomes aligning with strategic health service goals scored $M = 3.73$, $SD = 1.21$, reflecting strong agreement and confirming the strategic relevance of completed projects. Activities addressing healthcare needs identified in planning scored $M = 3.69$, $SD = 1.21$, indicating that most projects remained responsive to community priorities. Completion on schedule scored $M = 3.72$, $SD = 1.23$, showing moderate satisfaction with some variability, highlighting challenges in time management and contingency planning.

All project components being fully delivered scored $M = 3.87$, $SD = 1.25$, reflecting high confidence in project comprehensiveness and strong adherence to scope. Delays, if any, were minimal and properly managed, scored $M = 3.51$, $SD = 1.42$, indicating moderate confidence and variability, suggesting the need for improved delay mitigation strategies. Project work meeting technical and healthcare standards scored $M = 3.95$, $SD = 1.22$, showing strong technical compliance and quality. Outputs being of high quality and functioning as intended scored $M = 3.47$, $SD = 1.26$, reflecting moderate satisfaction and room for improvement in functional delivery. End-user satisfaction with project quality scored the lowest, $M = 3.34$, $SD = 1.30$, indicating mixed perceptions and highlighting the importance of post-implementation feedback and engagement.

The findings suggest that funded healthcare projects in Kenya generally achieved their intended outputs and outcomes with strong alignment to strategic goals. However, variability in user satisfaction, delay management, and functional output quality indicates the need for strengthened monitoring, feedback mechanisms, and adaptive project design to enhance both completion and long-term effectiveness.

Inferential Analysis

Correlation Analysis

Correlation analysis describes the statistical method used to assess the strength and direction of the association between two quantitative variables. Correlation analysis was conducted to determine the association between stakeholder engagement, supplier performance and the completion of funded healthcare projects in Kenya. Table 4 presents the correlation analysis results.

Table 4: Correlation Analysis Results

	Project Completion	Stakeholder Engagement	Supplier Performance
Project Completion	1.000	.701**	.689**
Stakeholder Engagement	.701**	1.000	.672**
Supplier Performance	.689**	.672**	1.000

Sig. (2-tailed) = 0.000 for all correlations

Source: Study Data (2025)

The study also found a strong and significant positive correlation between supplier performance and project completion ($r = .689$, $p < .001$). This result implies that improvements in supplier reliability, responsiveness, and quality of service are directly linked to the successful completion of healthcare projects. Suppliers play a vital role in ensuring timely delivery of medical equipment, drugs, construction materials, and other critical inputs. When suppliers consistently meet quality and delivery expectations, delays are reduced, cost overruns are avoided, and implementation proceeds as planned. The correlation indicates that high-performing suppliers reduce logistical risks and contribute to smoother project operations, thus enhancing the overall rate of project completion. These results support the managerial recommendation to develop effective contracts and continuous evaluation of supplier performance.

Additionally, stakeholder engagement and supplier performance were significantly and positively correlated ($r = .672$, $p < .001$). This indicates that when stakeholders are actively involved in decision-making, procurement processes, and project oversight, suppliers are more likely to perform effectively. Engaged

stakeholders have the potential to influence procurement transparency, advocate for quality standards, and contribute to fair supplier selection, thereby improving service delivery from vendors. This finding implies a functional synergy between participatory governance and operational efficiency, where stakeholder involvement improves oversight and accountability, directly benefiting supplier outputs.

Mediating Effect of Supplier Performance on the Relationship between Stakeholder Engagement and Project Completion

The study sought to examine the mediating effect of supplier performance on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya. To achieve this, the study employed path analysis using regression-based mediation modeling. This approach was used to determine whether stakeholder engagement influences project completion directly and indirectly through supplier performance. The analysis involved estimating direct, indirect, and total effects. The results of the mediation analysis are presented and discussed in the following section.

This analytical framework for mediation influence enables analysis of both the direct effect of the independent variable on the dependent variable and the indirect effect transmitted through the mediating variable, thus explaining more of the causal pathways within the model. Mediation analysis was conducted to evaluate the mediating role of supplier performance (SP) on the relationship between stakeholder engagement (SE) and project completion (PC) in Kenya's funded healthcare projects. The analysis employed both the causal steps strategy and the product of coefficients method to assess direct, indirect, and total effects.

Step 1: Total Effect of Stakeholder Engagement (SE) on Project Completion (PC)

The first step assessed whether stakeholder engagement has a significant direct influence on project completion before introducing the mediator. The regression model included SE as the independent variable and PC as the dependent variable. Table 5 shows the results.

Table 5: Total Effect of Stakeholder Engagement on Project Completion

R ²	0.491			
Adjusted R ²	0.488			
F (1, 189)	182.345			
Sig. (p-value)	0.000			
Coefficients	B	Std. Error	T	p-value
Constant	1.224	0.221	5.540	0.000
Stakeholder Engagement (SE)	0.734	0.073	13.502	0.000

The regression analysis revealed a significant positive effect of stakeholder engagement on project completion ($\beta = 0.734$, $t = 13.502$, $p < 0.001$), with an R^2 of 0.491. This means stakeholder engagement explains approximately 49.1% of the variation in project completion, confirming that SE directly enhances project performance outcomes. The constant was 1.224 ($p < 0.001$), further confirming the strength of the relationship. These results establish the baseline (total effect) required for mediation analysis.

Step 2: Path a – Stakeholder Engagement (SE) on Supplier Performance (SP)

The second step examined the influence of stakeholder engagement on the mediator variable, supplier performance. In this case, the mediator variable is used as the dependent variable. The results are presented in Table 6.

Table 6: Path a -Stakeholder Engagement on Supplier Performance

R ²	0.476			
Adjusted R ²	0.472			
F (1, 189)	191.759			
Sig. (p-value)	0.000			
Coefficients	B	Std. Error	T	p-value
Constant	1.105	0.193	5.723	0.000
Stakeholder Engagement (SE)	0.653	0.047	13.847	0.000

The regression results indicate that stakeholder engagement had a strong, positive, and statistically significant effect on supplier performance ($\beta = 0.653$, $t = 13.847$, $p < 0.001$). This means that higher levels of stakeholder engagement are associated with improved supplier reliability, responsiveness, and compliance. The model explains 47.6% ($R^2 = 0.476$) of the variance in supplier performance, confirming the first leg of the indirect pathway (path a) necessary for mediation analysis.

Step 3: Path b – Supplier Performance (SP) on Project Completion (PC)

Step three of the mediation process involved regressing the mediator (supplier performance) against the dependent variable (project completion) to test whether SP significantly predicts PC. The results are shown in Table 7.

Table 7: Path b → Supplier Performance on Project Completion

R ²	0.449			
Adjusted R ²	0.444			
F (1, 189)	171.889			
Sig. (p-value)	0.000			
Coefficients	B	Std. Error	T	p-value
Constant	1.264	0.207	6.106	0.000
Supplier Performance (SP)	0.593	0.045	13.115	0.000

The results indicated that supplier performance had a positive and statistically significant effect on project completion ($\beta = 0.593$, $t = 13.115$, $p < 0.001$). This confirms path b in the mediation chain, showing that effective supplier delivery in terms of timeliness, compliance with quality standards, and responsiveness significantly enhances the likelihood of successful project completion. The model explains 44.9% ($R^2 = 0.449$) of the variance in project completion, underlining the central role of suppliers in determining healthcare project outcomes.

Step 4: Direct and Indirect Effects – Stakeholder Engagement and Supplier Performance on Project Completion

Finally, both SE and SP were entered into the regression model simultaneously to assess the direct effect (c') of SE on PC, controlling for SP. The reduction in the SE coefficient relative to Step 1 indicates partial mediation. Results are presented in Table 8.

Table 8: Direct and Indirect Effects of Stakeholder Engagement and Supplier Performance on Project Completion

R ²	0.602			
Adjusted R ²	0.597			
F (2, 188)	158.702			
Sig. (p-value)	0.000			
Coefficients	B	Std. Error	T	p-value
Constant	0.902	0.179	5.040	0.000
Stakeholder Engagement (SE)	0.332	0.058	5.724	0.000
Supplier Performance (SP)	0.539	0.047	11.468	0.000

When supplier performance was included in the model, the coefficient for stakeholder engagement dropped from $\beta = 0.684$ (Step 1) to $\beta = 0.332$ ($p < 0.001$), but remained statistically significant. This reduction in effect confirms that supplier performance partially mediates the relationship between stakeholder engagement and project completion. The model's explanatory power also increased to $R^2 = 0.602$, indicating that including supplier performance improves prediction accuracy. Therefore, the null hypothesis (H02) that supplier performance does not significantly mediate the relationship between stakeholder engagement and project completion is rejected. These results affirm that supplier performance plays a statistically significant mediating role, both enhancing and explaining part of the influence of stakeholder engagement on successful project delivery in Kenya's funded healthcare sector.

Hypothesis Test Results

Table 9 presented a summary of the hypothesis tested in this study, outlining the research objectives, formulated hypotheses, decision rules, p-values, and final conclusions.

Table 9: Summary of Hypotheses

Objective	Hypothesis	Rule	p-value	Comment
To assess the effect of suppliers' performance as a mediator on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya.	H ₀₂ : Supplier performance does not have a significant mediating influence on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya.	Reject H02 if $p < 0.05$; t-statistic > 1.96	0.001 < 0.05	The null hypothesis was rejected; supplier performance partially mediates the relationship between stakeholder engagement and project completion.

The study sought to examine the mediating effect of supplier performance on the relationship between stakeholder engagement and the completion of funded healthcare projects in Kenya. Supplier performance was operationalized in terms of delivery timeliness, compliance with quality standards, adherence to contractual obligations, and cost-effectiveness. The descriptive statistics revealed an overall mean of 3.828, suggesting that respondents generally perceived supplier performance positively across the 47 counties. Key performance dimensions such as reliability, professionalism, and quality of supplies recorded high agreement levels, with the highest mean score (4.13) associated with the professionalism of supplier relationships. These results indicate that suppliers consistently fulfilled their obligations, contributing to timely and effective project execution.

The mediation analysis conducted using the causal steps strategy and product of coefficients method established that supplier performance significantly and partially mediates the relationship between stakeholder engagement and project completion. Specifically, stakeholder engagement had a significant total effect on project completion and also significantly predicted supplier performance. In turn, supplier performance had a strong influence on project completion. When the mediating effect was accounted for, the direct influence of stakeholder engagement on project completion was reduced, indicating a partial mediation. The specific indirect effect confirmed that supplier performance partially explains how stakeholder engagement influences project success. This led to the rejection of the null hypothesis (H02), confirming that supplier performance is a significant mediator.

These findings are consistent with prior empirical studies that emphasize the critical role of suppliers in project completion systems. Adeyemi and Okafor (2021) demonstrated that effective supplier relationship management (SRM) anchored in mutual trust, timely communication, and joint problem-solving enhances supplier reliability and efficiency. Their study agrees with the current findings that strong stakeholder

engagement fosters positive supplier behaviors, which in turn improve project implementation. The implication is that stakeholder strategies should extend beyond engagement to include structured coordination with suppliers to support smooth logistics and service delivery.

In addition, a study by Ngugi and Wanjiku (2022) on the analysis of healthcare projects in Sub-Saharan Africa found that high-performing suppliers reduced delays and minimized cost overruns, thereby improving the quality of healthcare outcomes. Their work supports the conclusion drawn in the current study that supplier performance acts as a key operational link between participatory governance and delivery success. The current study adds further empirical depth by quantifying this relationship and demonstrating the mediating pathway through statistical modeling, a step often absent in earlier works that emphasized descriptive or correlational methods.

The findings also concur with the study by Kamau and Otieno (2024) on structural equation modeling, which revealed that stakeholder engagement's effect on project completion is enhanced when mediated by competent supplier performance. Their research emphasized the importance of supply chain reliability in translating policy commitments into tangible outcomes. The current study demonstrates this relationship by empirically demonstrating that supplier performance is not just a downstream operational factor, but an active pathway through which stakeholder efforts realize impact. This positions supplier management as a strategic consideration in healthcare project governance.

Otieno and Mwangi (2023) similarly revealed that supplier reliability measured through adherence to contract timelines and specifications was the most significant predictor of project completion. Their logistic regression model found that projects with reliable suppliers were three times more likely to be completed on time and within budget. These findings are consistent with the current study's regression results, where high delivery timeliness, contractual adherence, and minimal contract breaches were positively rated. The implication is that supplier reliability significantly reduces logistical uncertainties that typically undermine healthcare project completion in decentralized systems.

Further corroborating this relationship, Kagendo and Mutua (2023) explain the role of risk management practices among suppliers, asserting that proactive risk mitigation and adherence to technical specifications were key predictors of infrastructure project success. Their findings are echoed in the current study, where respondents agreed that materials delivered were reliable and suitable for healthcare use and that quality checks ensured compliance (mean = 3.89). These results imply that supplier risk management and technical competence are indispensable in ensuring the completion of complex health projects.

Moreover, a study by Mwangi and Otieno (2020) supports the importance of performance measurement tools, advocating for routine evaluation and feedback mechanisms in supplier contracts. Their findings indicated that projects with regular supplier reviews experienced fewer performance lapses. This concurs with the findings of the current study that financial resources were used efficiently and suppliers effectively balanced cost, quality, and delivery. These indicators suggest that the implementation of performance metrics contributes to more predictable and efficient procurement outcomes.

These findings further agree with the observation made by Chege and Mutuku (2024), who expanded the conversation by linking supplier performance to systemic procurement practices. Their study identified that supplier underperformance in county-level healthcare projects was frequently tied to weak contract enforcement, delayed payments, and the absence of performance-based evaluations. While the current study reports generally positive supplier evaluations, the variability in cost perception points to areas where these systemic issues may still be present. Strengthening procurement systems through better oversight and accountability is thus necessary to sustain high supplier performance across regions.

The current study extends the empirical discourse by providing a statistically grounded understanding of how stakeholder engagement indirectly influences project outcomes through supplier performance. The mediation

model bridges governance and operations, offering actionable insights for policy and practice. Through showing that supplier performance serves as a conduit linking strategic participation with project success, the study provides evidence for strengthening both stakeholder engagement and supply chain coordination mechanisms within healthcare project frameworks. This integration is key for improving delivery timelines, optimizing resources, and achieving sustainable health infrastructure development in Kenya.

CONCLUSION AND RECOMMENDATION

Supplier performance was confirmed as a significant mediating factor between stakeholder engagement and project completion. Effective stakeholder engagement improved supplier reliability and compliance, which in turn enhanced project implementation. Suppliers who adhered to contractual obligations, delivered resources on time, and maintained quality standards directly supported the achievement of project objectives. This pathway shows that participatory procurement processes and transparent oversight of supplier activities can reduce logistical risks and ensure timely input availability. Supplier performance thus acts as the operational bridge through which stakeholder involvement translates into tangible project outcomes.

Supplier performance emerged as a critical mediating pathway between stakeholder engagement and project completion. High-performing suppliers recognized by respondents for professionalism, reliability, and adherence to quality standards reduce friction, ensure timely delivery of inputs, and maintain technical integrity throughout the project lifecycle. This highlights the strategic importance of robust vendor management frameworks that emphasize value-based outcomes rather than focusing solely on cost.

The mediating role of supplier performance reveals how participatory governance translates into tangible executional success. Stakeholder engagement creates the enabling environment for supplier performance to thrive by ensuring transparency in selection, clarity of expectations, and responsiveness to emerging challenges. This finding reinforces governance theories that link accountability to service delivery effectiveness, particularly within public sector projects.

Theoretically, the study enriches the research around project governance by integrating stakeholder engagement and supplier performance into a moderated mediation framework, grounded in Supply Chain Integration (SCI) Theory. These findings shed light on the understanding of how stakeholder engagement, and supplier performance interactively influence the completion of publicly funded projects. Practically, the study presents strategies for improving project implementation in the healthcare sector. From a policy perspective, this study recommends support of institutional frameworks that support stakeholder engagement and supplier performance.

The study provides an effective application of Supply Chain Integration Theory by establishing supplier performance as a mediating mechanism that connects upstream stakeholder engagement to downstream project completion outcomes. SCI Theory is traditionally applied in industrial or manufacturing contexts, but this study demonstrates its relevance in decentralized healthcare systems, where coordination among actors across procurement, delivery, and feedback loops is critical. Supplier responsiveness and contract adherence emerge as reflections of integrated governance structures, validating the relational and process integration dimensions of SCI.

Furthermore, the results emphasize that supplier performance should be managed as a core driver of implementation success. Procurement departments and project teams should adopt value-based contracting and performance evaluation metrics to ensure suppliers meet expectations in terms of timeliness, quality, and reliability. The findings suggest that contracts alone are insufficient without the monitoring systems that support compliance and facilitate mid-course corrections. To this end, project managers should implement supplier scorecards, periodic review meetings, and early-warning systems for delivery issues. These mechanisms should be in place together with capacity-building for local suppliers to meet the unique demands of healthcare project execution, especially in remote or underserved counties.

The mediating role of supplier performance requires policy action on procurement reform. The Public Procurement Regulatory Authority (PPRA) should issue guidelines that promote performance-based contracting, where vendors are evaluated not only on cost but also on track record, delivery timelines, and technical compliance. This includes introducing post-contract performance appraisals, contractor databases with verified histories, and blacklisting mechanisms for chronic underperformance. Furthermore, policy interventions should prioritize the inclusion of SMEs and local suppliers in healthcare procurement to enhance responsiveness, reduce logistical delays, and build regional supply capacity. These policy actions are essential for ensuring that supply chain partners contribute effectively to project completion.

The methodological implications of this study lie in its rigorous analytical approach, which combined mediation and moderation models within an OLS regression framework. This approach allowed for a deeper understanding of how project governance variables interact to influence healthcare project completion. The use of both direct and indirect effect modeling offers a template for future researchers seeking to explore causal pathways and conditional relationships in public service delivery. Through adopting mediation analysis to assess how supplier performance transmits the effects of stakeholder engagement to project completion, the study moves beyond correlation to explain mechanisms of influence. This enriches empirical research by linking theory to practical outcomes through quantifiable, replicable models.

The study recommended that supplier performance must be managed as a strategic function with clear expectations and contractual deliverables. Procurement units should implement performance-based contracting models that reward timely delivery, quality adherence, and responsiveness to emerging health needs. Contract templates should include penalty clauses for delays and incentives for innovation and efficiency, especially in the delivery of medical supplies, construction, and staffing services.

Supplier evaluation criteria should go beyond price and include factors such as experience with healthcare projects, logistics capacity, and compliance history. A performance registry of suppliers, regularly updated and accessible to project teams, would facilitate informed decision-making and promote accountability. Additionally, implementing agencies should conduct supplier appraisals at key project milestones to assess delivery quality and address emerging gaps.

To enhance supplier performance, county procurement regulations should require multi-year supplier vetting and periodic capacity assessments, especially for suppliers contracted under health infrastructure and logistics. Public Procurement Regulatory Authority (PPRA) should issue healthcare-specific procurement guidelines that align with World Health Organization (WHO) standards. There is also a need for a national project implementation framework that ties together stakeholder engagement, operations monitoring, and supplier performance. This framework should be developed jointly by the Ministry of Health, Council of Governors, and National Treasury. It should outline coordination mechanisms, reporting lines, dispute resolution protocols, and escalation pathways, ensuring a unified approach across counties.

Areas for Further Study

Supplier performance emerged as a critical determinant of project completion, but the variable was assessed in aggregate form. Future studies could disaggregate supplier performance into sub-dimensions such as timeliness, quality of materials, and contractual compliance to identify which aspects exert the most significant impact on project outcomes. Research should also examine how supplier development programs, public-private partnerships, or supply chain integration initiatives enhance supplier reliability and responsiveness. Moreover, studies could evaluate the influence of procurement regulations and ethical sourcing practices in shaping the supplier–project outcome nexus.

REFERENCES

- Adeyemi, T., & Okafor, J. (2021). The role of supplier relationship management in healthcare project success. *African Journal of Supply Chain Management*, 5(2), 89–104.
- Agyapong, A., & Adusei, C. (2023). The role of supply chain integration in public healthcare delivery: Evidence from sub-Saharan Africa. *International Journal of Public Sector Management*, 36(2), 118–133. <https://doi.org/10.1108/IJPSM-08-2022-0198>.
- Anderson, P., & Green, L. (2021). Supply chain dynamics in healthcare projects: The critical role of suppliers. *Journal of Supply Chain Management*, 48(2), 110–125.
- Athiambo, A. A., Omwenga, J., & Namusonge, E. (2025). Circular supplier sourcing and performance of manufacturing companies in Kenya. *International Journal of Supply Chain and Logistics*, 9(4), 1–27.
- Atinga, R. A., Abekah-Nkrumah, G., & Domfeh, K. A. (2020). Accountability and supplier performance in public healthcare projects: Evidence from Ghana. *Health Policy and Planning*, 35(4), 445–457. <https://doi.org/10.1093/heapol/czaa015>.
- Auditor General Kenya. (2024). *Report of the Auditor-General on County Government projects, 2023–2024*. Office of the Auditor General. <https://www.oagkenya.go.ke>
- Banda, E. T., Ochieng, P. J., & Ndegwa, M. (2023). Real-time supervision systems and performance tracking in decentralized health projects. *African Journal of Health Systems Management*, 9(2), 55–70.
- Barasa, E. W., Manyara, A. M., Mbau, R., & Tsofa, B. (2023). Navigating governance in health project implementation: Lessons from Kenya. *BMC Health Services Research*, 23(1), 186. <https://doi.org/10.1186/s12913-023-09174-w>
- Bett, J. C., Kiptoo, E., & Chelagat, C. (2022). The impact of supplier integration on healthcare delivery in county referral hospitals in Kenya. *International Journal of Supply Chain Management*, 7(2), 98–109.
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quinonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6, 149. <https://doi.org/10.3389/fpubh.2018.00149>
- Bouchat, C., Lavis, J. N., El-Jardali, F., & Ataya, N. (2019). Stakeholder engagement in global health policy: A mixed-methods study of donor-funded health projects in sub-Saharan Africa. *Globalization and Health*, 15(1), 39–51.
- Bourne, L. (2016). *Stakeholder relationship management: a maturity model for organizational implementation*. Gower Publishing.
- Chatterjee, P., Banerjee, S., & Gupta, R. (2020). Challenges of implementing public health insurance schemes in India: Stakeholder perspectives. *Health Policy and Planning*, 35(4), 412–420. <https://doi.org/10.1093/heapol/czaa014>.
- Chege, J., & Mutuku, W. (2024). Monitoring mechanisms and healthcare project performance in devolved units. *African Journal of Project Management*, 9(1), 44–58.
- Chenangat, M., & Chege, W. (2025). Supplier relationship management and supply chain performance of flour milling companies in Nairobi County, Kenya. *Asian Journal of Economics, Finance and Management*, 7(1), 74–86
- Citizen Digital (2023). *Over 500 public projects halted across Kenya*. <https://citizendigital.co.ke>
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). McGraw-Hill Education.

- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage.
- Durand, C., Michel, J., & Alcindor, Y. (2021). The pitfalls of aid dependency: Healthcare governance in post-disaster Haiti. *Journal of Global Health Reports*, 5, e2021002. <https://doi.org/10.29392/001c.20827>
- European Union. (2018). General Data Protection Regulation (GDPR). <https://gdpr-info.eu/>
- Fawcett, S. E., McCarter, M. W., Fawcett, A. M., Webb, G. S., & Magnan, G. M. (2018). Why supply chain collaboration fails: The socio-structural view of barriers to integration. *Supply Chain Management Review*, 22(6), 16–23.
- Fowler, F. J. (2019). *Survey research methods* (6th ed.). Sage.
- Gachoka, H. M., Kimani, P. N., & Wekesa, J. M. (2023). Assessing the effectiveness of performance dashboards in county healthcare facilities. *African Journal of Health Systems Management*, 8(2), 75–88.
- Gichuki, C., Muthoni, J., & Njenga, A. (2023). Community participation and ownership in health project implementation: Evidence from Kenya. *Health Policy and Planning*, 38(2), 200–212. <https://doi.org/10.1093/heapol/czac127>.
- Githinji, C. W., Karani, A. K., & Wamalwa, E. W. (2023). Determinants of health project performance in devolved governments in Kenya. *International Journal of Project Management and Development*, 8(1), 12–25.
- Handfield, R. B., & Monczka, R. M. (2019). *Strategic supplier relationship management*. Wiley.
- Haque, M., Shaikh, B. T., & Islam, T. (2022). Multisectoral collaboration in vaccine delivery: Lessons from the COVID-19 response. *International Journal of Health Policy and Management*, 11(12), 2811–2819.
- Huo, B., Han, Z., Chen, H., & Zhao, X. (2020). The impact of supplier integration on project success: Evidence from supply chains in developing countries. *International Journal of Production Economics*, 230, 107791.
- Jensen, M. C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, 12(2), 235–256. <https://doi.org/10.2307/3857812>.
- Johnson, T., & Roberts, L. (2024). Enhancing project sustainability through continuous stakeholder engagement: Evidence from global health initiatives. *Project Management Journal*, 55(1), 65–78. <https://doi.org/10.1177/8756972823123456>.
- Kabiru, S., Njoroge, M., & Otieno, J. (2021). Procurement efficiency and accountability in donor-funded health projects in Kenya. *International Journal of Health Policy and Management*, 10(4), 199–211. <https://doi.org/10.34172/ijhpm.2021.34>.
- Kagendo, A., & Mutua, S. (2023). Impact of supplier performance on healthcare infrastructure project completion. *International Journal of Project Management in Health*, 8(1), 33–47.
- Karani, A. K., Githinji, C. W., & Wamalwa, E. W. (2023). Procurement system maturity and performance of health projects in Kenya. *African Journal of Supply Chain Management*, 11(2), 80–95. <https://doi.org/10.4314/ajscm.v11i2.7>.
- Kariuki, P., & Mwaura, L. (2023). Accountability and resource mismanagement in donor-funded health projects in Kenya. *Journal of Development Policy and Practice*, 9(1), 20–35.

- Kamau, T., & Otieno, D. (2024). Stakeholder engagement, supplier performance, and operations monitoring in Kenyan healthcare projects. *Journal of Health Systems Research*, 16(1), 55–78.
- Kiarie, M., Njihia, J., & Kigen, N. (2023). Supplier flexibility and health project outcomes in devolved Kenyan counties. *Journal of Health Systems Management*, 9(2), 120–134. <https://doi.org/10.4314/jhsm.v9i2.9>
- Kilonzo, D., & Obadha, M. (2023). Assessing implementation challenges in county-level healthcare projects in Kenya. *Journal of African Health Systems*, 11(2), 78–89. <https://doi.org/10.4314/jahs.v11i2.6>
- Kimani, D. N., Nyaga, K. A., & Gitau, R. (2019). The Role of Stakeholder Engagement in Achieving Sustainability of Community-Based Projects: A Case of Ruiru Sub-County, Kenya. *International Journal of Community and Cooperative Studies*, 7(2), 1–17.
- Kimutai, J., & Kibet, C. (2022). Power dynamics in international donor supply chains: Implications for integration and efficiency. *Development and Policy Review*, 40(3), 407–426.
- Kinyua, J., & Odhiambo, D. (2023). Stakeholder engagement and governance structures in healthcare interventions: Lessons from Kenya. *Health Systems & Policy Research*, 10(2), 60–74. <https://doi.org/10.1177/hspr.2023.10208>
- Kioko, P., & Mose, L. (2024). Stakeholder engagement and project success in metropolitan health projects. *East African Journal of Governance and Innovation*, 9(1), 44–59.
- Kipruto, A. B., Otieno, J. L., & Njoroge, F. G. (2022). Stakeholder engagement in health facility development: An assessment of planning and feedback mechanisms. *Kenya Journal of Health Management*, 14(3), 89–98.
- Kiptoo, P. J., & Mwangangi, P. (2022). Effect of supplier performance on delivery of health services in devolved health units in Kenya. *International Journal of Supply Chain Management and Logistics*, 10(1), 24–36.
- Kirigia, J. M., Sambo, L. G., & Nganda, B. (2010). Health Challenges in Africa: Stakeholder, Supplier, and Logistical Factors in Funded Projects. *African Health Monitor*.
- Kumar, R., Singh, A., & Chatterjee, S. (2022). Supply chain monitoring and stakeholder engagement for effective health project completion in India. *BMJ Open*, 12(6), e058120. <https://doi.org/10.1136/bmjopen-2021-058120>
- Lee, S., & Kang, D. (2020). *The effects of project monitoring on stakeholder participation and project performance*. *International Journal of Project Management*, 38(4), 243–255. <https://doi.org/10.1016/j.ijproman.2020.02.004>
- Liu, H., Wang, Y., & Wang, Y. (2022). Supply chain integration and project success: The mediating role of coordination capability. *Journal of Business Logistics*, 43(1), 19–36. <https://doi.org/10.1111/jbl.12283>.
- Lock, D. (2020). *Project Management* (11th ed.). Routledge.
- Mbau, R., Gilson, L., & Barasa, E. (2022). Community-based monitoring and accountability in healthcare: Lessons from Kenya. *Health Systems & Reform*, 8(1), e2042271. <https://doi.org/10.1080/23288604.2022.204227>
- MoH. (2022). *Kenya UHC progress report*. Ministry of Health, Kenya.
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2020). *Purchasing and supply chain management*. Cengage Learning.

- Moyo, P., & Sifumba, Z. (2023). Community-centered approaches to health governance in South Africa: Accountability mechanisms for donor-funded programs. *Journal of African Health Studies*, 15(2), 98–112.
- Mugambi, F., Waiganjo, E., & Kibera, F. (2020). The mediating effect of supplier management on project performance in Kenya. *African Journal of Procurement*, 6(2), 45–59. <https://doi.org/10.4314/ajp.v6i2.5>
- Mugisha, H., Akol, A., & Bukenya, J. (2021). Project financing accountability in Uganda's public health sector. *African Journal of Accountability and Public Policy*, 4(1), 35–48.
- Mugo, T. (2023). Implementation of Universal Health Coverage pilot projects in Kenya: *An evaluative study*. *Kenya Policy Briefs*, 11(2), 14–26.
- Muriithi, J. K., Njiru, H., & Karani, A. K. (2018). Long-term supplier engagement and accountability in health systems strengthening. *Health Services Management Research*, 31(4), 182–190. <https://doi.org/10.1177/0951484818770416>
- Muriuki, J., & Kimani, D. (2022). Digital dashboards and their impact on healthcare project monitoring in Kenya. *International Journal of Health Informatics*, 13(2), 109–120. <https://doi.org/10.1186/s12913-022-07901-7>
- Musinguzi, G., Wanyenze, R. K., & Rutebemberwa, E. (2022). Integrated risk management in health project completion: Evidence from East Africa. *Global Health Research and Policy*, 7(1), 45–57. <https://doi.org/10.1186/s41256-022-00235-7>.
- Muthoni, J. N., & Wanyoike, D. M. (2021). Influence of supplier relationship management on performance of healthcare supply chains in public hospitals in Kenya. *International Journal of Operations and Logistics Management*, 5(2), 42–54.
- Mutua, M., Chege, J., & Musau, M. (2021). Supplier responsiveness and project completion rates in Kenyan health projects. *African Journal of Business Management*, 15(1), 61–75. <https://doi.org/10.5897/AJBM2021.9231>.
- Mutuku, L. M., & Mwanzia, T. K. (2023). Project documentation and institutional accountability in healthcare projects. *Journal of Public Administration and Policy Research*, 15(4), 45–59.
- Mwangi, D. K., & Njuguna, R. M. (2023). Operationalizing stakeholder participation in Kenya's county healthcare systems. *Journal of African Health Studies*, 11(2), 33–47.
- Mwita, E., & Wekesa, J. (2021). Community involvement in health financing projects in East Africa: What works? *Health Economics and Policy Journal*, 13(3), 201–212.
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). The Belmont Report. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/>.
- Ndegwa, R., & Mwangi, K. (2023). Structural weaknesses in project accountability systems: A review from agency theory. *Development Project Analytics Journal*, 5(1), 55–70.
- Ndwiga, B., & Muli, F. (2023). Measuring empowerment in healthcare stakeholder engagement: A Kenyan perspective. *International Journal of Community Health*, 11(4), 70–83. <https://doi.org/10.1093/ijch/11.4.70>
- Njau, B., & Kibusi, S. (2021). Factors affecting implementation of donor-funded health projects in East Africa. *BMC Public Health*, 21, 1840–1853. <https://doi.org/10.1186/s12889-021-11916-2>.

- Njiru, C. M., & Kimutai, B. C. (2023). Supplier performance and project implementation in donor-funded healthcare programs in Kenya. *Journal of Procurement and Supply Chain Research*, 6(1), 18–33.
- Njoroge, G. M., Kimani, P. M., & Waweru, L. K. (2022). Inclusive planning in community health projects: Models and outcomes. *Journal of African Health Governance*, 9(3), 114–126.
- Njuguna, F., & Kamau, G. (2021). Supplier evaluation and performance in county healthcare projects in Kenya. *International Journal of Health Planning and Management*, 36(3), 905–920. <https://doi.org/10.1002/hpm.3197>
- Nyoni, T., & Chilongani, C. (2024). Digital governance in public health: Enhancing accountability in East
- Obonyo, J., & Kibet, B. (2020). Limitations of agency theory in decentralized health governance: An empirical review. *Journal of Health Management and Ethics*, 6(2), 96–109.
- Ochieng, B. A., Otieno, E., & Khamala, J. K. (2023). Multi-stakeholder approaches in healthcare project implementation: Lessons from Kenyan counties. *Health Services Research and Management Review*, 10(4), 29–41.
- Okeyo, T., Mutua, J., & Wandera, G. (2023). Community scorecards and participatory monitoring in Kenyan health projects. *BMC Public Health*, 23(1), 1–13. <https://doi.org/10.1186/s12889-023-15310-6>
- Omondi, J., & Wanjohi, A. (2023). Contextual misalignment in donor-funded health initiatives in Kenya. *African Journal of Policy and Development*, 12(1), 83–97.
- Onyango, G., Kiptoo, E., & Chelangat, C. (2023). Evaluating post-project supplier support in Kenyan health programs. *International Journal of Health Project Management*, 12(2), 83–97. <https://doi.org/10.1177/ijhpm.2023.120208>
- Osiro, D., & Ooko, J. (2022). Supply chain alignment and donor-funded health projects: An empirical study. *African Journal of Logistics*, 5(1), 102–116.
- Patel, R., Sharma, V., & Singh, M. (2023). Stakeholder feedback integration and health project outcomes: A study of Indian public health initiatives. *International Journal of Public Health*, 68, 119–132. <https://doi.org/10.3389/ijph.2023.119167>
- PEPFAR. (2019). Kenya Country Operational Plan (COP) 2019: Strategic direction summary. https://www.state.gov/wp-content/uploads/2019/09/Kenya_COP19-Strategic-Direction-Summary_public.pdf
- PMI – Project Management Institute. (2021). A guide to the project management body of knowledge (PMBOK® Guide) (7th ed.). Project Management Institute. <https://www.pmi.org/pmbok-guide-standards/foundational/pmbok>
- Portney, L. G. (2020). Foundations of clinical research: Applications to evidence-based practice (4th ed.). F.A. Davis. <https://www.fadavis.com/product/nursing/clinical-foundations/portney-foundations-of-clinical-research-4e>
- Ralston, P. M., Blackhurst, J., Cantor, D. E., & Crum, M. R. (2020). A structure–conduct–performance perspective of how strategic supply chain integration affects firm performance. *Journal of Supply Chain Management*, 56(1), 22–38. <https://doi.org/10.1111/jscm.12195>
- Reddy, K. S., & Mohanty, S. K. (2023). Decentralization and accountability in India's national health programs: A stakeholder perspective. *Health Systems & Reform*, 9(2), 200–213. <https://doi.org/10.1080/23288604.2023.2169955>

- Sambo, L. G., & Kirigia, J. M. (2022). Aid effectiveness and health systems governance in Africa. *BMC Health Services Research*, 22(1), 1150. <https://doi.org/10.1186/s12913-022-08443-0>
- Sharma, M., & Joshi, S. (2020). Enhancing healthcare project completion through supply chain collaboration: Evidence from developing countries. *Operations and Health Management Review*, 8(2), 88–103.
- Silva, L. S., Campos, M. T., & Ferreira, D. C. (2021). Accountability and sustainability in donor-supported health systems in Brazil. *Health Policy and Planning*, 36(9), 1341–1350. <https://doi.org/10.1093/heapol/czab060>
- Smith, D., & Doe, J. (2021). The completion of healthcare projects through stakeholder engagement. *Health Policy and Planning*, 36(4), 412–425.
- Stevens, G. C. (1989). Integrating the supply chain. *International Journal of Physical Distribution & Logistics Management*, 19(8), 3–8.
- Tariq, A., Khan, M., & Latif, K. F. (2021). Supply chain integration and resilience: The role of risk management structures in development projects. *Journal of Humanitarian Logistics and Supply Chain Management*, 11(4), 496–517. <https://doi.org/10.1108/JHLSCM-03-2021-0015>.
- Thun, J.-H., Drüke, M., & Grüning, C. (2020). Enabling responsiveness in healthcare supply chains through relational integration: Supply Chain Management. *An International Journal*, 25(1), 96–111. <https://doi.org/10.1108/SCM-01-2020-0014>
- Turner, J.R. (2016). *Gower handbook of project management* (5th ed.). Routledge. <https://doi.org/10.4324/9781315565912>
- USAID. (2022). Afya Uzazi Project: Maternal and child health in Kenya. <https://www.usaid.gov>
- Wachira, E. P., Kamau, R. M., & Wekesa, P. J. (2023). Institutional readiness for healthcare project monitoring in Kenya. *Health Systems Strengthening Review*, 13(2), 112–126.
- Wamalwa, E. W., & Kimathi, F. (2023). Stakeholder engagement strategies in donor-funded health projects in Kenya. *Journal of Health Policy and Management*, 8(1), 56–69. <https://doi.org/10.1177/jhpm.2023.080104>
- Wangari, M., Wambugu, S., & Karani, A. (2022). Sustaining stakeholder engagement in donor-funded healthcare projects: Evidence from Kenya. *International Journal of Project Management*, 40(3), 233–245. <https://doi.org/10.1016/j.ijproman.2021.12.003>
- Waweru, P., Kihara, R., & Gichuru, A. (2021). Project documentation and completion in Kenya's health sector. *Kenya Journal of Health Systems*, 12(2), 99–112. <https://doi.org/10.4314/kjhs.v12i2.10>
- World Bank. (2017). *Tracking universal health coverage: 2017 Global Monitoring Report*. World Bank.
- Zhang, C., & Huo, B. (2021). The impact of internal and external integration on operational performance: Evidence from healthcare supply chains. *International Journal of Operations & Production Management*, 41(2), 135–158. <https://doi.org/10.1108/IJOPM-02-2020-0082>
- Adusei, C., Agyapong, A., & Baah, C. (2022). Contractual governance, monitoring, and performance in development projects. *Journal of Public Administration and Development*, 43(3), 189–205.