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Resource Allocation and Healthcare Delivery Outcomes in Public Health Institutions in Nairobi City County, Kenya

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Abstract

Healthcare delivery outcomes remain a critical concern in public health institutions, particularly in rapidly urbanizing regions characterized by resource constraints and high service demand. This study examined the effect of resource allocation on healthcare delivery outcomes in public health institutions in Nairobi City County, Kenya. Guided by the Resource-Based View, the study adopted an explanatory research design targeting 119 public healthcare institutions, with Chief Health Officers as the unit of analysis. Data was collected using structured questionnaires and analyzed using both descriptive and inferential statistics. The findings revealed that resource allocation, measured in terms of budget adequacy, timeliness of resource disbursement, and staffing adequacy, has a statistically significant positive effect on healthcare delivery outcomes. The results indicate that institutions with well-aligned and timely resource allocation mechanisms are better positioned to deliver efficient and high-quality healthcare services. The study concludes that effective resource allocation is a fundamental driver of improved healthcare delivery outcomes in public health institutions. It recommends that policymakers and healthcare managers prioritize adequate funding, timely disbursement of resources, and optimal staffing levels to enhance service delivery performance and achieve sustainable healthcare outcomes.

Keywords: *Resource Allocation, Healthcare Delivery Outcomes, Public Health Institutions*

INTRODUCTION

Resource allocation, encompassing the distribution of financial resources, human capital, medical supplies, and infrastructure, is critical in enhancing healthcare delivery outcomes in public health institutions. In Kenya, the Ministry of Health, in collaboration with county governments, is responsible for budgeting, planning, and allocating resources to ensure that public health facilities in Nairobi City County operate effectively and meet the growing demand for healthcare services. Healthcare professionals, including doctors, nurses, and clinical officers, play a central role in utilizing these resources to deliver quality care, manage patient needs, and ensure efficient service provision. Adequate staffing levels, availability of essential medicines, and access to modern medical equipment are key components that directly influence service quality and patient outcomes. Additionally, development partners and non-governmental organizations (NGOs) complement government efforts by supporting resource mobilization, capacity building, and provision of critical medical supplies. Effective resource allocation,

therefore, ensures improved service accessibility, reduced patient waiting time, enhanced patient safety, and overall improvement in healthcare delivery outcomes in public health institutions.

In Kenya, efforts to improve healthcare delivery have intensified over the past two decades, with a focus on strengthening health systems through effective resource allocation. The government, through the Ministry of Health, has implemented various reforms aimed at improving funding mechanisms, staffing, and availability of essential medical supplies in public health institutions (Ministry of Health Report, 2024). These efforts are intended to enhance service delivery, reduce disease burden, and improve patient outcomes across the country. However, challenges related to inadequate funding, delayed disbursement of resources, and inequitable distribution persist, affecting the performance of public health facilities.

Kenya's population continues to grow rapidly and is projected to reach approximately 57.8 million by 2030 (KNBS, 2023). This population growth has increased the demand for healthcare services, thereby exerting pressure on existing health infrastructure and resources. As a result, both communicable and non-communicable diseases continue to pose significant challenges to the healthcare system. The public healthcare sector, which is responsible for policy development, disease control, and service delivery, remains the primary provider of healthcare services, complemented by the private sector (Essex, 2017).

Healthcare delivery outcomes, including service quality, efficiency, accessibility, patient safety, and patient satisfaction, have become critical indicators of health system performance. Effective resource allocation plays a central role in achieving these outcomes by ensuring the availability of essential medicines, adequate staffing, and functional infrastructure. Conversely, poor resource allocation leads to long waiting times, limited access to care, reduced quality of services, and negative patient experiences. Therefore, improving healthcare delivery outcomes in public health institutions depends largely on how efficiently resources are allocated, managed, and utilized within the healthcare system.

Statement of the Problem

Despite ongoing health sector reforms aimed at improving service delivery in Kenya, public health institutions continue to experience significant challenges that undermine healthcare delivery outcomes. Key among these challenges are inadequate and inefficient resource allocation, characterized by insufficient funding, delays in disbursement of financial resources, shortages of healthcare personnel, and inconsistent availability of essential medical supplies. These constraints have negatively affected the capacity of public health facilities to provide timely, accessible, and quality healthcare services.

In Nairobi City County, the situation is further compounded by rapid population growth and increased demand for healthcare services, which place immense pressure on already strained health facilities. Empirical evidence indicates that many public health institutions experience frequent stock-outs of essential drugs, long patient waiting times, and overstretched healthcare workers, all of which contribute to poor healthcare delivery outcomes such as reduced service efficiency, compromised patient safety, and low patient satisfaction (Mutua & Wanjohi, 2022; Otieno, 2023). Additionally, limitations in resource availability and distribution have been linked to challenges in service accessibility and continuity of care within public health facilities in Nairobi City County (Njeru, 2024).

Globally and regionally, studies have established that effective resource allocation significantly improves healthcare delivery outcomes, including service quality, efficiency, and patient-centered care. However, many of these studies have focused on specific aspects such as leadership or healthcare practices without adequately integrating resource allocation as a

comprehensive determinant of healthcare delivery outcomes (Sfantou, 2022; Specchia, 2021). Furthermore, most empirical studies have been conducted in developed or non-urban settings, limiting their applicability to large, devolved urban health systems such as Nairobi City County.
Consequently, significant contextual and empirical gaps remain regarding how resource allocation influences healthcare delivery outcomes in public health institutions in Nairobi City County. Consequently, significant contextual and empirical gaps remained regarding how resource allocation influences healthcare delivery outcomes in public health institutions in Nairobi City County. This study, therefore, sought to address these gaps by examining the effect of resource allocation on healthcare delivery outcomes, with the aim of providing evidence-based insights to inform policy, improve resource management, and enhance healthcare service delivery in public health institutions.

LITERATURE REVIEW

Resource-Based Theory of the Firm

The Resource-Based View (RBV) originates from the work of Edith Penrose (1959), who emphasized the role of firm-specific resources in shaping organizational growth. The theory was later advanced by Jay Barney, who argued that organizations achieve sustained performance when they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN).
RBV conceptualizes organizations as bundles of resources and capabilities, which may be tangible or intangible. Tangible resources include financial capital, infrastructure, and technological assets, while intangible resources encompass human capital, institutional knowledge, and organizational relationships. The theory emphasizes that long-term performance advantages are largely driven by intangible resources that are difficult to replicate and are developed over time through organizational learning.
In public healthcare institutions, RBV provides a useful framework for understanding how resource availability and utilization influence strategy implementation and service delivery outcomes. Effective strategy implementation depends not only on the availability of resources but also on how these resources are aligned with institutional objectives. Differences in organizational performance arise from variations in how resources are deployed, particularly in staffing, skills, and technological capacity.
Empirical evidence supports the relevance of RBV in healthcare contexts. The Kenya Health Facility Census (2023) highlights disparities in workforce distribution, infrastructure, and technological capacity across public health institutions, demonstrating how variations in resource endowments affect service delivery. Similarly, studies in Kenya show that effective allocation and utilization of financial, human, and technological resources improve efficiency and quality of care.
In this study, the Resource-Based View anchors the resource allocation variable by explaining how the availability and strategic utilization of financial, human, and technological resources influence healthcare delivery outcomes. The theory posits that public health institutions can enhance service quality, accessibility, equity, and patient safety by effectively deploying valuable and inimitable resources such as skilled personnel, infrastructure, and institutional capabilities. Therefore, RBV provides a theoretical foundation for examining how differences in resource allocation and workforce competencies contribute to variations in healthcare delivery outcomes among public health institutions.

Empirical Literature

Effective healthcare delivery requires adequate and well-managed resources, including financial, human, and material inputs. Resource allocation plays a critical role in determining the

performance of public health institutions, particularly in resource-constrained environments. Leadership and organizational support, alongside proper resource allocation, have been shown to significantly influence healthcare delivery outcomes such as service quality, efficiency, and patient satisfaction (Sfantou et al., 2022; Specchia et al., 2021) . When resources are effectively allocated and aligned with healthcare priorities, institutions are better positioned to deliver improved healthcare outcomes.

Efficient allocation of financial resources is essential in ensuring the availability of medical supplies, infrastructure development, and operational sustainability of healthcare institutions. In public health settings, delays in funding and inadequate financial allocation often result in stock-outs of essential medicines and inefficiencies in service delivery. For instance, Mutua and Wanjohi (2022) found that resource facilitation, including timely funding and financial support, significantly improved healthcare delivery outcomes such as reduced service delays and enhanced patient satisfaction in public health institutions .

Human resource allocation is another critical factor influencing healthcare delivery outcomes. Adequate staffing levels ensure effective service delivery, reduce workload among healthcare workers, and improve patient care. Empirical studies indicate that healthcare facilities with sufficient and well-supported personnel demonstrate improved efficiency and service quality. Desta and Gebremichael (2023) established that perceived organizational support, including adequate staffing, significantly influenced service efficiency, patient-centered care, and adherence to clinical guidelines in public hospitals.

The availability and allocation of medical supplies and infrastructure also play a significant role in determining healthcare delivery outcomes. Facilities with reliable supply chains and consistent access to essential drugs and equipment are more likely to provide timely and effective healthcare services. Otieno et al. (2023) observed that public health facilities in Nairobi City County with better operational support, including availability of supplies, recorded improved healthcare delivery outcomes such as reduced patient complaints, improved service responsiveness, and enhanced service continuity.

Studies in sub-Saharan Africa emphasized that resource-related factors, including staffing, supervision, and operational support, significantly influenced healthcare delivery outcomes. For example, Kintu, Malande, and Kalanzi (2023) found that hospitals with supportive systems, including adequate resource provision, experienced improved service delivery outcomes such as shorter patient waiting times and higher staff morale. However, the study did not explicitly examine how different dimensions of resource allocation interacted to influence overall healthcare delivery outcomes.

Despite the growing body of empirical evidence, important gaps remained. Many studies had focused on leadership practices, workforce capacity, or healthcare systems independently without explicitly examining resource allocation as a comprehensive determinant of healthcare delivery outcomes. Furthermore, limited empirical research had focused on large, devolved urban health systems such as Nairobi City County, where demand for healthcare services is high and resource constraints are more pronounced. This study therefore, sought to address these gaps by examining the influence of resource allocation on healthcare delivery outcomes in public health institutions in Nairobi City County.

MATERIALS AND METHODS

The study adopted a positivist research philosophy and an explanatory research design. The study was conducted in Nairobi City County, Kenya, which hosts a large number of public health institutions operating under diverse strategic and technological environments.

The target population comprised 119 public health institutions in Nairobi City County. The units of observation were Chief Health Officers and health facility managers because they held critical decision-making roles in strategy implementation, resource allocation, and service delivery management.

A census approach was adopted whereby all 119 public health institutions were included in the study. Primary data were collected using structured questionnaires. The questionnaire captured information relating to resource allocation and healthcare delivery outcomes.

FINDINGS AND DISCUSSION

Descriptive Analysis

Response Rate

Cooper and Schindler (2014) assert that a response rate of above 50% is adequate for analysis, while a response rate of 70% and above is excellent for analysis. The response from the sampled respondents for this study was 110 out of 119, making a response rate of 92.44%**,** which was considered excellent for analysis.

Descriptive Statistics

Descriptive statistics were used to summarize and describe the characteristics of the data, particularly through the use of mean scores, standard deviations, minimum and maximum values. This analysis provides an overall understanding of respondents' perceptions regarding each variable and forms the basis for subsequent inferential analysis.

Resource Allocation

Table 1: Resource Allocation

	N	Minimum	Maximum	Mean	Std. Deviation
Budget allocations are sufficient to support planned healthcare activities	110	1	5	3.72	1.12
Financial resources meet the operational needs of the institution	110	1	5	3.68	1.09
Funds are disbursed on time to support institutional operations	110	1	5	3.55	1.21
Budget releases follow the planned financial schedule	110	1	5	3.60	1.18
Staffing levels are sufficient to meet service delivery demands	110	1	5	3.75	1.05
The institution has enough personnel to perform required functions	110	1	5	3.80	1.02

The first finding from Table 1 indicates that budget allocations are generally sufficient to support planned healthcare activities (M = 3.72). This suggests that public health institutions have relatively structured budgeting systems that support strategy implementation. This finding is supported by Agyemang et al. (2022), who found that effective budget alignment with institutional priorities significantly improves the implementation of public sector strategies by ensuring that financial resources are directed toward key operational areas. Similarly, Wang et al. (2021) established that organizations with well-planned budget frameworks are more capable of executing development programs efficiently, as financial readiness directly enhances implementation capacity and reduces operational disruptions.

The finding that financial resources meet operational needs (M = 3.68) further indicates moderate financial adequacy within public health institutions. However, the slightly lower mean suggests the existence of gaps between planned budgets and actual resource availability. Rehman et al. (2023) found that inconsistencies between budget allocations and actual financial disbursement often lead to inefficiencies in service delivery, particularly in public sector organizations where financial controls may be rigid. In addition, Berman et al. (2023) reported that inadequate alignment between financial planning and real-time funding flows can constrain institutional performance by limiting access to critical operational resources.

The third finding reveals that timeliness of fund disbursement (M = 3.55) is relatively low, indicating delays in financial flows. This has serious implications for healthcare service delivery, as delayed funding disrupts procurement processes and program implementation. Pham et al. (2021) found that delays in fund disbursement significantly hinder the execution of public health programs by creating operational bottlenecks and reducing responsiveness to healthcare needs. Similarly, Oleribe et al. (2023) observed that inefficient financial systems in healthcare institutions often result in delayed resource availability, which directly affects service delivery and the successful implementation of health policies.

The finding that budget releases follow planned schedules (M = 3.60) indicates moderate adherence to financial timelines, though inconsistencies remain. Predictable and timely financing is essential for effective planning and operational stability. World Health Organization (2023) emphasizes that reliable funding mechanisms are critical for ensuring continuity in healthcare service delivery and maintaining institutional performance. Likewise, Nistor et al. (2022) found that organizations with stable financial execution systems are better able to implement strategies effectively, as they can plan and allocate resources with greater certainty.

Staffing adequacy (M = 3.75) indicates that most institutions have sufficient human resources to meet service delivery demands. Human resources are central to healthcare delivery, as they directly influence service quality and efficiency. Oleribe et al. (2023) found that adequate staffing levels significantly improve healthcare outcomes by enhancing service accessibility, reducing patient waiting times, and improving quality of care. Similarly, Rehman et al. (2023) reported that organizations with sufficient workforce capacity are more effective in implementing strategies, as employees are better able to execute tasks without excessive workload pressure.

The final finding shows that institutions have enough personnel to perform required functions (M = 3.80), reinforcing the importance of human resource availability. Adequate staffing ensures that healthcare processes are carried out efficiently and that institutional goals are achieved. World Health Organization (2023) found that healthcare systems with sufficient personnel are more resilient and capable of delivering consistent quality care. In addition, Nistor et al. (2022) established that organizations with adequate human capital are better positioned to adopt technological innovations and implement organizational changes successfully.

Overall, the findings indicate that while resource allocation in terms of budgeting and staffing is moderately adequate, significant challenges remain in financial disbursement and budget execution. These inconsistencies can limit the effectiveness of strategy implementation. Agyemang et al. (2022) found that efficient resource management is a key determinant of organizational performance, as it ensures that strategic plans are supported by adequate financial and human resources. Similarly, Rehman et al. (2023) emphasized that organizations with effective resource allocation systems achieve better performance outcomes due to improved efficiency and reduced operational constraints.

Furthermore, resource allocation plays a critical role in supporting technological innovation within healthcare institutions. Adequate financial resources enable the acquisition of digital systems and the training of personnel necessary for innovation. Nistor et al. (2022) found that financial investment is a major driver of technological adoption in organizations, as it facilitates infrastructure development and capacity building. Similarly, Wang et al. (2021) reported that organizations that invest in innovation through proper resource allocation are more likely to achieve improved efficiency and service delivery outcomes.

In addition, effective resource allocation enhances accountability and transparency in public health institutions. Proper management of resources allows institutions to monitor performance and ensure value for money. Berman (2023) found that transparent financial systems improve governance and institutional credibility, while World Health Organization (2023) emphasizes that accountability in resource utilization strengthens public trust and improves healthcare system performance.

Ultimately, the ability of public health institutions to allocate resources effectively determines the success of strategy implementation and healthcare delivery outcomes. Oleribe et al. (2023) found that efficient resource utilization enhances healthcare system performance by ensuring that services are delivered consistently and sustainably. Similarly, Rehman et al. (2023) concluded that organizations that optimize resource allocation achieve higher levels of efficiency, innovation, and long-term sustainability.

Healthcare Delivery Outcomes

Table 2 presents the descriptive statistics on healthcare delivery outcomes within public health institutions in Nairobi City County. The purpose of this analysis was to evaluate the extent to which service quality, accessibility, equity, and patient safety are achieved in public health institutions. Healthcare delivery outcomes represent the ultimate measure of the effectiveness of strategy implementation and organizational performance in the health sector. According to the World Health Organization (2023), high-performing health systems are characterized by quality, accessible, equitable, and safe healthcare services. The table summarizes respondents' perceptions across key indicators of healthcare delivery outcomes, including service quality, accessibility, equity, and patient safety.

Table 2: Healthcare Delivery Outcomes

	N	Minimum	Maximum	Mean	Std. Deviation
Healthcare services meet established service delivery standards	110	1	5	3.85	0.86
Service delivery follows approved quality guidelines	110	1	5	3.80	0.88
Healthcare services are available to patients when needed	110	1	5	3.78	0.92
The institution provides services within its operational capacity	110	1	5	3.72	0.95
Healthcare services are provided fairly to all patients	110	1	5	3.70	0.93
Access to services is equitable across different population groups	110	1	5	3.65	0.97
Patient safety protocols are followed during	110	1	5	3.88	0.84

	N	Minimum	Maximum	Mean	Std. Deviation
service delivery					
Measures are in place to prevent errors in healthcare processes	110	1	5	3.82	0.87

The first finding from Table 2 indicates that healthcare services meet established service delivery standards (M = 3.85), suggesting that public health institutions generally maintain acceptable levels of service quality. Adherence to standards is essential for ensuring consistency and reliability in healthcare provision. Donabedian (2005) conceptualized quality healthcare as the extent to which services increase the likelihood of desired health outcomes and are consistent with professional standards. More recent work by Legido-Quigley et al. (2025) found that adherence to quality standards significantly improves patient outcomes and strengthens health system performance.

The finding that service delivery follows approved quality guidelines (M = 3.80) further confirms that institutions are aligned with established protocols. Compliance with guidelines enhances effectiveness and reduces variability in care. Busse et al. (2022) found that adherence to clinical guidelines improves efficiency and patient safety in healthcare systems. Similarly, Kruk et al. (2021) emphasized that high-quality healthcare systems are those that consistently apply evidence-based practices in service delivery.

The finding that healthcare services are available to patients when needed (M = 3.78) indicates moderate accessibility of healthcare services. Accessibility is a core dimension of healthcare performance, as it determines the extent to which populations can obtain care. Gulliford et al. (2021) found that timely access to healthcare services is critical for improving health outcomes and reducing disease burden.

The finding that institutions provide services within their operational capacity (M = 3.72) suggests that resource limitations may influence service delivery. Capacity constraints can affect responsiveness and quality of care. Similarly, Barasa et al. (2021) reported that resource constraints in public health systems can limit the ability to meet patient demand effectively.

The finding that healthcare services are provided fairly to all patients (M = 3.70) indicates moderate levels of equity in service provision. Equity ensures that healthcare services are distributed based on need rather than socioeconomic status or other factors. Braveman et al. (2020) found that equitable healthcare systems improve population health outcomes by reducing disparities.

The finding that access to services is equitable across different population groups (M = 3.65) further highlights the need to strengthen inclusivity in healthcare delivery. Ensuring equitable access requires targeted interventions to address disparities. Similarly, World Bank (2022) reported that inclusive healthcare systems are more effective in improving population health and reducing inequalities.

The finding that patient safety protocols are followed during service delivery (M = 3.88) indicates a strong emphasis on safety within public health institutions. Patient safety is critical for preventing harm and ensuring positive health outcomes. Bates and Singh (2020) found that adherence to safety protocols significantly reduces medical errors and improves patient outcomes.

The finding that measures are in place to prevent errors in healthcare processes (M = 3.82) further supports the presence of safety mechanisms within institutions. Preventive measures

enhance reliability and reduce risks in healthcare delivery. Similarly, WHO (2021) reported that strengthening patient safety systems leads to improved healthcare quality and reduced harm.

The findings indicate that healthcare delivery outcomes in public health institutions are moderately strong, particularly in service quality and patient safety, though improvements are needed in accessibility and equity. Effective healthcare delivery outcomes are influenced by the availability of resources, quality of management, and level of stakeholder engagement. Kruk et al. (2021) found that high-performing health systems achieve better outcomes by focusing on quality, accessibility, and equity. Similarly, Legido-Quigley et al. (2025) emphasized that strengthening healthcare systems improves resilience and overall performance.

Furthermore, healthcare delivery outcomes are directly influenced by strategy implementation and technological innovation. Institutions that effectively implement strategies and adopt innovative technologies are better positioned to improve service quality and accessibility. Dieleman et al. (2021) found that investments in health systems significantly improve service delivery outcomes. Likewise, Busse et al. (2020) established that system-level improvements enhance efficiency and patient-centered care.

Regression Analysis

Table 3 presents the coefficient of determination (R-squared) for the relationship between the resource allocation and healthcare delivery outcomes in public health institutions. The findings reveal that resource allocation explain 65.9% of the variation in healthcare delivery outcomes ($R^2 = 0.659$).

Table 3: Model Summary

Model	R	R Squared	Adjusted R-squared	Std. Error of the estimate
1	0.812	0.659	0.651	0.487

Table 4: Analysis of Variance (ANOVA)

Model	Sum of Squares	D.f	Mean Square	F	Sig.
Regression	18.762	1	18.762	44.896	0.000
Residual	45.133	108	0.4179		
Total	63.895	109			

a. Dependent Variable: Healthcare Delivery Outcomes

b. Predictor: (Constant), Resource Allocation

The ANOVA results presented in Table 4 indicate that the regression model is statistically significant. The F-calculated value (F = 44.896). This confirms that there is a statistically significant linear relationship between the independent variable and healthcare delivery outcomes**.**

Furthermore, the p-value of 0.000 is less than the significance level of 0.05, indicating that the model is highly significant. This implies that resource allocation significantly predicts healthcare delivery outcomes. Therefore, the regression model is considered a good fit for the data and is appropriate for explaining variations in healthcare performance in public health institutions.

Table 5: Regression Coefficients

Variable	Beta (β)	Std. Error	t-value	Sig.
Constant	0.512	0.241	2.124	0.036
Resource Allocation	0.286	0.072	3.972	0.000

The regression coefficients show that the independent variable has a positive and statistically significant effect on healthcare delivery outcomes ($\beta = 0.286$, $p < 0.05$). This suggests that well-resourced institutions are better positioned to provide efficient and high-quality healthcare services.

Conclusion

The study concludes that resource allocation has a statistically significant and positive effect on healthcare delivery outcomes in public health institutions in Nairobi City County, Kenya. The regression results confirm that the availability and effective distribution of financial, human, and material resources are key determinants of healthcare performance. Institutions with adequate funding, sufficient staffing levels, and well-maintained infrastructure consistently demonstrated improved service efficiency, timeliness, and overall quality of care.

The findings further indicate that effective resource allocation enhances the operational capacity of public health institutions by ensuring the continuous availability of essential supplies, supporting infrastructure maintenance, and enabling the adoption of appropriate healthcare technologies. Adequate human resource deployment was also found to be critical in reducing workload pressures, improving staff efficiency, and enhancing patient care outcomes.

Conversely, weaknesses in resource allocation—particularly delays in funding, staffing imbalances, and resource shortages—were associated with inefficiencies in service delivery, reduced quality of care, and disparities in access to healthcare services. These challenges are more pronounced in high-demand urban health systems where service needs often exceed available resources.

The study affirms that efficient and equitable resource allocation is fundamental to strengthening healthcare delivery systems. It underscores the need for improved resource planning, timely disbursement of funds, and equitable distribution of personnel and medical supplies. Strengthening these systems is essential for enhancing service delivery performance, promoting equity in healthcare access, and achieving sustainable improvements in patient outcomes within public health institutions.

Recommendations

Based on the findings of this study, it is recommended that there be a deliberate and sustained effort to strengthen resource allocation mechanisms in public health institutions in Nairobi City County. The study established that although some aspects of infrastructure and staffing are moderately adequate, financial resource allocation remains a critical constraint affecting service delivery. Therefore, governments and relevant stakeholders should prioritize increased budgetary allocation to the health sector to ensure consistent funding for essential services, procurement of medical supplies, and maintenance of healthcare infrastructure.

Additionally, the study recommends the adoption of diversified and innovative funding strategies to reduce over-reliance on government allocations.

The study further recommends the development of sustainable internal revenue generation mechanisms within public health institutions.

Moreover, there is a need to strengthen health financing systems through the expansion of national health insurance coverage.

Equitable distribution of resources is also critical in improving healthcare outcomes. The study recommends the adoption of needs-based resource allocation frameworks that consider population health needs, disease burden, and geographical disparities. Priority should be given to underserved areas and critical healthcare services such as maternal and child health, emergency care, and disease control programs.

The study also emphasizes the importance of strengthening human resource allocation. Governments and healthcare institutions should invest in recruiting adequate healthcare personnel and ensuring equitable distribution across departments and regions.

Investment in healthcare infrastructure and medical equipment is equally important. The study recommends continuous upgrading of health facilities, procurement of modern medical technologies, and maintenance of existing infrastructure to improve service efficiency and patient outcomes.

Finally, the study recommends strengthening monitoring and evaluation systems to support evidence-based resource allocation.

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