

The Effect of the Social Health Authority (SHA) on Health Facilities and Public Health Service Delivery in Navakholo Sub - County, Kakamega County, Kenya.

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DOI: <https://doi.org/10.51244/IJRSI.2026.1307000017>

Received: 05 July 2026; Accepted: 10 July 2026; Published: 23 July 2026

ABSTRACT

The transition from the National Hospital Insurance Fund (NHIF) to the Social Health Authority (SHA) under the Social Health Insurance Act, 2023 represents a major health financing reform aimed at improving healthcare access, financial risk protection, and service quality. However, its implementation has been characterized by operational and technical challenges, including limited system interoperability, legacy data migration errors, system downtime, registration bottlenecks, biometric integration difficulties, and database incompatibilities, raising concerns about its effect on healthcare service delivery. Against this background, this study examined the influence of SHA implementation on healthcare service delivery in public hospitals in Navakholo Sub-County, Kakamega County, Kenya.

Guided by the Health Systems Theory the study adopted a descriptive survey design using a mixed-methods approach. The target population comprised 1,938 healthcare workers and patients from public hospitals, from which a sample of 485 respondents was selected through stratified, systematic, and purposive sampling techniques. Primary data were collected using structured questionnaires with open-ended items, while secondary data were obtained from policy documents and relevant literature. A total of 401 questionnaires were completed and returned, yielding a response rate of 82.6%. Quantitative data were analyzed using descriptive statistics and Multivariate Analysis of Variance (MANOVA), whereas qualitative data were analyzed thematically.

The MANOVA results indicated no statistically significant differences in healthcare service delivery outcomes across hospital levels (Pillai's Trace = 0.030, $F(15, 1185) = 0.797$, $p = .683$), suggesting relatively consistent experiences of Social Health Authority implementation across facility categories. However, qualitative findings revealed persistent shortages of medicines, medical supplies, and equipment, declining service quality, reduced utilization of public health facilities, inadequate staffing, low staff morale, delayed provider reimbursements, weak stakeholder coordination, and governance inefficiencies. The study concludes that although Social Health Authority has introduced important health financing reforms, its implementation remains constrained by administrative, financial, and operational challenges. It therefore recommends strengthening financial accountability, improving stakeholder coordination and administrative capacity, ensuring timely provider reimbursements, and addressing resource shortages to enhance healthcare service delivery and advance the realization of Universal Health Coverage in Kenya.

Keywords: Social Health Authority, Health Financing Reforms, Healthcare Service Delivery, Universal Health Coverage, Public Hospitals.

BACKGROUND OF THE STUDY

Health financing reforms are widely recognized as a fundamental pillar for achieving Universal Health Coverage (UHC) by improving equitable access to healthcare, enhancing financial risk protection, and strengthening the efficiency and quality of health systems (World Health Organization, 2023). Globally, countries have increasingly adopted social health insurance and strategic purchasing reforms to reduce out-of-pocket

expenditure, improve resource mobilization, and enhance provider accountability (Cashin et al., 2017; Kutzin et al., 2017; Kabaniha et al., 2021).

Evidence suggests that well-designed health financing systems improve healthcare utilization, reduce catastrophic health expenditure, and promote equity, although their success largely depends on effective institutional arrangements, governance structures, and implementation capacity (Barasa et al., 2021; Wagstaff et al., 2020; WHO, 2023).

Despite these documented benefits, the implementation of financing reforms frequently encounters administrative, technological, and governance challenges that constrain their effectiveness, particularly in low and middle-income countries (Ndlovu & Mbandlwa, 2026). Against this global context, the present study examined the effects of the Initial Rollout Challenges and Structural System Design of the Social Health Authority on health facilities and public health service delivery in Navakholo Sub-County, Kakamega County, Kenya.

In Kenya, the enactment of the Social Health Insurance Act, 2023 established the Social Health Authority, replacing the National Hospital Insurance Fund (NHIF) as the country's principal public health financing institution. The reform seeks to strengthen Universal Health Coverage through expanded risk pooling, strategic purchasing, equitable resource allocation, and improved financial protection for households (Kariuki & Koori, 2025).

The establishment of SHA also introduced three financing mechanisms the Primary Healthcare Fund, the Social Health Insurance Fund, and the Emergency, Chronic and Critical Illness Fund to improve healthcare access and reduce catastrophic health expenditure (Government of Kenya, 2023). However, emerging evidence indicates that the transition from National Hospital Insurance Fund (NHIF) to Social Health Authority has been characterized by significant implementation challenges, including delayed provider reimbursements, digital registration constraints, weak interoperability between information systems, legacy data migration difficulties, inadequate provider training, and governance concerns that may undermine the anticipated benefits of the reform (Rotich, 2025).

These implementation challenges underscore the need to evaluate whether the new financing framework is achieving its intended objectives within public health facilities. Public health service delivery encompasses the organization and provision of preventive, curative, rehabilitative, and emergency healthcare services through coordinated institutional arrangements designed to improve population health (WHO, 2023). Effective service delivery depends on the availability of adequate financial resources, qualified human resources, essential medicines, functional infrastructure, efficient governance systems, and strong institutional coordination (Njuguna, 2024).

Health systems characterized by effective coordination, accountability, and resource stewardship generally achieve better health outcomes than systems constrained by fragmented governance and weak institutional capacity (Kazungu, 2025). Conversely, deficiencies in financing, infrastructure, workforce capacity, and governance contribute to inequalities in healthcare access, reduced service quality, and poor health outcomes, particularly in decentralized health systems (Gaitonde, 2017).

Kenya's devolved governance system, established under the Constitution of Kenya (2010), transferred responsibility for health service delivery to county governments while the national government retained responsibility for health policy formulation and regulation. This arrangement created a multilevel governance framework requiring effective coordination between national and county governments for the successful implementation of health financing reforms (Tsofa et al., 2017; Kagwanja et al., 2026).

Although devolution has improved local participation in health planning and resource allocation, studies indicate that variations in administrative capacity, financial management, institutional coordination, and accountability continue to influence health service delivery across counties (Tsofa et al., 2017). Consequently, the implementation of national financing reforms such as Social Health Authority is likely to produce different outcomes across counties depending on local governance capacity and institutional preparedness.

The literature consistently demonstrates that effective financial management systems are essential for translating health financing reforms into improved healthcare delivery. Predictable provider reimbursement mechanisms enhance facility liquidity, strengthen procurement systems, improve workforce motivation, and facilitate the continuous provision of healthcare services (Cashin et al., 2017; Barasa et al., 2021).

However, previous evaluations of Kenya's National Hospital Insurance Fund identified delayed reimbursements, bureaucratic inefficiencies, weak accountability mechanisms, and fragmented claims management systems as major constraints affecting healthcare quality and operational performance (Barasa et al., 2021; Mbau et al., 2023). Emerging evidence suggests that similar implementation challenges have persisted during the transition to SHA, raising concerns about whether the reform is improving health facility performance as intended (Yang, 2026).

Across sub-Saharan Africa, persistent fiscal constraints, increasing healthcare costs, and limited domestic resource mobilization continue to challenge governments' ability to provide equitable and quality healthcare services (WHO, 2023). In Kenya, these challenges are compounded by rising operational costs, disparities in resource allocation, weak digital health infrastructure, fragmented health information systems, and varying management capacities across county governments (Barasa et al., 2021; Ndung'u, 2025).

These systemic constraints contribute to variations in service quality, medicine availability, patient satisfaction, and healthcare utilization across counties. Furthermore, evidence indicates that patients' perceptions of healthcare quality strongly influence health-seeking behavior, continuity of care, and public confidence in government health facilities (Njuguna, 2024). Consequently, financing reforms can only improve health outcomes if they are accompanied by adequate investments in human resources, infrastructure, governance, and institutional capacity.

Despite substantial progress toward Universal Health Coverage, socioeconomic inequalities continue to limit equitable access to healthcare in Kenya. Vulnerable populations remain disproportionately exposed to catastrophic health expenditure and lower utilization of essential health services (Barasa et al., 2021). The Social Health Authority was introduced to address these disparities by expanding financial protection through contributory and government-subsidized financing arrangements (Government of Kenya, 2023).

However, preliminary implementation reports suggest that reimbursement delays, operational inefficiencies, digital registration challenges, and administrative bottlenecks continue to constrain equitable access to healthcare services (Yang, 2026). These findings suggest that expanding insurance coverage alone may be insufficient unless implementation systems function efficiently and health facilities possess the institutional capacity required to deliver services effectively.

County referral and sub-county hospitals remain central to Kenya's healthcare delivery system because they provide essential referral, diagnostic, and specialized services while serving as the primary recipients of public financing and insurance reimbursements. In Kakamega County, public hospitals depend heavily on government allocations and insurance reimbursements to finance routine operations, procure essential medicines, maintain medical equipment, and support healthcare personnel.

Consequently, the effectiveness of Social Health Authority implementation has significant implications for the operational sustainability and service delivery performance of these facilities. However, available empirical evidence on the effects of Social Health Authority implementation at county and sub-county levels remains limited, with most existing studies focusing on National Hospital Insurance Fund or earlier Universal Health Coverage pilot programs (Mbau et al., 2023; Rotich, 2025).

As a result, there is limited understanding of how the Initial Rollout Challenges and Structural System Design of Social Health Authority are influencing health facility performance and public health service delivery within devolved county health systems. A significant research gap therefore arises from the recent implementation of the Social Health Authority.

Existing empirical studies on health financing reforms in Kenya predominantly examine the former NHIF and earlier UHC initiatives, generating evidence based on financing systems that differ substantially from the

institutional, technological, and operational architecture of Social Health Authority (Mbau et al., 2023). Consequently, current knowledge provides limited insight into the real-time implementation experiences, digital transformation, provider payment mechanisms, governance arrangements, and service delivery outcomes associated with the new financing framework. This creates both a temporal and contextual gap, as findings generated under previous financing systems cannot adequately explain the emerging realities of Social Health Authority implementation.

Therefore, there is a need for contemporary, context-specific empirical evidence examining how the Initial Rollout Challenges and Structural System Design of the Social Health Authority influence health facility performance and public health service delivery within decentralized settings such as Navakholo Sub-County, Kakamega County.

Addressing this gap will contribute to strengthening evidence-based implementation of SHA and inform policy decisions aimed at accelerating Kenya's progress toward Universal Health Coverage.

Statement of the Problem

The transition from the National Hospital Insurance Fund (NHIF) to the Social Health Authority (SHA) has been accompanied by several technical challenges, including interoperability issues, data migration inaccuracies, system downtime, registration bottlenecks, real-time biometric integration difficulties, and database schema mismatches during the legacy data migration process, among other operational constraints. The introduction of the Social Health Authority (SHA) under the Social Health Insurance Act, 2023 marked a major reform in Kenya's health financing architecture, with the intention of improving equity, efficiency, financial protection, and quality of care (World Health Organization, 2022). By replacing the National Hospital Insurance Fund (NHIF), Social Health Authority (SHA) is expected to streamline resource mobilization, enhance pooling mechanisms, and ensure timely reimbursement to health facilities. However, health financing reforms often produce varied outcomes at sub-national levels, particularly within decentralized systems such as Kenya's county-based health structure (Barasa et al., 2021). Despite the scale and significance of this reform, there is limited empirical evidence on how the Social Health Authority has affected health facility operations and public health service delivery at the county level and sub-County level.

Existing studies in Kenya have largely focused on determinants of health service utilization, including cost of care, quality of services, availability of resources, patient satisfaction, and equity in service provision (Barasa et al., 2021). Other research has examined broader challenges in county health systems, such as delayed reimbursements, financial management inefficiencies, and resource constraints (Gatome-Munyua et al., 2022). While these studies provide important insights into health system performance, they do not specifically examine the institutional and operational effects of the newly established Social Health Authority on public hospitals.

Kakamega County hospitals, like other county facilities, rely significantly on government allocations and insurance reimbursements to sustain service delivery. Inadequate or delayed financing, limited infrastructure, and workforce shortages continue to affect service quality and patient outcomes (World Health Organization, 2022). Without empirical assessment of the Social Health Authority's influence on resource availability, service utilization, and quality of care at the county hospital level, policymakers and administrators lack context-specific evidence to guide resource allocation, strengthen accountability mechanisms, and refine implementation strategies.

Therefore, this study seeks to address this knowledge gap by examining the effect of the Social Health Authority on health facilities and public health service delivery in Navakholo Sub-County hospitals, Kakamega County, Kenya. The findings will contribute to evidence-based decision-making and inform ongoing health financing reforms aimed at achieving Universal Health Coverage.

Objective of the Study

To examine the effect of the Social Health Authority (SHA) on health facilities and public health service delivery in Navakholo Sub-County hospitals, Kakamega County.

Specific Objectives of the study

1. To assess the availability of healthcare resources (staff, equipment, and medicines) in public hospitals implementing the Social Health Authority in Navakholo Sub-County, Kakamega County.
2. To evaluate the quality of health service delivery in public hospitals implementing the Social Health Authority in Navakholo Sub-County, Kakamega County.
3. To examine patient access to and utilization of health services in public hospitals implementing the Social Health Authority in Navakholo Sub-County, Kakamega County.
4. To assess the institutional and implementation challenges associated with the implementation of the Social Health Authority in public hospitals in Navakholo Sub-County, Kakamega County.
5. To determine whether resource availability, quality of health service delivery, patient access and utilization, operational efficiency, and implementation challenges differ significantly across hospital levels (Level 3, Level 4, Level 5, and Level 6) in Navakholo Sub-County, Kakamega County.

Study Hypothesis

The study was guided by the following null hypothesis;

1. **H₀₁:** There is no statistically significant difference in resource availability (staff, equipment, and medicines) among Level 3, Level 4, Level 5, and Level 6 hospitals in Navakholo Sub-County, Kakamega County.
2. **H₀₂:** There is no statistically significant difference in the quality of health service delivery among Level 3, Level 4, Level 5, and Level 6 hospitals in Navakholo Sub-County, Kakamega County.
3. **H₀₃:** There is no statistically significant difference in patient access to and utilization of health services among Level 3, Level 4, Level 5, and Level 6 hospitals in Navakholo Sub-County, Kakamega County.
4. **H₀₄:** There is no statistically significant difference in institutional and implementation challenges among Level 3, Level 4, Level 5, and Level 6 hospitals in Navakholo Sub-County, Kakamega County.

LITERATURE REVIEW

This section provided a review of relevant theoretical and empirical literature. Accordingly, it is organized into two parts the theoretical framework and the empirical review, as described below.

Theoretical Framework

Health Financing Functions Framework

This study is anchored on the Health Financing Functions Framework, developed by Kutzin (2013), which conceptualizes health financing as a system comprising four interrelated functions: revenue collection, pooling of funds, purchasing of health services, and the provision of healthcare services. The framework posits that the manner in which financial resources are mobilized, managed, and allocated significantly influences the accessibility, quality, efficiency, and equity of healthcare services. It has been widely adopted in the evaluation of health financing reforms aimed at achieving Universal Health Coverage (UHC), particularly in low- and middle-income countries.

The framework is particularly relevant to Kenya's transition from the National Health Insurance Fund (NHIF) to the Social Health Authority (SHA), which seeks to improve financial risk protection, expand population coverage, strengthen strategic purchasing, and enhance equity in access to healthcare services. Under Social Health Authority, healthcare providers are expected to receive timely reimbursements based on defined benefit

packages and provider payment mechanisms, thereby improving the availability of essential resources, strengthening service delivery processes, and increasing healthcare utilization.

A central proposition of the Health Financing Functions Framework is that strategic purchasing serves as the critical link between health financing and service delivery outcomes. Strategic purchasing ensures that available resources are allocated efficiently to providers capable of delivering quality healthcare services while promoting accountability and value for money.

When reimbursement systems function effectively, health facilities are better positioned to procure essential medicines, maintain medical equipment, retain qualified personnel, and deliver uninterrupted healthcare services.

Conversely, delayed reimbursements, weak governance structures, and administrative inefficiencies may undermine service delivery despite increased financial investments in the health sector. The framework further recognizes that health financing reforms influence healthcare outcomes through multiple pathways. Predictable financing enhances resource availability by improving procurement systems, supporting infrastructure development, and ensuring adequate staffing levels. It also contributes to improved quality of care by facilitating continuous service provision, reducing stock-outs of essential commodities, and strengthening facility operations.

Furthermore, effective financing mechanisms promote equitable access to healthcare by reducing financial barriers and encouraging greater utilization of essential health services, particularly among vulnerable populations. Despite its strengths, the Health Financing Functions Framework has certain limitations.

The framework primarily emphasizes financial and institutional mechanisms while giving comparatively less attention to contextual factors such as political commitment, organizational culture, leadership capacity, technological readiness, and stakeholder acceptance, all of which may influence the implementation of health financing reforms. In addition, it assumes that improvements in financing automatically translate into better service delivery, whereas implementation challenges may prevent the realization of intended policy outcomes.

Notwithstanding these limitations, the framework provides a suitable theoretical foundation for the present study because it explains how reforms in health financing influence healthcare service delivery through resource mobilization, provider reimbursement, and strategic purchasing mechanisms. It therefore provides an appropriate lens for examining the influence of Social Health Authority implementation on resource availability, quality of healthcare service delivery, patient access and utilization, and institutional implementation challenges in public health facilities within Navakholo Sub-County, Kakamega County.

Empirical Literature Review

This section presents a review of empirical literature and empirical gaps on social health financing reforms and their implications for health facilities and public health service delivery. The review is organized according to the key variables underpinning the study, namely Health Financing and Human Resources for Health, Availability of Drugs and Medical Supplies and Accessibility, Utilization, Equity, and Healthcare Service Delivery.

Health Financing and Human Resources for Health

Health financing is a key determinant of health workforce performance because it influences healthcare workers' motivation, job satisfaction, retention, and productivity, which collectively affect the quality and continuity of healthcare service delivery (Kutzin et al., 2017). Sustainable and predictable financing enables health facilities to maintain adequate staffing, meet operational costs, and deliver uninterrupted services, whereas delayed provider payments undermine financial stability, reduce staff motivation, and disrupt healthcare delivery (Barasa et al., 2021).

International evidence indicates that effective health financing extends beyond resource mobilization to include efficient provider payment systems and sound institutional governance. Timely reimbursements strengthen

workforce retention, service continuity, and provider accountability, while strategic purchasing mechanisms, such as capitation and performance-based financing, improve efficiency and service quality only when supported by predictable payment systems and effective governance structures (Barasa et al., 2021).

Consequently, the effectiveness of health financing reforms depends not only on the availability of financial resources but also on the institutional capacity to administer provider payment systems efficiently. In Kenya, the transition from the National Hospital Insurance Fund (NHIF) to the Social Health Authority (SHA) has introduced implementation challenges that have affected health financing and workforce performance.

Reports indicate that reimbursement delays, prolonged processing of legacy National Hospital Insurance Fund claims, digital system interoperability challenges, delayed facility empanelment, registration constraints, and inadequate provider training have disrupted claims management and provider payments (Yang, 2026). Similar challenges were reported under National Hospital Insurance Fund, where delayed reimbursements and inefficient claims management weakened provider confidence and constrained service delivery (Mbau et al., 2023).

These operational challenges have exposed health facilities to financial instability, constrained routine service provision, and increased patients' out-of-pocket expenditure despite insurance coverage (Yang, 2026). Evidence further suggests that the success of provider payment reforms depends on institutional readiness, digital infrastructure, governance capacity, and administrative efficiency (WHO, 2023).

Despite these contributions, existing studies primarily examine Social Health Authority from policy, financing, or health system perspectives, with limited attention to its effects on healthcare workers within decentralized public health systems. Most Kenyan studies also focus on National Health Insurance Fund performance or national financing reforms rather than workforce outcomes under Social Health Authority (Barasa et al., 2021; Mbau et al., 2023).

In addition, available evidence is largely derived from national and county-level analyses, providing limited understanding of how implementation challenges vary across sub-county health facilities, where differences in administrative capacity, institutional preparedness, leadership, and resource availability may influence reform outcomes (Tsofa et al., 2017).

The reviewed literature therefore reveals an important empirical and contextual gap. Although previous studies consistently demonstrate that effective health financing strengthens workforce performance and healthcare service delivery, limited evidence exists on how Social Health Authority implementation affects healthcare workers within decentralized public health facilities.

Specifically, little is known about how reimbursement delays, digital system integration, and institutional capacity influence workforce motivation, retention, productivity, and service delivery at the sub-county level. This study addresses this gap by examining the effects of Social Health Authority implementation on human resource outcomes in public health facilities in Navakholo Sub-County, Kakamega County.

Availability of Drugs and Medical Supplies

The availability of essential drugs and medical supplies is a critical determinant of healthcare quality and health system performance. Evidence consistently shows that sustainable health financing supports efficient pharmaceutical procurement, inventory management, and distribution systems, thereby ensuring continuous access to essential medicines (Kabaniha et al., 2021).

Conversely, inadequate or delayed financing contributes to medicine stock-outs, procurement inefficiencies, and inequitable access to healthcare commodities (Nepomnyashchiy & Yadav, 2022). Studies from low- and middle-income countries indicate that medicine availability depends not only on financial resources but also on institutional capacity, governance, and effective supply chain management.

In Kenya, Mutua (2013), identified funding constraints and bureaucratic procurement procedures as major causes of inconsistent pharmaceutical supplies in public hospitals. Similarly, Herrera-Ramirez et al. (2026), attributed persistent medicine shortages to fragmented financing systems, weak supply chain coordination, and inadequate

governance, while Ndlovu & Mbandlwa (2026) and Yen et al. (2023), emphasized that increased financing improves medicine availability only when accompanied by transparent procurement systems, sound governance, and efficient logistics management.

The literature also identifies methodological and contextual limitations. Mbau et al. (2023), observed that studies on health system efficiency have largely focused on high and middle-income countries using quantitative approaches, with limited consideration of pharmaceutical supply chain performance in low- and middle-income settings.

Similarly, Nyawira et al. (2022), found that inadequate financing, delayed remuneration, and weak human resource management reduce overall health system efficiency, thereby affecting procurement and commodity distribution. These findings suggest that financing reforms alone are insufficient to improve medicine availability without complementary institutional and operational strengthening.

In Kenya, the Social Health Authority seeks to enhance pharmaceutical availability through strategic purchasing, pooled procurement, and improved provider reimbursement mechanisms (Ministry of Health, 2024). International evidence supports strategic purchasing as a means of improving access to essential medicines when reimbursement systems are timely, predictable, and supported by strong governance and accountability mechanisms (Cashin et al., 2017; Kutzin et al., 2017).

However, the transition from the National Hospital Insurance Fund to Social Health Authority has encountered implementation challenges, including reimbursement delays, digital system integration difficulties, and administrative bottlenecks that may undermine procurement efficiency and medicine availability (Ministry of Health, 2024). Consistent with these findings, studies on Kenya's pharmaceutical sector continue to report persistent medicine shortages, procurement inefficiencies, and inadequate financing in public health facilities (Mbau et al., 2023).

Despite substantial evidence linking health financing to pharmaceutical availability, important knowledge gaps remain. Existing studies largely examine financing reforms from national policy and health system perspectives, with limited attention to how SHA implementation influences procurement efficiency, supply chain performance, and the consistent availability of medicines within decentralized public health facilities. Furthermore, variations in governance, institutional capacity, administrative preparedness, and resource availability across devolved health systems remain insufficiently explored (Tsofa et al., 2017).

The reviewed literature therefore identifies a significant empirical and contextual gap. Although effective health financing is widely recognized as essential for strengthening pharmaceutical supply systems, there is limited evidence on whether SHA implementation has improved medicine availability, reduced stock-outs, and enhanced procurement efficiency within decentralized public health facilities. This study addresses this gap by examining the influence of Social Health Authority implementation on the availability of drugs and medical supplies in public health facilities in Navakholo Sub-County, Kakamega County.

Accessibility, Utilization, Equity, and Healthcare Service Delivery

Accessibility, utilization, and equity are fundamental indicators of health system performance and the effectiveness of health financing reforms. Evidence indicates that social health financing improves healthcare utilization by reducing financial barriers, strengthening financial risk protection, and expanding access to essential health services, particularly for vulnerable populations (Wagstaff et al., 2019). However, equitable access depends not only on financial protection but also on institutional capacity, governance, socio-cultural factors, and the responsiveness of health systems to population needs (Gaitonde, 2017).

Empirical studies demonstrate that healthcare accessibility and utilization are influenced by multiple interconnected factors. Okello (2025), found that public participation, including public hearings, public-private partnerships, and community awareness initiatives, strengthens primary healthcare implementation by enhancing transparency, accountability, and community ownership.

Similarly, Mohamed (2020), reported that healthcare utilization is shaped by previous patient experiences,

perceived quality of care, socio-cultural beliefs, and the availability of medicines and healthcare personnel. Gaitonde (2017), further conceptualize accessibility as encompassing affordability, availability, acceptability, geographical access, and the capacity of health systems to provide responsive services. Together, these studies demonstrate that improving healthcare utilization requires both financial protection and strong institutional and service delivery systems.

Evidence from social health insurance reforms also suggests that expanding financial coverage improves healthcare utilization and equity. In Kenya, Universal Health Coverage reforms increased outpatient service utilization, particularly among previously uninsured populations, while reducing financial hardship associated with seeking healthcare (Barasa et al., 2021).

Similarly, the World Bank (2023) and international studies report that social health insurance enhances health-seeking behavior, increases service utilization, and reduces catastrophic out-of-pocket expenditure (Wagstaff et al., 2020). Nevertheless, most studies focus on financial protection and aggregate utilization indicators, with limited attention to patients' experiences, including waiting times, continuity of care, service responsiveness, and perceived quality. They also provide limited analysis of how financing reforms interact with workforce capacity, governance, infrastructure, and administrative efficiency to influence equitable healthcare delivery (Wagstaff et al., 2020).

In Kenya, the Social Health Authority was established to advance Universal Health Coverage through expanded insurance coverage, strategic purchasing, and improved provider payment mechanisms (Yang, 2026). International evidence indicates that strategic purchasing enhances service accessibility when supported by efficient provider payment systems and strong governance structures (Cashin et al., 2017; WHO, 2023).

However, the transition from the National Hospital Insurance Fund to Social Health Authority has encountered implementation challenges, including reimbursement delays, digital registration constraints, system interoperability problems, and delayed facility empanelment, which may limit access to healthcare despite expanded insurance coverage (Yang, 2026). Earlier studies similarly reported that delayed provider payments and administrative inefficiencies under National Health Insurance Fund constrained equitable service delivery despite improvements in financial access (Barasa et al., 2021; Mbau et al., 2023).

Although existing literature establishes that social health financing reforms improve healthcare utilization and reduce financial barriers, important knowledge gaps remain. Most studies assess reforms from national policy or financing perspectives, with limited evidence on how Social Health Authority implementation influences accessibility, utilization, equity, and patients' experiences within decentralized public health facilities (Gaitonde, 2017; Odhiambo-Abuya & Owuor, 2025).

In addition, contextual differences in governance, institutional capacity, infrastructure, and administrative preparedness across devolved health systems remain insufficiently examined, despite their potential to influence implementation outcomes (Abdi, 2024; Kairu et al., 2023; Tsofa et al., 2017). The reviewed literature therefore reveals a significant empirical and contextual gap. While social health financing reforms have been associated with improved healthcare access and utilization, there is limited evidence on whether Social Health Authority implementation has translated these gains into equitable, timely, and patient-centered healthcare services within decentralized public health facilities (Odhiambo-Abuya & Owuor, 2025).

Furthermore, the effects of operational challenges during Social Health Authority implementation on patients' healthcare experiences and equity in access remain inadequately understood. This study addresses these gaps by examining the influence of Social Health Authority implementation on healthcare accessibility, utilization, and equity in service delivery in public health facilities in Navakholo Sub-County, Kakamega County.

Empirical Gaps

A synthesis of the reviewed literature reveals significant contextual, conceptual, methodological, and implementation gaps regarding the influence of the Social Health Authority on health facility performance and public health service delivery in Kenya. Although previous studies demonstrate that social health financing reforms improve healthcare utilization, financial protection, and progress toward Universal Health Coverage

(Barasa et al., 2021; WHO, 2023), they largely rely on national or cross-country evidence and provide limited insight into implementation within decentralized health systems (Kabaniha et al., 2021).

Similarly, while provider payment mechanisms are recognized as important determinants of workforce motivation and performance (Cashin et al., 2017; Kutzin et al., 2017; Barasa et al., 2021), existing studies primarily focus on NHIF rather than the newly established Social Health Authority, leaving limited evidence on workforce outcomes under the new financing framework.

The literature further indicates insufficient empirical evidence on the effects of Social Health Authority reforms on the availability of drugs and medical supplies, despite evidence linking sustainable financing and effective governance to improved pharmaceutical supply systems (Ndlovu & Mbandlwa, 2026; Mutua, 2013). Likewise, although studies associate infrastructure, equipment, and quality of care with improved health system performance (Gatome-Munyua et al., 2022; Kairu et al., 2023), they rarely examine these outcomes within the context of Social Health Authority implementation.

Similarly, existing research demonstrates that health insurance expansion improves healthcare accessibility, utilization, and equity (Barasa et al., 2021; Wagstaff et al., 2020), yet provides limited understanding of how contextual factors, including governance, public participation, and service quality, interact with Social Health Authority to influence patient experiences and equitable healthcare access in devolved settings (Gaitonde, 2017).

Methodologically, much of the available evidence is based on cross-sectional or policy-oriented studies that inadequately capture implementation processes and facility-level realities within decentralized health systems (Mbau et al., 2023). Consequently, there remains limited empirical evidence on how the initial rollout challenges and structural system design of the Social Health Authority influence human resources, pharmaceutical availability, infrastructure, accessibility, utilization, equity, quality of care, and overall public health service delivery at the sub-county level.

This study addresses these gaps by providing context-specific evidence from public health facilities in Navakholo Sub-County, Kakamega County, thereby contributing to the empirical literature on health financing reforms and informing the implementation of the Social Health Authority in Kenya.

Conceptual Framework

The current study was guided by the following conceptual framework, which explains the interrelationship between the variables. A conceptual framework is a scheme of variables a researcher operationalizes in order to achieve the set objectives (Oso & Onen 2005).

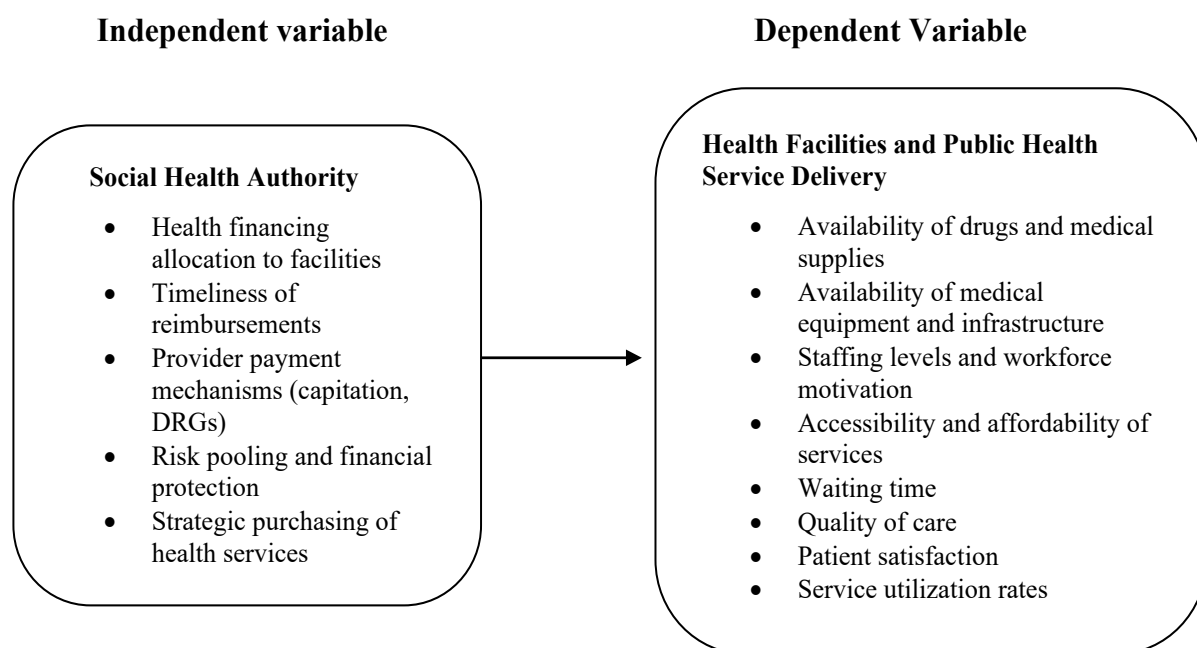


Figure 1.1: Conceptual Framework

RESEARCH METHODOLOGY

This section described the study's research design, target population, sample size, sampling techniques, data collection instruments, data analysis procedures, diagnostic tests of assumptions, and the ethical considerations that guided the research.

Research Design

The study adopted a descriptive survey research design using a mixed-methods approach that integrated quantitative and qualitative techniques to examine the effect of the Social Health Authority on Health Facilities and Public Health Service Delivery in Navakholo Sub- County hospitals, Kakamega County. The descriptive survey design was appropriate because it enabled the researcher to collect data from a large population and describe existing conditions regarding the Social Health Authority implementation and its influence on service delivery outcomes. The mixed-methods approach allowed quantitative data to establish statistical relationships while qualitative data provided contextual explanations to enrich interpretation of findings.

Target Population

The target population comprised 1,938 respondents drawn from Navakholo Sub- County hospital, Kakamega County, Kenya. The population included patients, hospital administrators, health workers, and relevant staff involved in service delivery and the Social Health Authority implementation.

Sample Size and Sampling Techniques

A sample of 485 respondents was selected using the Mugenda and Mugenda (1999) sample size determination formula. The study employed stratified sampling to categorize respondents into relevant sub-groups patients, administrators, clinicians, and support staff. Systematic sampling was utilized to select respondents within strata and Purposive sampling to select key informants with knowledge of the Social Health Authority implementation. This combination ensured representativeness and inclusion of information-rich participants.

Data Collection Instruments

Primary data were collected using a semi-structured questionnaire consisting of closed-ended questions measured on a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree) and Open-ended questions to capture qualitative insights. The questionnaire was administered using the drop-and-pick-later method, which allowed respondents adequate time to provide thoughtful responses. The instrument was selected because it allows collection of data from large populations simultaneously, ensures standardized responses, is cost-effective and easy to administer and lastly it encourages honest responses due to respondent privacy.

Data Analysis

Data were analyzed using SPSS version 26. Descriptive statistics including means, standard deviations, frequencies and percentages were used to summarize demographic characteristics and variable distributions. Inferential statistics were used to determine whether the Social Health Authority, treated as a continuous independent variable, had a statistically significant effect on health facility performance and public health service delivery in Kakamega County hospitals. Because the study examined five related dependent variables simultaneously, a multivariate statistical technique was appropriate.

The study employed one way Multivariate Analysis of Variance (MANOVA) to test the effect of the Social Health Authority on the five dependent variables simultaneously. MANOVA was appropriate because the study had one independent variable the Social Health Authority and five related dependent variables (Resource Availability, Quality of Service Delivery, Patient Access & Utilization, Operational Efficiency, and Institutional & Implementation Challenges).

The five outcomes are conceptually and empirically related since improved facility performance is expected to influence the quality and effectiveness of public health service delivery. Analyzing them together provided a more comprehensive understanding of the Social Health Authority's overall impact on service outcomes.

MANOVA was preferred over conducting separate ANOVAs because it controls Type I error inflation that would arise from conducting multiple ANOVAs independently. It also accounts for the correlation between the dependent variables. Lastly it determines whether Social Health Authority has a combined multivariate effect on health service outcomes.

The multivariate test statistics (such as Wilks' Lambda, Pillai's Trace, Hotelling's Trace, or Roy's Largest Root) were examined to determine the overall significance of the model. A significance level of $p < 0.05$ was adopted. If the MANOVA results were statistically significant ($p < 0.05$), the study proceeded with separate univariate ANOVAs as post-hoc analyses to determine which dependent variable(s) contributed to the significant multivariate effect. This step helped establish whether Social Health Authority significantly influenced health facility performance, Public health service delivery, or both variables independently.

To determine the strength and practical significance of the relationships, effect sizes (e.g., Partial Eta Squared) were reported. Partial Eta Squared values were interpreted to assess the magnitude of the Social Health Authority's influence on each dependent variable (small, medium, or large effect), beyond mere statistical significance. Overall, the use of MANOVA enhanced the robustness of the inferential analysis by providing a holistic assessment of the Social Health Authority's impact on both operational performance and public health service delivery outcomes.

Qualitative data from open-ended questions were analyzed using thematic analysis. Responses were coded according to emerging themes aligned with the study objectives and presented in narrative form to support quantitative findings.

Ethical Considerations

The study observed ethical research standards including approval from NACOSTI, informed consent from respondent's, Voluntary participation, Confidentiality and anonymity and Use of data strictly for academic purposes.

Diagnostic Tests of Assumptions

Before conducting MANOVA, it is essential to verify that the dataset satisfies the statistical assumptions that underpin the validity of multivariate analyses. Failure to meet these assumptions may result in biased estimates, inflated Type I error rates, or misleading conclusions (Tabachnick and Fidell, 2019). To verify the underlying statistical assumptions, diagnostic tests were carried out, including Box's M Test for homogeneity of variance-covariance matrices, multicollinearity assessment, and Levene's test for equality of variances.

FINDINGS AND DISCUSSIONS

Response Rate

A total of 485 questionnaires were distributed using stratified, systematic, and purposive sampling techniques across Navakholo Sub-County Hospital. Of these, 401 were properly completed and returned, yielding a response rate of 82.6%. This exceeds the 70% minimum threshold recommended by Mugenda and Mugenda (1999), thereby supporting the validity and generalizability of the study findings.

Participants' Demographics

Table 1 presents the demographic characteristics of the respondents. The largest age group was 21–25 years (19.7%, $n = 79$), followed by respondents aged 31–35 years (18.0%, $n = 72$). Participants aged 18–20 years and 35–40 years each accounted for 17.7% ($n = 71$), while those aged over 40 years constituted the smallest

proportion (13.7%, $n = 55$). Regarding marital status, single respondents formed the largest group (28.4%, $n = 114$), followed by widowed respondents (25.9%, $n = 104$). Married and divorced participants represented 22.9% ($n = 92$) and 22.7% ($n = 91$) of the sample, respectively.

The sample was almost equally distributed by gender, with males accounting for 50.1% ($n = 201$) and females 49.9% ($n = 200$). In terms of educational attainment, postgraduate and secondary education levels each represented 21.9% ($n = 88$) of respondents. University graduates accounted for 20.0% ($n = 80$), while those with tertiary and primary education represented 18.5% ($n = 74$) and 17.7% ($n = 71$), respectively.

For employment status, part-time employees constituted the largest proportion of respondents (23.4%, $n = 94$), followed by those in other employment categories (21.9%, $n = 88$) and permanent employment (20.9%, $n = 84$). Contract and temporary employees accounted for 17.2% ($n = 69$) and 16.5% ($n = 66$), respectively. Regarding hospital level, the highest proportion of respondents worked in Level 5 hospitals (27.4%, $n = 110$), followed by Level 6 hospitals (25.4%, $n = 102$). Respondents from Level 4 and Level 3 hospitals represented 24.2% ($n = 97$) and 22.9% ($n = 92$) of the sample, respectively.

Table 1: Participants' Demographic Data

Variable	Category	n	%
Age (years)	18–20	71	17.7
	21–25	79	19.7
	26–30	53	13.2
	31–35	72	18.0
	36–40	71	17.7
	>40	55	13.7
Marital Status	Single	114	28.4
	Married	92	22.9
	Divorced	91	22.7
	Widowed	104	25.9
Gender	Male	201	50.1
	Female	200	49.9
Education Level	Primary	71	17.7
	Secondary	88	21.9
	Tertiary	74	18.5
	University	80	20.0
	Postgraduate	88	21.9
Employment Status	Permanent	84	20.9
	Temporary	66	16.5
	Part-time	94	23.4
	Contract	69	17.2
	Other	88	21.9
Hospital Level	Level 3	92	22.9
	Level 4	97	24.2

	Level 5	110	27.4
	Level 6	102	25.4

Implementation of the Social Health Authority (SHA) ADD REFERENCES

Table 2 presents the descriptive statistics for the Social Health Authority (SHA) attributes. Reimbursement mechanisms recorded the highest mean score ($M = 2.50$, $SD = 0.51$), indicating that respondents generally had moderately positive perceptions regarding the effectiveness of reimbursement processes within the healthcare system. The scores ranged from 1.0 to 4.0, suggesting variation in respondents' experiences across healthcare facilities.

Strategic purchasing practices had a mean score of 2.34 ($SD = 0.56$), indicating moderate implementation of strategic purchasing approaches. The relatively low standard deviation suggests that respondents held fairly similar views regarding the extent to which these practices were applied. Funding adequacy recorded a mean score of 2.25 ($SD = 0.46$), suggesting that respondents perceived available funding as only moderately adequate for supporting healthcare services. The narrow spread of responses indicates a relatively consistent assessment among participants.

Financial accountability systems had the lowest mean score ($M = 2.11$, $SD = 0.61$), implying comparatively weaker perceptions of financial accountability mechanisms. The higher standard deviation relative to the other variables indicates greater variability in respondents' views concerning accountability practices across facilities.

Table 2: Descriptive Statistics for Social Health Authority; Implementation (N = 401)

Variable	N	Minimum	Maximum	M	SD
Reimbursement Mechanisms	401	1.0	4.0	2.50	0.51
Funding Adequacy	401	1.3	3.8	2.25	0.46
Strategic Purchasing Practices	401	1.3	4.0	2.34	0.56
Financial Accountability Systems	401	1.0	4.0	2.11	0.61

Note. M = Mean; SD = Standard Deviation. Scores were measured on a five-point Likert scale, with higher scores indicating more positive perceptions of the respective SHA implementation.

Impacts of the Social Health Authority on the quality of health services offered in Navakholo Sub-County, Kakamega County.

Table 3 presents the descriptive statistics for the healthcare service delivery outcome variables. Patient access and utilization recorded the highest mean score ($M = 2.25$, $SD = 0.46$), suggesting that respondents generally perceived moderate improvements in patients' ability to access and utilize healthcare services. The scores ranged from 1.2 to 4.2, indicating some variation in respondents' experiences.

Resource availability had a mean score of 2.16 ($SD = 0.45$), indicating moderately positive perceptions regarding the availability of healthcare resources such as personnel, equipment, and medical supplies. The relatively low standard deviation suggests that respondents had similar views on resource availability across healthcare facilities. Quality of health service delivery recorded a mean score of 2.15 ($SD = 0.47$), reflecting moderate perceptions of the quality of services provided.

The results indicated that while respondents generally viewed service quality positively, there remains room for improvement. Operational efficiency had the lowest mean score among the service delivery outcomes ($M = 2.09$, $SD = 0.62$). The relatively higher standard deviation indicates greater variation in respondents' perceptions of efficiency across healthcare facilities. This suggests that operational processes and service management practices may differ considerably between institutions.

Table 3

Variable	N	Minimum	Maximum	M	SD
Resource Availability	401	1.2	3.8	2.16	0.45
Quality of Health Service Delivery	401	1.0	3.8	2.15	0.47
Patient Access and Utilization	401	1.2	4.2	2.25	0.46
Operational Efficiency	401	1.0	4.0	2.09	0.62
SHA Implementation Challenges	401	1.2	3.8	2.68	0.47

Note. M = Mean; SD = Standard Deviation. Higher scores indicate more favorable perceptions of healthcare service delivery outcomes.

SHA Implementation Challenges

Table 4 presents respondents' perceptions regarding implementation challenges associated with the Social Health Authority (SHA). Most respondents agreed that reimbursement delays affect hospital service delivery, with 42.8% (n = 172) agreeing and 32.1% (n = 129) strongly agreeing. Only 5.7% (n = 23) disagreed or strongly agreed with the statement. Similarly, a majority of respondents indicated that hospitals lack adequate administrative capacity to implement SHA policies, as 44.3% (n = 178) disagreed and 26.4% (n = 106) strongly disagreed that sufficient administrative capacity exists. Only 10.2% (n = 41) agreed or strongly agreed.

Regarding coordination between the Social Health Authority and county hospitals, 58.7% (n = 236) of respondents disagreed or strongly disagreed that coordination is effective, while 32.6% (n = 131) remained neutral. Only 8.5% (n = 34) agreed that coordination was effective. Most respondents also disagreed that the Social Health Authority policy guidelines are clear and consistent. These observations are consistent with the findings of Tosun & Lang (2017) and Abdi (2024), who argued that the allocation and delegation of responsibilities across the two levels of government, together with the unclear distribution of associated costs, reflect challenges that extend beyond purely technical issues.

Specifically, 36.6% (n = 147) disagreed and 31.3% (n = 126) strongly disagreed, compared to only 10.4% (n = 42) who agreed or strongly agreed. Finally, respondents generally agreed that implementation challenges weaken the impact of SHA on service delivery. A combined 68.2% (n = 274) agreed or strongly agreed with this statement, while 11.2% (n = 45) disagreed or strongly disagreed.

The findings align with (Tosun and Lang (2017) and Abdi (2024), who found that weak coordination between national and local governments illustrates the "implementation gap" characteristic of decentralized governance systems.

Table 4: Respondents' Perceptions of Implementation Challenges Affecting SHA Implementation (N = 401)

Statement	SD n (%)	D n (%)	N n (%)	A n (%)	SA n (%)
Reimbursement delays affect hospital service delivery	129 (32.1)	172 (42.8)	77 (19.2)	23 (5.6)	45.2 (11.2)
The hospital has adequate administrative capacity to implement SHA policies	106 (26.4)	178 (44.3)	76 (18.9)	24 (6.0)	17 (4.2)
Coordination between SHA and county hospitals is effective	75 (18.7)	161 (40.0)	131 (32.6)	34 (8.5)	20 (0.0)

Policy guidelines from SHA are clear and consistent	126 (31.3)	147 (36.6)	86 (21.4)	29 (7.2)	13 (3.2)
Implementation challenges weaken the impact of SHA on service delivery	115 (28.6)	159 (39.6)	82 (20.4)	48 (11.9)	12 (5.05)

Note. SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

MANOVA Analysis

A one-way MANOVA was conducted to determine whether healthcare outcomes differed significantly across hospital levels (Level 3, Level 4, Level 5, and Level 6) (see Table 5). Preliminary assumption tests indicated that the data met the required conditions for MANOVA. Box's Test of Equality of Covariance Matrices was not significant ($p = .593$), suggesting that the covariance matrices were equal across groups. Similarly, Levene's tests for all dependent variables were non-significant ($p > .05$), indicating homogeneity of variances. The multivariate test using Pillai's Trace indicated no statistically significant effect of Hospital Level on the combined dependent variables (Pillai's Trace = .030, $F = .797$, $p = .683$). This suggests that differences in hospital levels did not significantly influence the combined outcome variables. Multicollinearity was assessed using Collinearity diagnostics based on eigenvalues, condition indices, and variance proportions. The results indicated that the highest condition index was 21.592, which suggests moderate but not severe Multicollinearity. Examination of variance proportions showed that no two or more predictor variables had high variance proportions (≥ 0.50) on the same dimension, indicating that Multicollinearity was not severe enough to distort the regression estimates. Therefore, the assumption of no serious Multicollinearity was considered satisfied.

The multivariate results showed that hospital level did not have a statistically significant effect on the combined dependent variables. Using Pillai's Trace, there was no significant difference across hospital levels, $V = .030$, $F(15, 1185) = 0.797$, $p = .683$, partial $\eta^2 = .010$. All other multivariate tests (Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root) also confirmed the same conclusion.

Although slight differences were observed in mean scores across hospital levels, these differences were minimal. For example, patient access and utilization was slightly higher in Level 4 hospitals ($M = 2.33$), while operational efficiency was slightly higher in Level 5 hospitals ($M = 2.14$). Institutional and implementation challenges were relatively similar across all hospital levels.

Table 5 MANOVA Results for Hospital Level Differences in Healthcare Outcomes (N = 401)

Descriptive Statistics by Hospital Level

Outcome	Level 3	Level 4	Level 5	Level 6
Resource Availability	2.12	2.16	2.18	2.18
Quality of Service Delivery	2.13	2.19	2.10	2.17
Patient Access & Utilization	2.29	2.33	2.19	2.19
Operational Efficiency	2.06	2.11	2.14	2.05
Institutional Challenges	2.67	2.70	2.71	2.66

Table 6 Levene's Test of Equality of Error Variances

Outcome Variable	F	df1	df2	p
Resource Availability	0.663	3	397	.575
Quality of Health Service Delivery	0.325	3	397	.807

Patient Access & Utilization	2.415	3	397	.066
Operational Efficiency	0.136	3	397	.938
Institutional & Implementation Challenges	0.293	3	397	.831

Multivariate Test of Hospital Level

Test	Value	F	Hypothesis df	Error df	p	Partial η^2
Pillai's Trace	0.030	0.797	15	1185	.683	.010
Wilks' Lambda	0.970	0.795	15	1085.30	.684	.010
Hotelling's Trace	0.030	0.794	15	1175	.685	.010
Roy's Largest Root	0.021	1.639	5	395	.149	.020

Hypothesis Testing Results

H₀₁: There is no statistically significant difference in resource availability across hospital levels. The Univariate ANOVA showed no significant difference in resource availability across hospital levels ($F = 0.370$, $p = .775$). Therefore, H₀₁ was not rejected.

H₀₂: There is no statistically significant difference in quality of health service delivery across hospital levels. The results indicated no significant difference ($F = 0.627$, $p = .598$). Therefore, H₀₂ was not rejected.

H₀₃: There is no statistically significant difference in patient access and utilization across hospital levels. The results showed no statistically significant difference ($F = 2.247$, $p = .082$). Therefore, H₀₃ was not rejected.

H₀₄: There is no statistically significant difference in institutional and implementation challenges across hospital levels. The analysis revealed no significant difference ($F = 0.201$, $p = .896$). Therefore, H₀₄ was not rejected.

Qualitative Analysis

Severe shortage of essential medicines, supplies, and equipment

A dominant and repeated concern was the persistent lack of essential drugs, laboratory reagents, and basic medical supplies. Respondents consistently described frequent stock-outs, expired drugs, and inadequate equipment, suggesting a strained supply chain and weakened service readiness.

Indeed, during the interviews, participants consistently reported persistent shortages of essential medicines and medical supplies in public health facilities. Several respondents noted that drug stock-outs were frequent and that many medicines were unavailable on most days. Others indicated that laboratory reagents were often depleted, while basic consumables required for routine service delivery were regularly missing.

Some participants further observed that poor logistics and inventory management contributed to the expiry of drugs before they could be utilized. In addition, respondents reported that health facilities had received little or no new medical equipment, which they believed limited the capacity of facilities to provide effective healthcare services. These experiences were supported by Herrera-Ramirez *et al.* (2026) who also observed poor logistics and inventory management contributed to the expiry of drugs before they could be utilized.

Declining quality of healthcare services and patient experience

Participants widely reported a deterioration in service quality since the Social Health Authority implementation. The data show concerns about poor clinical care, overcrowding, and reduced patient satisfaction.

Indeed, during the interviews, participants expressed concerns about the declining quality of healthcare services following the implementation of the Social Health Authority (SHA). Many respondents perceived that the quality of care remained poor, with some indicating that service standards had deteriorated compared to those experienced under the National Hospital Insurance Fund (NHIF).

Others observed a marked decline in the overall delivery of healthcare services, describing them as having worsened considerably (Herrera-Ramirez et al., 2026). These observations are consistent with the findings of Gatome-Munyua et al. (2022), who reported bureaucratic inefficiencies in the newly established claims processing system and complex verification procedures.

Reduced patient utilization and growing shift to private healthcare

A strong pattern shows declining use of public health services, with patient's increasingly avoiding the Social Health Authority facilities and seeking alternatives in private hospitals or self-care.

Indeed, during the interviews, participants consistently reported a decline in the utilization of public health services following the implementation of the Social Health Authority (SHA). Respondents observed reductions in outpatient attendance and hospital admissions, attributing these trends to declining confidence in public health facilities.

Several participants noted that patients increasingly preferred private healthcare providers, while others indicated that many community members avoided public hospitals altogether. Participants also explained that delayed reimbursements to health facilities often resulted in patients purchasing medicines out of pocket, creating "silent copayments" that undermine the principles of Universal Health Coverage (UHC).

These observations are consistent with the findings of Gatome-Munyua et al. (2022), who reported that although the Social Health Authority (SHA) was designed to strategically purchase services from both public and private healthcare providers, its initial implementation was hindered by difficulties in contracting and reimbursement.

The authors highlighted prolonged delays in settling claims submitted by public and private facilities, largely attributed to bureaucratic inefficiencies in the newly established claims processing system and complex verification procedures.

Weak staffing levels, poor morale, and overburdened health workers

Respondents consistently highlighted human resource shortages, burnout, and poor working conditions as major constraints affecting service delivery.

Indeed, during the interviews, participants consistently highlighted persistent human resource challenges following the rollout of the Social Health Authority (SHA). Respondents reported that there had been no corresponding increase in staffing despite growing service demands, leaving healthcare workers, particularly nurses, overworked and inadequately supported.

Many participants observed that staff were overwhelmed by their workload, while some noted that doctors were increasingly leaving public facilities for private practice. Participants further described staff morale as generally low, attributing it to excessive workloads, inadequate remuneration, and limited institutional support.

These findings are consistent with those of Mbau et al. (2020), who identified limited awareness and understanding of enrollment procedures and benefit packages among workers in the informal sector, widespread skepticism regarding the system's ability to provide meaningful benefits, and a mismatch between fixed contribution requirements and the irregular, unpredictable incomes typical of informal employment. Overall, the findings suggest that human resource constraints continue to pose a significant challenge to the effective delivery of healthcare services.

Persistent understaffing, heavy workloads, inadequate support, and challenges in retaining skilled health professionals contribute to staff burnout and low morale, ultimately reducing service efficiency, compromising

the quality of patient care, and limiting the capacity of public health facilities to respond effectively to increasing healthcare needs.

System inefficiencies, weak governance, and delayed reimbursements

A major structural challenge identified was inefficiency in financing, claims processing, coordination, and governance systems. Participants described bureaucratic delays, unclear procedures, and poor financial flows.

Indeed, during the interviews, participants identified significant weaknesses in the financing and governance systems underpinning the Social Health Authority (SHA). Respondents reported that provider reimbursements were often delayed for several months, leaving hospitals with mounting debts and creating financial instability that disrupted service delivery.

Participants also expressed concerns about unclear pre-authorization procedures, cumbersome claims processing, and the absence of effective accountability mechanisms, all of which contributed to inefficiencies in the administration of healthcare services. The findings corroborate the observations of Kairu et al. (2021) and Herrera-Ramirez et al. (2026), who found that ongoing coordination failures between the national and county governments were manifested through ambiguous functional responsibilities, delayed transfer of funds, and poorly integrated information systems.

DISCUSSION

The findings of this study indicate that respondents rated reimbursement mechanisms most positively, followed by strategic purchasing practices and funding adequacy, while financial accountability systems received the lowest ratings. This pattern suggests that although the Social Health Authority financing architecture is generally perceived to be functional in terms of fund flow and purchasing arrangements, weaknesses remain in oversight and accountability structures.

These results are consistent with Health Systems Theory, which emphasizes that financing reforms only improve system performance when governance and accountability mechanisms are strong World Health Organization (WHO, 2023).

Empirically, these findings align with Barasa et al. (2021), who observed that while insurance-based financing improves financial access and utilization, weak accountability and delayed reimbursement mechanisms often undermine health system efficiency. The relatively positive perception of reimbursement mechanisms in this study contrasts with earlier National Hospital Insurance Fund based evidence of persistent delays Mbau et al. (2023), and Gatome-Munyua et al. (2022), suggesting that the Social Health Authority may be perceived as an improvement in financial flow predictability, though accountability gaps remain a critical concern.

The study further found that respondents expressed generally negative perceptions regarding administrative capacity, coordination mechanisms, and clarity of policy guidelines, while neutrality was common regarding the Social Health Authority coordination with county hospitals. This reflects uncertainty and inconsistent implementation experiences across facilities. These findings are strongly supported by Cashin et al. (2017) and Kairu et al. (2021), who argued that provider payment reforms only translate into improved service delivery when administrative systems are well aligned and clearly communicated.

Similarly, Nyawira et al. (2022), highlighted that weak administrative systems in devolved Kenyan health structures contribute to inefficiencies in financing reforms.

In the context of the Social Health Authority, these results suggest that while the structural design of the system is sound in principle, implementation bottlenecks particularly at the administrative and coordination levels limit its effectiveness at the facility level.

The finding that hospital level does not significantly influence resource availability, service quality, patient access, or operational efficiency suggests a relatively uniform experience of SHA implementation across

different facility tiers. This implies that systemic factors associated with the Social Health Authority may be overriding facility-level structural differences, leading to homogeneous outcomes across hospitals.

This observation is consistent with WHO (2023), which notes that financing reforms can standardize service delivery conditions when centrally coordinated purchasing mechanisms are applied. However, it also contrasts with earlier studies that show significant variation in service delivery outcomes across facility levels due to resource disparities (Barasa et al., 2017).

The lack of significant variation in this study may therefore indicate either early-stage uniform constraints in Social Health Authority implementation or widespread systemic challenges affecting all facility levels equally as highlighted by (Gatome-Munyua et al., 2022).

The qualitative findings provide deeper insight into the quantitative results, revealing widespread concerns about shortages of medicines, equipment, and staff, as well as declining service quality and increased patient dissatisfaction. These findings are strongly supported by Gatome-Munyua et al., 2022 and Mbau et al., 2018...who identified financial and procurement inefficiencies as major drivers of drug stock-outs in Kenyan hospitals, and by Herrera-Ramirez *et al.* (2026), who highlight that weak financing and supply chain systems in LMICs lead to persistent medicine shortages.

The reported shift of patients toward private facilities due to reduced trust in public health services aligns with Mohamed (2020), who found that perceived quality of care and availability of supplies significantly influence healthcare utilization behavior. Additionally, Barasa et al. (2021) similarly noted that insurance reforms improve utilization only when supply-side readiness is adequate, reinforcing the finding that demand shifts away from public facilities when service quality deteriorates.

Finally, the study identifies key implementation challenges including delayed reimbursements, weak coordination, unclear guidelines, and systemic inefficiencies. These findings strongly resonate with Barasa et al. (2021), Gatome-Munyua et al. (2022), and Mbau et al. (2023), who emphasize that provider payment systems require timely reimbursements and strong institutional alignment to function effectively. They also support Nyawira et al. (2022), who highlight that administrative inefficiencies and weak governance structures in Kenyan devolved systems undermine the effectiveness of health financing reforms.

Overall, the findings suggest that while the Social Health Authority represents a structurally progressive reform aligned with global UHC principles (WHO, 2023), its early rollout in Navakholo Sub-County is constrained by implementation challenges that limit its impact on service delivery outcomes. This underscores the gap between policy intent and facility-level realities, reinforcing the need for strengthened administrative capacity, improved coordination, and enhanced accountability mechanisms to realize the intended benefits of the Social Health Authority.

The multivariate analysis revealed no statistically significant differences in healthcare service delivery across the hospital levels included in the study. These findings suggest that the implementation of the Social Health Authority has, thus far, produced relatively similar experiences across Level 3, Level 4, and Level 5 public health facilities within Navakholo Sub-County. Rather than indicating that SHA implementation has had no influence on service delivery, the non-significant MANOVA results imply that observed variations among hospital levels were insufficient to reach statistical significance.

This finding may reflect the standardized implementation approach adopted by the Ministry of Health, whereby similar operational guidelines, reimbursement procedures, and administrative requirements were applied across all public health facilities irrespective of level. Consequently, implementation experiences may have been broadly comparable across the facilities studied.

The apparent inconsistency between the quantitative and qualitative findings regarding reimbursement delays may be attributed to differences in participant perspectives. The survey included both healthcare workers and patients, whose responses primarily reflected their direct experiences with healthcare services. As a result, many

respondents may not have been sufficiently exposed to provider reimbursement processes to perceive their effects on service delivery.

In contrast, qualitative responses were provided by healthcare workers with greater familiarity with administrative and financial operations, enabling them to identify reimbursement delays as a significant implementation challenge. The divergence therefore reflects differences in participants' roles and levels of involvement in Social Health Authority implementation rather than contradictory findings.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that the successful implementation and sustainability of the Social Health Authority (SHA) require an integrated approach that goes beyond expanding health insurance coverage to strengthening financial management, digital health systems, governance, legal frameworks, stakeholder participation, institutional capacity, and continuous monitoring and evaluation.

Achieving Universal Health Coverage (UHC) depends on coordinated national and county government efforts, evidence-based policymaking, and adaptive implementation strategies that promote efficiency, equity, accountability, and quality healthcare. These findings provide practical, managerial, policy, and theoretical insights that can guide Kenya and other low- and middle-income countries in designing resilient, inclusive, and sustainable health financing systems (Barasa et al., 2017; Gatome-Munyua et al., 2022; Kairu et al., 2023).

Recommendations

Recommendation for Practice

Enhancing the effectiveness of the Social Health Authority (SHA) requires integrated reforms that address structural, financial, technological, and governance challenges. Priority should be given to strengthening reimbursement systems, digital health infrastructure, inclusive enrolment, stakeholder engagement, legal preparedness, and continuous monitoring and evaluation, while improving coordination among national and county governments and building institutional capacity.

These measures will support efficient, equitable, and sustainable implementation of Social Health Authority and provide practical guidance for Kenya and other low- and middle-income countries pursuing Universal Health Coverage (UHC) through health financing reforms (Nyawira et al., 2023).

Recommendation for Future Studies

The study examined the influence of financial fiscal policy on women's economic empowerment in Kakamega County and recommends further research on other factors influencing women's empowerment beyond fiscal policies. Future studies should include multiple counties or employ longitudinal designs to enhance external validity and assess Social Health Authority's long-term effects.

IMPLICATIONS

Policy Implications

The findings suggest that the successful implementation and sustainability of the Social Health Authority (SHA) require comprehensive policy reforms that strengthen financial management, digital health infrastructure, inclusive enrolment, governance, stakeholder participation, legal preparedness, and continuous monitoring and evaluation.

The study emphasizes the need for coordinated national and county government action, institutional capacity building, and evidence-based policymaking to enhance efficiency, accountability, equity, and service quality. These policy priorities provide valuable guidance for Kenya and other low- and middle-income countries seeking

to strengthen health financing systems and accelerate progress towards Universal Health Coverage (UHC) (Gatome-Munyua et al., 2022; Kairu et al., 2023).

Managerial Implications

The findings indicate that the effective implementation of the Social Health Authority (SHA) depends on strong managerial leadership, efficient financial and digital systems, stakeholder collaboration, organizational capacity, and continuous performance improvement. Managers should strengthen financial accountability, enhance digital transformation, promote client-centered service delivery, institutionalize monitoring and evaluation, invest in staff capacity building, foster coordination across national and county health systems, and adopt strategic change management practices.

These managerial actions will improve operational efficiency, service quality, organizational resilience, and public confidence, thereby supporting the successful implementation of Social Health Authority (SHA) and accelerating progress towards Universal Health Coverage (UHC) in Kenya and other low- and middle-income countries (Kairu et al., 2021).

THEORETICAL IMPLICATIONS

The study extends Health Systems Theory by demonstrating that the successful implementation and sustainability of the Social Health Authority (SHA) depend on the integration of financing, governance, digital health infrastructure, institutional capacity, stakeholder participation, and continuous learning. It reinforces Health Systems Theory by emphasizing that health system performance is driven by the interaction of interconnected system components.

REFERENCES

1. Abdi, A. A. (2024). *Governance of Health Systems and Service Delivery in National Referral Hospitals in Kenya* [PhD Thesis]. JKUAT-COHRED.
2. Barasa, E., Mathauer, I., Kabia, E., Ezumah, N., Mbau, R., Honda, A., Dkhimi, F., Onwujekwe, O., Phuong, H. T., & Hanson, K. (2021). How do healthcare providers respond to multiple funding flows? A conceptual framework and options to align them. *Health Policy and Planning*, 36(6), 861–868.
3. Barasa, E., Musiega, A., Hanson, K., Nyawira, L., Mulwa, A., Molyneux, S., Maina, I., Tsofa, B., Normand, C., & Jemutai, J. (2021). Level and determinants of county health system technical efficiency in Kenya: Two stage data envelopment analysis. *Cost Effectiveness and Resource Allocation*, 19(1), 78.
4. Barasa, E. W., Manyara, A. M., Molyneux, S., & Tsofa, B. (2017). Recentralization within decentralization: County hospital autonomy under devolution in Kenya. *PloS One*, 12(8), e0182440.
5. Cashin, C., Bloom, D., Sparkes, S., Barroy, H., Kutzin, J., O'Dougherty, S., & Organization, W. H. (2017). *Aligning public financial management and health financing: Sustaining progress toward universal health coverage*. World Health Organization.
6. Gaitonde, R. (2017). The Role of the Health System. In *Health Inequities in India: A Synthesis of Recent Evidence* (pp. 189–220). Springer.
7. Gatome-Munyua, A., Sieleunou, I., Sory, O., & Cashin, C. (2022). Why is strategic purchasing critical for universal health coverage in sub-Saharan Africa? *Health Systems & Reform*, 8(2), e2051795.
8. Kabaniha, G. A., Ataguba, J. E.-O., & Kutzin, J. (2021). Global healthcare financing: Economics, methods, and strategies for sustainable healthcare. In *Handbook of global health* (pp. 1569–1609). Springer.
9. Kagwanja, N., Oyando, R., Hassan, S., Diallo, B. A., Badjie, J., Lucinde, R., Mumba, N., Kinyanjui, S., Perel, P., & Etyang, A. (2026). Understanding what factors influence community health worker involvement in hypertension service delivery in Kenya: Applying a community health system lens. *Health Policy and Planning*, 41(4), 627–639.
10. Kairu, A., Mulupi, S., Mao, W., Bharali, I., Kokwaro, G., McDade, K. K., & Yamey, G. (2023). *Lessons on strategic purchasing of health services in Kenya*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4406108

11. Kariuki, N. W., & Koori, J. (2025). *Health Insurance Schemes Financing and the Healthcare Insurance Uptake in Kenya* [PhD Thesis, Kenyatta University]. <https://ir-library.ku.ac.ke/server/api/core/bitstreams/37ba7085-d73b-4731->
12. Kazungu, J. (2025). *Whom to buy from: Examining NHIF members' preferences and the inequities in the distribution of and access to NHIF-contracted facilities in Kenya* [PhD Thesis]. The Open University.
13. Kutzin, J. (2013). Health financing for universal coverage and health system performance: Concepts and implications for policy. *Bulletin of the World Health Organization*, 91, 602–611.
14. Kutzin, J., Witter, S., Jowett, M., Bayarsaikhan, D., & Organization, W. H. (2017). *Developing a national health financing strategy: A reference guide*. World Health Organization. <https://iris.who.int/bitstream/handle/10665/254757/9789241512107->
15. Mbau, R., Musiega, A., Nyawira, L., Tsofa, B., Mulwa, A., Molyneux, S., Maina, I., Jemutai, J., Normand, C., & Hanson, K. (2023). Analysing the efficiency of health systems: A systematic review of the literature. *Applied Health Economics and Health Policy*, 21(2), 205–224.
16. Mohamed, H. (2020). *Factors Associated With Health Seeking and Utilization Behaviour among the Somali Community in Garissa County, Kenya* [PhD Thesis]. JKUAT-COHES.
17. Mutua, D. M. (2013). Factors Affecting Consistency in Supply of Pharmaceutical Products in Government Hospitals in Kenya: A Case Study of Maragua District Hospital Jomo Kenyatta University of agriculture and technology Kenya. *International Institute for Science, Technology and Education (IISTE)*.
18. Ndlovu, J., & Mbandlwa, Z. (2026). Institutional Dynamics of Health System Strengthening in Low-and Middle-Income Countries: A Review of Governance Mechanisms and Reform Challenges. *Societies*, 16(6), 176.
19. Nepomnyashchiy, L., & Yadav, P. (2022). *Decentralized purchasing of essential medicines and its impact on availability, prices, and quality: A review of current evidence*.
20. Njuguna, D. K. (2024). *The Role of Health Services Integration in Healthcare System Performance: A Case of Hiv/Aids and Ncd Services in Nakuru County, Kenya*. [PhD Thesis]. KeMU.
21. Nyawira, L., Tsofa, B., Musiega, A., Munywoki, J., Njuguna, R. G., Hanson, K., Mulwa, A., Molyneux, S., Maina, I., & Normand, C. (2022). Management of human resources for health: Implications for health systems efficiency in Kenya. *BMC Health Services Research*, 22(1), 1046.
22. Odhiambo-Abuya, I., & Owuor, M. (2025). Beyond the rhetoric: The political economy of exclusion in Kenya's social health programming. *The African Journal of Research on Policy Harmonization*, 1(1).
23. Okello, C. O. (2025). *Public Participation and Implementation of Primary Healthcare Project among County Governments in Kenya. A Case of Homa Bay County*. [PhD Thesis]. Kenyatta University.
24. Organization, W. H. (2023). *WHO health workforce support and safeguards list 2023*. World Health Organization. <https://books.google.com/books?hl=en&lr=&id=34wOEQAQBAJ&oi=fn>
25. Rotich, H. K. (2025). *Effect of Strategic Planning Practices on Performance of Selected National Health Insurance Fund Branches in Western Kenya Region* [PhD Thesis]. Kisii University.
26. Tosun, J., & Lang, A. (2017). Policy integration: Mapping the different concepts. *Policy Studies*, 38(6), 553–570.
27. Tsofa, B., Molyneux, S., Gilson, L., & Goodman, C. (2017). How does decentralisation affect health sector planning and financial management? A case study of early effects of devolution in Kilifi County, Kenya. *International Journal for Equity in Health*, 16(1), 151.
28. Wagstaff, A., Eozenou, P., & Smits, M. (2020). Out-of-pocket expenditures on health: A global stocktake. *The World Bank Research Observer*, 35(2), 123–157.
29. Yang, Z. (2026). *Analyzing National Health Financing Reform Strategies and Health System Governance Challenges in Singapore: A Modelling Study*.
30. Yeniet, A., Nibret, G., & Tegegne, B. A. (2023). Challenges to the Availability and Affordability of Essential Medicines in African Countries: A Scoping Review. *Clinic Economics and Outcomes Research*, Volume 15, 443–458. <https://doi.org/10.2147/CEOR.S413546>