

COOPERATIVE-LED TRANSFORMATION OF PRIMARY HEALTH CARE SYSTEMS IN KENYA

Conference Theme: Innovative and Sustainable Cooperatives

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ABSTRACT

Strengthening primary health care (PHC) systems is central to achieving universal health coverage (UHC), particularly in low- and middle-income countries where health systems face financial, structural, governance and human resource constraints. In Kenya, high out-of-pocket expenditure, inequitable access, workforce shortages, weak community financing and uneven responsiveness continue to undermine PHC performance. This study examined the contribution of cooperative-led approaches to PHC transformation in Kenya, focusing on access, financial protection, service utilisation, community participation and system responsiveness. A mixed-methods cross-sectional design was adopted. Data were collected from 480 cooperative leaders, health practitioners, policymakers and community representatives across selected counties. Quantitative data were analysed using descriptive statistics, chi-square tests and logistic regression, while qualitative data from key informant interviews were analysed thematically. Findings showed that 78% of respondents reported improved access to health services and 72% indicated enhanced financial protection through cooperative-based mechanisms. Cooperative participation was significantly associated with improved PHC access, $\chi^2 = 18.64$, $p < .001$. Cooperative membership also increased the likelihood of PHC service utilisation, OR = 2.35, 95% CI [1.60, 3.45], $p < .001$. In addition, 69% reported increased community participation and 74% observed improved system responsiveness. The study concludes that cooperative-led approaches can strengthen PHC systems through access, affordability, participation and accountability, but scaling requires supportive policy, infrastructure investment, stronger governance and integration into national and county health strategies.

Keywords: Cooperative health models; Primary health care; Health system resilience; Community participation; Universal health coverage.

1.0 Introduction

Primary health care (PHC) remains the foundation of equitable, inclusive and sustainable health systems. It emphasises accessible, comprehensive, continuous, coordinated and people-centred services, including health promotion, disease prevention, treatment, rehabilitation and palliative care. Globally, PHC is recognised as one of the most practical routes towards achieving universal health coverage (UHC) because it brings essential services closer to communities and reduces avoidable dependence on higher-level hospitals (World Health Organization [WHO], 2018, 2023).

In Kenya, the pursuit of UHC has increased national and county-level attention to PHC as a strategy for expanding access, improving affordability, strengthening disease prevention, enhancing continuity of care and promoting community participation. The Kenya Primary Health Care Strategic Framework 2019-2024 emphasizes delivery of the right services, at the right time, at the right place, at the right cost and by the right provider (Ministry of Health, 2019).

Despite this policy commitment, PHC systems in Kenya continue to face structural and operational challenges, including high out-of-pocket payments, uneven distribution of health facilities, health workforce shortages, inadequate financing, commodity stock-outs, weak referral systems, fragmented community health structures and limited local participation in health governance. These barriers are particularly severe among low-income households, rural populations, informal workers, women, older persons, persons with disabilities and geographically marginalized communities.

Cooperatives provide an important but underutilized institutional pathway for addressing some of these challenges. Cooperatives are member-owned and democratically controlled organizations created to meet common economic, social and cultural needs. Their values of self-help, democracy, equality, equity, solidarity, social responsibility and concern for others make them relevant to health system strengthening (International Cooperative Alliance [ICA], 1995; International Labour Organization [ILO], 2015). In Kenya, cooperatives have historically contributed to socio-economic development through agriculture, savings and credit,

housing, transport and enterprise development. These same structures can support PHC transformation through collective financing, health education, community outreach, referral support, local infrastructure investment and accountability platforms.

However, the potential of cooperative-led approaches in transforming PHC remains insufficiently documented in Kenya. Most health financing and service delivery discussions focus on government schemes, private insurance, donor-funded interventions and facility-based models. Less attention has been given to how cooperative structures can strengthen PHC resilience, inclusivity and governance. This study therefore examines the role of cooperative-led approaches in transforming PHC systems in Kenya.

1.1 Statement of the Problem

Kenya has made considerable progress in strengthening PHC and advancing UHC through policy reforms, community health strategies, primary care networks, social health financing reforms and county-led health investments. However, the central problem is that many households still experience limited access to affordable, timely, quality and people-centred PHC services despite these policy commitments. This weakens progress towards UHC and leaves vulnerable populations exposed to preventable illness, delayed treatment, avoidable complications and financial hardship.

The problem is significant because PHC is expected to address most essential health needs at community and facility levels, yet access and financial protection remain inadequate. Globally, progress towards UHC remains slow, with WHO reporting that about 4.6 billion people were not fully covered by essential health services in 2023, while 2.1 billion people experienced financial hardship due to health spending in 2022 (WHO, 2025). This global challenge is reflected in Kenya, where out-of-pocket expenditure accounted for about 24.25% of current health expenditure in 2023, while current health expenditure was about 4.35% of gross domestic product in the same year (World Bank, 2025).

The problem manifests through delayed care-seeking, avoidable out-of-pocket spending, weak referral support, inadequate community financing, uneven health system responsiveness and limited community participation in health governance. Although cooperatives are well established in Kenya and have demonstrated capacity for collective savings, credit mobilisation, social protection and community development, their contribution to PHC transformation remains weakly integrated into formal policy and planning.

Therefore, the specific research problem is that despite the potential of cooperatives to strengthen access, affordability, financial protection, community participation and health system responsiveness, there is limited empirical evidence on how cooperative-led models contribute to PHC transformation in Kenya. This study addresses the gap by examining the contribution of cooperative-led approaches to PHC transformation.

1.2 Objectives of the Study

1.2.1 General Objective

To examine the role of cooperative-led approaches in transforming primary health care systems to build resilient and inclusive health systems in Kenya.

1.2.2 Specific Objectives

- i. To determine the influence of cooperative-led models on access to primary health care services in Kenya.
- ii. To assess the contribution of cooperative mechanisms to financial protection and affordability of primary health care services.
- iii. To examine the relationship between cooperative membership and utilization of primary health care services.
- iv. To establish the role of cooperative-led governance in enhancing community participation, system responsiveness and sustainability of primary health care models.

1.3 Literature Review and Theoretical Foundation

PHC literature emphasizes that health systems become more equitable and effective when essential services are organized around community needs, prevention, continuity of care and participation (WHO, 2018, 2023). UHC literature further shows that financial protection is central to health system performance because direct household payments can discourage early care-seeking and increase catastrophic expenditure (WHO, 2025; World Bank, 2025).

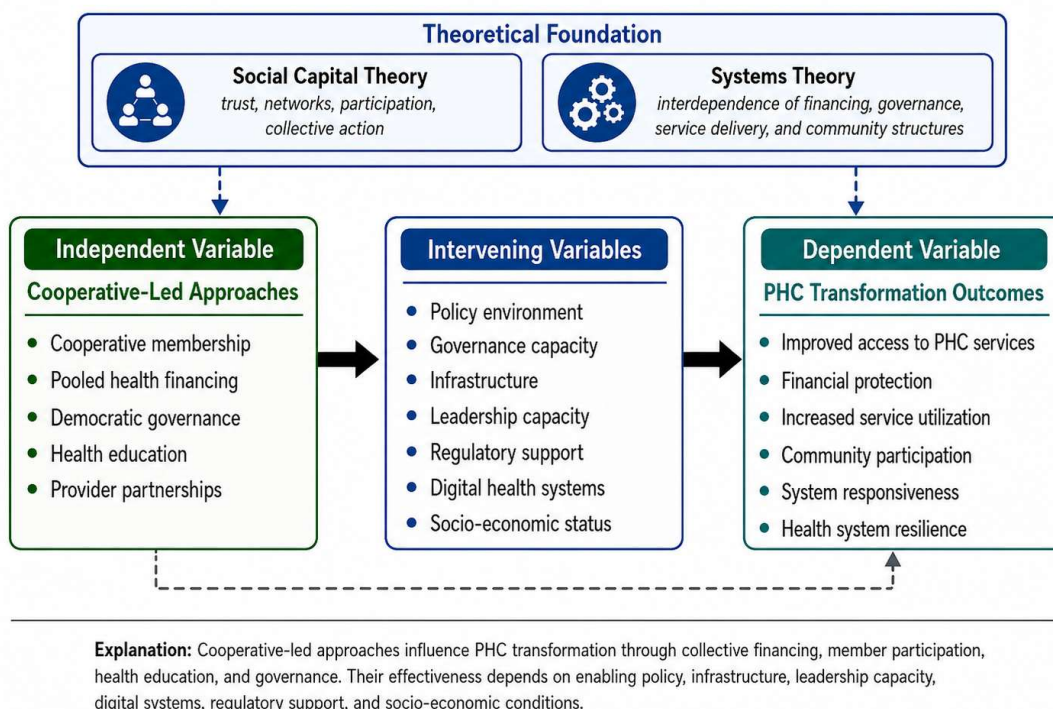
Community-based and cooperative approaches are relevant because they mobilize social capital, pool resources and create local accountability. Studies on community-based health insurance indicate that pooled community financing can increase health service utilization, although financial protection effects may vary depending on scale, contribution levels and linkage to formal insurance systems (Eze et al., 2023). Recent studies on Kenya's PHC reforms also show that stronger coordination, financing, workforce readiness and community linkage are necessary for effective PHC implementation (Amboko et al., 2025; Karimi et al., 2025).

This study was guided by Social Capital Theory and Systems Theory. Social Capital Theory explains how trust, networks, reciprocity and collective action enable communities to address shared problems (Putnam, 2000; Woolcock & Narayan, 2000). Systems Theory views primary health care as an interconnected system involving financing, governance, workforce, infrastructure, service delivery and community structures (World Health Organization [WHO], 2010). Together, the theories explain how cooperative-led approaches may influence PHC transformation through collective financing, participation, governance and local accountability.

Figure 1

Conceptual Framework for Cooperative-Led PHC Transformation

Figure 2: Conceptual Framework for Cooperative-Led PHC Transformation



Source. Author conceptualization based on Social Capital Theory, Systems Theory and reviewed literature (2026).

2.0 Methodology

The study adopted a mixed-methods cross-sectional design. This design was appropriate because it allowed quantitative measurement of cooperative-led primary health care (PHC) outcomes and qualitative exploration of experiences, governance issues and implementation challenges (Creswell & Creswell, 2023). Quantitative data provided measurable evidence on access, financial protection and utilization, while qualitative data enriched interpretation of community participation, responsiveness and sustainability.

The target population comprised cooperative leaders, health practitioners, policymakers, administrators and community representatives from selected counties in Kenya. Stratified sampling was used to ensure representation of key stakeholder categories, while purposive sampling was used to select key informants with knowledge of cooperative governance, PHC implementation, health financing and community development (Saunders et al., 2023).

Data were collected from 480 participants using structured questionnaires and key informant interviews. Quantitative data were analyzed using descriptive statistics, chi-square tests and logistic regression, which were appropriate for summarizing patterns and testing relationships between cooperative participation and PHC outcomes (Mugenda & Mugenda, 2003). Qualitative data were analyzed thematically by coding responses and grouping them into themes related to access, financial protection, utilization, governance, participation, responsiveness, barriers and sustainability (Braun & Clarke, 2022).

Ethical principles of informed consent, voluntary participation, confidentiality and anonymity were observed. Participants were informed about the purpose of the study and their right to withdraw at any stage. Data were used only for academic and policy purposes, consistent with accepted ethical standards in social and health research (Creswell & Creswell, 2023).

3.0 Results and Discussions

This section presents the findings according to the four specific objectives. Tables and figures are followed by interpretation and discussion. The independent variable was cooperative-led approaches, while the dependent variable was PHC transformation outcomes. Intervening factors included policy environment, infrastructure, regulatory support, governance capacity, leadership capacity, digital health systems and socio-economic status.

3.1 Respondent Categories

Table 1

Distribution of Study Participants by Category

Cooperative leaders	120	25.0
Health practitioners	140	29.2
Policymakers and administrators	70	14.6
Community representatives	150	31.2
Total	480	100.0

Source. Field data (2026).

Table 1 shows that community representatives formed the largest group at 31.2%, followed by health practitioners at 29.2%, cooperative leaders at 25.0% and policymakers/administrators at 14.6% (Field Data, 2026). This distribution was appropriate because cooperative-led PHC transformation requires perspectives from communities, health providers, cooperative institutions and policy actors. The range of respondents also reflects Systems Theory, which views PHC as an interconnected system involving financing, governance, service delivery and community structures (World Health Organization [WHO], 2010).

3.2 Cooperative-Led Models and Access to PHC Services

Table 2: Respondents Reporting Improved Access to PHC Services

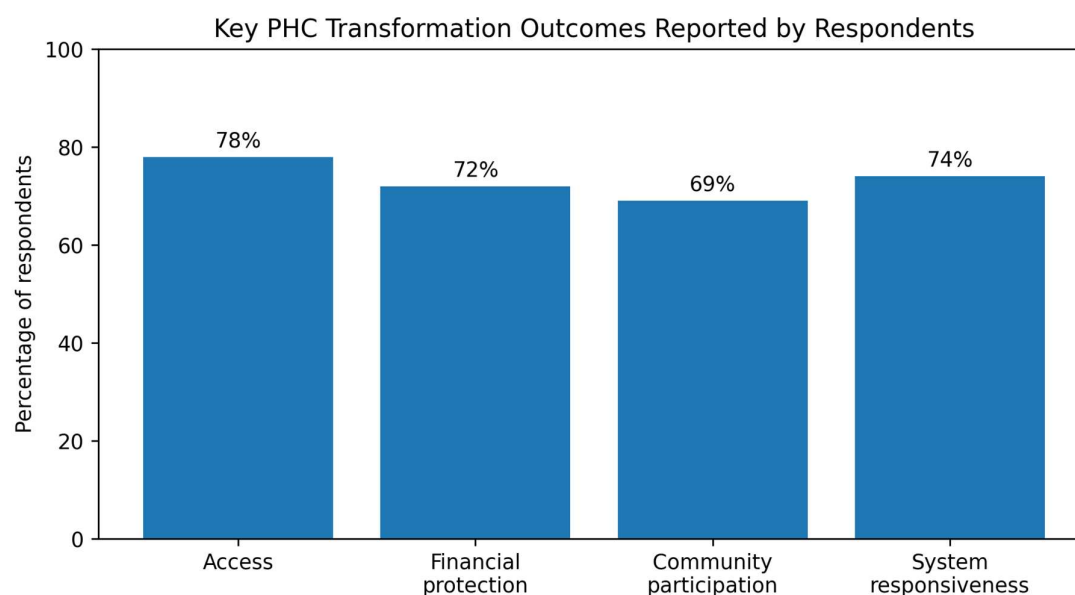
Access to PHC services	Frequency	Percentage
Reported improved access to PHC services	374	78.0
Did not report improved access to PHC services	106	22.0
Total	480	100.0

Source. Field data (2026).

Table 2 shows that 78.0% of respondents reported improved access to primary health care (PHC) services through cooperative-led models, while 22.0% did not report improved access (Field Data, 2026). This means that cooperative-led approaches contributed positively to PHC access for most respondents. The reported improvement was linked to pooled health financing, emergency welfare support, health education, referral assistance, community outreach and cooperative-provider partnerships, consistent with PHC principles of accessibility, community participation and people-centred care (World Health Organization [WHO], 2018; WHO, 2021).

Figure 2

Key PHC Transformation Outcomes Reported by Respondents



Source. Field data (2026).

3.3 Association Between Cooperative Participation and Access to PHC Services

Table 3

Chi-Square Test of Association Between Cooperative Participation and Improved Access to PHC Services

Variable relationship	χ^2 value	df	p-value	Decision
Cooperative participation and improved access to PHC services	18.64	1	< .001	Significant

Source. Field data (2026).

Table 3 shows a statistically significant association between cooperative participation and improved access to primary health care (PHC) services, $\chi^2 = 18.64$, $p < .001$ (Field Data, 2026). Since the p-value is below .05, the finding indicates that respondents participating in cooperative structures were more likely to report improved access than those with limited cooperative engagement. This supports Social Capital Theory because cooperative participation builds trust, networks and mutual support that help members overcome financial and informational barriers to care (Putnam, 2000; Woolcock & Narayan, 2000).

3.4 Cooperative Mechanisms and Financial Protection

Table 4

Respondents Reporting Improved Financial Protection Through Cooperative-Based Mechanisms

Financial protection outcome	Frequency	Percentage
Reported improved financial protection	346	72.0
Did not report improved financial protection	134	28.0
Total	480	100.0

Source. Field data (2026).

Table 4 shows that 72.0% of respondents reported improved financial protection through cooperative-based mechanisms, while 28.0% did not report improved financial protection (Field Data, 2026). This indicates that cooperatives helped many households reduce the financial burden of accessing primary health care (PHC) services. Mechanisms included pooled health financing, welfare funds, emergency medical loans, savings groups, negotiated payment arrangements and member-based support systems.

The finding is important because out-of-pocket expenditure remains a major barrier to PHC utilization in Kenya (World Bank, 2025). Cooperative-based financial support can reduce delayed care-seeking, informal borrowing and asset sales, consistent with cooperative principles of member economic participation, mutual aid and concern for community (International Cooperative Alliance [ICA], 1995). However, the 28.0% who did not report financial protection show that cooperative health funds may be insufficient where medical costs are high, member contributions are low or serious illness requires specialized care. This is consistent with evidence that community-based health insurance can improve utilization but may have mixed effects on financial protection when risk pools are small or poorly linked to formal systems (Eze et al., 2023).

3.5 Cooperative Membership and PHC Service Utilization

Table 5

Logistic Regression Results for Cooperative Membership and PHC Service Utilisation

Predictor variable	Odds ratio	95% confidence interval	p-value	Interpretation
Cooperative membership	2.35	1.60-3.45	< .001	Cooperative members were more likely to utilise PHC services

Source. Field data (2026).

Table 5 shows that cooperative membership significantly increased the likelihood of PHC service utilisation, OR = 2.35, 95% CI [1.60, 3.45], $p < .001$. This means that cooperative members were more than twice as likely to utilise PHC services compared with non-members or those with limited cooperative participation. Membership may increase utilization by improving financial readiness, health awareness, trust, peer support and access to referral information.

This finding is congruent with PHC and community financing literature, which shows that service utilisation is shaped not only by facility availability but also by affordability, information, trust and social support (WHO, 2023; Eze et al., 2023). It also agrees with Kenya PHC studies indicating that local coordination, community linkage and financing are important for effective PHC implementation (Amboko et al., 2025; Karimi et al., 2025).

3.6 Community Participation, System Responsiveness and Barriers

Table 6

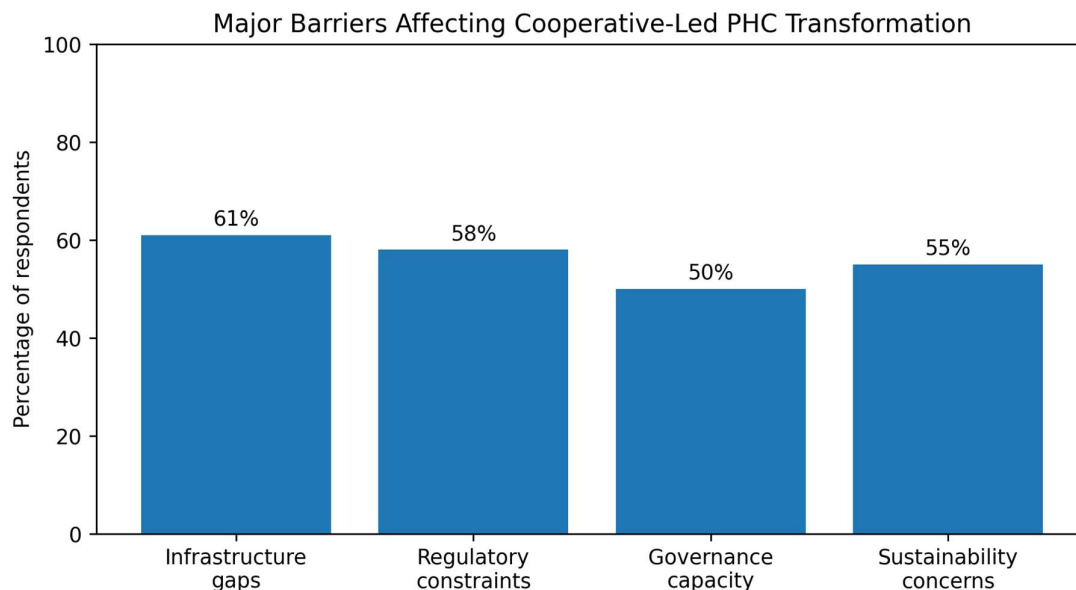
Community Participation and Health System Responsiveness

PHC transformation outcome	Frequency	Percentage
Reported increased community participation	331	69.0
Reported improved health system responsiveness	355	74.0

Source. Field data (2026).

Table 6 shows that 69.0% of respondents reported increased community participation, while 74.0% reported improved health system responsiveness to local needs (Field Data, 2026). Cooperatives provide organised platforms for meetings, resource mobilisation, elected leadership and collective decision-making, reflecting cooperative principles of democratic member control and concern for community (International Cooperative Alliance [ICA], 1995). These platforms can be used to identify community health needs, support vulnerable households, communicate with providers and promote preventive health messages, consistent with PHC principles of community participation and people-centred care (World Health Organization [WHO], 2018).

Figure 3: Major Barriers Affecting Cooperative-Led PHC Transformation



Source. Field data (2026).

The major barriers identified were infrastructure gaps, regulatory constraints, governance capacity limitations and sustainability concerns. These barriers show that cooperative-led PHC transformation cannot succeed through community effort alone. Cooperatives require supportive policy frameworks, targeted infrastructure investment, regulatory clarity, leadership development, digital health systems and stronger linkage with formal national and county health systems.

3.7 Overall Discussion

Overall, the findings demonstrate that cooperative-led approaches contribute meaningfully to PHC transformation in Kenya. The results show improved access to services, better financial protection, increased service utilization, enhanced community participation and improved system responsiveness. These outcomes are consistent with cooperative principles of democratic member control, member economic participation, education and concern for community (International Cooperative Alliance [ICA], 1995; International Labour Organization [ILO], 2015).

The findings are also congruent with PHC literature, which emphasizes accessibility, affordability, people-centred care, community participation and local responsiveness (World Health Organization [WHO], 2018, 2023). In this study, cooperative-led approaches supported these PHC principles by mobilizing local resources, strengthening social support and creating channels for communication between communities and health systems.

The statistical findings strengthen the argument. The significant chi-square result confirmed that cooperative participation was associated with improved PHC access (Field Data, 2026). The logistic regression result further showed that cooperative membership increased the likelihood of service utilization. These findings suggest that cooperatives can act as community-based mechanisms for overcoming financial, informational and social barriers to PHC, consistent with Social Capital Theory (Putnam, 2000; Woolcock & Narayan, 2000).

Nevertheless, the findings also reveal areas of incongruence and caution. While 72.0% reported improved financial protection, 28.0% did not (Field Data, 2026). This shows that cooperative-based health support is helpful but may not provide complete protection against high-cost illness, hospitalization or specialized care. This agrees with studies showing that community-based health financing can improve utilization but may have inconsistent financial protection effects unless linked to larger health financing systems (Eze et al., 2023).

The findings also indicate that cooperative governance matters. Where leadership is transparent, accountable and inclusive, cooperatives are more likely to mobilise members and sustain health initiatives. Where governance is weak, cooperative-led PHC models may suffer from low trust, poor accountability and limited sustainability. Therefore, scaling cooperative-led PHC models requires integration into national and county health strategies, stronger governance, regulatory alignment and infrastructure support (WHO, 2021; ICA, 1995).

3.8 Limitations of the Study

First, the study adopted a cross-sectional design. Therefore, it established associations between cooperative-led approaches and PHC transformation outcomes but could not prove direct causality. Second, the study relied partly on self-reported data, which may be affected by recall bias or social desirability bias. Third, the study was conducted in selected counties, meaning that findings may not fully represent all regions of Kenya, especially areas with weak cooperative structures or different health system conditions.

Fourth, cooperative-led health models differ in size, governance quality, financial capacity, membership base and provider linkages. This variation made it difficult to treat all cooperatives as uniform institutions. Fifth, the study did not conduct a cost-effectiveness analysis. Future studies should use longitudinal designs and economic evaluation methods to assess the long-term impact and sustainability of cooperative-led PHC models.

4.0 Conclusion and Recommendations

4.1 Conclusion

The study concludes that cooperative-led approaches provide a viable and sustainable pathway for strengthening PHC systems in Kenya. Cooperatives can improve access to PHC services, enhance financial protection, increase service utilisation, promote community participation, strengthen system responsiveness and support health system resilience. Their values of solidarity, democratic participation, equity and concern for community make them well suited to inclusive health system strengthening. However, cooperative-led PHC models face challenges related to infrastructure, regulation, governance capacity and sustainability. Addressing these challenges requires coordinated action by national government, county governments, cooperative regulators, health sector actors, development partners and cooperative members.

4.2 Recommendations

- i. National and county health authorities should formally recognise cooperative-led models as complementary mechanisms for PHC strengthening and UHC advancement.
- ii. Cooperative health initiatives should be integrated into county health plans, community health strategies and health financing reforms.
- iii. Cooperative leaders should receive training in governance, financial management, health financing, accountability, member engagement and ethical leadership.
- iv. Clear regulatory frameworks should be developed to guide cooperative participation in health financing, health promotion, provider partnerships and community health support.
- v. Cooperative health funds should be linked to formal health financing arrangements to improve financial protection and reduce the risk of small risk pools being overwhelmed by high-cost illnesses.
- vi. County governments and partners should support infrastructure, digital health tools, referral systems and preventive health programmes within cooperative-linked PHC models.

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6.0 Appendix

6.1 Appendix Table A1

Alignment of Objectives, Variables and Analysis Methods

Objective	Independent variable focus	Outcome variable	Analysis method
Access to PHC	Cooperative-led models	Improved access	Descriptive statistics and chi-square
Financial protection	Cooperative mechanisms	Affordability and financial protection	Frequencies and thematic analysis
Service utilisation	Cooperative membership	PHC utilisation	Logistic regression
Governance and responsiveness	Cooperative-led governance	Participation, responsiveness and sustainability	Descriptive and thematic analysis

Source. Author compilation (2026).