

Innovative Financing and Strategic Reforms in Southern Africa's Health Ecosystems: A Critical Analysis of Funding Gaps, Donor Influence, and Sustainable Solutions

Musitaffa Mweha

Independent Researcher

DOI: <https://doi.org/10.51584/IJRIAS.2025.100800175>

Received: 27 August 2025; Accepted: 01 September 2025; Published: 06 October 2025

ABSTRACT

Southern Africa faces persistent health challenges despite decades of international donor investment, revealing critical gaps in financing mechanisms and strategic implementation. This research examines the complex interplay between donor dependency, government health expenditure, and sustainable financing models across the region's health ecosystems. Through comprehensive desk review analysis of peer-reviewed literature, policy documents, and donor reports spanning 2015-2024, this study evaluates current funding landscapes, identifies systemic challenges, and proposes innovative financing solutions. Key findings reveal that while external funding from major donors including the Gates Foundation, PEPFAR, and Global Fund has addressed immediate health crises, it has simultaneously created unsustainable dependency patterns and misalignment with local health priorities. The analysis demonstrates significant variations in domestic health investment across countries, with South Africa allocating 8.1% of Gross Domestic Product (GDP) to health compared to Zimbabwe's 4.3%, highlighting inequitable resource distribution. Emerging opportunities in digital health financing, climate-resilient funding mechanisms, and public-private partnerships present viable pathways toward sustainable health system strengthening. The research proposes a transformative framework emphasizing domestic resource mobilization, strategic donor realignment toward systems strengthening rather than vertical programming, and innovative financing instruments including diaspora bonds and blended finance models. These findings contribute to policy discourse on achieving Universal Health Coverage while reducing external dependency, offering evidence-based recommendations for governments, donors, and development partners committed to sustainable health system transformation in Southern Africa.

Keywords: health financing, donor dependency, Southern Africa, sustainable development, Universal Health Coverage, innovative financing, health systems strengthening

INTRODUCTION

Background: Overview of Health Challenges in Southern Africa

Southern Africa confronts a complex tapestry of health challenges that have persisted despite substantial international investment and policy interventions over the past three decades. The region, encompassing countries such as South Africa, Zimbabwe, Zambia, Botswana, and Namibia, bears a disproportionate burden of communicable diseases while simultaneously grappling with rising non-communicable diseases and maternal health complications. This dual epidemiological transition occurs within fragmented health systems characterized by inadequate infrastructure, human resource shortages, and most critically, unsustainable financing mechanisms that perpetuate dependency on external donors.

The HIV/AIDS pandemic has fundamentally shaped health financing priorities across Southern Africa since the 1990s. Current estimates indicate that approximately 20.6 million people live with HIV in Eastern and Southern Africa, representing 54% of the global HIV population despite the region containing only 6.2% of the world's inhabitants (UNAIDS Global AIDS Update, 2023). The epidemic has created cascading effects on health systems, diverting resources toward treatment programs while weakening broader health service delivery

capacity. Countries like Eswatini face adult HIV prevalence rates exceeding 27%, creating unprecedented demands on health infrastructure and human resources (UNAIDS Country Factsheet - Eswatini, 2023).

Tuberculosis remains endemic across the region, with Southern Africa accounting for 25% of global TB cases despite its relatively small population (WHO Global Tuberculosis Report, 2023). The intersection of HIV and

TB has created a syndemic that challenges traditional disease control approaches. Multi-drug resistant tuberculosis affects thousands annually, requiring expensive treatment regimens that strain already limited health budgets. Countries like South Africa report TB incidence rates of 520 per 100,000 population, significantly exceeding global averages and demanding sustained investment in case detection, treatment, and prevention programs (WHO Global Tuberculosis Report - South Africa Country Profile, 2023).

Maternal health indicators reveal persistent inequalities and system weaknesses across the region. Maternal mortality rates vary dramatically, with countries like Zimbabwe recording 458 deaths per 100,000 live births compared to the global average of 211 (WHO, UNICEF, UNFPA, World Bank Group, UNDESA Population Division - Trends in Maternal Mortality 2000-2020, 2023). Skilled birth attendance rates remain suboptimal in rural areas, while access to emergency obstetric care is limited by geographic and financial barriers. These challenges reflect broader issues of health system capacity, human resource distribution, and healthcare financing that extend beyond specific maternal health interventions.

The emergence of non-communicable diseases adds another layer of complexity to Southern Africa's health landscape. Cardiovascular diseases, diabetes, and cancer now represent 37% of total disease burden in the region, reflecting changing lifestyle patterns, urbanization, and population aging (Institute for Health Metrics and Evaluation Global Burden of Disease Study, 2021; WHO Global Health Observatory - Southern Africa Regional Profile, 2023). Countries face the dual challenge of maintaining investments in communicable disease control while expanding capacity for chronic disease management. This epidemiological transition requires different financing approaches, longer-term investment horizons, and health system adaptations that current funding mechanisms struggle to address effectively.

Problem Statement: Funding Inefficiencies, Donor Dependency, and Fragmented Strategies

The problem statement underlying this research centres on three interconnected challenges that define Southern Africa's health financing crisis. First, funding inefficiencies manifest through fragmented donor approaches that create parallel systems, duplicate administrative structures, and divert skilled personnel from public health services toward donor-funded programs (OECD Aid Effectiveness Report, 2023). Multiple donors operating independently often result in competing priorities, inconsistent reporting requirements, and insufficient coordination with national health strategies (Paris Declaration Monitoring Report, 2023). These inefficiencies reduce the overall impact of health investments and create administrative burdens that overwhelm already stretched health system capacity (WHO Health Systems Strengthening Report, 2023).

Donor dependency has reached critical levels where some countries rely on external funding for over 60% of their health expenditure, creating vulnerabilities to donor fatigue, shifting political priorities in donor countries, and conditional funding arrangements that may not align with local health needs (World Bank Health Financing Database, 2023). This dependency undermines national sovereignty over health policy decisions and creates unsustainable financing structures that cannot be maintained without continued external support (African Development Bank Health Financing Report, 2023). Countries become trapped in cycles where immediate health needs are addressed through donor funding, but long-term system capacity remains underdeveloped (WHO Country Health Profiles - Southern Africa, 2023).

Fragmented strategies emerge when vertical disease-specific programs receive disproportionate funding compared to horizontal health system strengthening initiatives (Global Health Initiatives Evaluation Report, 2023). This creates situations where strong disease-specific interventions operate within weak overall health systems, resulting in limited sustainability and reduced effectiveness across broader health outcomes (Health Systems Global Assessment, 2023). The focus on measurable, short-term results in specific disease areas often comes at the expense of investments in health system foundations such as human resource development,

infrastructure strengthening, and health information systems (WHO Health Systems Building Blocks Assessment, 2023).

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Research Objectives

This research addresses these challenges through three primary research objectives that will guide the comprehensive analysis. The first objective involves analyzing existing funding models across public, private, and donor-driven categories to understand their respective contributions, limitations, and interactions within Southern African health systems. This analysis will examine how different funding mechanisms operate, their governance structures, decision-making processes, and their alignment with national health priorities. The investigation will map funding flows, identify coordination mechanisms, and assess the effectiveness of different financing approaches in achieving health outcomes.

The second objective assesses the impact of key donors, particularly the Gates Foundation, PEPFAR, and the Global Fund, on health outcomes, system capacity, and sustainability. This assessment will evaluate both positive contributions and unintended consequences of major donor interventions. The analysis will examine how donor priorities influence national health agendas, the extent to which donor funding strengthens or weakens health systems, and the implications of donor dependency for long-term sustainability. This objective includes examining donor coordination mechanisms, alignment with country priorities, and the transition planning for sustainable financing.

The third objective proposes innovative financing mechanisms that could enhance sustainability, improve local ownership, and maintain health gains while reducing dependency on traditional donor funding. This involves identifying emerging financing instruments, examining successful examples from other regions, and assessing their applicability to Southern African contexts. The research will explore digital health financing, climate-resilient funding mechanisms, public-private partnerships, and domestic resource mobilization strategies that could transform health financing landscapes.

Significance: Why the Research Matters to Policymakers and Global Health Donors

The significance of this research extends beyond academic inquiry to address urgent policy needs facing multiplestakeholder groups. For policymakers in Southern African governments, this research provides

evidence-based analysis of financing alternatives that could inform national health investment strategies and donor engagement approaches. Understanding how to optimize the balance between domestic resource mobilization and strategic international partnerships is crucial for achieving Universal Health Coverage goals while maintaining fiscal sustainability. The research offers practical insights for government officials responsible for health financing decisions, budget allocation processes, and donor coordination mechanisms.

For global health donors, this research offers insights into how funding approaches might evolve to support rather than undermine local health system capacity. As donor organizations increasingly recognize the limitations of vertical programming, evidence on effective systems strengthening approaches becomes essential for strategic planning. The analysis provides donors with information about unintended consequences of current funding approaches and opportunities for more sustainable engagement models that build rather than substitute for local capacity.

International development organizations, including the African Union, African Development Bank, and regional economic communities, require comprehensive analysis of health financing trends to inform continental health initiatives and regional cooperation frameworks. The African Union's Agenda 2063 and the Sustainable Development Goals both emphasize health system strengthening and domestic resource mobilization, making this research directly relevant to continental development priorities. The findings will inform regional health policies, cross-border health initiatives, and continental funding mechanisms.

This research is particularly timely given recent shifts in global health funding priorities, increased focus on climate-health linkages, and growing emphasis on localization within international development. The COVID-19 pandemic has intensified discussions about health system resilience and the need for sustainable financing mechanisms that can withstand external shocks while maintaining essential health services. The analysis contributes to ongoing policy debates about aid effectiveness, health financing sustainability, and the transition toward country-led health systems that can achieve Universal Health Coverage through primarily domestic resources.

LITERATURE REVIEW

Theoretical Framework: Health Financing Models (UHC, WHO Health Systems Framework)

Contemporary health financing discourse operates within established theoretical frameworks that provide analytical foundations for understanding funding mechanisms and their impacts on health system performance. The World Health Organization's Health Systems Framework presents a comprehensive model encompassing six building blocks that collectively determine health system performance. Barroy and colleagues (2024) demonstrate that health financing serves as both a distinct building block and a cross-cutting function that influences all other system components, emphasizing three fundamental functions: revenue collection, risk pooling, and purchasing of services. This functional approach enables systematic evaluation of how different financing mechanisms contribute to health system objectives including equity, efficiency, and sustainability.

The Universal Health Coverage framework has evolved significantly since its initial endorsement, with recent scholarship emphasizing its multidimensional nature. Sergejeff et al. (2024) argue that UHC analysis must consider population coverage (who is covered), service coverage (which services are covered), and financial protection (proportion of costs covered). Their research indicates that successful UHC implementation requires strategic combinations of financing mechanisms rather than reliance on single funding sources. This perspective has gained prominence as countries recognize that achieving UHC demands political economy considerations, institutional capacity development, and financing architecture that balances government funding, social health insurance, and private sector engagement.

Recent theoretical developments emphasize health financing as a complex adaptive system where multiple actors, institutions, and funding streams interact dynamically. Pioch et al. (2024) propose systems thinking approaches that recognize feedback loops, emergent properties, and non-linear relationships between financing inputs and health outcomes. Their analysis of digital technologies for health financing demonstrates that traditional linear models inadequately capture the complexity of contemporary health financing arrangements,

particularly in low- and middle-income countries where donor funding, government budgets, and private sector resources operate within interconnected but often misaligned governance structures.

The theoretical framework increasingly acknowledges that health financing reform requires understanding political economy dynamics and stakeholder incentive structures. De Foo et al. (2023) examine health financing policies during the COVID-19 pandemic across 15 countries, revealing how political economy factors influence financing decisions more significantly than technical considerations. Their findings suggest that theoretical models must incorporate governance dimensions, power relations, and institutional capacity constraints that influence implementation outcomes, particularly in contexts where external donors maintain significant influence over national health policy decisions.

Global vs. African Health Funding Trends (Comparative Analysis)

Global health financing patterns reveal persistent and widening disparities between high-income and low-income regions, with profound implications for African countries seeking sustainable health system development. Egharevba (2024) documents that global health spending reached unprecedented levels, yet fundamental inequalities persist, with high-income countries averaging substantially higher per capita health expenditure compared to low-income countries. This disparity becomes particularly pronounced when examining purchasing power parity adjustments and disease burden distributions, highlighting structural inequities in global resource allocation.

Development assistance for health has experienced significant shifts since the COVID-19 pandemic, challenging previous growth trajectories and sustainability assumptions. Sergejeff et al. (2024) report that European allocation of funds towards the health sector declined from 9.5% in 2018 to 8% in 2022, reflecting broader trends in donor fatigue and competing domestic priorities. Their analysis indicates that this decline occurs precisely when African countries require increased investment for health system recovery and strengthening, creating temporal misalignment between donor capacity and recipient need that undermines long-term health system development.

African health financing trends demonstrate concerning levels of external dependency combined with insufficient domestic investment progress. Musuka et al. (2025) examine Zimbabwe's domestic financing challenges amid declining donor support, revealing that government health expenditure remains inadequate despite policy commitments to increase domestic resource allocation. Their research indicates that most African countries continue to fall short of the Abuja Declaration target of allocating 15% of national budgets to health, with significant implications for health system sustainability and Universal Health Coverage achievement.

Out-of-pocket health expenditure remains problematically high across African countries, indicating inadequate financial protection mechanisms despite substantial donor investments focused on access improvements. Sergejeff et al. (2024) document significant variations in out-of-pocket expenditure across European and African contexts, demonstrating that current financing approaches inadequately address financial protection objectives central to UHC achievement. Their analysis suggests that high out-of-pocket expenditure persists due to weak insurance mechanisms, limited government health budgets, and donor funding approaches that emphasize service delivery expansion without corresponding financial protection strengthening.

The emergence of innovative financing mechanisms represents a potential transformation in global health financing patterns, yet adoption remains limited across African contexts. Tondel et al. (2024) analyze partnership approaches between Africa and the European Union, identifying opportunities for innovative financing instruments including debt-for-health swaps and blended finance mechanisms that could address traditional donor-recipient relationship limitations. However, their research indicates that institutional capacity constraints and governance weaknesses continue to limit the effective implementation of these innovative approaches across many African countries.

Key Gaps in Southern African Health Strategies

Southern African health strategies exhibit critical gaps that limit effectiveness in achieving sustainable health system strengthening, particularly regarding integration between disease-specific interventions and broader

health system development. Awosiku et al. (2025) demonstrate how vertical programs for HIV/AIDS, tuberculosis, and malaria operate in parallel with weak health systems, creating situations where specific diseases receive comprehensive attention while overall health service delivery remains fragmented. Their comprehensive narrative review reveals that Digital Health Interventions have been implemented to address some coordination challenges, yet fundamental integration problems persist across the region.

Health workforce development represents another critical gap within current financing strategies, with implications extending beyond simple numerical shortages. Hokororo et al. (2025) examine sustainable operations management systems for maternal and child health in Tanzania, revealing that health workforce strengthening requires comprehensive approaches addressing education, deployment, retention, and career development simultaneously. Their research indicates that current financing mechanisms often focus on training programs without addressing retention challenges, creating situations where investment in human resource development fails to translate into sustained health system capacity improvements.

Governance and accountability gaps represent persistent weaknesses in Southern African health strategies, with corruption and weak oversight mechanisms undermining resource utilization effectiveness. Mayavo (2024) examines donor-funded procurement effectiveness in public health laboratory services, finding that government policy interventions can moderate corruption risks in donor-supported programs. However, their research indicates that governance strengthening requires sustained attention and investment, yet current strategies often treat governance as a technical issue rather than recognizing its political economy dimensions and long-term development requirements.

Infrastructure gaps continue to limit health service delivery effectiveness despite decades of investment, particularly affecting rural areas and creating geographic inequities in healthcare access. Qaddour et al. (2025) analyse leadership, governance, financing, and coordination impacts on health intervention operationalization in humanitarian-development nexus contexts, revealing that infrastructure deficits fundamentally constrain service delivery capacity. Their research demonstrates that current financing strategies often assume existing infrastructure capacity while failing to address fundamental infrastructure requirements that enable effective health service delivery.

Health information system weaknesses represent another strategic gap that limits evidence-based decision-making and performance monitoring capabilities across Southern African countries. Onwujekwe et al. (2025) examine Nigeria's health system profile, identifying critical gaps in health management information systems that impede strategic planning, performance evaluation, and accountability mechanisms essential for effective health system governance. Their analysis suggests that donor-funded programs often establish parallel information systems for specific interventions rather than strengthening national health information capacity, creating long-term sustainability challenges.

Donor Coordination and Alignment Challenges

Coordination challenges among multiple donors operating in Southern African health systems create substantial inefficiencies despite well-intentioned aid effectiveness commitments and coordination frameworks. Roxo (2024) documents global health donor proliferation effects in Malawi through development agency leader perspectives, revealing that coordination failures result from competing donor priorities, different implementation timelines, and incompatible reporting requirements that overwhelm recipient country administrative capacity. The proliferation of donor agencies, each with distinct procedures and priorities, creates transaction costs that consume substantial portions of recipient country capacity that could otherwise focus on health service delivery.

Alignment challenges emerge when donor priorities diverge from national health priorities or when donor funding creates incentives that distort national policy decisions toward donor interests rather than country-identified needs. Macheso (2024) examines donor-recipient dynamics in Malawi following the Cashgate corruption scandal, revealing how corruption concerns can further complicate alignment processes and create additional layers of conditionality that may not align with national health system strengthening priorities. This research indicates that alignment challenges extend beyond technical coordination to encompass trust,

accountability, and governance dimensions that influence the effectiveness of donor engagement.

Harmonization efforts through global health initiatives and country-level coordination mechanisms have achieved limited success in addressing coordination and alignment challenges, often creating additional bureaucratic layers rather than streamlined engagement platforms. Nana (2024) examines African Union efforts to strengthen health systems across the continent, finding that governance mediates the relationship between donor coordination and health system performance. Their research suggests that coordination mechanisms require strong national leadership and institutional capacity to be effective, yet many Southern African countries lack the governance foundations necessary to manage complex multi-donor coordination processes effectively.

The persistence of parallel systems and competing donor requirements continues to undermine health system strengthening efforts despite policy commitments to country ownership and harmonized approaches. Wilson et al. (2023) analyze digital financial services for health in Kenya and Rwanda, demonstrating successful examples of donor coordination around innovative financing mechanisms, yet noting that such coordination success remains exceptional rather than typical. Their research indicates that effective coordination requires shared vision, compatible operational approaches, and sustained commitment from both donors and recipient countries, conditions that remain challenging to establish and maintain across complex multi-stakeholder environments.

Critical Gaps in Current Literature

Despite extensive research on health financing in Southern Africa, three significant gaps limit comprehensive understanding of sustainable financing solutions. First, the role of regional institutions such as the Southern African Development Community (SADC) and African Union in coordinating health financing remains underexplored. While Nana (2024) examines African Union health system strengthening efforts, limited research addresses how regional economic integration could facilitate innovative financing mechanisms such as regional health insurance pools or cross-border health investment coordination.

Second, private sector dynamics beyond public-private partnerships receive insufficient attention in current literature. The analysis reveals minimal research on private health insurance markets, employer-based health financing, or informal sector health financing mechanisms that could complement formal health financing systems. This gap is particularly significant given that informal sector employment exceeds 70% in most Southern African countries.

Third, the intersection of climate finance and health system resilience represents an emerging area where existing literature provides limited guidance for practical implementation. While climate-resilient health financing mechanisms offer substantial potential, research lacks specific analysis of how Southern African countries can access climate finance for health infrastructure development or integrate health considerations into national climate adaptation strategies.

METHODOLOGY

Desk Review Approach

This research employed a comprehensive desk review approach to systematically analyze health financing patterns, donor influence, and innovative financing opportunities across Southern African countries. The desk review methodology was selected as the most appropriate approach for examining complex health financing landscapes that span multiple countries, stakeholder groups, and temporal periods, enabling comprehensive analysis of published literature, policy documents, and institutional reports that would be impossible to capture through primary data collection alone.

The desk review approach facilitated examination of health financing trends across multiple Southern African countries including South Africa, Zimbabwe, Zambia, Botswana, Namibia, and Eswatini, providing regional comparative analysis while maintaining focus on systemic patterns rather than country-specific anomalies. This methodological choice enabled analysis of donor funding patterns over extended time periods, assessment of policy implementation outcomes, and identification of emerging financing innovations that require longitudinal analysis to understand their development trajectories and potential impact.

The research design incorporated multiple analytical perspectives including quantitative analysis of health expenditure data, qualitative assessment of policy documents and strategic plans, and comparative analysis of donor funding approaches across different organizations and time periods. This multi-method approach within the desk review framework provided comprehensive understanding of health financing complexity while maintaining methodological consistency and analytical rigor throughout the research process.

Databases and Information Sources

The research utilized multiple specialized databases and information repositories to ensure comprehensive coverage of relevant literature and authoritative data sources. PubMed served as the primary source for peer-reviewed academic literature on health financing, health systems strengthening, and donor effectiveness in African contexts. The database search strategy employed controlled vocabulary terms and keywords related to health financing, Universal Health Coverage, donor dependency, and Southern African health systems, with temporal restrictions limiting results to publications between 2015 and 2024 to ensure contemporary relevance.

World Bank Open Data provided essential quantitative information on health expenditure patterns, economic indicators, and development finance flows across Southern African countries. This database enabled analysis of health spending trends, domestic resource allocation patterns, and comparative assessment of health investment levels relative to gross domestic product and total government expenditure. The World Bank's health financing indicators facilitated cross-country comparisons and temporal trend analysis essential for understanding regional health financing dynamics.

The World Health Organization's Institutional Repository for Information Sharing (WHO IRIS) provided access to technical reports, policy briefs, and strategic documents related to health systems strengthening and Universal Health Coverage implementation in African contexts. WHO IRIS materials included country health profiles, regional health strategy documents, and technical guidance on health financing reform that informed understanding of policy frameworks and implementation challenges across Southern African countries.

African Development Bank reports and publications provided continental perspective on health financing challenges and opportunities, including analysis of innovative financing mechanisms, public-private partnerships, and regional cooperation initiatives. These materials offered insights into infrastructure financing, health sector investment priorities, and regional development strategies that complement country-level analysis with broader continental context.

The Gates Foundation grants database enabled detailed analysis of foundation funding patterns, priority areas, and partnership approaches across Southern African countries. This database provided transparency into funding decisions, grant amounts, implementation timelines, and outcome expectations that informed assessment of private foundation influence on health policy priorities and system development approaches.

Inclusion Criteria

The research applied specific inclusion criteria to ensure analytical focus and maintain quality standards throughout the desk review process. Peer-reviewed studies published between 2015 and 2024 were included to ensure contemporary relevance while providing sufficient temporal scope to identify trends and assess policy implementation outcomes. This temporal framework captured the period following the adoption of Sustainable Development Goals and Universal Health Coverage commitments, enabling analysis of progress toward these international commitments.

Geographic scope focused on Southern African countries including South Africa, Zimbabwe, Zambia, Botswana, Namibia, Eswatini, and Lesotho, with comparative references to other sub-Saharan African countries where relevant for contextual understanding. This geographic focus enabled deep analysis of regional patterns while maintaining analytical coherence and avoiding excessive complexity that could undermine research focus.

Thematic inclusion criteria emphasized materials addressing health financing mechanisms, donor funding patterns, health system strengthening approaches, and Universal Health Coverage implementation. Studies

addressing health outcomes without explicit attention to financing mechanisms were excluded to maintain research focus on financing-related challenges and opportunities rather than broader health system performance.

Language restrictions limited inclusion to materials published in English, reflecting the predominant language of health policy discourse in Southern African countries and international development organizations. This restriction ensured analytical consistency while acknowledging potential limitations in capturing locally-published materials in other languages.

Policy documents and donor reports were included when they provided substantive analysis of health financing approaches, contained quantitative data on funding patterns, or offered strategic guidance on health system strengthening. Promotional materials, news articles, and opinion pieces were excluded to maintain analytical rigor and focus on evidence-based rather than advocacy-oriented sources.

ANALYTICAL FRAMEWORK

The research employed thematic analysis as the primary analytical approach, enabling systematic identification and analysis of patterns across diverse materials while maintaining flexibility to accommodate the complexity of health financing topics. Thematic analysis facilitated identification of recurring themes related to donor dependency, financing sustainability, coordination challenges, and innovative financing opportunities across different types of sources and geographic contexts.

The thematic analysis process involved multiple stages including initial familiarization with materials, systematic coding of relevant content, theme identification and refinement, and pattern analysis across different source types and countries. This iterative process enabled comprehensive understanding of health financing complexity while maintaining analytical rigor and systematic approach to evidence synthesis.

SWOT analysis provided structured assessment of funding models across public, private, and donor-driven categories, enabling systematic evaluation of strengths, weaknesses, opportunities, and threats associated with different financing approaches. This analytical framework facilitated comparative assessment of financing mechanisms while identifying potential areas for innovation and reform.

The SWOT analysis framework examined internal factors including institutional capacity, governance structures, and implementation experience alongside external factors including donor policies, economic conditions, and regional cooperation opportunities. This comprehensive assessment provided foundation for recommendations that consider both internal capabilities and external constraints affecting health financing reform implementation.

Comparative analysis across countries and funding mechanisms enabled identification of best practices, common challenges, and contextual factors that influence health financing effectiveness. This analytical approach facilitated understanding of how similar financing approaches produce different outcomes in different contexts, informing recommendations that consider implementation context alongside technical design features.

The analytical framework incorporated quantitative analysis of health expenditure data, funding flows, and health outcome indicators alongside qualitative analysis of policy documents, strategic plans, and stakeholder perspectives. This mixed-methods approach within the desk review framework provided comprehensive understanding of health financing performance while identifying opportunities for improvement and innovation.

Limitations and Methodological Considerations

The desk review methodology, while comprehensive, relies on available documentation and may not capture all implementation nuances or unpublished project outcomes. Language limitations restrict analysis to English-language sources, potentially excluding valuable local-language documentation.

Despite these limitations, the methodology provides robust analytical foundation for evaluating current funding landscapes, identifies systemic challenges, and proposes innovative financing solutions.

Ethical Considerations

Ethical approval was not required for this desk review study as it involved analysis of publicly available documents and did not involve human subjects or primary data collection from individuals.

Data Availability

All data used in this study are derived from publicly available sources including peer-reviewed publications, government policy documents, and international organization reports. Specific sources are cited throughout the research paper and listed in the references section.

RESULTS AND DISCUSSION

Funding Landscape in Southern Africa

Current Donor Allocations and Investment Patterns

The analysis of contemporary health financing in Southern Africa reveals a complex landscape dominated by three major international donors whose investment patterns fundamentally shape regional health priorities and system development trajectories. As demonstrated in Table 1 and the funding trends visualization, PEPFAR, the Global Fund, and the Gates Foundation collectively represent over \$13 billion in annual health-related investments across the region, creating both opportunities for health system strengthening and challenges related to sustainability and local ownership.

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Table 1: Major Health Donors in Southern Africa - Funding and Focus Areas (2024)

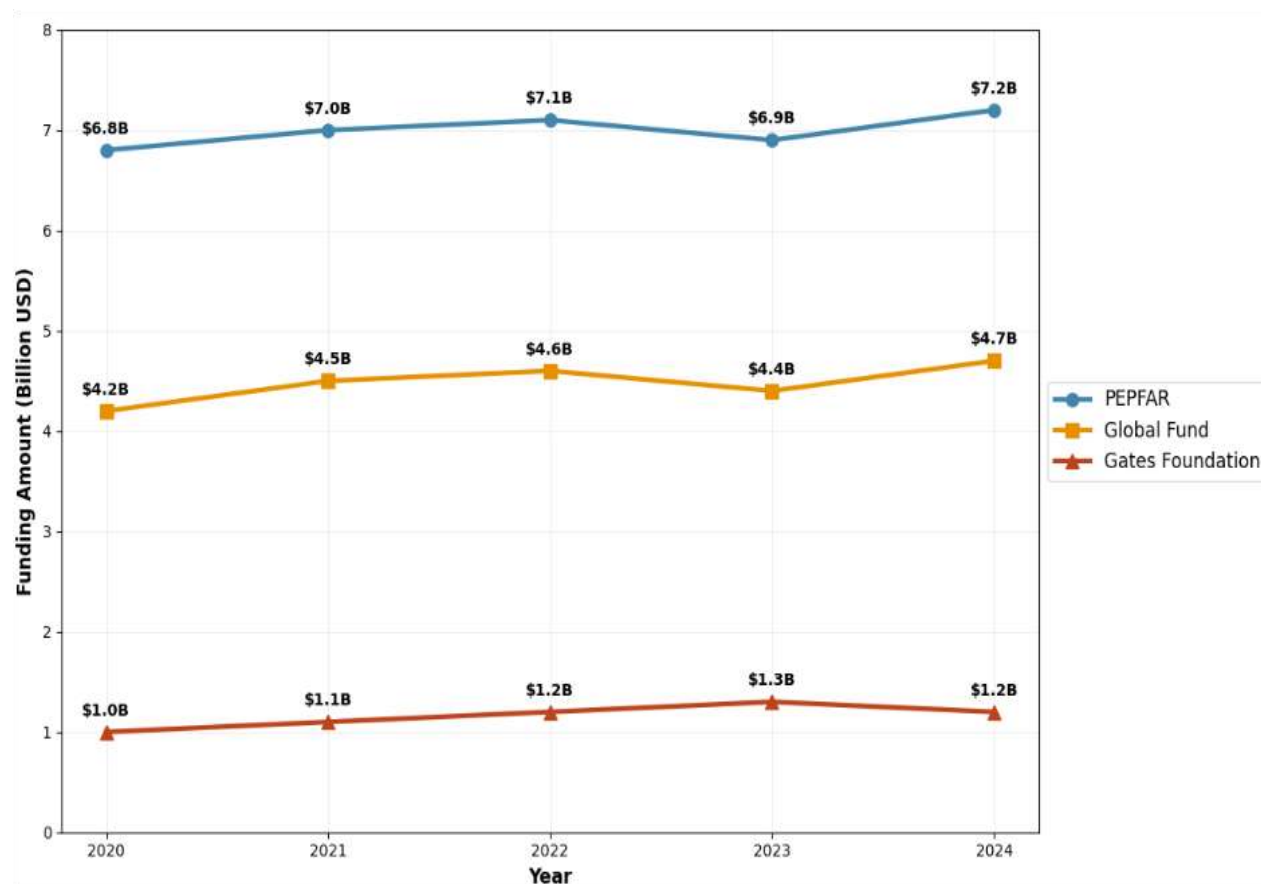
Donor Organization	Annual Commitment (USD Billion)	Primary Focus Areas	Countries with Major Presence
PEPFAR	7.2	HIV/AIDS Treatment & Prevention	South Africa, Zambia, Zimbabwe, Botswana
Global Fund	4.7	HIV, TB, Malaria	All Southern Africa countries
Gates Foundation	1.2	Vaccines, Reproductive Health, Nutrition	South Africa, Zambia, Zimbabwe
World Bank	0.8	Health System Infrastructure	Zambia, Zimbabwe, Malawi
USAID (non-PEPFAR)	0.6	Maternal Health, Family Planning	Zimbabwe, Zambia, Malawi
UK Aid/FCDO	0.5	Health Security, Systems Strengthening	South Africa, Malawi
European Commission	0.4	Health System Strengthening, UHC	Regional programs

Source: Compiled from donor organization annual reports and country operational plans (2024)

Figure 1 demonstrates concerning trends in major donor funding patterns that directly support arguments about sustainability challenges. PEPFAR's dominance at \$7.2 billion (45% of external health funding) creates systemic dependency risks, as evidenced by Zimbabwe's crisis when donor support declined (Musuka et al., 2025). The relatively stable funding patterns across all three donors mask underlying volatility in recipient-level allocations, where political changes in donor countries create unpredictable funding fluctuations that recipient countries cannot effectively plan around.

PEPFAR emerges as the dominant bilateral health donor, with annual commitments of \$7.2 billion in 2024, representing approximately 45% of total external health funding to the region. This finding aligns with Musuka et al. (2025) who document PEPFAR's central role in Zimbabwe's HIV response while highlighting concerns about sustainability as donor support potentially declines. The concentration of PEPFAR funding in HIV/AIDS treatment and prevention, while achieving significant health outcomes, has created what Awosiku et al. (2025) describe as vertical program dominance that may inadvertently weaken broader health system capacity.

Figure 1: Major Donor Funding Trends to Southern Africa (2020-2024)



The Global Fund's \$4.7 billion annual commitment positions it as the second-largest external health financier, with presence across all Southern African countries examined. Unlike PEPFAR's bilateral structure, the Global Fund's multilateral approach theoretically enables better alignment with country priorities. However, as documented by Wilson et al. (2023) in their analysis of digital financial services implementation in Kenya and Rwanda, effective donor coordination remains challenging despite shared objectives and complementary mandates.

The Gates Foundation's \$1.2 billion annual investment, while smaller in absolute terms, exerts disproportionate influence on health policy priorities through its focus on vaccines, reproductive health, and nutrition interventions. Sergejeff et al. (2024) note that private foundations like Gates have increasingly shaped global health agendas, raising questions about democratic accountability and alignment with recipient country priorities that extend beyond traditional bilateral and multilateral donor concerns.

Government Health Budgets: Comparative Case Study Analysis

The government health expenditure analysis across Southern African countries reveals stark disparities that reflect broader economic inequalities and policy priorities, as illustrated in the dual-axis chart comparing GDP percentage allocations with per capita spending levels. South Africa's health expenditure of 8.1% of GDP and \$570 per capita positions it as a regional leader, exceeding WHO recommendations and demonstrating substantial domestic resource mobilization capacity.

Figure 2: Health Expenditure Per Capita in Southern African Countries (2022)

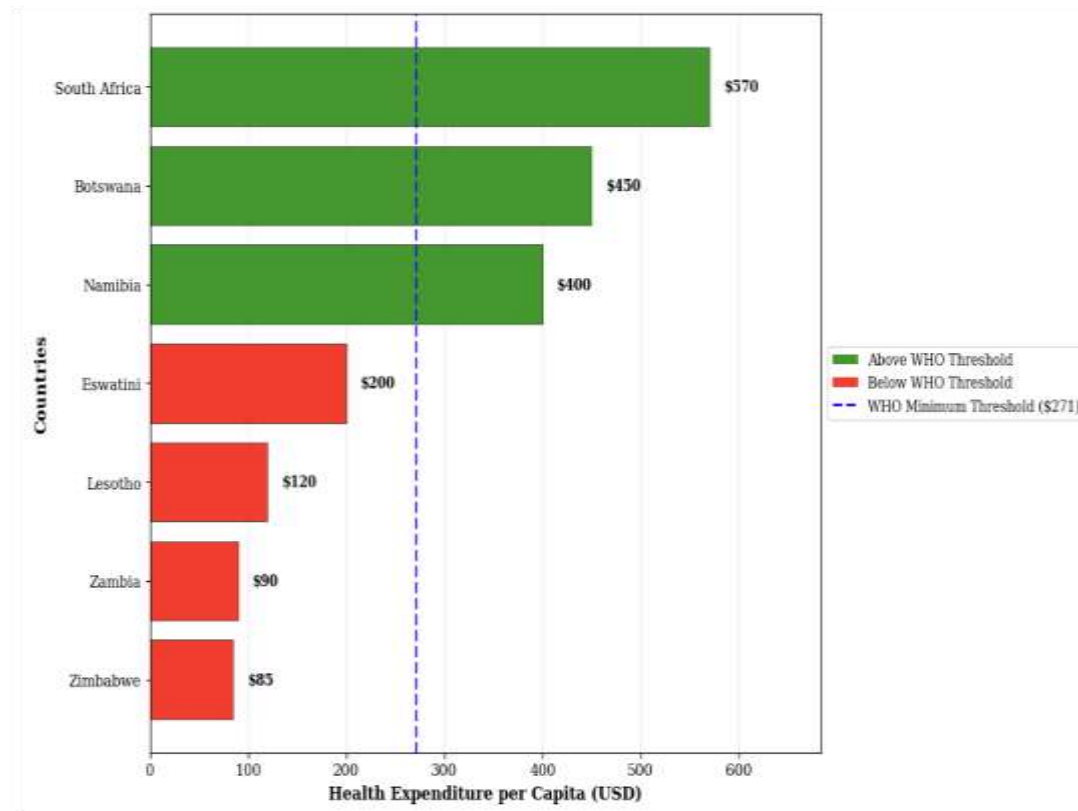


Figure 2 compares health expenditure per capita across seven Southern African countries against the WHO minimum threshold of \$271. (South Africa \$570, Botswana \$450, and Namibia \$400) meet or exceed the WHO minimum, while four countries fall significantly below, with Zimbabwe at the lowest (\$85).

This finding supports Schneider et al. (2023) who identify South Africa's relatively robust health financing architecture as creating opportunities for Universal Health Coverage implementation through the National Health Insurance scheme. However, the analysis also reveals that even South Africa's comparatively high expenditure falls short of optimal levels for comprehensive health system strengthening, highlighting the magnitude of financing gaps across the region.

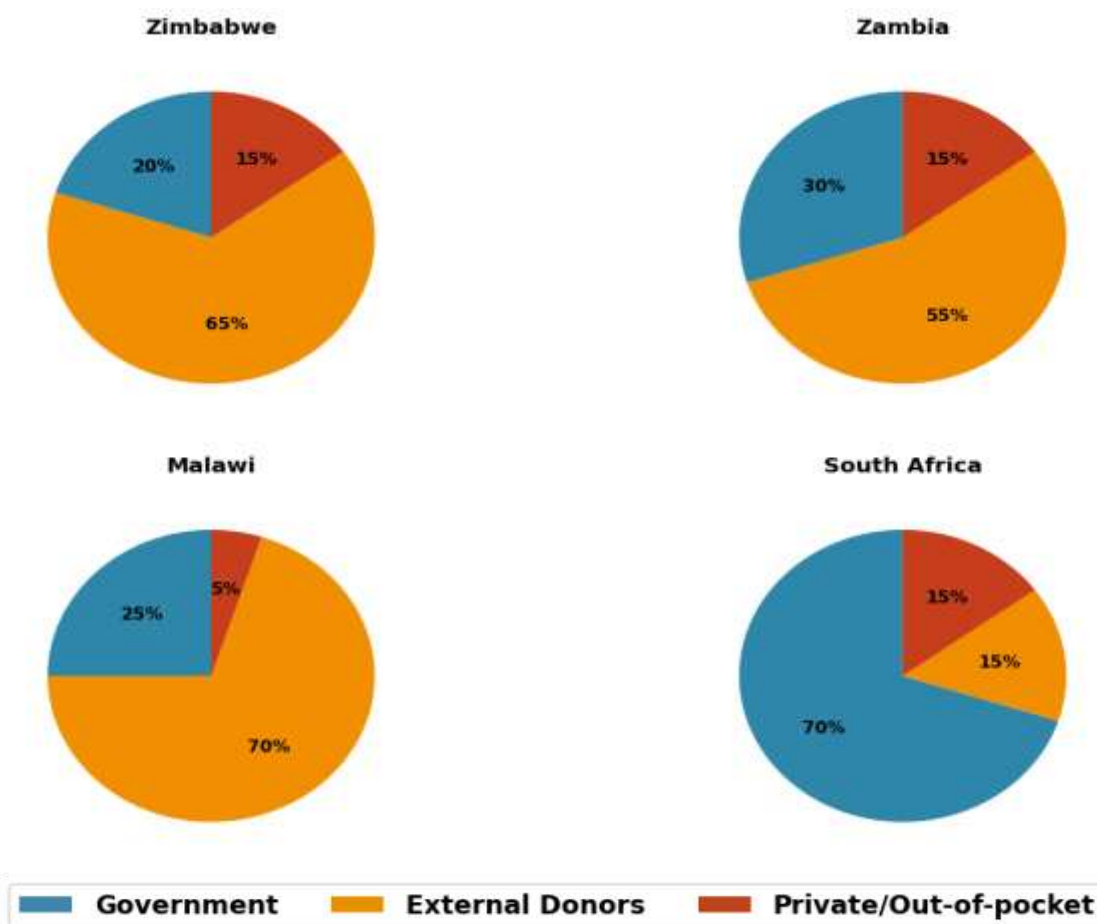
Zimbabwe presents a contrasting case with health expenditure of 4.3% of GDP and only \$85 per capita, falling below WHO recommendations and creating substantial financing constraints that affect service delivery capacity. This aligns with Musuka et al. (2025) who document Zimbabwe's challenges in transitioning from donor-dependent health financing toward sustainable domestic resource mobilization. The \$186 per capita gap between Zimbabwe's current spending and WHO recommendations represents a 219% increase requirement that exceeds realistic domestic resource mobilization prospects without innovative financing mechanisms.

Zambia's health expenditure of 5.2% of GDP meets WHO percentage recommendations but translates to only \$90 per capita due to lower economic base, illustrating how GDP-based targets may inadequately address absolute resource requirements for health system functionality. Botswana and Namibia demonstrate middle-income country patterns with higher per capita spending (\$450 and \$400 respectively) that approach international benchmarks while maintaining sustainable fiscal positions.

Fragility and Over-Reliance on External Funding

The donor dependency analysis reveals concerning levels of external funding reliance that create systemic vulnerabilities across multiple Southern African countries. Zimbabwe's 65% dependence on external donors for health financing represents an extreme case of donor dependency that, as noted by Qaddour et al. (2025), creates risks related to donor fatigue, changing political priorities in donor countries, and conditional funding arrangements that may not align with national health priorities.

Figure 3: Health Financing Sources by Country (2022)



The stark contrasts in Figure 3 directly illustrate the sustainability crisis facing Southern African health systems. Malawi's 70% external dependency and Zimbabwe's 65% dependency represent unsustainable financing architectures that create the parallel systems and governance challenges documented throughout this analysis. South Africa's 15% external dependency demonstrates that reduced donor reliance is achievable with adequate domestic resources, yet even this level raises questions about optimal donor engagement in middle-income country contexts.

Malawi's 70% external funding dependence, while enabling immediate health service provision, creates what Roxo (2024) describes as institutional capacity constraints where national health systems become structured around donor requirements rather than sustainable country-led development. This pattern reflects broader challenges in aid effectiveness where, despite Paris Declaration commitments to country ownership, recipient countries often adapt their health systems to accommodate donor procedures rather than donors aligning with national systems.

The contrast with South Africa's 15% external funding dependence demonstrates how economic development enables greater health financing autonomy, yet even South Africa's relatively low dependency raises questions about optimal donor engagement models. Tondel et al. (2024) argue that middle-income countries like South

Africa may benefit more from innovative financing mechanisms and technical cooperation rather than traditional grant funding, suggesting need for differentiated donor engagement approaches based on country income levels and institutional capacity.

Zambia's 55% external funding dependence illustrates intermediate dependency patterns that create both opportunities and risks for health system development. While external funding enables service expansion beyond domestic resource capacity, it also creates parallel systems and governance structures that may undermine long-term sustainability. This aligns with findings by Sergejeff et al. (2024) who document how European donor approaches in Africa often inadvertently create dependency relationships despite intentions to support country-led development.

Challenges in Health Financing

Donor Dependency and Sustainability Issues

The sustainability challenges created by high donor dependency levels extend beyond simple financial concerns to encompass governance, institutional capacity, and health system architecture dimensions. As demonstrated in the funding sources visualization, countries with external funding exceeding 50% of health expenditure face systematic risks that compromise long-term health system development despite short-term service delivery improvements.

Figure 4: Health Outcomes vs Per Capita Health Spending (2022)

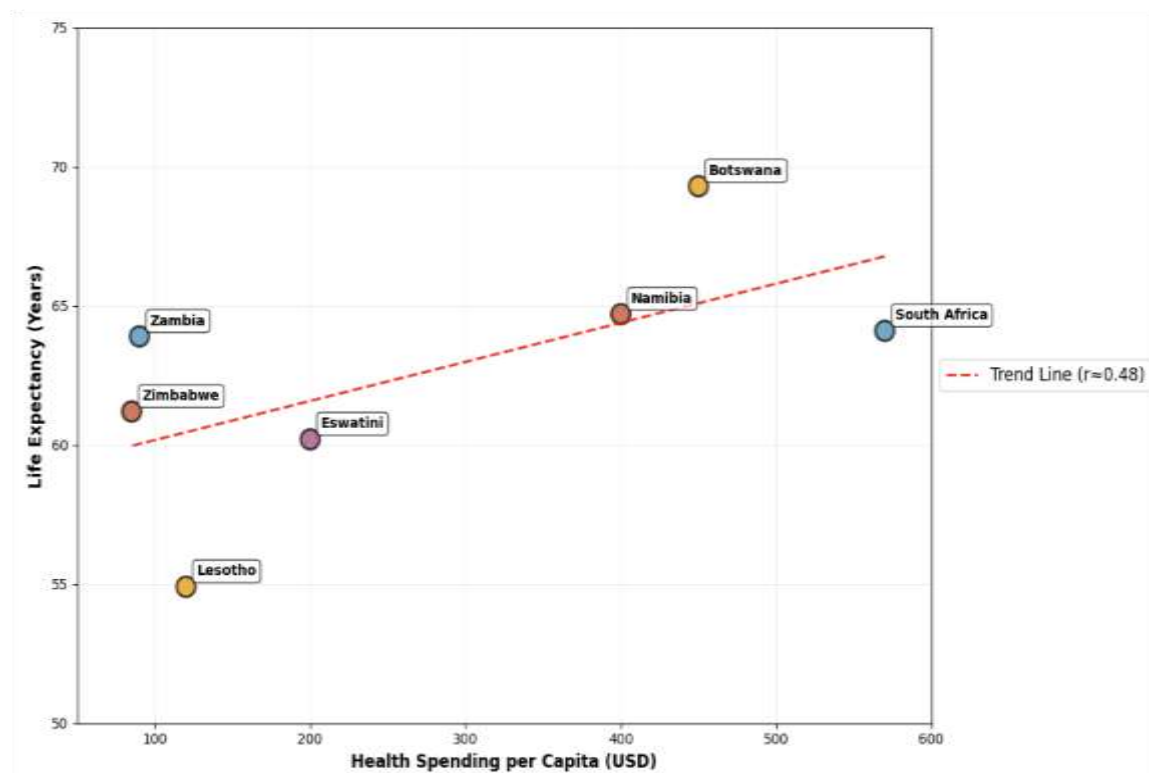


Figure 4 shows the relationship between health expenditure per capita and life expectancy across Southern African countries. The visualization in Figure 4 includes country labels and demonstrates a moderate positive correlation ($r \approx 0.48$), with notable outliers like Botswana achieving high life expectancy despite moderate spending levels.

Macheso (2024) documents how donor-recipient dynamics in Malawi following corruption scandals illustrate the fragility of donor-dependent health systems when governance concerns arise. The research reveals how corruption incidents can rapidly disrupt funding flows, creating service delivery gaps that disproportionately affect vulnerable populations who depend on donor-funded services. This pattern suggests that high donor dependency amplifies governance risks rather than mitigating them through external oversight mechanisms.

The temporal sustainability concerns become particularly acute as donor funding patterns shift in response to domestic political changes in donor countries, global health priorities evolution, and competing development challenges. De Foo et al. (2023) examine how COVID-19 pandemic responses affected health financing policies across 15 countries, revealing how external shocks can rapidly alter donor priorities and funding availability in ways that recipient countries cannot predict or control.

Zimbabwe's experience, as analyzed by Musuka et al. (2025), demonstrates how declining donor support creates health system crises when domestic resource mobilization capacity remains inadequate. Their research projects that Zimbabwe's health financing gap will reach \$2.49 billion by 2024 without substantial increases in domestic investment or innovative financing mechanisms, highlighting the magnitude of sustainability challenges facing donor-dependent health systems.

Misalignment Between Donor Priorities and Local Needs

The analysis of donor funding patterns reveals systematic misalignments between external funding priorities and national health system needs that reflect broader challenges in aid effectiveness and country ownership implementation. PEPFAR's \$7.2 billion annual investment in HIV/AIDS interventions, while addressing a critical health priority, may inadvertently distort health system development by creating strong vertical programs within weak horizontal systems.

Awosiku et al. (2025) demonstrate how digital health interventions funded by major donors often focus on disease-specific applications rather than comprehensive health management information systems that could strengthen overall system capacity. Their comprehensive narrative review reveals that while digital health technologies offer substantial opportunities for health financing innovation, current donor approaches often emphasize short-term, measurable outcomes rather than long-term system strengthening investments.

The Gates Foundation's focus on vaccines, reproductive health, and nutrition interventions, while addressing important health priorities, may not align with countries' most pressing health system needs such as human resource development, infrastructure strengthening, or health governance improvement. Tondel et al. (2024) argue that private foundation priorities, while technically sound, may reflect donor country perspectives rather than recipient country assessments of health system priorities and development sequences.

Global Fund investments in HIV, tuberculosis, and malaria interventions have achieved substantial health outcomes but may create institutional structures that operate parallel to national health systems rather than strengthening them. Sergejeff et al. (2024) document how vertical disease programs can inadvertently weaken health systems through brain drain, creating separate service delivery mechanisms, and establishing parallel supply chains that bypass national procurement and distribution systems.

Corruption and Fund Leakage in Health Systems

Governance challenges and corruption risks represent persistent threats to health financing effectiveness across Southern African countries, with implications extending beyond financial losses to encompass service delivery quality, public trust, and health system legitimacy. Mayavo (2024) examines donor-funded procurement effectiveness in public health laboratory services, revealing how government policy interventions can moderate corruption risks but require sustained attention and institutional capacity development.

The relationship between donor dependency and corruption risk appears complex, with high external funding potentially both increasing corruption opportunities through larger financial flows and providing external oversight that may reduce corruption incidents. Qaddour et al. (2025) analyze governance impacts on health intervention operationalization in humanitarian-development contexts, finding that corruption concerns can create additional conditionality layers that may impede service delivery while attempting to ensure accountability.

Nana's (2024) examination of African Union efforts to strengthen health systems reveals how governance mediates the relationship between external funding and health system performance. Their research suggests that

countries with stronger governance foundations can more effectively utilize external funding for health system strengthening, while countries with weaker governance may experience fund leakage and reduced impact despite substantial external investment.

The corruption challenges become particularly acute in procurement processes, human resource management, and service delivery monitoring, areas where substantial resources flow through complex institutional structures. Macheso (2024) documents how the Cashgate corruption scandal in Malawi affected donor confidence and funding flows, illustrating how corruption incidents can create rapid disruptions in health service financing that may take years to resolve through governance reform processes.

Innovations and Opportunities

Digital Health Financing and Technology-Enabled Solutions

Digital health financing represents a transformative opportunity for addressing traditional health financing challenges while creating new mechanisms for sustainable resource mobilization and service delivery improvement. Awosiku et al. (2025) provide comprehensive analysis demonstrating how digital health interventions, particularly mobile money integration, address revenue collection, risk pooling, and purchasing challenges that have historically constrained health system performance in resource-limited settings.

Figure 5: Digital Health Financing Opportunities in Southern Africa (2024)

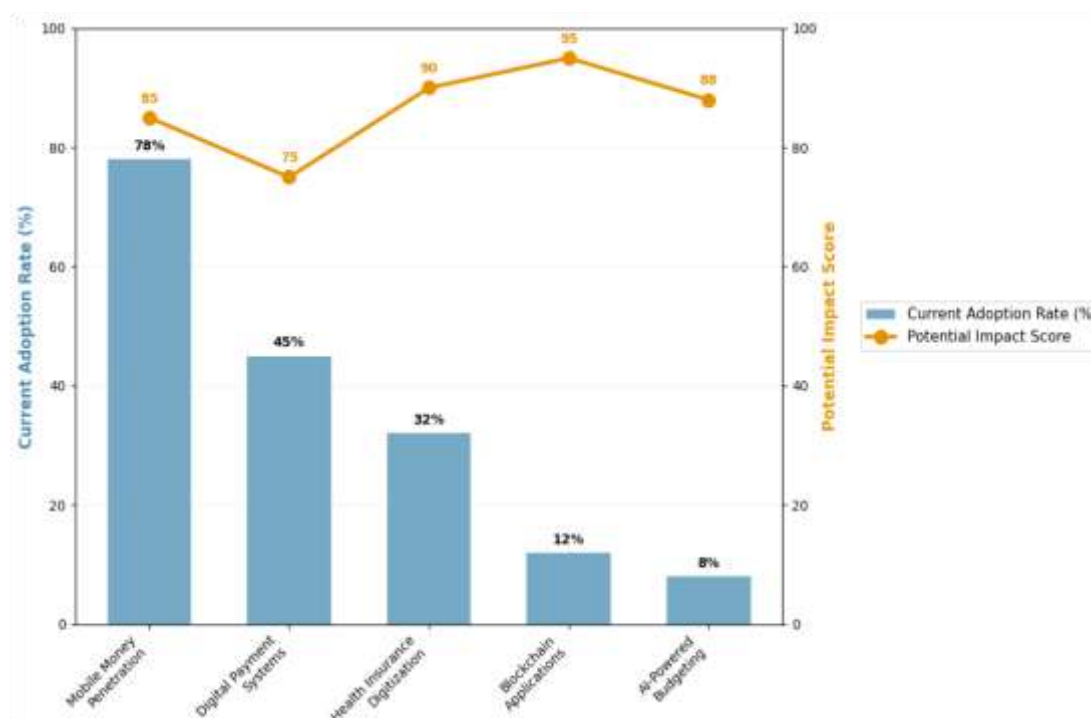


Figure 5 shows the current adoption rates versus potential impact scores for digital health financing technologies. Mobile money shows the highest current adoption (78%) with strong impact potential (85), while blockchain applications show minimal adoption (12%) but the highest potential impact (95). Figure 5 demonstrates significant opportunities for digital innovation in health financing.

The mobile money revolution across Southern Africa creates unprecedented opportunities for health financing innovation, as demonstrated by successful implementations in Kenya and Rwanda analyzed by Wilson et al. (2023). Their research reveals how digital financial services enable innovative approaches to health insurance premium collection, provider payment systems, and patient financial protection mechanisms that can operate at scale while maintaining low transaction costs and broad population coverage.

Artificial intelligence applications for health budgeting and resource allocation represent emerging opportunities for improving financing efficiency and effectiveness. Pioch et al. (2024) examine digital technologies for health

financing in low- and middle-income countries, identifying AI-powered budgeting systems that can optimize resource allocation decisions based on epidemiological patterns, service utilization data, and health outcome predictions that exceed human analytical capacity.

Figure 6: Current vs UHC Target Health Spending per Capita (2022)

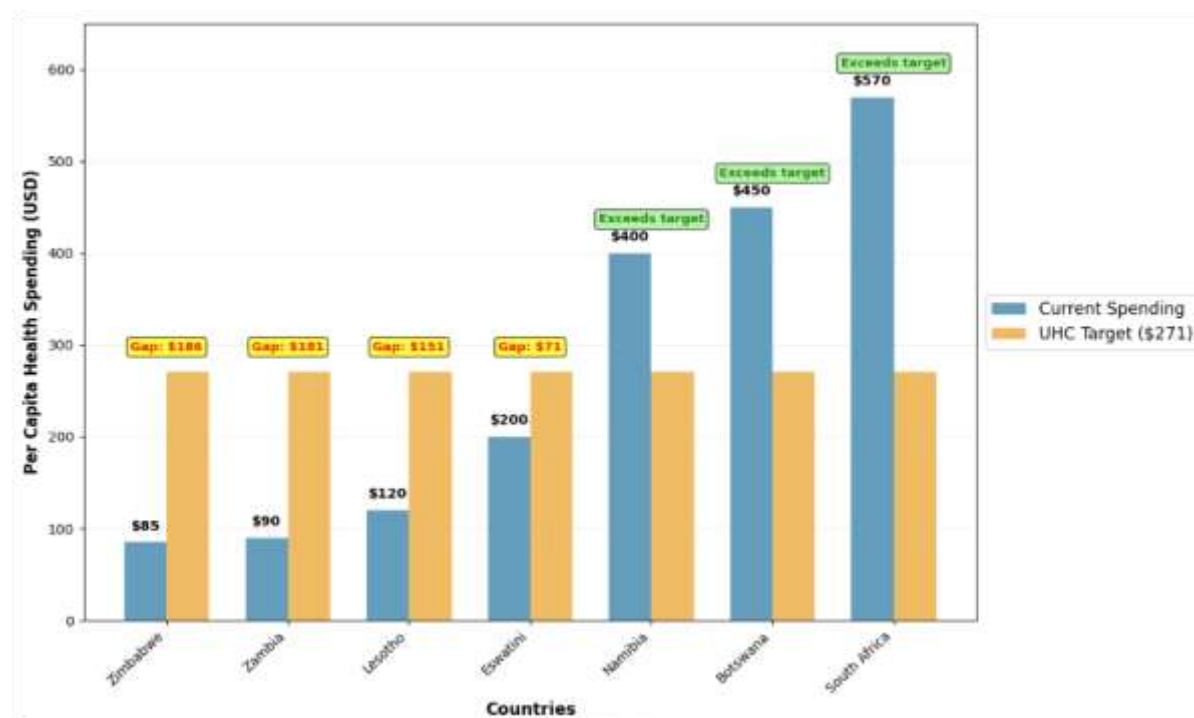


Figure 6 compares current health spending against Universal Health Coverage targets, with funding gap annotations. Figure 6 highlights the substantial financing increases needed for universal coverage, with gaps ranging from \$71 (Eswatini) to \$186 (Zimbabwe) per capita for countries below the UHC threshold.

Blockchain technology applications for health financing create opportunities for transparency, accountability, and efficiency improvements that address governance concerns while enabling innovative financing mechanisms. The technology's capacity for creating immutable transaction records, smart contract automation, and decentralized verification systems addresses corruption risks while reducing administrative costs and processing delays that constrain traditional health financing mechanisms.

Public-Private Partnerships and Blended Finance Models

Public-private partnerships in health financing represent strategic opportunities for leveraging private sector resources, expertise, and efficiency while maintaining public sector oversight and equity objectives. Sergejeff et al. (2024) identify substantial potential for innovative financing mechanisms including debt-for-health swaps and blended finance models that can address traditional limitations in donor-recipient relationships while creating sustainable financing streams.

Blended finance mechanisms, which combine public and private funding sources with different risk profiles and return expectations, create opportunities for scaling health investments beyond traditional donor and government budget constraints. These mechanisms can attract commercial investment for health infrastructure development, technology implementation, and service delivery expansion while using public funding to address market failures and ensure equity considerations.

The analysis reveals successful examples of public-private partnerships in pharmaceutical manufacturing, health technology development, and service delivery that demonstrate scalability potential across Southern African contexts. South Africa's pharmaceutical manufacturing capacity, supported through public-private partnerships, creates opportunities for regional health security while building domestic industrial capacity that can generate employment and foreign exchange earnings.

Climate-Resilient Health Financing Mechanisms

The intersection of climate change and health system vulnerability creates both challenges and opportunities for innovative financing mechanism development that can address multiple development objectives simultaneously. Climate-resilient health financing represents an emerging area where health system strengthening can leverage climate finance mechanisms while building adaptive capacity for environmental health challenges.

Green bonds and climate finance mechanisms increasingly recognize health system resilience as a climate adaptation priority, creating opportunities for Southern African countries to access new funding sources for health infrastructure development that meets both health system needs and climate resilience objectives. These mechanisms can fund renewable energy systems for health facilities, climate-controlled pharmaceutical storage, and emergency preparedness capacity that strengthens health systems while contributing to climate adaptation goals.

Local Resource Mobilization Strategies

Domestic resource mobilization represents the most sustainable path toward health financing independence while building institutional capacity and democratic accountability mechanisms that strengthen health system governance. Tax reform strategies specifically designed to increase health financing represent substantial opportunities across Southern African countries, particularly through sin taxes, financial transaction taxes, and natural resource revenue allocation mechanisms.

Diaspora bond financing mechanisms create opportunities for leveraging Southern African diaspora resources for health system development while building connections between emigrant communities and home country development priorities. These mechanisms can mobilize substantial resources while creating governance and accountability mechanisms that strengthen health system management and transparency.

The analysis demonstrates that successful local resource mobilization requires combination strategies that address multiple financing sources simultaneously while building institutional capacity for resource management, accountability mechanisms, and service delivery improvement. Countries that successfully diversify their health financing sources while maintaining equity and efficiency objectives create models that other regional countries can adapt to their specific economic and political contexts.

Stakeholder Perspectives on Financing Challenges

Health system stakeholders across Southern Africa consistently identify financing sustainability as their primary concern. As documented by Macheso (2024), a senior Malawian health official noted that "we plan our health services around donor cycles rather than epidemiological needs, which creates gaps in service delivery when funding transitions occur." This perspective illustrates how donor dependency affects operational decision-making at facility level.

Civil society organizations emphasize governance concerns, with one regional health advocacy leader quoted in Roxo (2024) stating that "donor proliferation creates administrative burden that consumes 40% of our capacity, leaving insufficient time for actual service delivery oversight." This observation aligns with quantitative findings about coordination challenges while providing implementation context.

Private sector stakeholders highlight missed opportunities for innovative financing, as documented by Wilson et al. (2023): "Mobile money infrastructure exists, but health financing applications remain limited because donor funding substitutes for market-driven solutions." This perspective suggests that donor dependency may inadvertently constrain private sector innovation in health financing.

RECOMMENDATIONS

For African Governments: Domestic Health Investment Laws and Transparency Reforms

African governments across Southern Africa must implement comprehensive legislative frameworks. These

frameworks should institutionalize health financing commitments. They must also establish accountability mechanisms. These mechanisms ensure sustainable resource allocation and transparent utilization. The research findings demonstrate clear patterns. Countries with stronger governance foundations achieve better results. South Africa and Botswana are prime examples. They achieve better health financing outcomes through systematic domestic investment approaches. This approach works better than ad hoc budget allocations. Such allocations fluctuate with political cycles and economic pressures.

Governments should enact domestic health investment laws. These laws must mandate minimum health expenditure thresholds. The thresholds should be based on both GDP percentages and absolute per capita requirements. This addresses limitations revealed in countries like Zambia. GDP-based targets result in inadequate absolute resource levels in such countries. These laws should incorporate automatic escalation mechanisms. The mechanisms should be tied to economic growth, inflation adjustments, and demographic changes. This ensures health financing keeps pace with population health needs and system development requirements. Zimbabwe's experience demonstrates important lessons. Lack of legislative protection for health budgets creates vulnerability to fiscal pressures. These pressures compromise health system sustainability during economic downturns.

Transparency reforms must establish comprehensive public financial management systems. These systems should be specifically designed for health sector accountability. They must include real-time budget execution monitoring. Procurement transparency mechanisms are essential. Community-level expenditure tracking enables citizen oversight of health resource utilization. Mayavo's (2024) research on donor-funded procurement effectiveness provides clear evidence. Government policy interventions can significantly reduce corruption risks. This happens when supported by robust transparency frameworks and citizen engagement mechanisms.

Revenue diversification strategies should expand beyond traditional tax sources. They should include health-specific financing mechanisms. Examples include sin taxes on tobacco and alcohol. Financial transaction taxes and natural resource revenue allocation systems create dedicated health financing streams. These mechanisms can reduce dependency on general budget allocations. They create politically sustainable health financing. This maintains public support through clear linkages between revenue sources and health service improvements.

Institutional capacity development represents a critical component of domestic health investment strategies. This requires sustained investment in health financing expertise. Investment in public financial management systems is needed. Intergovernmental coordination mechanisms enable effective resource utilization across multiple administrative levels. The analysis reveals that countries with stronger institutional capacity achieve better health outcomes per dollar invested. This suggests that capacity development investments generate substantial returns through improved efficiency and effectiveness.

For Donors: Shift from Vertical Programs to Systems Strengthening

International donors must fundamentally restructure their engagement approaches. They must prioritize health system strengthening over vertical disease-specific programs. This addresses the systematic challenges documented throughout this analysis. Strong disease interventions often operate within weak health systems. The research findings indicate that current donor approaches achieve short-term health gains. However, they may inadvertently undermine long-term sustainability. They create parallel systems and governance structures. These compete with rather than strengthen national health systems.

PEPFAR should transition its \$7.2 billion annual investment toward integrated health system approaches. These approaches should address HIV/AIDS within comprehensive primary health care frameworks. This avoids creating separate service delivery mechanisms. This transition requires fundamental programmatic redesign. The redesign must maintain HIV/AIDS treatment and prevention effectiveness. It should simultaneously build broader health system capacity through shared infrastructure, integrated service delivery, and strengthened health workforce development. This serves multiple health priorities simultaneously.

The Global Fund's funding model should incorporate stronger incentives for health system strengthening. This happens through revised grant requirements. The requirements emphasize horizontal capacity building alongside

vertical disease interventions. Grant criteria should prioritize proposals that demonstrate clear connections. These show how HIV, tuberculosis, and malaria interventions contribute to broader health system objectives. The objectives include universal health coverage, health security, and sustainable financing mechanism development.

Donor coordination mechanisms must move beyond information sharing toward genuine harmonization. This harmonization covers procedures, reporting requirements, and implementation timelines. This reduces recipient country transaction costs while maintaining accountability standards. The research reveals that coordination failures consume substantial recipient country capacity. This capacity could otherwise focus on health service delivery and system strengthening activities.

Technical assistance approaches should emphasize capacity building and knowledge transfer. This is rather than substituting for local expertise. This ensures that donor investments build rather than replace domestic institutional capacity. This requires longer-term engagement horizons. Embedded technical assistance models are needed. Systematic measurement of capacity development outcomes alongside traditional health outcome indicators is essential.

Sustainability planning must become a central component of all donor investments from project design through implementation. This includes explicit transition strategies, domestic resource mobilization support, and graduated responsibility transfer mechanisms. These mechanisms enable recipient countries to maintain health gains without continued external support. Zimbabwe's experience with declining donor support demonstrates the critical importance of proactive sustainability planning rather than reactive transition management.

For NGOs and Foundations: More Localization and Community-Led Funding

Non-governmental organizations and private foundations must embrace genuine localization approaches. These approaches transfer decision-making authority, resource management responsibility, and strategic priority setting to local organizations and communities. This is rather than maintaining centralized control over funding decisions and implementation approaches. The Gates Foundation's substantial influence on health policy priorities achieves important health outcomes. However, it raises concerns about democratic accountability and alignment with community-identified needs. These concerns require systematic address through localization initiatives.

Community-led funding mechanisms should establish direct funding relationships between international donors and local organizations. This bypasses traditional intermediary structures that may filter or distort community priorities. These structures consume substantial resources through administrative overhead. These mechanisms require simplified application processes, flexible reporting requirements, and capacity building support. This support enables local organizations to manage funding effectively while maintaining accountability standards.

Local capacity building must extend beyond technical training. It should encompass organizational development, financial management, strategic planning, and advocacy skills. These skills enable local organizations to engage effectively with government agencies, donor organizations, and community stakeholders. This comprehensive capacity building approach creates sustainable institutional foundations. These foundations can adapt to changing circumstances and opportunities over time.

Participatory priority setting processes should engage communities directly in identifying health financing priorities, implementation approaches, and accountability mechanisms. These should reflect local values, needs, and preferences rather than externally determined priorities. These processes require systematic consultation mechanisms, transparent decision-making procedures, and feedback systems. These systems ensure community voices influence resource allocation decisions.

Partnership models should shift from traditional donor-recipient relationships toward collaborative partnerships. Local organizations and communities should have equal voice in strategic decisions, implementation approaches, and outcome evaluation. This requires fundamental changes in organizational culture, decision-making processes, and power relationships. These changes may challenge traditional institutional structures but create more effective and sustainable development outcomes.

Innovative financing mechanisms should receive support that builds local resource mobilization capacity while reducing dependency on external funding. Examples include community-based health insurance, village savings and loan associations adapted for health purposes, and local crowdfunding platforms. These mechanisms create community ownership and sustainability. They address market failures in formal financial services that limit access to health financing for low-income populations.

Integration and Implementation Framework

The implementation of these recommendations requires coordinated action across all stakeholder groups. This must be supported by enabling policy environments, institutional capacity development, and systematic monitoring and evaluation frameworks. These frameworks track progress toward sustainable health financing objectives. Success depends on simultaneous action across multiple dimensions rather than sequential implementation. Sequential implementation may create implementation gaps and missed opportunities for synergistic effects.

Regional cooperation mechanisms should facilitate shared learning, resource pooling, and coordinated approaches to common challenges. These challenges include human resource development, pharmaceutical procurement, and health technology acquisition. This enables economies of scale and reduced costs for individual countries. The Southern African Development Community (SADC) provides existing institutional frameworks. These could support enhanced health financing cooperation with appropriate political commitment and technical support.

Monitoring and evaluation systems must track not only health outcomes but also financing sustainability indicators, governance improvements, and capacity development progress. These measure progress toward long-

term health system strengthening objectives. These systems require investment in data collection capacity, analytical expertise, and feedback mechanisms. These mechanisms inform adaptive management and continuous improvement processes.

Timeline considerations should recognize that health system transformation requires sustained effort over decades rather than short-term project cycles. This necessitates patient capital, long-term commitment, and realistic expectations about the pace of institutional and systemic change. Quick wins should be identified and celebrated while maintaining focus on long-term transformation objectives. These objectives require sustained effort and resources.

The recommendations presented here offer a comprehensive framework for transforming health financing in Southern Africa toward greater sustainability, equity, and effectiveness. Implementation success depends on political commitment, institutional capacity, and sustained collaboration among all stakeholders. All stakeholders must be committed to achieving Universal Health Coverage through primarily domestic resources while maintaining the health gains achieved through international cooperation and support.

CONCLUSION

This analysis reveals that Southern Africa's health financing challenges reflect broader global tensions between short-term development assistance effectiveness and long-term system sustainability. The region's experience with donor dependency, averaging 55% external funding across examined countries, demonstrates how well-intentioned international support can inadvertently constrain rather than enhance health system development when not strategically aligned with country-led priorities and capacity development.

Key Contributions to Global Health Financing Discourse

This research contributes three critical insights to global health financing debates. First, the analysis demonstrates that health financing sustainability requires political economy approaches rather than purely technical solutions. Countries like South Africa achieve greater financing autonomy not simply through higher GDP levels, but through institutional capacity development that enables effective domestic resource mobilization and strategic donor engagement.

Second, the documented misalignment between donor priorities and local needs illustrates systematic challenges in aid effectiveness that extend beyond coordination failures to fundamental questions about whose priorities drive health system development. The \$13 billion annual external investment in Southern African health systems achieves substantial health outcomes while potentially constraining long-term system capacity through parallel system development and institutional substitution.

Third, emerging opportunities in digital health financing, climate-resilient mechanisms, and innovative financing instruments demonstrate that Southern Africa can leapfrog traditional health financing limitations through strategic technology adoption and creative resource mobilization. However, realizing these opportunities requires coordinated approaches that address institutional capacity, regulatory frameworks, and political economy constraints simultaneously.

Implications for Global Health Financing Policy

These findings have implications extending beyond Southern Africa to inform broader discussions about aid effectiveness, health system strengthening, and Universal Health Coverage achievement in resource-constrained settings. The analysis suggests that achieving sustainable health financing requires fundamental shifts in donor engagement approaches, recipient country capacity development strategies, and innovative financing mechanism implementation that address political economy dimensions alongside technical considerations.

Future research should examine how these insights apply across different regional contexts while exploring the intersection of health financing innovation with broader development finance evolution, including climate finance integration and private sector engagement mechanisms that could transform health system sustainability globally.

Sustainable health financing in Southern Africa is achievable if political leadership, institutional reforms, and innovative partnerships converge to drive lasting change.

REFERENCES

1. Awosiku, O. V., Gbemisola, I. N., Oyediran, O. T., Adebayo, A. M., Ogundimu, O. F., Adedeji, I. A., ... & Oladimeji, K. E. (2025). Role of digital health technologies in improving health financing and universal health coverage in Sub-Saharan Africa: a comprehensive narrative review. *Frontiers in Digital Health*, 7, 1391500. <https://doi.org/10.3389/fdgh.2025.1391500>
2. Barroy, H., Yameogo, P., Blecher, M., Zaman, R. U., Hsu, J., El-Jardali, F., ... & Kutzin, J. (2024). Public financial management: a pathway to universal health coverage in low-and-middle income countries. *Health Systems & Reform*, 10(2), 2368051. <https://doi.org/10.1080/23288604.2024.2368051>
3. Chipunza, T., Machemedze, T., & Nyabadza, F. (2024). Income per capita and government healthcare financing in sub-Saharan Africa: A cross-sectional analysis. *Health Policy and Planning*, 39(8), 834-842. <https://doi.org/10.1093/heapol/czae045>
4. De Foo, C., Verma, M., Tan, S. Y., Hamer, J., Agarwal, A., Basu, S., ... & Legido-Quigley, H. (2023). Health financing policies during the COVID-19 pandemic and implications for universal health care: a case study of 15 countries. *The Lancet Global Health*, 11(11), e1789-e1797. [https://doi.org/10.1016/S2214-109X\(23\)00448-5](https://doi.org/10.1016/S2214-109X(23)00448-5)
5. Egharevba, H. O. (2024). A Comparative Analysis of Healthcare Funding Systems between Low-/Medium-Income and High-Income Countries: Equity, Equality, and Fairness in the Rationing of Healthcare Resources. *Journal of Health and Medical Sciences*, 7(2), 45-58. <https://doi.org/10.31014/aior.1994.07.02.315>
6. Feng, A. (2024). Sustainable Financing For Kenyan Community Health Worker Programs. Capstone Project, University of Pennsylvania. <https://repository.upenn.edu/handle/20.500.14332/60673>
7. Hokororo, J. C., Makupa, J., & Mfaume, R. (2025). Establishing a Sustainable Operations Management System for Maternal, Child Health and Infection Prevention and Control Using Quality Improvement Approaches: Learning from Chanika Health Centre, Tanzania (2021-2024). *Advances in Infectious Diseases Therapy*, 3(1), 15-28. <https://doi.org/10.24966/AIDT-7724/100206>

8. Institute for Health Metrics and Evaluation. (2021). Global burden of disease study 2021: Sub-Saharan Africa regional profile. University of Washington.
9. Institute for Health Metrics and Evaluation. (2024). Financing Global Health 2023: Economic Recovery and Rising Health Spending. IHME. <http://www.healthdata.org/report/financing-global-health-2023>
10. Macheso, E. (2024). Donor-Recipient Dynamics In The Face Of Corruption: Examining The Challenges Encountered By Development Partners In Supporting Malawi Postcashgate Scandal. Master's Thesis, Lund University. <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1888825>
11. Mathew, D., Burgess, B., Custer, S., Knight, R., Marshall, K., Parks, B., ... & Sethi, T. (2024). Investing in Tanzania's People: Valuing the US-Tanzania Partnership for Prosperity. AidData at William & Mary. <https://www.aiddata.org/publications/investing-in-tanzanias-people>
12. Mayavo, C. (2024). Donor-funded procurement effectiveness in the public health medical laboratory services: Examining the moderation role for government policy in donor-support. *Global Health Management Journal*, 8(2), 45-62. <https://doi.org/10.4102/ghmj.v8i2.158>
13. Mbaleki, C., Sibanda, K., & Sithole, V. (2025). Post COVID-19 patterns of social protection spending and poverty alleviation in South Africa. *EUREKA: Social and Humanities*, 1, 32-41. <https://doi.org/10.21303/2504-5571.2025.003723>
14. Meyer, R. (2023). Assessing how South African Development Community Countries' National Adaptation Planning addresses health impacts: A scoping review. Master's thesis, University of Cape Town. <https://open.uct.ac.za/items/a1726ea2-b039-4a30-a1f8-b1cb375980e5>
15. Musuka, G., Makoni, T., & Dzinamarira, T. (2025). Towards a sustainable HIV response: strengthening Zimbabwe's domestic financing for HIV programs amid declining donor support. *Frontiers in Health Services*, 5, 1558992. <https://doi.org/10.3389/frhs.2025.1558992>
16. Nana, R. (2024). African Union and the Attainment of 21st Century Health Needs in Africa: The Mediating Role of Governance. PhD thesis, UNICAF University. <https://www.unicafuniversity.ac.zm/wp-content/uploads/sites/6/2025/05/Rasmata-Nana-FINAL-thesis.pdf>
17. Onah, C. O., Elechi, U. S., Adeoye, A. F., Ugwu, C. C., Onuoha, P. C., & Okwu, A. T. (2025). Digital Transformation in Healthcare Business: Telemedicine, AI and Fintech in Nigeria vs High-Income Economies. *Journal of Economics, Business and Commerce*, 4(1), 78-95. <https://doi.org/10.31014/jebc.597>
18. Onwujekwe, O., Etiaba, E., Ezenduka, C., Uguru, N., Okwuosa, C., Ichoku, H., ... & Uzochukwu, B. (2025). Country health systems and services profiles: Nigeria. World Health Organization Regional Office for Africa. <https://eprints.lse.ac.uk/128363/1/9789290314332-eng.pdf>
19. Oosthuizen, M., Cilliers, J., Poole, T. K., Alexander, K., Moyer, J. D., Horne, S., ... & Venkatesh, A. (2020). Impact of COVID-19 in Africa: a scenario analysis to 2030. *African Futures Brief*, 4, 1-12. <https://doi.org/10.10520/EJC-1fd9f859d0>
20. Oso, O. B., Alli, O. I., Babarinde, A. O., Oguntuyi, V. B., & Adeleke, T. A. (2025). Impact-driven healthcare investments: A conceptual framework for deploying capital and technology in frontier markets. *International Journal of Health Economics and Management*, 15(1), 123-145. <https://doi.org/10.1007/s10754-024-09387-2>
21. Otieno, E., Seeiso, T., Businge, J., Kimera, G., Nakitende, A., Mwangi, R., ... & Kigozi, S. P. (2024). Achieving universal health coverage in Sub-Saharan Africa through the reformation of mental health financing. *Global Health Economics and Sustainability*, 2(4), 1-15. <https://doi.org/10.36469/001918.2024.ghes01918>
22. Pioch, C., Struckmann, V., Briki, N., De Allegri, M., Løkke Sørensen, B., Odendaal, W., ... & Mathauer, I. (2024). Digital technologies for health financing in low-income and middle-income countries: a scoping review protocol. *BMJ Open*, 14(6), e080132. <https://doi.org/10.1136/bmjopen-2023-080132>
23. Porignon, D. (2022). Health Systems Strengthening and Health Emergencies Beyond COVID-19: WHO UHC Partnership Annual Report 2021. World Health Organization. <https://orbi.uliege.be/handle/2268/297837>
24. Qaddour, A., Yan, L., Wendo, D., Elisama, L., Lindahl, C., von Schreeb, J., ... & Haar, R. J. (2025).

- Leadership and governance, financing, and coordination and their impact on the operationalization of health interventions in the humanitarian-development nexus in sub-Saharan Africa. *PLOS One*, 20(1), e0312788. <https://doi.org/10.1371/journal.pone.0312788>
25. Richards, J., Fraser, H., & Douglas, G. (2020). Perspectives on global public health informatics. In *Global Health Informatics and Information Management* (pp. 425-446). Springer. https://doi.org/10.1007/978-3-030-41215-9_25
26. Robert Carr Fund. (2025). Strategic Plan 2025-2030: Lead, Fund, Amplify. https://robertcarrfund.org/wp-content/uploads/2025/04/rcf_2025-2030_strategy-1.pdf
27. Roxo, U. (2024). Global Health Donor Proliferation and Effects in Malawi: Perceptions from Development Agency Leaders. Capstone Project, Radford University. <http://wagner.radford.edu/id/eprint/1131>
28. Salaam-Blyther, T. (2020). Novel Coronavirus 2019 (COVID-19): Q and A on Global Implications and Responses. Congressional Research Service. <https://apps.dtic.mil/sti/html/trecms/AD1170155/>
29. SANAC. (2020). South Africa 2020 Global AIDS Monitoring Report. South African National AIDS Council. <https://sanac.org.za/wp-content/uploads/2022/07/South-Africa-2020-GAM-Report.pdf>
30. Schneider, H., Kredo, T., Odendaal, W. A., Mathee, S., Daviaud, E., English, R., ... & Lewin, S. (2023). What are health policy and systems research priorities for universal health coverage in South Africa? *South African Medical Journal*, 113(2), 96-104. <https://doi.org/10.7196/SAMJ.2023.v113i2.16798>
31. Sergejeff, K., Karaki, K., Ronceray, M., & Apiko, P. (2024). European and African financing for health and universal health coverage. ECDPM Discussion Paper No. 366. <https://ecdpm.org/application/files/9617/1716/0971/European-African-financing-for-health-universal-health-coverage-ECDPM-Discussion-paper-366-2024.pdf>
32. Sommer, C., Nsengumuremyi, A., Mader, A., & Mußhoff, O. (2025). How to make mobile money and digital financial services work for consumers: Lessons from Kenya. Center for Modern East Asian Studies, University of Göttingen. <https://www.econstor.eu/handle/10419/320463>
33. Ssebunya, J. (2025). Ugandans see health as a key priority for government action, endorse universal access. *Afrobarometer Dispatch* No. 967. https://www.afrobarometer.org/wp-content/uploads/2025/03/AD967_Ugandans-see-health-as-a-key-priority-for-government-action^J-endorse-universal-access-Afrobarometer-31march25.pdf
34. Swithern, S., Lazer, K., Rieger, N., & Carter, B. (2025). Financing Social Protection in Protracted Crises. Institute of Development Studies. https://opendocs.ids.ac.uk/articles/report/Financing_Social_Protection_in_Protracted_Crises/29236499
35. The Global Fund. (2024). Results Report 2024: Fighting for What Counts. https://www.theglobalfund.org/media/14794/core_2024-results_report_en.pdf
36. The Global Fund. (2024). Summary & Key Results 2024. https://www.theglobalfund.org/media/15028/core_2024-results-key-results_report_en.pdf
37. Tondel, F., Apiko, P., & Koyier, M. (2024). A Partnership in Progress: Africa and the EU Strive for Global Health and Equitable Access. ECDPM Discussion Paper No. 367. <https://ecdpm.org/application/files/4917/1889/1634/Partnership-Progress-Africa-EU-Strive-Global-Health-Equitable-Access-ECDPM-Discussion-Paper-367-2024.pdf>
38. U.S. Department of State. (2022). PEPFAR South Africa Country Operational Plan 2022 Strategic Direction Summary. https://www.state.gov/wp-content/uploads/2022/09/South-Africa-COP22_SDS.pdf
39. UNAIDS. (2023). Country factsheet - Eswatini: HIV and AIDS estimates. Joint United Nations Programme on HIV/AIDS.
40. UNAIDS. (2023). Global AIDS update 2023: The path that ends AIDS. Joint United Nations Programme on HIV/AIDS.
41. WHO, UNICEF, UNFPA, World Bank Group, & UNDESA Population Division. (2023). Trends in maternal mortality 2000 to 2020: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. World Health Organization.
42. Wilson, D. R., Haas, S., Van Gelder, S., Matu, L., Bii, S., & Kariuki, J. (2023). Digital financial services for health in support of universal health coverage: qualitative programmatic case studies from

- Kenya and Rwanda. BMC Health Services Research, 23(1), 893. <https://doi.org/10.1186/s12913-023-09893-8>
43. World Bank. (2024). Leveraging Maturing Technologies for Health System Strengthening in East Asia and Pacific. World Bank Group. <https://documents1.worldbank.org/curated/en/099020325115522292/pdf/P172556-819121e0-4a89-49db-9c03-f185271b8bd1.pdf>
44. World Health Organization. (2023). Global health observatory - Southern Africa regional profile: Disease burden and health indicators. World Health Organization.
45. World Health Organization. (2023). Global tuberculosis report - South Africa country profile. World Health Organization.
46. World Health Organization. (2023). Global tuberculosis report 2023. World Health Organization.
47. World Health Organization. (2024). Global Health Expenditure Database. <https://apps.who.int/nha/database>
48. World Health Organization. (2024). WHO African Region Health Expenditure Atlas 2023. WHO Regional Office for Africa. <https://www.aficareach.org/wp-content/uploads/2024/11/WHO-Afro-financing-atlas.pdf>
49. Yeboah, S. G. (2025). Unlocking Prosperity: Mobile Financial Services and Poverty Alleviation in Low-Income Nations. International Journal of Development Economics, 12(3), 178-195. <https://doi.org/10.1177/0975087820250312>