AfricaCDC
Centres for Disease Control and Prevention

Safeguarding Africa's Health

FINANCING AFRICA'S HEALTH SECURITY AND SOVEREIGNTY

A HEALTH FINANCING REFORM HANDBOOK FOR AFRICAN UNION MEMBER STATES

An entity of the African Union

5 Pillars

AFRICA'S HEALTH SECURITY AND SOVEREIGNTY AGENDA

1. Reformed and Inclusive Global Health Architecture
2. Institutionalise Continental PPPR Agenda
3. Predictable, Domestic, Innovative and Blended Financing
4. Digital Transformation
5. Local Manufacturing

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AfricaCDC
Centres for Disease Control and Prevention

Africa Centres for Disease Control and Prevention,
Ring Road, 16/17, Haile Garment Square,
P.O. Box 3243, Addis Ababa, Ethiopia.

Africa CDC is a continental autonomous health agency of the African Union established to support public health initiatives of Member States and strengthen the capacity of their public health institutions to detect, prevent, control and respond quickly and effectively to disease threats.

An entity of the African Union

Safeguarding Africa's Health

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List of Acronyms

AHSS	Africa Health Security and Sovereignty
ALM	African Leadership Meeting
AMA	African Medicines Agency
APPM	African Pooled Procurement Mechanism
AU	African Union
AfEF	Africa Epidemics Fund
CHE	Current Health Expenditure
DAH	Development Assistance for Health
GDP	Gross Domestic Product
GGHED	General Government Health Expenditure
GHI	Global Health Initiative
HRH	Human Resources for Health
HiAP	Health in All Policies
IFMIS	Integrated Financial Management Information System
IMST	Incident Management Support Team
LIC	Low-Income Country
LMIC	Lower-Middle-Income Country
MDB	Multilateral Development Bank
MTEF	Medium-Term Expenditure Framework
NCDs	Non-Communicable Diseases
ODA	Official Development Assistance
OOP	Out-of-Pocket
PAVM	Partnership for African Vaccine Manufacturing
PFM	Public Financial Management
PHAHM	Platform for Harmonized African Health Manufacturing
PHC	Primary Health Care
PPP	Public–Private Partnership
PPPR	Pandemic Prevention, Preparedness and Response
THE	Total Health Expenditure
TSA	Treasury Single Account
UHC	Universal Health Coverage
UMIC	Upper Middle-Income Country
WHO	World Health Organization

Foreword

As Chairperson of the African Union Commission, it is my honour to present this foundational document, a strategic compass for Africa's collective pursuit of health security, resilience, and sovereignty in the twenty-first century. At a time when our continent stands at the threshold of transformative progress, this work articulates a bold vision rooted in African agency, solidarity, and partnership — a vision that will guide our shared efforts to protect the health and wellbeing of every African citizen.

Over the past decade, Africa has demonstrated remarkable resilience in the face of unprecedented health emergencies. Our response to outbreaks ranging from Ebola and cholera to COVID-19 and Mpox has tested our institutions, our systems, and our endurance. These experiences have underscored a fundamental truth: health security is not merely a technical endeavour — it is a strategic imperative that underpins economic growth, human development, and social stability across the continent.

This document reflects that imperative. It offers not only a clear diagnosis of the challenges before us, but also a roadmap for action — grounded in evidence, informed by lessons learned, and driven by a commitment to African leadership in health governance. It embodies the principles of partnership, equity, and accountability that are at the heart of the African Union's Agenda 2063: *The Africa We Want* — a future in which all Africans enjoy dignity, opportunity, and wellbeing.

Central to this agenda is the dual principle of **African ownership** and **efficiency in the stewardship of health systems across the continent**. For too long, elements of the global health landscape have been shaped predominantly by external priorities, resulting in fragmented investments, parallel delivery structures, and misaligned incentives. This work calls for a new compact — one in which Africa defines and leads its own health trajectory, mobilizing collective capacities and more domestic resources to strengthen national public health institutions, sustain resilient and diversified supply chains, develop and retain a skilled health workforce, and expand equitable access to essential health services. It advocates for integrated and interoperable systems that bridge health security, primary health care, and universal health coverage, advancing a holistic and people-centred approach that leaves no one behind.

Playing the critical role for the design and implementation of this vision, **the Africa Centres for Disease Control and Prevention (Africa CDC),** elevated by the African Union's Assembly of Heads of State and Government as the Continental Public Health Agency — endowed with political mandate and technical authority — to mark a historic milestone in institutionalizing health security and sovereignty leadership within the Africa.

We also recognize that health security cannot be achieved in isolation from sustainable financing. Too many African states struggle under the weight of unpredictable external funding, vertical programme models, and financing gaps that constrain long-term

H.E. Mahmoud Ali Youssouf
Chairperson,
African Union Commission

As we embark on the next chapter of Africa's health transformation, this document stands as both a beacon and a blueprint. It challenges us to transcend short-term reactions and embrace long-term resilience. It reaffirms our collective responsibility to protect the lives and livelihoods of all Africans.

preparedness. This work advances innovative, homegrown financing strategies that are equitable, predictable, and aligned with national priorities. By advocating for increased domestic resource mobilization, pooled procurement mechanisms, and strategic partnerships that respect African leadership, it offers a pragmatic pathway toward financial sovereignty in health.

Equally important is the emphasis on **local manufacturing and supply chain resilience**. The COVID-19 pandemic laid bare the vulnerabilities inherent in global supply chains and underscored the urgency of developing robust regional production capacities for vaccines, therapeutics, diagnostics, and essential commodities. This document champions an African pharmaceutical ecosystem — one that is competitive, quality-assured, and integrated into global value chains — to ensure that Africans have reliable access to the products they need, when they need them.

Yet, infrastructure and financing alone are not enough without people. The future of health security depends on the skills, dedication, and leadership of a new generation of African health professionals. Accordingly, this work prioritizes **human resources for health** as a strategic pillar, advocating for investment in training, retention, and professional development across all cadres. It calls for strengthening regional centres of excellence, fostering cross-border collaboration, and incentivizing innovation that leverages digital technologies and data analytics.

This foreword would be incomplete without acknowledging the indispensable role of **partnerships**. The African Union embraces collaboration with global institutions, bilateral partners, philanthropic organizations, and civil society — not as subordinate actors, but as equal collaborators who respect Africa's voice and priorities. True partnership amplifies impact, shares risk and builds mutual accountability. I commend this document for guiding the forging of partnerships that are equitable, sustainable, and aligned with Africa's long-term interests.

As we embark on the next chapter of Africa's health transformation, this document stands as both a beacon and a blueprint. It challenges us to transcend short-term reactions and embrace long-term resilience. It reaffirms our collective responsibility to protect the lives and livelihoods of all Africans. And it places African leadership and innovation at the centre of our efforts to build an Africa that is healthier, stronger, and more sovereign.

In closing, I extend my gratitude to the many stakeholders whose expertise enriched this work — from technical experts and policymakers to frontline health workers and community advocates. Your contributions reflect the spirit of unity and shared purpose that defines the African Union. May this document inspire bold action, sustained commitment, and collaboration at every level of society as we realize the promise of a more secure and prosperous Africa.

Addis Ababa 10 January 2026

Message from the Director General, Africa CDC

H.E. Dr Jean Kaseya
Director General,
Africa CDC,
African Union Commission

Africa stands at a historic inflection point. The continent faces a defining choice: to continue confronting health crises through fragmented, externally driven responses, or to decisively secure its own health destiny through sovereignty, resilience, and sustained domestic investment. This document sets out a bold, coherent, and actionable agenda to protect the health and future of Africa—anchored in one fundamental principle: **Africa must define its own health priorities, lead its own solutions, and finance its own resilience from within.**

The recent past has been an unforgiving teacher. Recurrent outbreaks of Ebola, Marburg, Cholera, and Mpox have exposed deep structural weaknesses in global and regional health architectures. COVID-19 laid bare the fragility of global solidarity and the limits of reliance on external goodwill. Today, Africa confronts an equally dangerous threat: a health financing crisis. Declining donor assistance, rising public debt, and escalating costs of care risk reversing decades of progress toward universal health coverage and health security.

This document presents the most comprehensive analysis to date of health financing in Africa in the post-ODA-cut era. Its conclusion is unequivocal: **Africa's path out of aid dependency will not be found by chasing more money, but by stopping the massive inefficiencies and waste in the money it already has.** This is not primarily a funding crisis; it is an efficiency crisis.

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The evidence is compelling. Pooled procurement alone can reduce the cost of health commodities by 30–33%. Integrated service delivery can generate US$1.3–1.6 billion in annual savings. Human-resources reforms can unlock up to US$6.8 billion per year. When combined with decisive reforms in planning, digitization, procurement, and public financial management, Africa can generate efficiency gains of approximately US$14 per capita—equivalent to US$16 billion in 2026 and US$37 billion by 2050.

These gains are transformational. Within five years, they are sufficient to replace roughly 50% of current donor financing and reduce external dependence to below 20% of total health expenditure. Africa is therefore no longer positioning itself as a passive recipient of aid, but as a proactive architect of its own health security.

At the heart of this transformation is **Africa Health Security and Sovereignty (AHSS)**, a unifying vision that reframes health not as a social sector expense, but as a foundation of continental sovereignty, economic resilience, and geopolitical credibility. It affirms a simple truth: Africa's health security is inseparable from its economic future and global standing.

This vision has been shaped and inspired by the decisive leadership of African Heads of State and Government and African Union Champions. **I express my profound appreciation to Their Excellencies Presidents João Lourenço, Paul Kagame, William Ruto, Cyril Ramaphosa, and John Mahama, and to the**

Chairperson of the African Union Commission, H.E. Mahmoud Ali Youssouf. Their guidance and steadfast commitment throughout 2025 anchored a strategic shift—from reaction to anticipation, from dependency to sovereignty, and from vulnerability to resilience—which this document seeks to advance.

Africa CDC, as the continent's public health agency, has been mandated by the African Union Assembly of Heads of State and Government to guide and coordinate this transformation. This mandate marks a new era of African public health leadership—one that empowers Africa CDC to harmonize preparedness capacities, drive evidence-based policy, and deliver rapid, effective responses that save lives and protect economies.

Yet leadership without sustainable financing is fragile. Recurrent cycles of emergency funding undermine preparedness, weaken institutions, and trap countries in perpetual crisis mode. Africa CDC's message is clear and uncompromising: **Africa is not poor; it is mis-organized and fragmented—often by the very financing mechanisms meant to help it.** Current approaches infantilize systems and entrench dependency. The alternative is within reach: Africa can fund the foundations of its health systems if it plans better, purchases smarter, and governs more effectively.

Financing Africa's Health Security and Sovereignty is therefore a blueprint for transformation. It sets out a coherent package of reforms capable of reshaping Africa's health financing architecture by 2030 and anchoring AHSS in durable national systems. Financing reform must proceed hand in hand with **local manufacturing and supply-chain autonomy**, ending Africa's structural dependence on external sources for vaccines, diagnostics, therapeutics, and essential commodities.

Partnerships remain essential—but on Africa's terms**.** Africa welcomes collaboration with global institutions, bilateral partners, philanthropy, civil society, and the private sector as equals, aligned with continental priorities and respectful of African leadership. True partnership amplifies impact, catalyzes innovation, and strengthens collective resilience.

Ultimately, this agenda is about **dignity and sovereignty**. AHSS is not a slogan; it is the practical ability of a continent to protect its people without waiting for permission or pledges. The African Union has demonstrated political resolve through the Lusaka Agenda and the continental AHSS vision. The moment has now come to translate that resolve into a new financial architecture for health**.**

I extend my deepest appreciation to Member States, technical experts, partners, and the dedicated staff of Africa CDC whose commitment and expertise shaped this work. Let this document serve not as an endpoint, but as a catalyst—for decisive action, sustained investment, and unified African leadership in securing the health and future of our continent.

Addis Ababa 10 January 2026

Executive Summary

Introduction

Africa's health-financing landscape has entered a decisive transition. After two decades of progress supported by expanding development assistance for health (DAH) and disease-specific programmes, the continent now faces a convergence of fiscal pressures that threaten the sustainability of health systems and recent gains in coverage and outcomes. Declining external assistance, moderate economic growth, rising public debt, rapid population growth, and a shifting disease burden are fundamentally reshaping the financing environment. Without structural reform, African health systems risk becoming increasingly fragile, inequitable, and exposed to shocks.

The scale of the challenge

Africa bears approximately 22 % of the global burden of disease, yet accounts for 1 % of global health expenditure. Average total health expenditure per capita on the continent remains low, at US$85, with fewer than 40 % of African countries meeting the WHO-recommended minimum of US$86 per capita required to deliver an essential package of health services. While total health spending is projected to grow steadily—from about US$110 billion in 2023 to US$260 billion by 2050—rapid population growth will significantly dampen per-capita gains. Africa's population will grow from 1.4 billion in 2025 to 2.5 billion in 2050.

The composition of health financing further compounds these challenges. Across Africa, government sources account for 35 % of total health expenditure, external assistance about 23 %, and out-of-pocket (OOP) payments, 35 %, with wide variation across countries and sub-regions. In many low- and lower-middle-income countries, reliance on OOP spending ranges between 40–60 %, exposing households to catastrophic health expenditures and pushing an estimated 15 million people into poverty each year.

At the same time, after peaking during the COVID-19 response, total development assistance for health for Africa has entered a sustained decline. From a high of US$25.8 billion in 2021, DAH fell to US$19.9 billion in 2022 and further to around US$13 billion in 2025, driven largely by sharp reductions in U.S. and European funding. Projections indicate that total development assistance for health will remain flat or decline further in real terms. As countries transition out of eligibility for concessional and disease-specific programmes, essential services once fully subsidised are increasingly shifting onto domestic budgets and households.

Inefficiency as the immediate constraint to impact

The analysis shows that although underfunding remains the core constraint, inefficiencies in the allocation and use of existing health resources are large and persistent. On average, African health systems operate at 77% efficiency, implying that 23% of health spending is lost through misallocation, duplication, weak management, leakage, and fraud.

Government health budgets mostly fund recurrent inputs. Human resources absorb about 55 % of domestic health spending, while the procurement of medicines and medical supplies accounts for roughly 30%. Yet weaknesses in payroll management, procurement systems, fragmented planning and reporting, and weak public financial management (PFM) undermine value for money. In several countries, integrity gaps such as ghost workers and procurement overpricing account for losses equivalent to multiple percentage points of national health expenditure.

These inefficiencies are reinforced by fragmentation. Many countries operate with dozens of financing schemes, hundreds of implementing partners, and multiple parallel plans, budgets, reporting systems, and delivery platforms. This fragmentation erodes accountability, inflates transaction costs, and prevents strategic purchasing and integrated service delivery.

The AHSS response: from fragmentation to reform

This Handbook presents a coherent **health financing reform agenda** anchored in Africa's Health Security and Sovereignty (AHSS) framework and aligned with the Lusaka Agenda. The central proposition is that **efficiency is the new source of financing**.

Seven mutually reinforcing reform areas are advanced:

1. **One Plan, One Budget, One Report (OPBR)** – Establishing integrated, costed, multi-year national health plans as the foundation for budgeting, partner alignment, and accountability, replacing fragmented project-based approaches.
2. **Realignment of external assistance** – Aligning all donor and partner resources to national plans and budgets, reducing duplication and transaction costs.
3. **Efficiency reforms** – Targeting the largest recurrent spending items through:
    - improved human-resources management and skills mix,
    - rationalised and cost-effective health benefit packages,
    - pooled procurement mechanisms for health commodities,
    - intersectoral co-financing to address social determinants of health,
    - integrated, people-centred service delivery anchored in primary health care.
4. **Strengthened public financial management** – Improving budget credibility, cash management, procurement, transparency, and digital integration to ensure that financing reforms translate into real system performance gains.
5. **Reduction of out-of-pocket spending** – Expanding prepayment and pooling mechanisms, including tax-based and insurance-based approaches, to protect households and enable strategic purchasing.
6. **Strategic purchasing** – Using pooled funds to actively purchase services and commodities that maximise value, quality, and equity.

Quantified impact and fiscal space

The modelling presented in this Handbook demonstrates that these reforms are not merely conceptual. If implemented collectively and at scale, they could:

- generate approximately **US$14 per capita** in new fiscal space through efficiency gains;
- offset **around half of the projected decline in development assistance for health**;
- reduce reliance on external aid to **below 20 % of total health expenditure within five years**;
- significantly improve financial protection by lowering catastrophic out-of-pocket spending.

Key drivers of these gains include:

- **20–35 % efficiency gains** from integrated planning and rationalisation,
- **up to 30–33 % price reductions** through pooled procurement,
- improved productivity and reduced duplication through service delivery integration,
- strengthened PFM and digital systems that reduce leakage and fraud.

A path to health sovereignty

The evidence assembled in this Handbook leads to a clear conclusion: **Africa can finance the foundations of its own health security**. Doing so requires a deliberate shift away from fragmented, aid-dependent models toward integrated, efficient, and domestically anchored financing systems. The AHSS framework provides the strategic direction; this Handbook provides the operational, fiscal, and institutional pathway.

The choice facing African countries is no longer whether reform is desirable, but whether inaction is affordable. By planning better, pooling resources, purchasing strategically, integrating services, and strengthening public financial management, Africa can protect its populations, sustain essential services, and build resilient health systems capable of withstanding future shocks.


Central to this agenda is the dual principle of **African ownership** and **efficiency in the stewardship of health systems across the continent.**

1. Africa Health Security and Sovereignty framework (AHSS)

1.1. Introduction

In the aftermath of the COVID-19 pandemic, Africa articulated an ambitious vision through the New Public Health Order (NPHO) to strengthen core public health institutions, expand and professionalise the workforce, advance local manufacturing, mobilise domestic financing, and deepen strategic partnerships to safeguard the continent's health security (Nkengasong et al., 2017). Endorsed by African Heads of State and Government in 2022, the NPHO provided a unifying framework to guide Africa's recovery and rebuilding in response to the systemic vulnerabilities laid bare by the pandemic.

While the NPHO laid a critical foundation for strengthening public health architecture across the continent, the global health environment has continued to evolve. Intensifying geopolitical shifts, declining and increasingly fragmented external financing, and the persistence of complex and overlapping health emergencies underscore the need for a more resilient and forward-looking continental vision (Kaseya, 2025). In response and following the guidance of the Committee of African Heads of State and Government at its meeting in September 2025, the Africa Centres for Disease Control and Prevention (Africa CDC) has adopted a renewed strategic direction.

This strategic transition—Africa's Health Security and Sovereignty (AHSS)—builds on the commitments of the NPHO while translating them into a more concrete, practical, transformative, and adaptive framework. AHSS reflects a growing recognition that the attainment of universal health coverage, effective pandemic preparedness and response, and sustainable development is inextricably linked to health sovereignty: the capacity of African countries to sustainably finance, locally produce, and autonomously govern their health systems and essential countermeasures (Kaseya, 2025).

1.2. Rationale for the AHSS

1.2.1. Rapid changes in the global health landscape

There has been a steady decline in external funds which climaxed with the American funding cuts in 2025. At the same time, there has been a steady increase in the proportion of out-of-pocket health expenditure. Africa has also faced recurrent outbreaks such as mpox, cholera, Ebola and Marburg which surged by 41% between 2022 and 2024. Africa has also faced climate related crises such as floods and droughts which have directly or indirectly affected health outcomes (Atwoli et al., 2022). Given all the health challenges, Africa has a significant need of health commodities, but it still imports more than 90% of them (Kaseya, 2025).

Figure 1: The five pillars of Africa's Health Security and Sovereignty Framework

1.2.2. Africa's public health architecture has matured

The African Union Assembly of Heads of State and Government officially designated Africa CDC as the Public Health Agency of Africa with political, strategic, and technical capacities, empowering it to lead the continental health agenda and shape global health reform. This leadership and coordination role of Africa CDC has been demonstrated during the response to the ongoing mpox outbreak, the Marburg outbreak response in Rwanda, and the cholera outbreak response in southern and central African countries in 2022 and 2023, among others (Kaseya, 2025).

1.2.3. An ineffective global health architecture

The current state of the global health architecture is not fit for purpose. It is characterized by asymmetric power relations, particularly with high-income countries (HICs) often prioritizing their own interests over global solidarity, inequity and rigid implementation approaches that have not adapted to the changing situation on the African continent (Agyepong, Irene et al., 2023; Williamson et al., 2022). These issues were amplified during the COVID-19 pandemic and other outbreaks where Africa faced severe inequities in access to vaccines, medicines and diagnostics.

The AHSS agenda therefore aims to address these issues by strengthening and building reliance on Africa's own capacities, resources, and institutions in order to guarantee the health of its people. The AHSS has five interdependent pillars as follows:

1. **Reform of the Global Health Architecture** through stronger regional and national institutions, ensuring that Africa speaks with one voice and leads in shaping global health governance.
2. **Continental Preparedness and Response Capacity** built around the Africa Epidemics Fund (AfEF), the Africa CDC Emergency Operations Centres, and a unified Incident Management System for all public health emergencies.
3. **Sustainable Health Financing** that mobilizes domestic resources, strengthens fiscal accountability, and harnesses innovative mechanisms to reduce dependence on external aid.
4. **Digital Transformation for Resilient Primary Health Care**, including continental digital health governance, national health intelligence systems, and universal digital health identity.
5. **Local Manufacturing and Pooled Procurement** of vaccines, diagnostics, and medicines through the African Pooled Procurement Mechanism (APPM) and the Platform for Harmonized African Health Manufacturing (PHAHM).

The first pillar calls for a reformed and more inclusive global health architecture—one that moves beyond the traditional donor-recipient paradigm and empowers regional institutions as anchors of preparedness and response. Africa CDC advocates for a governance model where decisions, financing, and implementation power are shared equitably among global, regional, and national actors, valuing contextual factors.

The second pillar institutionalizes Continental Preparedness, Prevention, and Response (PPPR) Agenda, which unifies emergency systems under a single operational platform, the Incident Management Support Team (IMST), and its sustainable financing arm, the Africa Epidemics Fund (AfEF). The IMST, operating under the concept of one team, one plan, one budget, and one delivery mechanism, ensures efficiency of response efforts by bringing the expertise of all stakeholders into one response mechanism. This has been demonstrated by the continental IMST established to respond to mpox, under the joint leadership of Africa CDC and WHO. The AfEF, established to provide flexible financing mechanisms to respond to public health emergencies, provides an opportunity to optimally finance pandemic preparedness and response, including zero-day financing and surge financing. Together, these mechanisms ensure that Africa can prevent, detect and respond to outbreaks with appropriate resources, teams, and stockpiles. This shift represents a deliberate move from ad hoc emergency responses to permanent, continent-wide readiness.

The third pillar seeks to secure predictable, domestic, innovative, and blended financing. This will include increasing domestic health spending, strengthening alignment of external resources, improving public financial management, reducing out of pocket expenditures and leveraging innovative instruments such as solidarity levies, diaspora bonds, and health taxes.

The fourth pillar embraces digital transformation as the backbone of resilient primary health care (PHC). Africa CDC is building a PHC Digital Intelligence Ecosystem—linking community health workers, facilities, districts, and national health intelligence centres through real-time data systems to the continental data centre. Initiatives such as the Digital Birth-to-Care Card and the African Health Data Governance Framework ensure that no child, woman,

or community is left invisible. Digitalization is not only a tool for efficiency; it is the infrastructure for sovereignty in the data age.

The fifth pillar promotes local manufacturing as the driving force for Africa's second independence, boosting the African economy, creating jobs, and protecting health security for Africa and the world. Supporting the PHAHM, approved by the African Heads of State and Government during the 2024 African Union Assembly, which replaced the Partnership for Accelerated Vaccine Manufacturing (PAVM) initiative, which was limited to vaccines, the African Union approved two vital tools: the Africa Medicine Agency (AMA), responsible for regulation, and the African Pooled Procurement Mechanism (APPM), led by the Africa CDC for demand creation and market intelligence.

The AHSS vision therefore calls for a fundamental rebalancing of how health systems in Africa are financed, governed, and sustained. It places public financing and strong national institutions at the centre of health sovereignty, while embedding these within a continental solidarity architecture capable of addressing shared risks and collective priorities.

1.2.4. The Lusaka Agenda and the AHSS

The Lusaka Agenda and the Africa Health Security and Sovereignty (AHSS) Agenda are mutually reinforcing frameworks that together define Africa's pathway from fragmented, externally dependent health systems toward resilience, self-reliance, and security. AHSS articulates the continent's strategic vision for sovereignty across financing, preparedness, digital systems, and manufacturing, while the Lusaka Agenda provides the operational reforms required to realize that vision at country level. By institutionalizing country-led planning and budgeting, strengthening public financial management, improving efficiency, aligning external assistance, and leveraging pooled procurement and local manufacturing, the Lusaka Agenda translates AHSS from vision into implementation. Under the AHSS, the Lusaka Agenda becomes the political engine that drives reform. It moves health system reform out of the technical margins of ministries and places it squarely on the political agenda of the African Union Assembly and the Committee of Heads of State and Government.

2. Purpose of the Handbook

This Handbook serves three core purposes and is primarily intended for planners and decision-makers in Ministries of Health and Ministries of Finance, while also providing guidance for all stakeholders involved in health financing and health system reform, including development partners, oversight institutions, and civil society. First, it recommends a coherent set of health financing and related system reforms that African Union Member States can adopt to increase domestic health resources, improve fiscal sustainability, and enhance efficiency in the use of existing funds. Second, the Handbook demonstrates the scale of efficiency gains that can be realized through these reforms. Third, the Handbook sets out how Africa CDC will support Member States in implementing these reforms.

The rest of the document is structured as follows. Chapter 3 discusses the context of health financing in Africa, Chapter 4 provides the health financing situation analysis, Chapter 5 purposes health financing and related health system reforms to support the AHSS agenda. Chapter 6 estimates the efficiency gains of implementing the proposed reforms. Chapter 7 details the implementation arrangements and Chapter 8 concludes.

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3. The context of health financing in Africa

3.1. Macroeconomic situation

Africa's Gross Domestic Product (GDP) was estimated at $3 trillion current dollars in 2025 (International Monetary Fund, 2026). GDP grew by an average of 3.9% between 2022 and 2024 (Afrexim Bank, 2024). Growth has, however, been volatile, limiting its ability to consistently offset the rising debt burden (Ighodalo Ehikioya et al., 2020). The debt-to-GDP ratio for Africa was estimated at 66.8 % in 2024 (Afrexim Bank, 2024). External debt burden has more than doubled, increasing from 18.8 % of GDP in 2008 to 41.6 % in 2023. This growing debt burden, compounded by successive global macroeconomic shocks, has placed sustained pressure on fiscal revenues and contributed to debt distress and defaults in several countries (Afrexim Bank, 2024) . Africa's economy is projected to grow at an average rate of 4.5 % between 2025 and 2028 (Afrexim Bank, 2024). However, Africa needs to reach and sustain an economic growth rate of 7% in order to create fiscal space required for the provision of social services (King & Ramlogan-Dobson, 2015).

3.2. Declining development assistance for health and increasing Out of Pocket spending

Development assistance for health (DAH) for Africa was estimated at $1.6billion in 1995, rose to $10.3billion in 2010, and rose further to $17.2 billion in 2019. DAH for Africa surged during the COVID-19 period in order to support countries respond to the COVID-19 pandemic, rising to $20.2billion in 2020 and $25.8 in 2021. It declined to $19.9 billion in 2022 and a record $13 billion in 2025, well below the pre-COVID-19 levels (Institute for Health Metrics and Evaluation (IHME), 2025). The DAH decline in 2025 was driven largely by a 67% drop, more than $9 billion, in U.S. financing. The United States has historically been the largest funder overall, contributing around 35% of DAH each year for the past decade (ThinkGlobalHealth, 2025). Other donor countries also reduced their funding, despite their relatively low contributions. Finland has cut its DAH by 11% ($14.9 million), France by 33% ($555.1 million), Germany by 12% ($304.5 million), and the United Kingdom by 39% ($796.1 million) (ThinkGlobalHealth, 2025). Total out-of-pocket (OOP) expenditures for Africa, on the hand, were estimated at $13.2 billion in 1995, $22.4 billion in 2010 and $27.8billion in 2019. OOP spending increased to $30.1billion in 2020, $31.2billion in 2021 and $32.9 in 2022. It declined to $30.4billion in 2023 and then $32.8 billion in 2025 (Institute for Health Metrics and Evaluation (IHME), 2025). The World Health Organization's 2025 guidance on the implications of declining aid underscores warns that essential services once covered by external funding are increasingly shifting to households, leading to higher out-of-pocket spending, reduced service utilization, and widening inequities.

3.3. Transition associated with income reclassification

Compounding the challenge of declining development assistance for health (DAH) is the graduation of several African countries from eligibility for concessional or disease-specific financing mechanisms such as Gavi and the Global Fund (Saxenian et al., 2015). Graduation is typically triggered by countries crossing predefined income thresholds, most commonly the transition from low-income to lower-middle-income status, rather than by demonstrated fiscal readiness, health system maturity, or the sustainability of domestic financing arrangements. As a result, many countries face a sharp reduction in external support despite persistent disease burdens and limited fiscal space. Graduating countries are expected to assume responsibility for large and recurrent commodity budgets, particularly for vaccines, antiretrovirals, and tuberculosis and malaria commodities, at full market prices. These costs are frequently incompatible with public financial management constraints, and competing development priorities. Where transition planning is weak or domestic resource mobilization is insufficient, this financing cliff can lead to stagnation or reversal of coverage gains for essential health interventions, including immunization and disease control programmes (Obi et al., 2021). This experience underscores the need for stronger transition frameworks that link income reclassification with realistic assessments of fiscal capacity, efficiency gains, and long-term health financing sustainability.

3.4. Demographic trends

Africa's population is expected to grow from approximately 1.4 billion people in 2025 to 2.5 billion by 2050, effectively doubling within this period (Dovie, 2015). Africa's share of the global population will rise from about 13–18% in 2000–2020 to 22–26% by 2050 and could reach 40% by 2100 (Yeboah et al., 2025). Urbanization will be a defining feature of this growth: by 2050, 56–60% of Africans are projected to live in urban areas, with urban population increases accounting for about 80% of the total population growth (Vearey et al., 2019). Urbanization is expected to quadruple the urban population in sub-Saharan Africa (SSA), reaching 1.2 billion by 2050 (Latino et al., 2020). By 2050, Africa will still have the world's youngest population, and the dependency ratio (the ratio of dependents, people younger than 15 or older than 64, to the working-age population) will remain high, though it may gradually decline as the working-age population grows. The demographic shift presents both challenges and opportunities: a high dependency ratio can strain resources, but a growing working-age population (the "demographic dividend") could drive economic growth if harnessed effectively (Vearey et al., 2019).

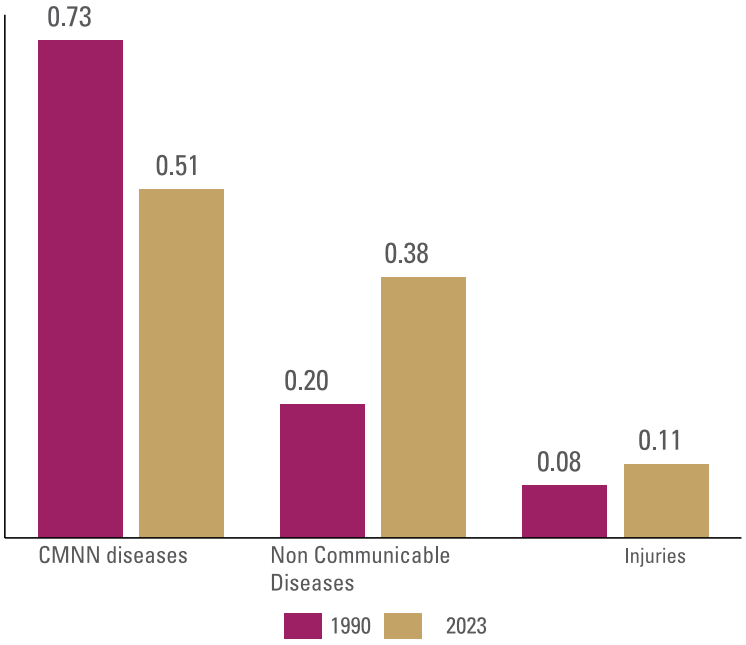
3.5. Remittances as External Private Financial Flows

Nearly 39.5 million Africans have migrated, of which 21 million did so within the continent and 18.5 million outside of it (Akokuwebe et al., 2023). The migration is largely youth-driven, with 60% of irregular African migrants under 35 years old. Migration is motivated by the search for employment, education, and better economic opportunities, as well as by forced reasons such as conflict and political instability. Remittances sent by African immigrants are a major economic benefit providing a link between migration and development. Remittance inflows account for about 3–5% of Africa's GDP (Kessy & Shayo, 2022). They were estimated at US$9.6 billion in 1990, $11.4 billion in 2000, $53 billion in 2010 increased to US$105 billion in 2024 with more than half, US$57 billion, going to sub-Saharan Africa (World Bank, 2026b). Remittances were estimated to be more than three times the size of official development assistance (ODA) (Agradi, 2023). Remittances contribute significantly to the GDP of countries. In Cabo Verde, Senegal, and Togo, remittances made for more than 10 % of GDP while in Lesotho, they accounted for close to 30% of GDP. In Egypt, remittances surpassed Suez Canal revenues, while in Morocco they surpassed tourism earnings (Kessy & Shayo, 2022). Financing mechanisms built around diaspora savings and remittances could therefore fill a significant gap that DAH reductions have created.

3.6. Epidemiological transition

Burden of disease data show that Africa is in the midst of an epidemiological transition (Institute for Health Metrics and Evaluation (IHME), 2024). *Figure 2* shows that in 1990, communicable, maternal, neonatal, and nutritional (CMNN) conditions accounted for approximately 73% of the total disease burden. By 2023, their share had declined to about 51%, representing a 30 % reduction over the period. This shift reflects sustained gains in infectious disease control, maternal and child health, vaccination, and basic public health interventions. However, these gains are being offset by rapid growth in non-communicable diseases (NCDs), whose share of the disease burden increased by 95 % between 1990 and 2023, rising from about 20% to 38%. Injuries have also become more prominent, increasing by 41 %, and now account for almost 11% of the total burden. This transition underscores the emergence of a multifaceted burden of disease, in which long-standing communicable disease challenges coexist with rapidly rising NCDs and injuries. This burden is exacerbated by disease outbreaks and natural disasters such as floods, droughts, cyclones and heat waves which affect health directly or indirectly.

Figure 2: Share of total burden of disease for Africa in 1990 and 2023



Data source:
Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2023, https://vizhub.healthdata.org/gbd-compare/

CMNN = Communicable, maternal, neonatal and nutritional diseases

3.7. Conclusion

This chapter has outlined the contextual issues shaping health financing in Africa. Moderate and uneven economic growth, rising public debt, and recurrent global shocks have constrained fiscal space, limiting governments' ability to expand public health spending. At the same time, development assistance for health has taken a steep decline, a trend compounded by income reclassification as graduating countries transition out of concessional and disease-specific financing before domestic systems are fully prepared to absorb the associated costs. Together, these dynamics are accelerating the shift of financing responsibility to national budgets and households, increasing risks to equity and service continuity.

Demographic changes further intensify these challenges. Rapid population growth has led to rapid urbanization, increased dependency and on the other hand, a growing working age population that could drive economic growth. Limited employment opportunities have contributed to increased economic migration within and beyond the continent. While primarily driven by livelihoods, this mobility has generated substantial remittance flows, which now exceed official development assistance and represent a stable source of income with potential to support health financing. At the same time, Africa's epidemiological transition is characterized by the coexistence of communicable diseases, rising non-communicable diseases, injuries, and recurrent outbreaks. Taken together, these trends define the parameters within which viable health financing options must be designed and assessed.

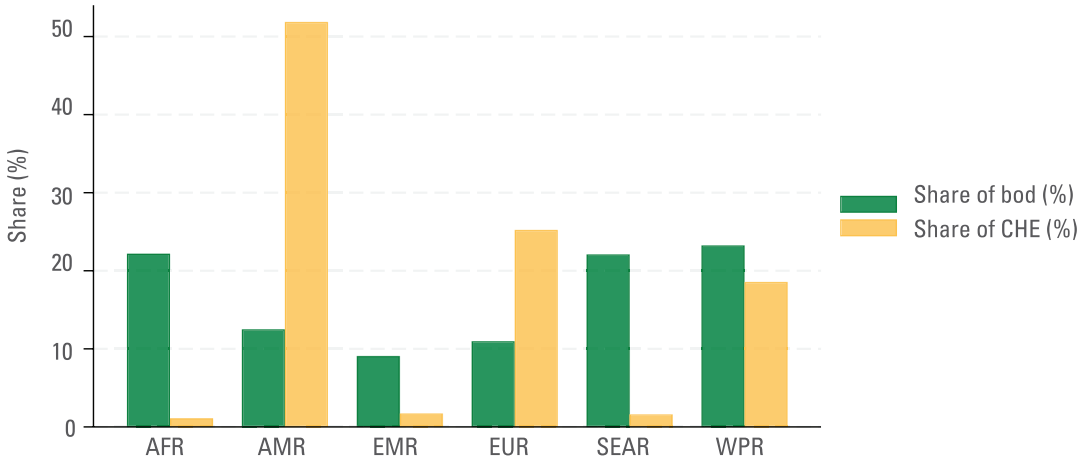
Moderate and uneven economic growth, rising public debt, and recurrent global shocks have constrained fiscal space, limiting governments' ability to expand public health spending.

4. Health financing situation in Africa

4.1. Health financing by continent versus burden of disease

Global current health expenditure was estimated at $10.3 trillion in 2022 with $5.2 trillion spent in the Americas, $2.5 trillion in Europe, $1.9 trillion in the western pacific region, $170 billion in the eastern mediterranean region, $159 billion in South-East Asia, and $110 billion in Africa *(Global Burden of Disease Collaborative Network, 2025)*. Global health expenditure by continent is not aligned with burden of disease, however, highlighting a structural misalignment that has persisted for decades *(Murray & Lopez, 1997)*. Figure 1 shows that Africa accounted for approximately 22% of the global burden of disease, yet only accounted for about 1% of global current health expenditure (CHE). This imbalance starkly contrasts with high-spending regions: the Americas, which shoulder 12% of the disease burden, absorb 52% of global health spending, while Europe, with 11% of the burden, accounts for 25% of CHE.

Figure 3: Share of burden of disease versus share of current health expenditure by region, 2023



Note: AFR, African Region, AMR, Region of the Americas, EMR, Eastern Mediterranean Region, EUR, European Region, SEAR, South-East Asian Region, WPR, Western Pacific Region

Data sources

Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2023 (GBD 2023) Results. Institute for Health Metrics and Evaluation (IHME), 2024. https://vizhub.healthdata.org/gbd-results/.

Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health. http://vizhub.healthdata.org/fgh/

Africa's health expenditure is mostly financed by domestic as opposed to external financing as shown in *Table 1*; domestic government, out-of-pocket and other private expenditures constitute domestic expenditures. In 2022, 77% of Africa's health expenditure was domestic and 23% was external. This provides a glimmer of hope that the continent can finance basic services, on the one hand, but is a cause of concern on the other because much of this domestic financing comes from out-of-pocket payments, estimated at 35% of total health expenditure (THE). This means the burden is shifted to households, which weakens risk pooling, and perpetuates inequity.

There are variations across the African Union (AU) regions in terms of the expenditure components (*Table 1*). Out-of-pocket expenditures are lowest in the southern African region at 9.2%, while they are highest in West African region (47.8%). External expenditures are highest in the Southern African region (32.8%) and almost at the same level in the Eastern African region, at 32.3%, and lowest in the Northern African region (5.2%). Government spending is highest in the North African region (48,2%), then in the Southern African region (45.7%) and lowest in the West African region (29.2%).

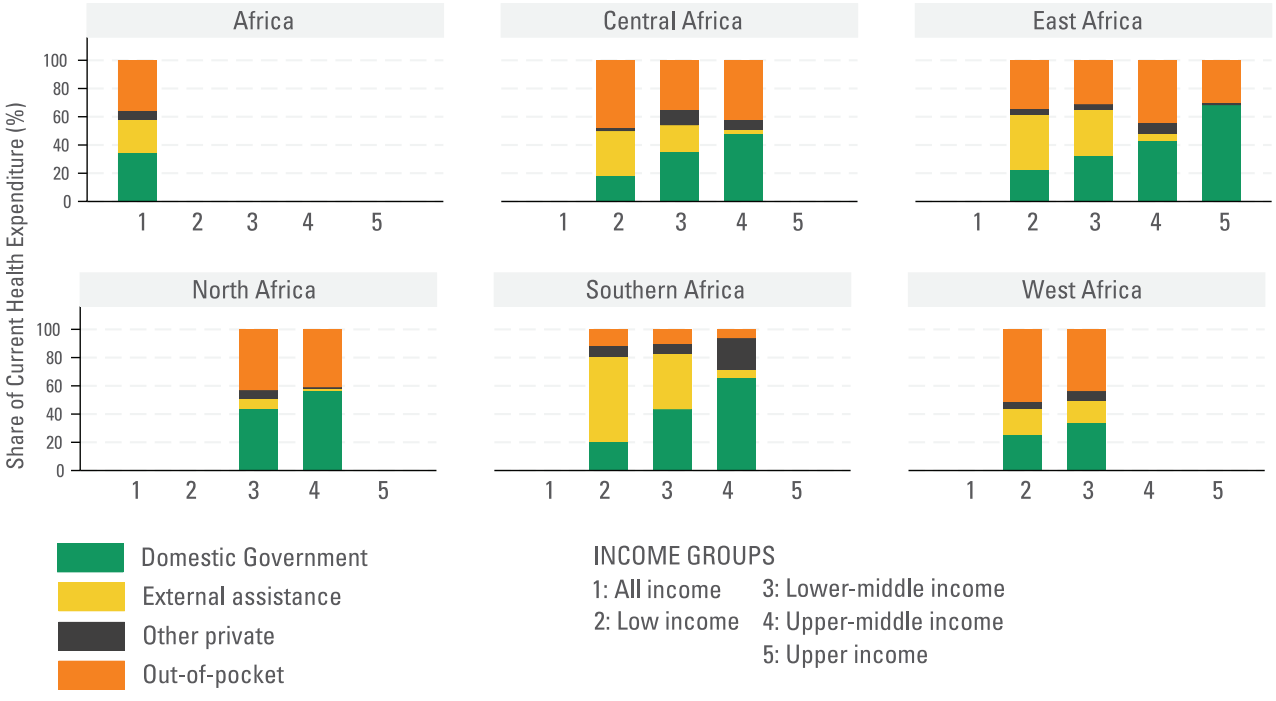
Further analysis of out-of-pocket spending is conducted in Figure 3. There is a clear economic gradient in government and external expenditure for all regions; low-income countries have lower Government spending contributions than higher income countries and they have higher external expenditures than higher income countries. Low- and lower middle-income countries show high dependence on either external financing or OOP or both, reflecting constrained fiscal space and limited risk pooling. Lower-middle- and upper middle-income countries in central and east Africa display a mixed profile, with growing domestic financing, yet high OOP spending, suggesting that economic transition has not automatically translated into effective financial protection.

Table 1: Total Health expenditure shares by component in the African Union and its sub-regions, 2022

African Union sub-region	Out of pocket spending	External health spending	Government spending	Other private spending
Southern Africa	9.2	32.8	45.7	12.3
East Africa	33.7	32.3	29.5	4.5
Central Africa	40.8	19.5	32.4	7.3
North Africa	42.4	5.2	48.2	4.3
West Africa	47.8	17.3	29.2	5.8
Africa	**35.7**	**23.1**	**34.7**	**6.6**

Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health. http://vizhub.healthdata.org/fgh/

Figure 4: Government, out-of-pocket, other private and external financing by African Union regions and income states in 2022

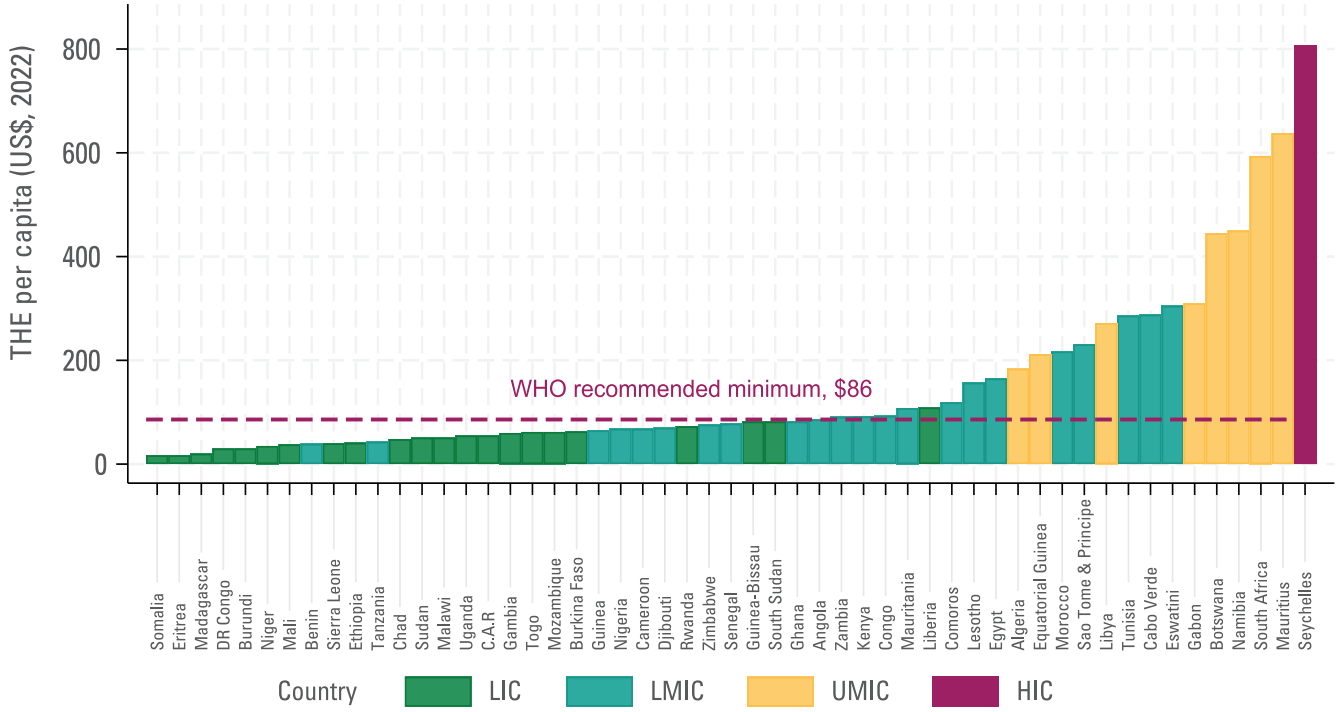


Data source:
WHO Global Health Expenditure Database (Updated 12th December 2025).
https://apps.who.int/nha/database

4.2. Health financing per capita distribution

Per capita health spending in Africa has increased gradually over time, driven primarily by growth in government health expenditure and, to a lesser extent, development assistance for health. Using the WHO-recommended minimum of US$86 per capita required to deliver an essential package of health services, only about 40% of African countries (21 out of 53) meet or exceed this threshold. Nearly 60% of African countries fall below the minimum, indicating that the majority of the African population live in settings where basic health system inputs are structurally underfunded. Only one low-income country (LIC), Liberia, meets the US$86 benchmark. Some lower-middle income countries (LMICs), e.g. Kenya, Egypt, Morocco, Tunisia, Cabo Verde, meet or exceed the WHO minimum while many others remain below the threshold, despite higher fiscal capacity than LICs. This reflects uneven prioritisation of health within public budgets, rather than income alone.

Figure 5: "Total Health Expenditure per Capita by Country (Africa, 2022)



Data source:
Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health.
http://vizhub.healthdata.org/fgh/

4.3. Total health expenditure and outcomesTop of Form

Figure 5 compares between universal health coverage (UHC) service coverage index (SCI) by THE per capita for AU member states by health financing system type. Health financing system classification is based on the approach by Arhin et al. (2023) where a system is classified as public, private or external if either of these financing sources exceed 50% or mixed if none of the financing sources is at least 50%. Across all countries, higher THE per capita is generally associated with higher UHC-SCI, but the relationship is not linear. Countries with similar levels of spending have different coverage outcomes, indicating that system type and its implied organization which determines how resources are pooled, purchased, and governed matters as much as how much is spent.

Public systems consistently achieve higher UHC-SCI at comparable or even lower levels of THE per capita. Examples include Ghana (THE pc, US$82, UHC-SCI 57), Tunisia (US$276, UHC-SCI 76) and South Africa (US$570, UHC-SCI 75). This is likely because of budget-based financing, pooling, and strategic purchasing, which translate spending into service coverage more efficiently. Even where out-of-pocket shares remain non-trivial, public budget dominance anchors coverage expansion.

Private systems often show moderate to high THE per capita, but UHC-SCI lags behind public systems at similar spending levels. Examples include Nigeria (US$90, UHC-SCI 47), Cameroon (US$72, UHC-SCI 47), Equatorial Guinea (US$215,

UHC-SCI 49). These three countries also have very high out-of-pocket shares (>60%). This implies that fragmented private spending does not guarantee service coverage and high household spending inflates THE per capita without producing proportional UHC gains.

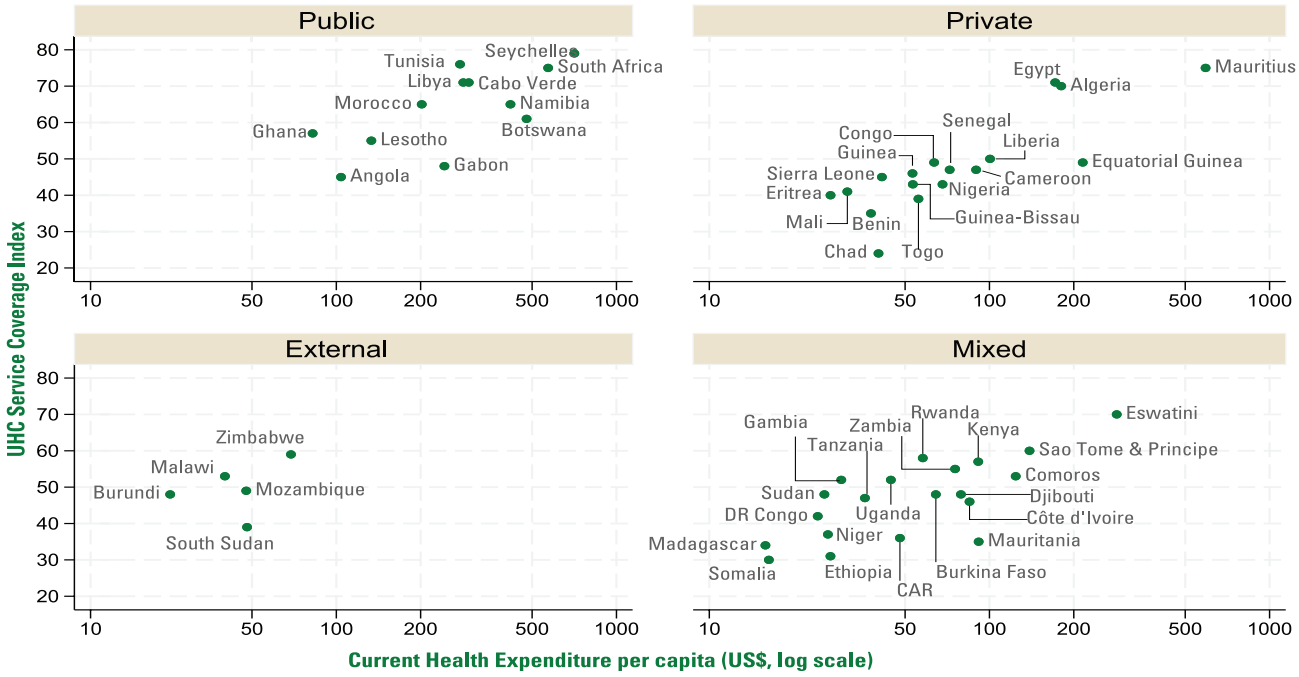
External-dominant systems achieve moderate UHC-SCI at low THE per capita, but results plateau quickly. Examples include Malawi (US$40, UHC-SCI 53), Mozambique (US$48, UHC-SCI 49) and Zimbabwe (US$69, UHC-SCI 59). This shows that donor financing can temporarily raise coverage, particularly for priority services, but coverage gains are fragile, highly program-specific, and not embedded in national purchasing or fiscal systems.

Mixed systems display the widest scatter: low spending with low coverage, but also cases of inefficiently high OOP with limited UHC gains. Examples include, Ethiopia (US$27, UHC-SCI 31), DR Congo (US$24, UHC-SCI 42), Kenya (US$91, UHC-SCI 57). No financing source dominates sufficiently to anchor the system. Fragmentation across public, donor, and household spending weakens purchasing power, accountability, and planning causing mixed systems to face largest efficiency losses.

Figure 5 focuses on the relationship between THE per capita and life expectancy. It is shown that LICs cluster at very low levels of health spending—generally below US$80 per capita—yet exhibit wide variation in life expectancy, ranging from the mid-50s to close to 70 years. Several LICs (e.g. Eritrea, Ethiopia, Rwanda, Uganda, Malawi) achieve life expectancy outcomes comparable to, or better than, some lower-middle-income countries despite extremely constrained resources. In contrast, countries facing fragility, conflict, or weak system governance (e.g. Chad, Central African Republic, South Sudan) show much lower outcomes at similar spending levels.

Lower-middle-income countries display a wide range of health spending (approximately US$60–300 per capita) and varying levels of performance. Several LMICs with moderate spending (e.g. Mauritania, Djibouti, Senegal, Tanzania, Congo and Zambia) achieve life expectancy outcomes comparable to peers spending significantly more. Upper-middle-income countries and Seychelles spend substantially more per capita, between US$300– 800, yet life expectancy is highly variable, between 68 and 77 years. A few of the upper middle-income (UMIC) countries perform poorer than lower middle-income countries with similar spending levels.

Bottom of Form Figure 6: Total health financing per capita vs UHC service coverage index



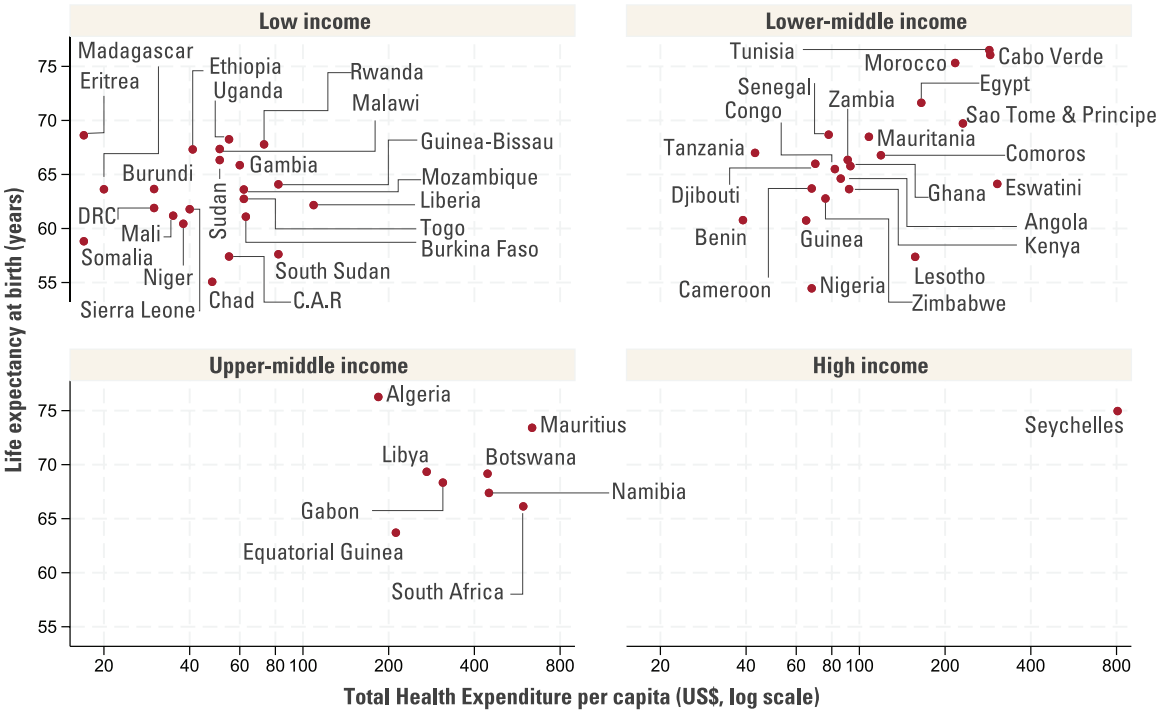
Note: Classification of health systems adopted from Arhin et al. (2023) with the following amendments. Togo, Algeria, Eritrea, South Sudan, Libya, Morocco, Tunisia, Egypt, Djibouti, Somalia, Sudan Uganda and Tanzania which were not in the study have been added and classified using the same methodology but for 2022 data.

Data sources

Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health.
http://vizhub.healthdata.org/fgh/

World Health Organization (2025).
https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage

Figure 7: Total health expenditure per capita versus life expectancy by country income status for African Union member states, 2023



Data sources

Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health. http://vizhub.healthdata.org/fgh/

World Health Organization (2025). https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage

Across all the income groups, the evidence confirms that life expectancy is produced by coherent intersectoral systems, not health spending alone. While increasing health expenditure remains necessary, particularly in low-income settings, the most durable improvements in population health come from how countries organize their economies, deliver public goods, and invest across sectors that shape health. Health financing reforms will therefore be most effective when embedded within broader development strategies that prioritize prevention, equity, and multisectoral action.

4.4. Health financing delivery channels

Health financing in Africa is highly fragmented, with multiple funding sources, financing agents and implementing partners operating independently or in parallel, often leading to inefficiencies and challenges in health system navigation and service delivery (Malakoane et al., 2020; Siita et al., 2019). For example, in Malawi, the 2017/18 health sector resource mapping showed that there were 191 financing sources and 261 implementing partners (Government of Malawi, 2017). A multi-country study documented an average of 23 health financing schemes per country across 11 African countries, highlighting the high degree of fragmentation and the complexity of the financing landscape (Akhnif et al., 2018).

4.5. The efficiency of African health systems

The scale of inefficiency in health spending is substantial. The World Health Organization (WHO) estimates that 20–40 % of resources spent on health globally are wasted due to inefficiency (World Health Organization, 2010). In the African context, it has been estimated that health systems operate at an average efficiency of approximately 67 % (Sun et al., 2017). These inefficiencies arise from a combination of structural and institutional factors which include the misuse of health inputs, sub-optimal allocation of resources, weak management practices, and deficiencies in public financial management systems, as well as unpredictable and disease-specific donor funding that is poorly aligned with national priorities.

The predominance of personal emoluments and medicines and medical supplies allocations in Government budgets, approximately 55% and 25% respectively, makes efficiency improvements in these two areas particularly critical (Toure et al., 2023; Wirtz et al., 2017). In the area of human resources for health, documented challenges include poor skill mix, maldistribution of personnel in favour of higher-level facilities, inappropriate task shifting that overburdens specific cadres, and the persistence of ghost workers (Engidaw et al., 2023; Nyawira et al., 2022; Okoroafor et al., 2022). In-service training programs funded mostly by external partners are costly, both financially and in terms of the opportunity cost of lost health worker time. In some cases, they are repetitive due to high staff turnover, further increasing loss (Nakiire et al., 2019).

Inefficiencies are also caused by verticalized planning and execution with disease specific financing systems, human resources, data systems, supervision and infrastructure and equipment, among others (Kruk et al., 2010). Vertical funds have, in some cases, not been allocated to priority health needs, or have been allocated to interventions that have a high opportunity cost in terms of foregone health gain in other programmatic areas. In many cases, there has been low absorption of donor resources due to stringent or misaligned financing requirements. On the demand side, vertical service delivery has led to multiple patient visits, repeated assessments, and missed opportunities for early detection and continuity of care.

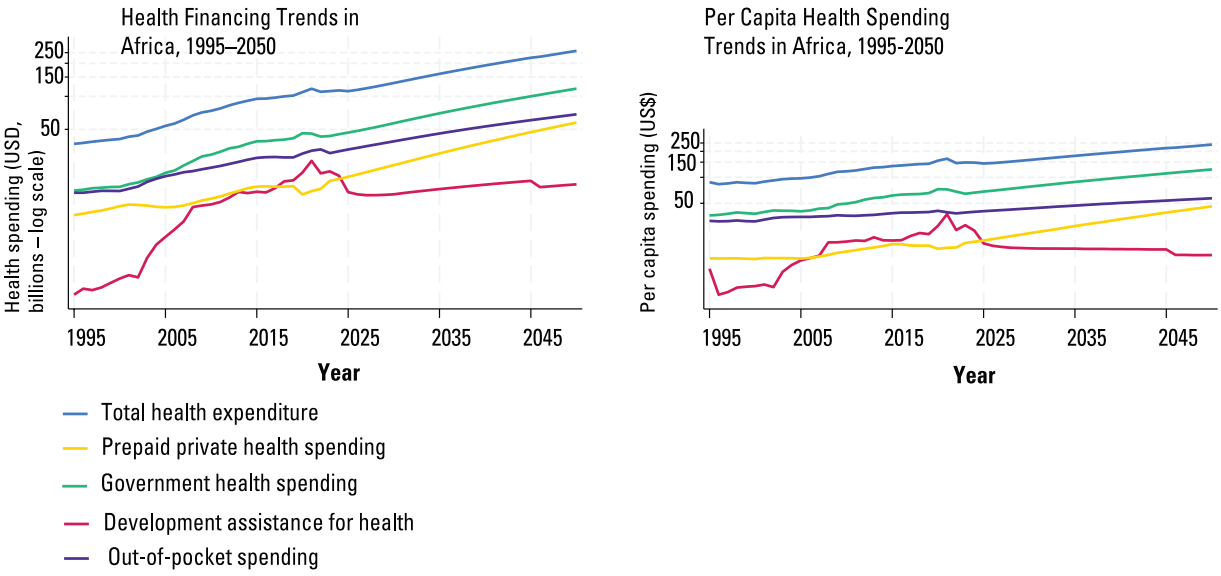
Beyond technical constraints, governance factors also play an important role: the extent of corruption control and the strength of the rule of law are crucial determinants of efficiency in health (Drama et al., 2025). Finally, as shown earlier in this chapter, health system type also influences efficiency, with more fragmented financing and delivery arrangements generally associated with poorer resource use and weaker outcomes.

4.6. Projected health financing for Africa, 2025-2050

IHME expenditure data from 1995-2022 and financing projections from 2023 to 2050 show that health financing in Africa is projected to grow steadily between 1995 and 2050 but there will be a shift in its composition (*Figure 7*) (Institute for Health Metrics and Evaluation (IHME), 2025). THE for the African continent will grow from approximately US$112 billion in 2025 to US$260 billion in 2050, implying an average annual growth rate of about 3.4% lower than the average growth between 1995-2019, which was 4.3% per year. Government Health Expenditure (GHE) will grow from US$47 billion in 2025 to US$120 billion in 2050, an average annual growth rate of 3.8%. Private health expenditures (PHE) will rise from about US$51 billion in 2025 to US$126 billion in 2050 corresponding to an average annual growth rate of 3.7%. OOP spending, a component of PHE, will increase from US$33 billion in 2025 to US$69 billion in 2050, an average annual growth rate of 3%. Although OOP will grow more slowly than GHE and PHE, it will continue to rise in absolute terms. It will constitute 59% of PHE annually, on average, for the whole period. Development Assistance for Health (DAH) will remain broadly flat in real terms, US$13 in 2025 to $16 billion in 2050, implying an average growth of 0.7%. Corresponding per capita variables show lower growth than the aggregate figures. For example, THE per capita will grow much more slowly, at 1.52% per year. This is likely due to the dampening effect of Africa's population growth which is projected to grow on average by 1.89% annually during the same period.

In summary, growth in health spending will be driven primarily by government and private expenditures, with OOP comprising the majority of PHE. Flat DAH growth confirms that Africa can no longer plan its health systems around expanding donor flows. The moderate overall growth compared with earlier decades suggests that incremental gains will not be enough; structural health financing and related reforms are critical.

Figure 8: Health financing projections for Africa, 1995-2050



Data source:
Institute for Health Metrics and Evaluation (IHME) (2025). Financing Global Health.
http://vizhub.healthdata.org/fgh/

4.7. Conclusion

Africa's health financing remains misaligned with its disease burden. The continent bears approximately 22 % of the global burden of disease, yet accounts for only about 1 % of global current health expenditure. While domestic sources now finance roughly 77 % of THE, compared with 23 % from external assistance, this aggregate picture masks a critical vulnerability: in 2025, OOP spending accounted for about 64 % of domestic health expenditure, or 35 % of THE. This level of reliance on direct household payments poses serious concerns for equity, financial protection, and access to care. Using the WHO-recommended minimum of US$86 per capita required to deliver an essential package of health services, only around 40 % of African countries (21 out of 53) currently meet or exceed this threshold.

Comparisons between health expenditure and health outcomes further underscore that spending levels alone do not determine performance. While higher THE per capita is generally associated with improved UHC service coverage, the relationship is non-linear. Countries with similar levels of spending often achieve markedly different coverage outcomes, indicating that health system type, organization, and purchasing arrangements are as important as the level of expenditure itself. Systems characterized by fragmentation and weak pooling consistently underperform relative to more integrated and publicly anchored models.

Across all income groups, the evidence also confirms that life expectancy is shaped by coherent intersectoral systems rather than health spending alone. Although increasing health expenditure remains necessary—particularly in low-income settings—the most sustained gains in population health are achieved through how countries organize their economies, deliver public goods, and invest across sectors that influence health outcomes, including education, nutrition, water and sanitation, housing, transport, and environmental protection. Health financing

reforms will therefore be most effective when embedded within broader development strategies that prioritize prevention, equity, and multisectoral action, consistent with a Health in All Policies approach.

The chapter further demonstrates that inefficiency is a major structural constraint. On average, African health systems operate at approximately 67 % efficiency, with losses driven by resource misallocation, fragmentation, weak public financial management, and governance failures. These inefficiencies represent not only a fiscal loss, but also a significant opportunity: recovering even a portion of wasted resources could generate substantial fiscal space, reduce dependence on external financing, and accelerate progress towards UHC and health security. Fragmentation remains a defining feature of health financing in Africa, with multiple funding sources, financing agents, and implementing partners operating in parallel, undermining coordination, accountability, and service delivery effectiveness.

Looking ahead, Africa's THE is projected to grow from approximately US$112 billion in 2025 to US$260 billion by 2050, driven primarily by government and private spending. However, OOP expenditure is expected to remain the dominant component of private health expenditure, perpetuating risks to equity and financial protection. At the same time, flat or declining development assistance for health confirms that Africa can no longer plan its health systems around expanding donor flows. The future of health financing on the continent will therefore depend on how effectively countries mobilize domestic resources, reduce inefficiencies, and restructure financing toward pooled, prepaid, and publicly governed systems capable of sustaining UHC and health security.

Africa's THE is projected to grow from approximately US$112 billion in 2025 to US$260 billion by 2050, driven primarily by government and private spending.

5. Health financing and related reforms to support the AHSS agenda

5.1. Introduction

Building on the diagnostic evidence presented in the preceding Chapter, this chapter sets out a focused package of reforms to realign Africa's health financing systems with the pillars of the Africa Health Security and Sovereignty (AHSS) agenda. First, the chapter advances the principle of a One Plan, One Budget, and One Report as the foundation for coherent health sector financing, emphasizing the need to anchor all domestic and external resources to a single, costed national health strategy. Closely linked to this, it calls for the realignment of external assistance to national plans, moving away from fragmented, project-based funding toward predictable financing that strengthens country systems and accountability. Then, the chapter focuses on efficiency reforms as a central lever for expanding fiscal space without imposing additional financial burdens on households. These reforms target key drivers of inefficiency, including human resources for health, health benefits package design, pooled procurement mechanisms for health commodities, intersectoral co-financing and implementation, and service delivery integration.

Third, the chapter emphasizes the importance of strengthening Public Financial Management (PFM) in the health sector, recognizing that weak budget credibility, fragmented execution, and limited expenditure controls undermine the effectiveness of both domestic and external health spending. Fourth, responding directly to the evidence of persistently high out of pocket spending, the chapter prioritizes reducing out-of-pocket spending in Africa by shifting financing towards pooled and prepaid mechanisms that improve financial protection and equity. Domestic resource mobilization strategies are then proposed including innovating financing mechanisms. Finally, the chapter advances strategic purchasing as a critical reform to ensure that available resources are used to buy priority services from providers in ways that incentivize quality, efficiency, and coverage, rather than merely financing inputs. Together, these reforms constitute a coherent financing transformation agenda that responds directly to the structural weaknesses identified in the preceding chapter and provides a practical pathway for translating increased spending into measurable health gains and progress toward universal health coverage.

5.2. One Plan, One Budget and One Report

The One Plan, One Budget and One Report (OPBR) framework addresses the problem of multiplicity of strategic plans and investment cases that countries have developed in response to the conditionalities of fragmented funding streams. Multiple strategic plans often duplicate health systems strengthening activities, the indicators to measure them and they set different targets for similar indicators. The financing for the different strategic plans flows through different channels to specific programmes and to different implementing partners. There are parallel review processes for the different strategic plans that are informed by the different monitoring and evaluation frameworks (including data collection tools, such as health facility registers and digital health systems). The OPBR framework by unifying planning, budgeting and review processes, reduces financial resources and staff time spent on the duplicative processes.

One Plan: The core objective of the One plan should be to facilitate joint priority setting, particularly joint sector wide target setting within Ministries of Health and with donors and other stakeholders. The One Plan will happen both at the strategic and operational levels. At the strategic level, one national health sector strategic plan should be developed based on an agreed format by all stakeholders including in-country donors and Global Health Initiatives. At the operational level, joint priority setting must be conducted based on one agreed format and governance structures. The question that must be answered is "Given the total available health resources for the fiscal year, to what extent will the health sector move targets from the current level to the desired level, and what health systems and related investments will be required?"

The One plan assumes that there is a feasible health services package or a health benefits package which includes interventions (promotive, preventive, curative, rehabilitative and palliative) across all programmatic areas. Such kind of planning can be facilitated by all-disease, whole-of-health-system models as opposed to disease specific modelling approaches (Hallett et al., 2025; Verguet et al., 2019). The planning process is therefore focussed on expanding access to this package through necessary health systems investments.

The critical ingredients for a robust One plan are as follows:

- It must be costed in a way that will optimally satisfy cost representations required by different stakeholders starting with the Government, Global Health Initiatives, bilateral and multilateral donors and other stakeholders. This implies that there has to be consensus on feasible cost representations.
    - The costing should be conducted in a way that is not static but is amenable to regular updates with minimum effort
- Since the one plan is implemented at the subnational level, its priority and target setting process should be designed to enable and inform subnational and health facility One plans. This could involve an iterative top-down and bottom-up approach.
- The annual One Plan should be designed to accommodate different financial years for key stakeholders, where necessary, in order to accommodate different financial years of different key stakeholders.

The One Plan process will have to be accompanied by a change management process in order to address existing perverse incentives

One Budget: The core objective of the One Budget should be to fund the priorities identified in the One Plan. Budget support as part of a health sector wide approach is the gold standard for the One Budget. However, where budget support cannot be implemented, creating funding pooling mechanisms outside of the public financial management system has increasingly become common. This has mostly taken the form of Single Project Implementation Units (SPIUs). The ambition of the SPIU may vary depending on context. Options include any or a combination of the following:

- Bringing staff of PIUs of different projects under one leader (usually a public servant) to coordinate their operations.
- In addition to the previous point, rationalizing staff
- Harmonizing financial management and procurement processes and systems across different donors

One Report: The aim of the one Report is to monitor the implementation of the One Plan, the execution of the one budget and to audit of the expenditures. Possible actions that countries can take to move towards the One report include:

- Defining, as part of the one plan, a core indicator list that all stakeholders in the health sector will use to monitor the implementation of the One Plan
- Design an information architecture that will provide data for decision making at all levels of the health system
- Rationalize fragmented data collection tools (health facility registers or digital tools) to align with the core indicator list
- Build consensus among stakeholders on the minimum requirements of a single health sector audit
- Build the capacity of the supreme audit institution and the internal Ministry of Health finance and audit functions
- Consolidate programmatic reviews into sector-wide reviews

5.3. Realign external assistance to the national plan

In order for the OPBR to be effectively implemented, countries must embark on a realignment process of all external support to the OPBR. The following steps are recommended:

- Engage in-country donors and Global Health Initiatives to fund the one plan as opposed to dragging the Government into different funding application processes
- Assess the health financing landscape of the country through a resource mapping exercise that maps existing resources to the One Plan, determining what volume of resources is truly aligned and what is not aligned
- Using the resource mapping data, assess which areas are overfunded or underfunded relative to need,

which resources are committed to delivery approaches that are cost-ineffective and how much of the total health sector budget is discretionary to the Government.

- Based on this assessment, engage donors and other stakeholders and develop a plan to reallocate resources and more importantly make structural changes to the resource allocation process.

5.4. Efficiency reforms

Given the modest average annual growth in total health financing for Africa between 2023 and 2050, efficiency gains will be the most immediate source of fiscal space. It is therefore imperative for countries to analyze both recurrent and capital health budgets items and identify areas of inefficiency. Based on the efficiency issues diagnosed in Section 4.5, the section proposes the areas of reform in *Table 2* based on the stated logic.

Table 2: The logic of efficiency reforms

Logic	Reform area
What should the Government feasibly deliver complemented by donors and other stakeholders?	Health benefits package
How can the health sector minimize the costs of inputs for delivering the package?	Human resources for health, pooled procurement
How can the health sector effectively combine the inputs to produce maximum health benefit?	Service delivery integration
How can the health sector improve health outcomes beyond its own activities?	Intersectoral co-financing and implementation

5.4.1. Health benefit packages

Health service or benefit packages are typically designed to cover a country's essential health needs, but donor and partner influence has sometimes led to the inclusion of interventions that may be cost-ineffective or financially unsustainable for the country. In addition, prioritization of interventions has been done in silos which has led to fragmented packages that do not maximize the value of the available resources. In addition, such interventions may have been delivered through cost-ineffective approaches. The following reform actions are suggested:

- Reprioritize interventions in a holistic approach considering all important criteria including cost-effectiveness, opportunity cost and sustainability (Glassman et al., 2017).
- Define clear access conditions/entitlements to the health benefits package and enforcement mechanisms especially in tax financed systems that provide services free at the point of access.
- Utilize Health technology Assessment (HTA) to add services to the existing health benefits package. This may imply setting up HTA structures where they do not exist and building the necessary capacity of different stakeholders.

5.4.2. Human resources for health

Reforming human resources for health (HRH) is a prerequisite for unlocking efficiency gains across the health system and enabling other financing and service delivery reforms to take effect. Personal emoluments account for approximately 55% of government health budgets, while, on average, only about 6% of development assistance for health (DAH) over the period 1990–2021 was allocated to HRH capacity building (Institute for Health Metrics and Evaluation (IHME), 2025). Given this imbalance, targeted HRH reforms represent one of the largest opportunities for efficiency gains. The following reforms are recommended:

5.4.2.1. Skills mix and workforce configuration

- Review the skills mix across different levels of the health system to ensure that the composition of the workforce aligns with evolving population health needs and service delivery models.

- Undertake a holistic assessment of health worker cadres across all levels of care, including how they are trained, deployed, and utilized.
- Reassess pre-service and in-service training pathways to ensure that competencies are developed at the most appropriate stage of the training continuum.

5.4.2.2. Reform of in-service training delivery

- Improve the efficiency of in-service training by developing integrated curricula that reduce duplication across programmes and disease areas.
- Expand the use of cost-effective digital and online training platforms, including peer-learning mechanisms, to deliver standardized content at scale.
- Promote the sharing of online training content across countries and institutions for similar cadres to reduce development and delivery costs.
- Regularly assess which components of in-service training can be shifted to pre-service training as a means of generating sustained efficiency gains.

5.4.2.3. Payroll management and workforce governance

- Institute routine payroll audits to address issues such as ghost workers, inappropriate grading, and payroll leakages.
- Complement payroll audits with the digitalization of payroll and human resource management systems to improve transparency, control, and accountability.

Evidence suggests that implementing reforms related to improved human resources for health management can generate efficiency savings of up to 26% (Kurowski et al., 2003), underscoring the centrality of HRH reform to broader health financing and system efficiency agendas.

5.4.3. Pooled procurement mechanisms for health commodities

On average, medicines and medical supplies constitute 25% of health budgets in Africa (Wirtz et al., 2017). Most health commodities are procured by Government Central Medical Stores through tenders. The use of the "middleman" is inefficient and increases the unit prices of medicines. As such, pooled procurement mechanisms have emerged. The benefits of pooled procurement include the reduction of unit prices, supply chain costs and administrative burden, improved quality assurance, reduced opportunities for corruption, and increased supply equity across markets (Barton et al., 2022; Prakash et al., 2025). The African Pooled Procurement Mechanism (APPM) is a strategic initiative led by the Africa CDC to enhance the affordability, availability, and equitable access to essential medical supplies across all African Union (AU) Member States. In order to benefit from the efficiencies of pooled procurement, the following actions are suggested for countries:

- Review legal and other regulatory standards, treatment guidelines, and import and customs regimes to enable pooled procurement.
- Strengthen governance systems related to the procurement of commodities to address vested interests and perverse incentives
- Review misaligned incentives, such as policies to strengthen local pharmaceutical manufacturing and the revenue potential for national medicines regulatory authorities' registration fees for medical products (Barton et al., 2022)

It has been shown that pooled procurement can reduce prices of medicines by up to 33% (Dubois et al., 2021).

On average, medicines and medical supplies account for approximately 25% of health budgets in Africa (Wirtz et al., 2017), making them the second-largest expenditure item after human resources. In most African countries, health commodities are procured through government Central Medical Stores using national and international tendering processes. However, fragmented procurement arrangements and the use of intermediaries increase transaction costs and inflate unit prices, undermining value for money.

In response to these inefficiencies, pooled procurement mechanisms have emerged as a critical reform to improve purchasing power and supply chain performance. Evidence shows that pooled procurement can reduce unit prices, lower supply chain and administrative costs, improve quality assurance, reduce opportunities for corruption, and enhance equity in access across markets (Barton et al., 2022; Prakash et al., 2025). The African Pooled Procurement Mechanism (APPM), led by Africa CDC, is a strategic continental initiative designed to enhance the affordability, availability, and equitable access to essential medical products across AU Member States. To fully realise the efficiency gains associated with pooled procurement, countries may consider the following actions:

- Review legal and regulatory frameworks, including procurement laws, treatment guidelines, and import and customs regimes, to enable participation in pooled procurement arrangements.
- Strengthen procurement governance systems to address vested interests, reduce discretion, and mitigate perverse incentives that undermine competitive purchasing.
- Align industrial and regulatory incentives, particularly where policies to promote in-country pharmaceutical manufacturing or revenue-generation objectives of national medicines regulatory authorities—such as registration fees—may inadvertently distort procurement decisions (Barton et al., 2022).

Empirical evidence suggests that well-designed pooled procurement mechanisms can reduce medicine prices by up to 33% (Dubois et al., 2021). It is expected that as local pharmaceutical manufacturing expands and more health commodities are sourced from Africa, the efficiency gains of pooled procurement will increase.

5.4.4. Service delivery integration

In order to reduce duplication caused by working in silos and effectively address the multifaceted burden of disease that Africa faces, vertical health systems must be restructured and redesigned into integrated and patient-centred models, particularly in PHC (Shortell, 2021). Evidence suggests that people-centered and integrated services can improve health status and be an essential building block of universal health coverage (Kruk et al., 2010; Lê et al., 2016). While many studies are heterogeneous, with pathways tailored to context and need, current evidence suggests that integrated care through a patient-centered lens, especially at the primary and secondary levels, enhances service delivery, improves patient access and participation, and improves or maintains patient outcomes (Chireshe et al., 2024; Danielle Yugbaré Belemsaga et al., 2018; Harrison & Jordan, 2022; Kivuyo et al., 2023; Mitchell et al., 2015). Recent economic studies are promising in reducing patient out-of-pocket and overall programmatic costs contingent on maintaining the quality of integrated services (more services per visit and better use of infrastructure and staff); poorly implemented integration can cause increased wait times and staff burden without proportional health gains (Moucheraud et al., 2020; Wroe et al., 2022).

5.4.4.1. Integration models explored on the African continent

Many countries have combined HIV, TB, maternal–child health, and increasingly, hypertension and diabetes into single PHC visits or "one-stop" chronic care clinics, often utilizing task-shifting to nurses and clinical officers along with harmonized clinical guidelines. Examples include:

- **HIV, maternal and child health (MCH), and prevention of mother to child transmission (PMTCT) integration**: HIV services within MCH clinics, ranging from full HIV care and ART initiation to partial services (Humphrey et al., 2023).
- **Integration of PMTCT into general maternal and child health care** in Western Kenya (Berlacher et al., 2020).
- **Integration of maternal and child health services**, such as family planning, postnatal care and immunizations in several eastern and western Africa countries (Cooper et al., 2020; Danielle Yugbaré Belemsaga et al., 2018; Dulli et al., 2016; Hamon, Kambanje, Pryor, Kaponda, Mwale, Burchett et al., 2022; Hamon, Kambanje, Pryor, Kaponda, Mwale, Webster et al., 2022; Nelson et al., 2019; Vance et al., 2014).
- **Combined management of HIV, TB, and NCDs** where healthcare workers, pharmacy, medical records, registration, waiting areas, and laboratory services are shared (Kivuyo et al., 2023).
- Integrated delivery models have expanded beyond focusing solely on HIV to encompass full PHC strengthening. These models are fundamentally patient-centered, aiming to structure and coordinate healthcare delivery efficiently to improve outcomes.

- In Mozambique, this involved placing ART services within existing units, retraining staff, strengthening laboratories, testing, referral systems, expanding testing in TB wards, integrating HIV and antenatal services, and enhancing district management (Pfeiffer et al., 2010).
- In Botswana and Nigeria, they have created national guidelines to integrate HIV and/or PHC services, providing strategic, step-by-step guidance for positioning integrated service delivery within primary and secondary care to achieve improved health outcomes. (Federal Government of Nigeria, 2013)
- In Malawi, the comprehensive care model comprises three pathways: a) integrated screening offering a set of tests to all patients; b) maternal and child health clinics; c) chronic disease clinics combining HIV and other chronic illnesses. This approach has included reorganizing facilities and space, staff training and mentorship, improving diagnostic and NCD medication availability, and developing an integrated screening register (Wroe et al., 2015, 2020).

5.4.4.2. Suggested steps to implement integration reform

This reform signifies a major transformation in how health services are designed and delivered, moving away from a fragmented, program-oriented approach toward a unified, people-focused, and nationally coordinated model. To promote client-centered care, it is crucial to transition from disease-specific initiatives—such as TB, HIV/ART, or family planning—toward a comprehensive continuum of care that meets clients' overall needs. This continuum includes health education, promotion, prevention, screening, diagnosis, treatment, supportive services, and referrals, all with integrated services and resources at each stage for prioritized conditions. The recommended steps are as follows:

- Create an integration blueprint for health facilities that clearly illustrates how healthcare delivery will shift from fragmented methods to a cohesive, integrated system across different levels. This entails identifying, designing, and implementing integration services, possibly employing hub and spoke models that include referral, and sample transportation systems. Updates and adjustments to guidelines, protocols, and governance frameworks will be necessary to support this transition.
- Conduct health facility readiness assessments to guide adjustments to health care delivery inputs. The following examples for some specific pillars are provided:
    - ***Workforce:*** Initiate a mindset change among health workers to embrace redesigned health service delivery. This could involve updating both pre-service and in-service training, as well as mentorship programs, to support integrated healthcare. Effective task delegation and role redefinition within care teams managing a wider variety of cases, guided by proper training and incentives (Angwenyi et al., 2020), may be necessary. Additionally, staffing levels at health facilities might need to be adjusted to enhance service delivery. For instance, a recent modelling study found that including a pharmacy health worker cadre at health centres increased the availability of medical products by 85% (Mohan et al., 2024).
- The following national and district-level catalytic reforms should support health facility-level integration efforts:
    - Transition from a programmatic to a system-wide or service delivery platform costing approach
    - Unified quantification of medicines and medical supplies, and joint forecasting of equipment and medical products for multiple funding streams
    - Integrated supply chain and sample transportation systems
    - Integrated supportive supervision and reviews
    - Rationalize data collection tools and explore options for integrated digitalization
    - Integrated target setting, financing, and reporting that is coherent across the hierarchy of the health system through a One Plan, One Budget, and One Report mechanism.

5.4.5. Intersectoral co-financing and implementation

Health financing reform has traditionally focussed on changes that can happen within the health sector. As important as that is, health care is only one of the social determinants of health (SDOH). It has been shown that the high burden of illness responsible for premature loss of life arises in large part because of the conditions in which

people are born, grow, live, work, and age, as well as the broader systems and forces that shape these conditions (CSDH, 2008; Mihret et al., 2022). The main domains of SDOH, as identified by multiple frameworks include: economic stability (income, employment, wealth, and financial security), education access and quality, health care access and quality, neighbourhood and built/physical environment (housing, safety, environmental exposures), social and community context (social support, discrimination, community engagement), cultural and social norms, early childhood experiences and behavioural factors.

It is generally agreed that social determinants of health contribute a significantly larger proportion to health outcomes than medical care alone. However, the exact percentage attributed to SDOH varies across sources. Some studies have shown that social determinants and related health behaviours account for 80–90% of modifiable contributors to population health outcomes, while healthcare alone accounts for only 10–20% (Lagziel et al., 2024; Mihret et al., 2022; Sandhu et al., 2021; Suntai, 2021). One study estimated that social, behavioural, and environmental factors accounted for up to 70% of health outcomes (Markatou et al., 2023). The World Health Organization (WHO) estimates that social determinants contribute to 30–55% of health outcomes (Tan et al., 2022). Social and economic factors are reported to account for almost 50% of health outcomes, with clinical care accounting for 16% (Dzau et al., 2024). Social and environmental factors account for between 45% and 60% of the variation in health outcomes (Roszko-Wójtowicz et al., 2025).

Therefore, a health financing reform agenda that only focusses on health care system changes will not be effective in contributing to better population health. Hence, an inter-sectoral co-financing approach is recommended for countries. Intersectoral co-financing is a financing approach whereby two or more sectors or budget holders, each with different objectives, co-fund an intervention which advances their respective objectives simultaneously (Guthrie & Webb, 2019). The costs of the interventions are split among 'benefitting sectors', based on each sector's estimation of the opportunity cost and their ability to pay for expected results. Co-financing does not necessarily require additional resources but rather it helps optimize allocation of existing resources across sectors to maximise cross-sector outcomes (Guthrie & Webb, 2019). The following actions are recommended for countries to implement cross-sectoral financing.

- Create a committee for joint planning and budgeting with Ministries/Departments/agencies (MDAs) that are responsible for selected key social determinants of health. It may not be feasibly possible for such a committee to include all SDOH hence the need for prioritization. Aligning with stated national policies, for example, a focus on human capital development in some contexts, may facilitate the selection of MDAs. This committee may be responsible for the following suggested actions:
    - Identifying key priority areas for joint implementation planning budgeting. This may include the use of appropriate data and tools such, as intersectoral modelling approaches, to estimate benefits and the payer's opportunity costs, as well as their ability to re-allocate existing budgets for certain services/outputs to others with potentially greater outcomes, even down to regional or district level (Guthrie & Webb, 2019).
    - Harmonize to the intersectoral budget, external resources that do not use the public financial management system and are currently spread across diverse actors and use parallel fund flows and management systems.
    - Jointly lobby as MDAs for feasible public financial management (PFM) reforms that enable cross-sectoral budgeting, and accountability. More importantly, the opportunities within the existing PFM system must be explored given.
- Raise awareness and obtain the necessary buy-in from the various stakeholders especially at the district level

5.5. Strengthen Public Financial Management (PFM) in the health sector

Public financial management (PFM) systems are central to ensuring that health sector funds are used efficiently and effectively to deliver high-impact services. Effective PFM enables funds to be directed to priority populations, interventions, and provides predictable funding, allowing ministries of health to develop realistic and ambitious plans with greater assurance (Masis et al., 2021). Countries that have made significant progress towards UHC relied on a dominant share of public funds to finance health(Mcintyre et al., 2017). The quality of PFM systems is

positively associated with improved health outcomes, such as reduced child mortality, especially in countries that channel more spending through government systems(Dieleman et al., 2019). The strength of PFM systems is variable across African countries with some countries such as South Africa, Rwanda and Ethiopia being ahead while the majority of countries lag behind (Piatti-Fünfkirchen & Schneider, 2018). Some of the common PFM challenges include:

- **Fragmented and incoherent Planning, Budgeting, and Financing** – the problem starts from weak linkage between national development plans and the many programmatic strategic plans in the health sector and from the programmatic strategic plans to the budget structure. This is related to the many off-budget funds and donor managed projects that are set up to fund fragmented health sector plans (Bertone et al., 2019; Tsofa et al., 2017).

- **Weak Budget Credibility -** the inability of governments to reliably execute budgets as planned, resulting in a lack of trust among stakeholders, frequent deviations between budgeted and actual expenditures, and a reliance on external support for key public services and investments (Pierre & Diaby, 2025). For example, large discrepancies between budgeted amounts and actual expenditures, with differences greater than 50% in 66% of surveyed countries were observed for immunization budgets (Griffiths et al., 2020). In addition, revenue shortfalls and optimistic macro-fiscal assumptions undermine execution (Asante et al., 2024). Weak budget credibility may also be due to inadequate or late budget releases and weak procurement systems (Mukwena & Manyisa, 2022; Olaniran et al., 2022).

- **Weak Cash Management and Commitment Controls –** weak cash forecasting affects the predictability of budget execution of Government entities, negates the system of commitment controls as Ministries commit expenditures without confirmed cash availability, erodes trust of public entities and leads to the accumulation of areas. Ineffective implementation of a Treasury single account (TSA) or weak implementation of the IFMIS contribute to this challenge.

- **Accumulation and poor management of arrears –** arrears to suppliers of goods and services are widespread and are often not reported transparently in fiscal accounts. This masks the true fiscal deficit and creates implicit debt (Duran et al., 2014; Glenngård & Maina, 2007).

- **Weak Oversight and transparency and accountability -** Parliaments often approve budgets with limited scrutiny, while supreme Audit Institutions produce reports late, with limited follow-up and sanctions for misuse of public funds are not implemented or they are weakly enforced (Bertone et al., 2019). In addition, the budget structure is opaque to many stakeholders including citizens and Civil Society Organisations (CSOs). This makes fiscal oversight and evidence-based decision-making difficult.

- **Debt and Fiscal Risk Management Weaknesses –** Countries have faced increased debt due to many diverse factors including exchange rate fluctuations, external shocks, commodity dependence, and week public debt management. High debt constricts fiscal space for public service delivery.

- **Inadequate and incoherent data for monitoring PFM performance** - Data for budget monitoring and evaluation are not adequately available at the different levels of the health system, especially subnational and health facility level. This is because of fragmented systems; for example, the IFMIS may have salary and health commodity expenditures while disaggregated health worker and health commodity data are in a human resource management information system (HRMIS) and Open Logistics Management Information system (OpenLMIS) and these systems are not interoperable. Secondly, given that the health system hierarchy has different responsibilities, budget information pertaining to one level but executed at a different level is not available at the level it pertains to. For example, health commodities are procured at national level but delivered to a health facility level whereas budget and expenditure information is only available at either the district or regional or national level (Dominic Nkhoma, 2025).

- **Incoherence of PFM and health objectives.** Reforms in public financial management are often designed and implemented without sufficient consideration of health system objectives, resulting in unintended trade-offs that undermine service delivery. For example, fiscal decentralization has the potential to enhance provider autonomy and responsiveness at subnational level, but when expenditure responsibilities are devolved without commensurate revenue authority or equalization mechanisms, it can exacerbate geographical inequalities in health financing and outcomes across local governments (Birru et al., 2024; Tsofa et al., 2017). Similarly, Treasury Single Account (TSA) reforms—while strengthening cash control and fiscal discipline—can constrain health facility autonomy when implemented in ways that eliminate or restrict operational bank accounts for frontline service providers. In such cases, TSA design and enforce-

ment may conflict with direct health facility financing and broader provider-autonomy reforms, limiting facilities' ability to plan, manage resources, and respond to local service delivery needs.

- **Capacity constraints and systems gaps -** Shortage of skilled public finance professionals (accountants, economists, auditors), incomplete or poorly used integrated financial management information systems (IFMIS) platforms, and heavy reliance on manual processes, especially at district and facility levels (Negera et al., 2021)

The following generic reforms are suggested to address the PFM challenges highlighted earlier.

- **Strengthen use of country systems by donor and other implementing partners** – the starting point must be the Government rationalizing its own strategic plans, making sure the One Plan aligns with the national development plan and the health sector one plan maps to the budget structure and is costed. Then donor support should be aligned to a rationalized health sector plan (Martínez Álvarez et al., 2016; Watkins et al., 2025).
- **Strengthening budgeting, disbursement, implementation and expenditure tracking -** Governments should institutionalize expenditure tracking at all levels for both government and donor spending (Abubakar et al., 2022). Governments should also improve budget credibility by ensuring that budgets are realistic, strengthening cash management and commitment controls and enhancing the efficiency and effectiveness of procurement systems (Kolesar et al., 2022). Governments should also align budget structures across government levels (Ravishankar et al., 2024).
- **Enhance transparency, accountability, and governance** – Governments could formalize publishing accessible health budget performance reports allow citizens to hold officials accountable, especially when revenue is raised through taxation. This will entail strengthening data systems (Abubakar et al., 2022). Countries could also implement broader or health sector specific corruption control measures(Drama et al., 2025).
- **Digitalization** & **Capacity Building** - Digitalizing funding and expenditure flows and ensuring that every level of execution has all data that is required for decision making at that level is an important reform that countries must embark on. Therefore, developing an information architecture that includes PFM, that devolves and links PFM and health system performance data is an important digitalization reform. Particularly, key health expenditure functions such as human resources and procurement should be integrated in the IFMIS or should be made interoperable with it. Institutional capacity building and mindset change of officials at all levels will need to accompany this digitalization reform.

Public Finance remains the most effective source of financing towards UHC (Yazbeck et al., 2023). Moreover, the effectiveness of other sources of health financing including donors depend on the strength of the PFM systems of a country (Ogbuabor & Onwujekwe, 2019). Public financial management (PFM) reform should be catalytic of health financing reform. It is therefore imperative that a health financing reform should be informed by and be within broader PFM reform or be preceded by or implemented alongside broader PFM and public administration reforms (Ravishankar et al., 2024). When health financing reforms are introduced before or without collaboration with PFM reforms, unreformed budget systems can impinge on health financing reform objectives (e.g., rigid input-based controls preventing the use of output-based payments or hindering strategic purchasing more broadly) (Hawkins et al., 2023). Nesting health financing reform within broader PFM reforms will lay the foundation for cross-sectoral initiatives and inter-sectoral co-financing (Hanson et al., 2022). So, countries are encouraged to align PFM and health financing reforms and effective dialogue between the Ministries of Health and Finance is essential (Martínez Álvarez et al., 2016; Musango et al., 2012).

5.6. Reduce Out-of-Pocket spending in Africa

OOP spending constitutes a significant share of health financing in Africa. In many African countries, more than 40% of THE comes from OOP payments, with some countries experiencing even higher rates. For example, in Nigeria, out-of-pocket expenditure accounted for over three-quarters (78%) of all health expenditure in 2019 and has not fallen below 70% since 2005 (Abubakar et al., 2022). Across sub-Saharan Africa, the average out-of-pocket expenditure for health care is reported to be about 40% (Garcia-Diaz et al., 2024) Only a few countries, such as Botswana, Mozambique, Namibia, Seychelles, and South Africa, have managed to keep out-of-pocket contributions below 10% of THE (Agyepong, Irene Akua et al., 2017; Piabuo & Tieguhong, 2017). Tax-based health systems

generally result in lower and less regressive out-of-pocket expenditures compared to social insurance systems, which may have higher out-of-pocket costs and less financial protection for lower-income groups, especially when co-payments and contribution ceilings are present (Luyten & Tubeuf, 2025; Tan-Torres Edejer et al., 2008; Wagstaff & van Doorslaer, 1992).

High out-of-pocket payments are regressive and create financial barriers to accessing health services, leading to increased risk of impoverishment and catastrophic health expenditures. Between 23% and 68% of households in 15 African countries resorted to loans or selling household assets to pay for health services, further deepening poverty and social inequalities (Pinzón-Flórez et al., 2015). Out-of-pocket payments are especially burdensome for the poorest segments of the population, who are more likely to incur catastrophic health expenditures (Masiye et al., 2016). Inadequate prepayments and risk-pooling mechanisms exacerbate the reliance on out-of-pocket payments (Kengne et al., 2013). Suggested strategies to reduce OOP spending are indicate below:

- **Expand prepayments –** For health insurance systems, social, private or micro-insurance, expanding coverage of the national insurance scheme will reduce OOP. This will require a contextual analysis of the determinants of low uptake. For Beveridge or national health service type of systems, increasing tax compliance especially by informal sector workers will reduce OOP.
- **Abolition or reduction of user fees and exemptions** Many countries have abolished user-fees for entire populations or certain demographic groups like women and children or for specific services. Expanding such mechanisms, will reduce OOP payments. In some contexts, however, user fee removal/reduction has depended on donor resources. and in some cases, there has not been consistent provision of Government resources to replace the lost revenue in health facilities. It will therefore be important to estimate how much domestic resources can cover when such a policy is proposed (Masiye et al., 2016; Meda et al., 2020; Onwujekwe et al., 2010; Sidze et al., 2013).
- **Strengthen health sector governance –** Countries must establish/strengthen the estimation and monitoring of out-of-pocket spending in order to inform appropriate corrective policies. Special surveys and improved data collection are recommended to better understand and address the burden of out-of-pocket spending (Sidze et al., 2013). The proportion of OOP payments that is due to informal payments can be reduced or eliminated by strong health facility governance mechanisms. Social accountability mechanisms or health facility management committees/boards that include health care users would be recommended can improve trust and health financing contributions (Boutin et al., 2025; Hussien et al., 2022). Tackling inefficiencies that have already been tackled in this document and strengthening digitalization are also essential for reducing out-of-pocket spending and improving health system performance (Kaseya, 2025).

5.7. Innovative financing mechanisms

Innovative financing mechanisms are a set of solutions that aim to raise and channel both public and private funds and resources beyond those provided through traditional funding mechanisms (Winkler et al., 2025). They include debt conversion, special levies and earmarked taxes, bonds, blended finance and results-based financing. These are elaborated below.

- **Debt conversion:** This has taken two forms in practice: 1) Debt Swaps which are designed to increase domestic financing in health by converting debt repayments into investments in public health and 2) Debt buy-downs which convert credits to grants, often with conditions. The Global Fund through its Debt2health programme has facilitated debt swaps in fourteen countries including five African countries as shown in Table *3*. The International Bank of Reconstruction and Development (IBRD) and the European Commission supported Botswana with debt buy–downs of US$ 50 million and US$ 20 million, respectively, to address implementation gaps in the HIV response (Atun et al., 2016).

Table 3: Debt Swaps in Africa

Debt2Health Agreement	Signed	Health Investment (USD)	Debt Swap Amount	Benefiting Program
Germany – Côte d'Ivoire	Sept. 2010	13M	25M	HIV and AIDS
Germany – Egypt	Jun. 2011	5M	10M	Malaria
Spain – Cameroon	Nov. 2017	10M	27M	HIV and AIDS
Spain – Democratic Republic of the Congo	Nov. 2017	3M	9M	Malaria
Spain – Ethiopia	Nov. 2017	4M	8M	Resilient and Sustainable Systems for Health (RSSH)

Source: (The Global Fund, 2025)

- **Special levies and earmarked taxes:** African countries have implemented special levies and earmarked taxes on services such as mobile communication and on commodities such as alcohol, tobacco, and on natural resources such as crude oil, gas, and minerals (Brikci, 2024).
- **Green bonds** are debt instruments used to finance projects that deliver environmental and climate benefits, such as clean energy, climate resilience, water and sanitation, and pollution reduction. Although not health-specific, green bonds are increasingly relevant for health because climate and environmental risks are major drivers of disease and health system vulnerability. In the health sector, green bonds could finance:
    - climate-resilient health facilities.
    - renewable energy for health facilities
    - water, sanitation, and waste management systems.
    - climate adaptation measures that reduce climate-sensitive diseases.

Many African countries have issued green bonds including South Africa, Nigeria, Côte d'Ivoire, Kenya, Morocco and Senegal. It is estimated that since 2012, $2.78 billion worth of green bonds has been floated (Kodongo et al., 2023). These bonds have been invested in areas such as renewable energy, green infrastructure and sustainable built environment, areas that are relevant to health.

- **Diaspora bonds** are government-issued debt instruments targeted at the diaspora, designed to mobilize their savings for national development. They have been successfully implemented in India, since 1991, in Israel, since 1951 and in Sri Lanka, since 2001 (Atun et al., 2016). In Africa, the evidence shows that only Ethiopia has issued diaspora bonds: the Millennium Corporate Bond in 2008 for improving energy and the Grand Renaissance Dam financing bond in 2011 (Kayode-Anglade & Spio-Garbrah, 2012). Their success depends on large and stable diaspora remittance flows, trust in public institutions, macroeconomic stability, credible use of proceeds, and effective diaspora engagement. When well designed, diaspora bonds can provide stable, longer-term financing at lower cost than commercial borrowing.
- **Health Bonds** are debt instruments issued by governments, development banks, or special-purpose vehicles to raise capital specifically for health-related investments. Investors provide upfront financing and are repaid over time, usually with interest, from government budgets, earmarked revenues, or donor-backed guarantees They allow governments to mobilise upfront capital while spreading costs over time. While the evidence on stand-alone sovereign health bonds in Africa is limited, several African countries and institutions have successfully mobilised financing through social bonds, sustainability bonds, results-based health impact bonds and sovereign bonds that include health as an eligible expenditure category.
- **Blended financing** entails the strategic use of public or concessional funds to mobilise additional private capital for health investments that would otherwise be considered too risky or insufficiently profitable. It typically combines public or donor funding (grants, concessional loans, guarantees) with private investment (commercial loans, equity, institutional investors). The public funds are used to reduce risk—through guarantees or interest-rate subsidies, thereby "crowding in" private investments. Public–private partnerships can be used as delivery arrangements for blended finance.

- **Results-Based Financing (RBF):** While the evidence on the sustainability and long-term impact of RBF models in Africa is mixed, the principle of linking financing to results is central to innovating financing mechanisms. Therefore, the design of RBF mechanisms should consider the documented weaknesses of past implementation arrangements. Two design principles are important, embedding RBF mechanisms in the PFM system and incentivising holistic health care delivery.

5.8. Strategic purchasing

Many African health systems reimburse health providers in a way that does not incentivize quality or efficiency or does not respond to the most fundamental health needs of populations. This may be due to rigid budget structures, fragmentated financing, legal or institutional barriers and weak data systems among others (Hajji et al., 2025; Kachapila et al., 2023; Sharma & Lakhan, 2025). Strategic purchasing aims to address these challenges by allocating pooled health funds to healthcare providers based on evidence. It involves making decisions about what goods and services to buy, which providers to contract with, how to pay the providers and how to monitor and enforce performance (Montás et al., 2022). Strategic purchasing seeks to achieve equity, efficiency, containment of health expenditure growth, quality in health service delivery, and responsiveness to citizen priorities (Montás et al., 2022). It is a dynamic continuum that is based on a country's health system objectives and an evolving health financing landscape. The following reforms are suggested for countries to transition from passive to strategic purchasing:

- **Provider Payment Reform:** Shift from historical and input based budgeting or fee-for-service payment to alternative payment methods such as capitation, pay-for-performance, or blended models to incentivize efficiency and quality (Barasa et al., 2021; Ndayishimiye et al., 2025; Siita et al., 2019). This reform is premised on the availability of a health benefit package that is developed using explicit priority setting approaches including health technology assessment.
- **Decentralization and local accountability:** In tandem with PFM reform, delegate purchasing authority to local officials to improve alignment with local health needs, while ensuring robust accountability mechanisms to prevent corruption (Adeoye et al., 2024). The development of necessary resource allocation formulae to the lowest budget holding units will be necessary. It is recommended, however, that the purchasing authority of health products that will benefit from pooled procurement efficiency gains and economies of scale be retained by the central Ministry of Health.
- **Reduce fragmentation and align incentives:** Harmonize multiple funding flows and through the One Plan, One Budget and One Report mechanism, to ensure coherent incentives for providers and efficient resource allocation (Barasa et al., 2021).

These reforms must be supported by strengthening institutional capacity, for example, building expertise and systems for strategic purchasing, clarifying roles among actors, improving management capacity at all levels of the health system and strengthening transparency through and stakeholder engagement (Adeoye et al., 2024; Sriram et al., 2025).

5.9. Conclusion

Chapter 5 sets out a coherent package of health financing and related system reforms designed to operationalise the Africa Health Security and Sovereignty (AHSS) agenda at country level. Building on the diagnostic evidence presented in earlier chapters, the chapter argues that, in a context of constrained fiscal space and declining external assistance, efficiency, alignment, and system integration are the primary levers for expanding fiscal space and strengthening health system performance without increasing financial burdens on households.

At the core of the reform agenda is the principle of One Plan, One Budget, and One Report. This framework aims to address fragmentation arising from multiple strategic plans, parallel financing channels, and duplicative reporting systems driven by donor conditionalities. By anchoring all domestic and external resources to a single, costed national health plan, the OPBR approach seeks to strengthen country ownership, improve prioritisation, reduce

transaction costs, and enhance accountability. Where direct budget support is not feasible, the chapter recognises transitional arrangements, such as pooled financing mechanisms or consolidated project implementation units, as intermediate steps toward greater alignment.

Closely linked to this is the realignment of external assistance to the OPBR. The chapter calls for the mapping of resource to assess alignment, identify over- and under-funded areas, and inform dialogue with development partners on reallocating resources toward national priorities.

The chapter positions efficiency reforms as the most immediate and scalable source of fiscal space. Priority areas include reforming health benefit packages to improve cost-effectiveness and sustainability; strengthening human resources for health through improved skills mix, training efficiency, payroll management, and governance; expanding pooled procurement mechanisms to reduce the cost of medicines and medical supplies; integrating service delivery to reduce duplication and improve continuity of care; and advancing intersectoral co-financing to address social determinants of health.

A strong emphasis is placed on strengthening public financial management (PFM) in the health sector as an enabling condition for all financing reforms. Weak budget credibility, fragmented execution, and limited expenditure controls are identified as binding constraints that undermine the effectiveness of both domestic and external health spending. The chapter underscores the importance of improving cash management, procurement systems, transparency, digital integration, and coordination between Ministries of Health and Finance to ensure that financing reforms translate into real service delivery gains.

Responding to persistently high levels of out-of-pocket spending, the chapter prioritises expanding pooled and prepaid financing mechanisms and strengthening health financing governance at all levels.

The chapter also highlights the role of innovative financing as a complementary, but not substitutive, source of funding in a context of declining official development assistance. A range of innovative financing approaches is presented, including debt conversion, earmarked taxes and levies, diaspora-linked instruments, blended finance, and results-based financing mechanisms. These approaches are not abstract or theoretical; there is clear evidence of their application across African Union Member States.

Finally, the chapter advances strategic purchasing as a unifying reform that links financing to results. By actively purchasing priority services and commodities in ways that incentivise quality, efficiency, and equity, governments can move beyond input-based financing toward performance-oriented systems. Taken together, the reforms outlined in this chapter provide a practical and integrated pathway for strengthening resilience, improving efficiency, and advancing universal health coverage under the AHSS agenda.

Countries may choose to pursue one or a combination of these innovative financing options, or explore other novel approaches altogether, depending on national context and priorities. Willingness to move beyond traditional financing models, creativity, and institutional readiness to adopt and implement these reforms will be critical. Strong analytical capacity will be required to assess the viability of the reforms, their full range of their consequences and associated political economy will be required. Robust public financial management systems and, above all, political acceptability will ultimately determine whether efficiency and innovative financing reforms can be successfully adopted and sustained.

At the core of the reform agenda is the principle of One Plan, One Budget, and One Report. This framework aims to address fragmentation arising from multiple strategic plans, parallel financing channels, and duplicative reporting systems driven by donor conditionalities

6. Expected efficiency savings from health financing related reforms

6.1. Introduction

This chapter brings together the health financing and related reforms in the previous chapter by estimating the efficiency gains in monetary terms from selected reforms where data were available. It takes a case study of a country, the Democratic Republic of Congo (DRC), to illustrate the potential of both efficiency gains and innovative financing mechanisms. The following primary data sources are used 1) Health financing projections from IHME used in Chapter 4 (Institute for Health Metrics and Evaluation (IHME), 2025) 2) Population projections (United Nations, Department of Economic and Social Affairs, Population Division, 2024) 3) Efficiency savings estimates from the literature for the reforms where data were available 4) Remittances and imports of goods for the DRC (World Bank, 2026b).

6.2. Methodology

The following steps were followed, with the details presented in Annex 1.

- Estimation of annual total budget requirements for the African continent for the period 2026-2050 using a World Bank estimate of THE per capita and population projections.
- Estimation of financial resource gap by subtracting projected annual THE for Africa from IHME data from the annual total budget requirements
- Establishing the ceiling of what is pragmatically feasible to generate as efficiency savings based on the literature. Globally, health spending wastage through inefficiency stands at 20–40% (World Health Organization, 2010) while a study has estimated it to be 23% for African countries (Nabyonga-Orem et al., 2023).
- Estimating efficiency savings by each component of THE i.e. government health expenditure, development assistance for health and private expenditure, with a focus on out-of-pocket expenditure as follows:
    - Government expenditure
        - Estimating government expenditures that are allocated to health worker salaries, purchase of medicines and medical supplies and other procurements apart from medicines and medical supplies, based on the literature
        - Estimating the savings from HRH efficiency reforms, pooled procurement and other public procurement related reforms, respectively, based on estimates from the literature
    - Development assistance for health
        - Estimating the proportion of DAH allocated to HRH capacity building activities using IHME DAH data.
        - Using estimates from the literature to calculate the efficiency savings from fragmented capacity building budgets of donors using IHME DAH data
    - Out of pocket expenditure
        - Estimating the value of savings from reducing OOP and increasing prepayments

It was assumed that the pooled procurement efficiency gains would only be realized from government health expenditures because commodities procured using DAH, such as vaccines, antiretrovirals, malaria and TB medicines and diagnostics, are procured from pooled procurement mechanisms already. It was also assumed that corruption control, an intervention under strengthening PFM was embedded in HRH and procurement reforms.

Efficiency gains are modelled as phased, one-off structural improvements that are gradually realized over a five-year period, from 2026-2030, and then maintained from 2032-2050, with savings increasing thereafter only in line with growth in total health expenditure. Therefore, efficiency gains are lower at the beginning and reach the feasible maximum in 2030. The details of the methods are in Annex 1.

6.3. Estimation results

Figure 9 summarizes the resource gap analysis for the African continent from 2026 to 2050. The total budget for the continent to provide basic essential care is estimated at $179 billion in 2026 and it rises to $424 billion in 2050. Projected THE is estimated at $115 billion and increases to $260billion in 2050. The financing gap is $64 billion in 2026 and rises to $164 billion in 2050. *Figure 9* also shows the projected THE net of the budget that is lost to inefficiencies based on the 23% inefficiency estimate. In 2026, projected THE net of inefficiency is estimated at $88 billion versus total projected THE of $115 billion and it is estimated at $200 billion versus total projected THE of $60billion in 2050. Figure 10 shows the efficiency gains that can be achieved by implementing different reforms as follows:

- **Pooled procurement**: Savings of $1.2billion in 2026 to $4.3billion in 2030 and $9.7billion in 2050. This assumes that all countries are using pooled procurement for 100% of their government medicines and medical supplies budgets.
- **Procurement of other goods and services**: Savings of $242million in 2026 to $741million in 2030 and $1.8billion in 2050.
- **Human Resources for Health salaries**: Savings of $2.7billion in 2026 to $7.5billion in 2030, to $16.8billion in 2050.
- **Human Resources for Health capacity building:** $51million in 2026 to $123million in 2030, to $165million in 2050.
- **Service delivery integration:** Savings of $492 billion in 2026 to $983million in 2030 and $1.5billion in 2050. It is assumed, based on the literature, that service delivery integration will require initial investments before it can yield efficiency gains.
- **Converting OOP spending to prepayments**: Savings of $1.7billion to $7.4billion
- **Total efficiency gains**: savings of $ 5.4 billion in 2026 to $21 billion in 2030 to $44 billion in 2050, translating into an average efficiency savings per capita of $3.43 in 2026, $12.31 in 2030 and $17.84 in 2050. The average efficiency savings per capita for the period 2026-2050 is **$14.23**.

Figure 9: Health financing needs, resources, and gap (Africa), 2026-2050

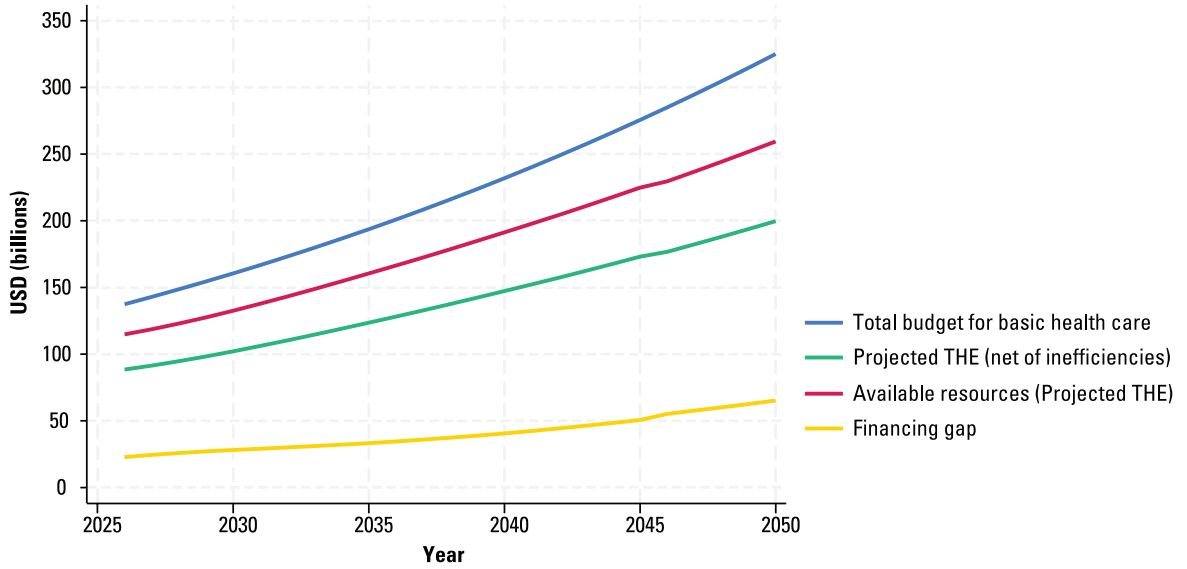
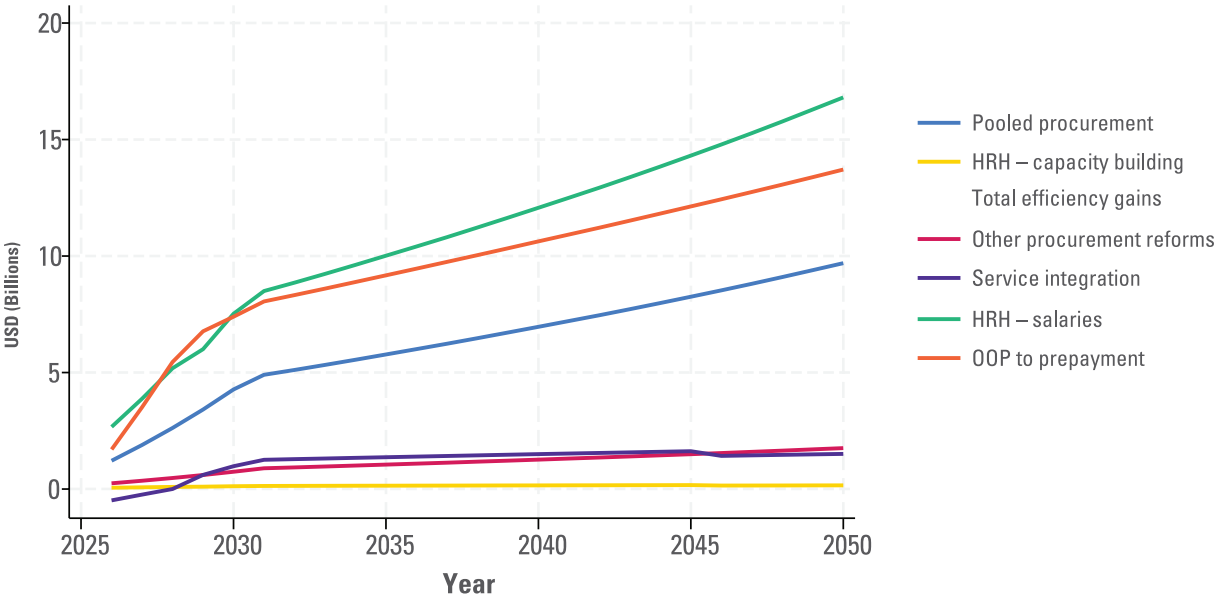


Figure 10: Efficiency Gains by Source (Billions USD), 2026-2050

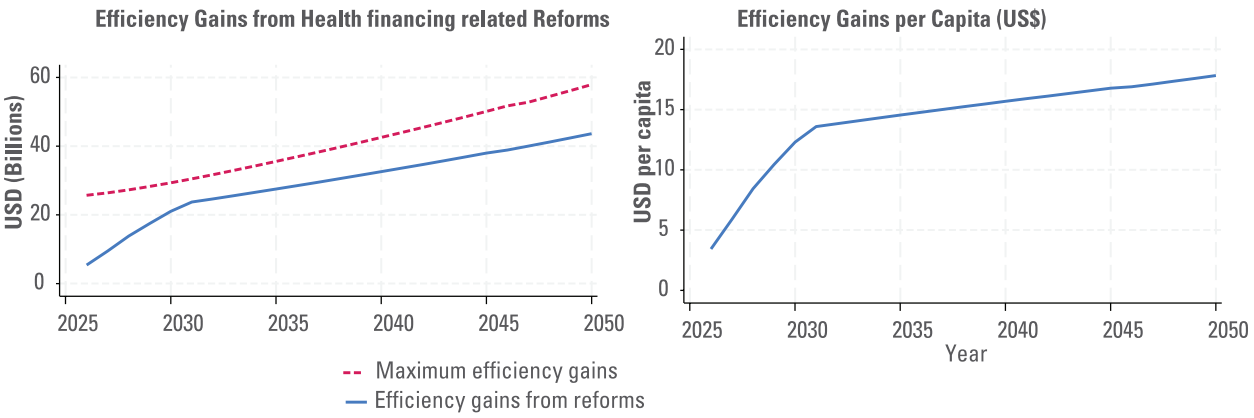


Data source:
Estimations based on various sources including the Institute for Health Metrics and Evaluation (IHME) (2025). *Financing Global Health*. http://vizhub.healthdata.org/fgh/.

Figure 11 compares the estimated efficiency gains against the maximum feasible efficiency gains based on the 23% average inefficiency estimate for Africa. There is a persistent gap between the two trends over the entire period. This can be explained by the lack of estimates on the efficiency savings afforded by the reforms outlined in Chapter 5.

This Handbook used point estimates for variables instead of accounting for the uncertainty of the estimates. It is also important to consider that some of the reforms will generate demand side efficiencies that are not accounted for in the modelling. For example, service delivery integration has been shown to reduce patient transport and productivity costs that are not captured in this supply-side oriented analysis (Wroe et al., 2022).

Figure 11: Comparison of maximum feasible efficiency gains and efficiency gains from selected reforms, 2026-2050



6.4. Country case study: The Democratic Republic of Congo

The Democratic Republic of the Congo (DRC) is selected as a case study to illustrate the potential impact of the health-financing reforms proposed in this Handbook. The DRC exemplifies a large, low-income, and fragile health system characterized by high levels of fragmentation, heavy reliance on out-of-pocket payments and external aid, and inefficiencies in resource allocation and service delivery. At the same time, the country presents a compelling reform opportunity: there is growing momentum to address these structural challenges through ongoing reforms aligned with the Lusaka Agenda, which seek to improve coordination, efficiency, and national ownership in health financing and implementation. The DRC initiated the following key Lusaka agenda related reforms: 1) increasing the population's financial protection and equitable access to health care under the leadership of the Presidential UHC National Council and 2) implementation of the one plan, one budget and one report and with a stakeholder forum to champion it. This work is advancing with the next step being the integration of two alignment tools currently piloted in several provinces into a single tool (Contrat Unique, MOU). DRC is also working on defining a legal framework to enforce donor alignment 3) implementation of innovative financing mechanisms. This combination of system constraints and active reform efforts makes the DRC a particularly relevant and instructive case for demonstrating how the recommended reforms can translate into tangible efficiency gains and strengthened health system performance.

The DRC had a population of 109 million in 2025. Its population is estimated to grow to 218 million in 2050. It is a low-income country with a GDP per capita of $649.4 (current US$) in 2024. In 2024, the DRC's economy grew by 6.5%, driven by a 12.8% expansion in the extractive sector (World Bank, 2026a). Its national budget in 2025 was $17.6 billion (N'dimon, 2025). The health system in DRC relies on private financing (43%), external resources (37%), government expenditure (16%) (Ministry of Public Health, Hygiene and Prevention, 2024). The percentage of the state budget for health was estimated at 9.86% in 2023. Government health financing is primarily directed towards salaries, consuming 80% of the budget (Ministry of Public Health, Hygiene and Prevention, 2024). THE per capita was estimated at $30 in 2022 (Global Burden of Disease Collaborative Network, 2025).

The following challenges provide opportunities for generating efficiency savings:

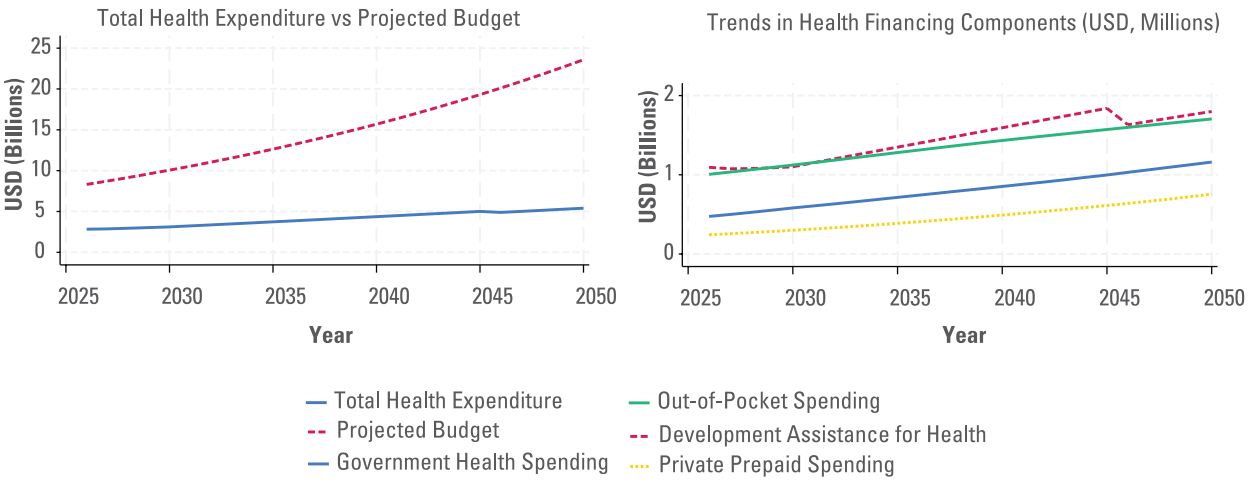
- **High OOP expenditures** reinforce health financing fragmentation and weaken supply chain performance by bypassing pooled purchasing and coordinated logistics systems.
- **Human resources for health:** DRC, like many African countries, has insufficient numbers of health workers. This is exacerbated by an imbalance in frontline and administrative staff; nursing and medical staff (47%) are less represented than administrative staff (53%) in the workforce (Mushagalusa et al., 2023). There are also delays in absorbing health workers into the health system after graduation (Ogunfolaji et al., 2023).
- **Medicines and medical supplies:** There are high rates of stockouts for essential medicines, due to supply chain challenges and an inadequate budgetary provision for medicines and medical supplies (Michielsen & Criel, 2024).
- **Fragmentation:** The health system is characterized by fragmentation and limited coordination, partly due to the proliferation of poorly regulated private-for-profit sectors and vertical disease control programs that disrupt comprehensive primary health care (Bosongo et al., 2024)

It is projected that by implementing some of the suggested reforms, i.e. converting OOP to prepayments, improving the management and development of human resources for health, pooled procurement and related supply chain reforms and service delivery integration and the one plan, one budget and one report, the DRC could generate $53 million in 2026 to $436 million in 2030, representing $0.45 and $3.31 per capita savings respectively. From 2031 to 2050, efficiency savings increase from $499 million to $812 million with an average per capita efficiency savings for the period estimated at $3.41.

Efficiency savings alone will not meet the health financing needs of the DRC. Its financing gap per capita to provide essential basic services is estimated at $45 in 2026, rising to $83 in 2050, with an average gap of $63 per capita for the period, 2025-2050. The DRC hence introduced a 2.5% health contribution based on gross salary, 0.5% paid by workers and 2% by employers. Based on the FSS (Fonds de Solidarité de Santé/Health Solidarity Fund) projections, this measure will generate $297 million in the first year (2026), with 10% of formal sector workers contributing. The DRC is further introducing a 2% tax on imported goods to fund its universal healthcare program. Revenues will go directly to the National Health Promotion Fund, which manages medicines procurement, hospital renovations, and equipment upgrades nationwide (Luabeya, 2025). Current estimates from the Health Promotion Fund show that this tax will yield minimum annual revenue of $153 million and maximum annual revenue of $256million in 2026. Figure

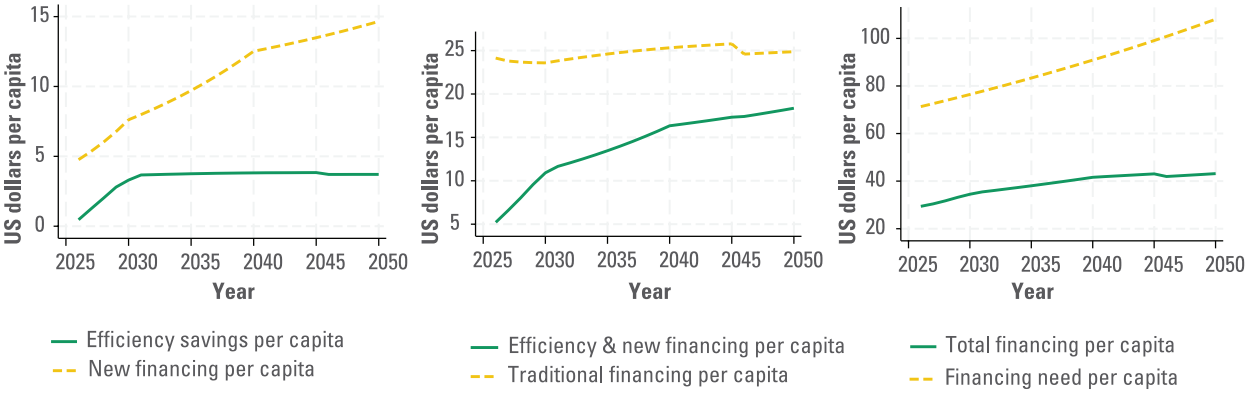
13 compares efficiency savings per capita and new innovative financing per capita (top left panel) and shows that although efficiency savings will be significant, the two new domestic resource mobilization measures will contribute much more to the health financing of DRC. A comparison in the top right panel indicates that the combined contribution of efficiency savings and the two innovative financing measures increases over time, whereas traditional financing remains essentially unchanged. Nevertheless, the financing gap will remain as shown in the bottom left panel, indicating the need for expanding the innovative financing mechanisms.

Figure 12: Projected health financing trends for the Democratic Republic of Congo, 2026-2050

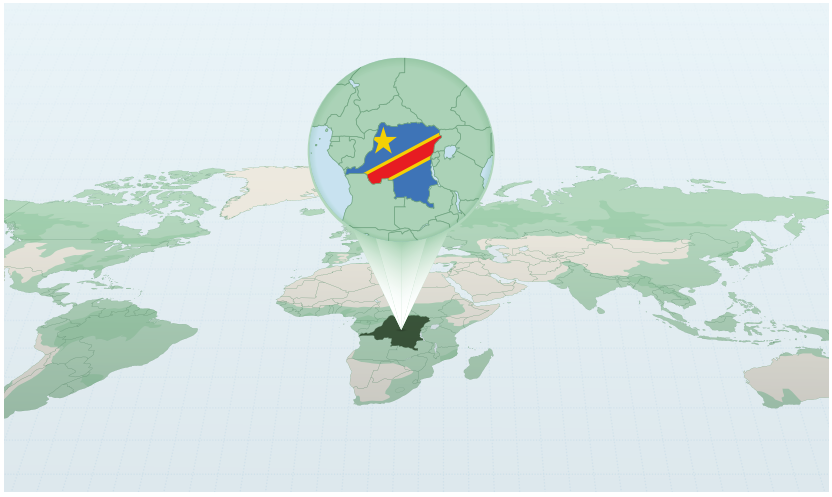


Source:
Institute for Health Metrics and Evaluation (IHME) (2025). *Financing Global Health.* http://vizhub.healthdata.org/fgh/.

Figure 13: Projections of efficiency savings and innovating financing in the DRC, 2026-2050



Data sources:
Various including Institute for Health Metrics and Evaluation (IHME) (2025). *Financing Global Health.* http://vizhub.healthdata.org/fgh/.



There is scope for the DRC to raise a health bond backed by remittances. Remittances were estimated at $3.3 billion in 2023, up from $594 million in 2016 (TheGlobalEconomy.com, 2026). Based on conservative assumptions, US$3.3 billion could potentially support a health bond in the order of US$300–400 million. There is also potential for strengthening tax collection as one of the key strategies for raising traditional health financing as the revenue to GDP ratio declined to 13.7 % in 2023 from its highest ever level of 15.4 % in 2022 (International Monetary Fund, 2024). This could be accompanied by increasing the share of government resources allocated to health and necessary public financial management reforms.

6.5. Conclusion

Overall, Chapter 6 demonstrates that health financing–related reforms can generate substantial efficiency gains within existing spending levels across African health systems. The analysis estimates total efficiency gains of approximately $5.4 billion in 2026, rising to $43.6 billion by 2050, equivalent to around $14.23 per capita. The largest contributions come from human resources for health reforms, pooled and strategic procurement of medicines and supplies, and reducing reliance on out-of-pocket spending through prepayment and pooling, complemented by gains from service delivery integration and strengthened public financial management. While these gains do not fully close projected health financing gaps, they represent a significant and realistic source of fiscal space that can be reinvested to improve coverage, efficiency, and financial protection.

The Democratic Republic of the Congo (DRC) case study illustrates these dynamics in a highly constrained and fragmented context. With health financing heavily reliant on out-of-pocket spending and external assistance, the modelling suggests that implementing the proposed reforms could generate efficiency savings of approximately $53 million in 2026, increasing to $813 million by 2050 ($3.41 per capita average). Innovative financing would generate $553 million additional annual revenue in 2026, increasing to $3.2billion in 2050, for an average of $11 per capita. Although substantial, these gains would cover only a portion of the projected financing gap, highlighting both the importance of efficiency reforms and the continued need for additional domestic resource mobilisation.

With health financing heavily reliant on out-of-pocket spending and external assistance, the modelling suggests that implementing the proposed reforms could generate efficiency savings of approximately $53 million in 2026, increasing to $813 million by 2050 ($3.41 per capita average).

7. Implementation Arrangements

Effective implementation of the reforms proposed in this Handbook requires clear governance, sustained national ownership and strong coordination across levels of health systems, from the facility to the national level, and across relevant MDAs. The Africa CDC will support implementation through a structured governance model, reinforced by cross-cutting enablers and clearly defined country responsibilities.

7.1. Governance and Coordination

To coordinate and sustain reform efforts across the continent, Africa CDC will deploy a three-tier governance model aligned with the Africa Health Security and Sovereignty (AHSS) agenda and the Lusaka Agenda.

7.1.1. Continental Coordination

At the continental level, the Africa CDC will provide strategic oversight and policy guidance for implementation as follows:

- Coordinate alignment of reforms with the Lusaka Agenda shifts and AHSS objectives.
- Provide normative guidance and support related to health financing, efficiency reforms, and public financial management.
- Facilitate peer review, cross-learning and mutual accountability among Member States.
- Serve as the interface between member states, the African Union Commission, Regional Economic Communities, and global partners.

7.1.2. Regional Execution

At the regional level, Africa CDC Regional Coordinating Centres (RCCs) will play a critical role in operationalising reforms. RCCs will:

- Support Member States in adapting and sequencing reforms based on regional and income-group contexts.
- Facilitate peer learning and exchange of practical implementation experience.
- Provide technical backstopping on reforms including integrated planning, pooled procurement and service delivery integration

Regional execution will ensure that implementation reflects shared challenges and opportunities within AU sub-regions, while avoiding one-size-fits-all approaches.

7.1.3. National Implementation

At the national level, reforms will be implemented through Lusaka Agenda roadmaps anchored in existing health sector plans. These roadmaps will:

- Be governed through existing national institutional and accountability mechanisms;
- Be jointly owned by the Ministry of Health, donors and other stakeholders
- Be supported by the Africa CDC Country Public Financial Management (PFM) Specialists, embedded to provide hands-on technical assistance.

Member states will be expected to conduct annual efficiency audits to quantify savings from reforms and explicitly reinvest these resources into priority areas, particularly primary health care and essential health services. Progress on implementation will be reported regularly to the Africa CDC and relevant AU organs, ensuring transparency, learning, and accountability across levels.

7.1.4. Monitoring, Accountability, and Learning

Implementation progress will be tracked using existing continental monitoring mechanisms, avoiding parallel reporting systems. These include:

- The African Union Accountability and Learning Mechanism (ALM).
- The Lusaka Agenda Monitoring and Accountability Framework.
- The Africa Health Financing Dashboard.

Together, these platforms will enable systematic tracking of reforms, measurement of efficiency gains, and documentation of progress toward reduced fragmentation, improved pooling, and stronger financial protection.

7.1.5. Cross-Cutting Enablers

Successful implementation will be underpinned by a set of cross-cutting enablers coordinated by the Africa CDC:

- **Capacity Development:** Africa CDC and its partners will support structured training programmes for health and finance officials at national and subnational levels, focusing on integrated planning, strategic purchasing, efficiency analysis, and health-sector PFM.
- **Accountability and Civil Society Engagement:** Citizen-led oversight mechanisms will be promoted to strengthen transparency and accountability in service delivery reforms, ensuring that efficiency gains translate into improved access and quality of care.
- **Research and Innovation:** Evidence generation will be embedded in the implementation through Africa CDC's Research & Policy Observatory, in collaboration with universities, think tanks, and research institutions across the continent. This will support adaptive learning, policy refinement, and dissemination of good practices.

This implementation framework is designed to ensure that the reforms proposed in this Handbook are not only technically sound but also politically feasible, nationally owned, and sustainably institutionalised. By combining continental coordination, regional execution, and national leadership—supported by strong accountability and evidence—Africa can translate health financing reform into tangible gains in efficiency, equity, and health security.

Effective implementation of the reforms proposed in this Handbook requires clear governance, sustained national ownership and strong coordination across levels of health systems, from the facility to the national level, and across relevant MDAs.

8. Conclusion: Financing Africa's Health Security and Sovereignty

This Handbook has collated Africa's health financing challenges and proposed actions and reforms that will lead to Africa's Health Sovereignty and Security (AHSS). AHSS has five pillars: i) a reformed and inclusive global health architecture; ii) institutionalized continental PPPR; iii) predictable domestic, innovative, and blended health financing; iv) digital transformation of health systems; and (v) strengthened local manufacturing of health products.

This Handbook has shown that although Africa's main health-financing challenge is inadequate resources, there are important issues of structural misalignment, fragmentation, and inefficiency in how resources are mobilized, pooled, and used. At a time when external financing is declining and fiscal pressures are intensifying, the sustainability of Africa's health systems—and the continent's ability to protect its populations from health shocks—will depend on how decisively these structural weaknesses are addressed.

The macro-fiscal context is stark. Africa's external public debt has risen sharply since 2008, reaching approximately US$1.2 trillion in 2023, equivalent to nearly 60 % of total public debt and 41.6 % of GDP. At the same time, the continent faces rapid demographic growth, with the population projected to rise from 1.4 billion in 2025 to 2.5 billion by 2050, exerting sustained pressure on health systems and public budgets. While Africa's economy is projected to grow by an average of 4.4 % between 2022 and 2028, this growth will be insufficient to offset rising needs unless health financing systems become significantly more efficient and better aligned with demographic realities.

The financing outlook reinforces this conclusion. Africa currently accounts for about 22 % of the global burden of disease, yet receives only around 1 % of global health expenditure. THE on the continent is projected to increase from approximately US$110 billion in 2023 to US$260 billion by 2050, but per-capita growth will remain modest, around 1.6–1.7 % annually, as rapid population growth absorbs much of the aggregate expansion. Development assistance for health, which peaked during the COVID-19 period, has already fallen to US$13 billion in 2025, well below pre-pandemic levels, and is expected to remain flat or decline further. In contrast, out-of-pocket spending continues to rise in absolute terms, exposing households to financial hardship and reversing gains in financial protection.

Against this backdrop, the Handbook demonstrates that efficiency is Africa's first and most immediate source of health financing. Inefficiency is the single largest untapped source of fiscal space for health on the continent. Government health budgets are dominated by recurrent costs, with human resources absorbing roughly 55 % and procurement around 30 % of spending. Yet weaknesses in payroll management, procurement systems, planning, and public financial management mean that 20–40 % of total health spending is effectively wasted through misallocation, duplication, leakage, and fraud. In some settings, integrity failures alone, such as ghost workers and procurement overpricing, account for losses equivalent to several percentage points of national health expenditure. At the same time, donor resources remain fragmented and insufficiently aligned with national priorities, further diluting their impact.

The reform agenda presented in this Handbook is therefore both urgent and feasible. The proposed shift toward a One Plan, One Budget, and One Report approach directly addresses the fragmentation that undermines efficiency and accountability. Integrated, costed, multi-year national plans provide the foundation for credible budgeting, alignment of external assistance, and strategic purchasing. Evidence and modelling in this Handbook suggest that integrated planning and rationalization of fragmented investments could yield efficiency gains of 20–35 % of total spending in heavily fragmented systems—delivering immediate fiscal dividends without requiring new revenue sources.

Pooled procurement mechanisms, particularly at regional and continental levels, offer potentially significant efficiency savings. Modelling and international experience indicate that price reductions of up to 30–33% are achievable for medicines and health commodities, alongside lower transaction costs and reduced corruption. Similarly, service delivery integration, especially through strengthened primary health care, can reduce duplication, increase productivity, and improve continuity of care—delivering more services per visit and better outcomes without proportional increases in cost.

Reducing reliance on out-of-pocket spending emerges as both an equity and efficiency imperative. The Handbook shows that shifting toward prepayment and pooling mechanisms, including tax-based and insurance-based financing, can reduce catastrophic health expenditure by 20–45 % in well-designed systems, while enabling strategic purchasing and better cost control. Countries that have reduced out-of-pocket spending below 10 % of THE consistently demonstrate stronger financial protection and more efficient service use.

Crucially, these reforms are mutually reinforcing and depend on strong public financial management and digitalization. Improvements in budget credibility, cash management, procurement, transparency, and digital systems are not peripheral; they are the mechanisms through which planned efficiency gains are converted into real, usable fiscal space.

However, the Handbook also makes clear that efficiency gains alone are not sufficient. Sustaining reform requires steady growth in domestic public financing, anchored in annual budget increases that reflect health priorities. Without this backbone of domestic growth, efficiency savings risk being temporary rather than transformative. Predictable increases in government health spending are therefore essential to consolidate gains, expand coverage, and respond to demographic and epidemiological pressures.

The Handbook also underscores the strategic role of innovative financing mechanisms such as debt conversion, special levies and earmarked taxes, bonds, blended financing and results-based financing, particularly for capital-intensive investments such as local manufacturing, infrastructure, and supply chains. While public budgets must anchor recurrent spending, blended finance can help de-risk and scale structural investments that strengthen resilience and reduce long-term dependence on imports.

Aligned external assistance remains important, but its role must evolve. As domestic systems strengthen, aid should shift from substituting for domestic spending toward catalyzing reform, supporting transition, and reinforcing national systems. Properly aligned, external financing can accelerate efficiency reforms, support PPPR, and crowd in domestic and private investment—without perpetuating dependency.

The modelling presented in this Handbook indicates that, if implemented collectively, the proposed efficiency reforms could generate an average of approximately US$14.23 per capita. In addition, country experiences such as the DRC suggest that domestic and innovative financing measures could yield substantially higher increases in new financing per capita.

Ultimately, this Handbook affirms that health financing is a cornerstone of sovereignty. Africa's Health Security and Sovereignty is not aspirational, it is operational. By treating efficiency as the first financing source, sustaining domestic budget growth, leveraging digitalization and PFM reforms, deploying blended finance for structural investments, and repositioning external assistance as a strategic partner, African countries can finance the foundations of their own health security. The choice is no longer between ambition and realism; it is between reform and vulnerability. The path set out in this Handbook offers a credible route toward resilience, equity, and self-reliance in health for Africa.

This Handbook has collated Africa's health financing challenges and proposed actions and reforms that will lead to Africa's Health Sovereignty and Security (AHSS).

Annex

Methodology for Estimating Health Financing Requirements and efficiency gains from reforms (2026–2050)

Introduction

This annex describes the methodology used to estimate the annual health financing requirements for the provision of essential health services in Africa over the period 2025–2050, based on population projections and a per-capita cost benchmark. The following primary data sources are used 1) Health financing projections from IHME used in Chapter 4 (Institute for Health Metrics and Evaluation (IHME), 2025) 2) Population projections from are the primary source of data (United Nations, Department of Economic and Social Affairs, Population Division, 2024) 3) Efficiency savings estimates from the literature for the specific reforms where data were available.

Methodology

The following steps were followed:

- Estimation of annual total budget requirements for the African continent for the period 2026-2050.
- Estimation of financial resource gap, subtracting annual THE for Africa from the annual estimated budget for the period 2026-2050.
- Establishing the ceiling of what is pragmatically feasible to generate as efficiency savings based on the literature. Globally, health spending wastage through inefficiency stands at 20–40% (World Health Organization, 2010) while a study has estimated it to be 23% for African countries (Nabyonga-Orem et al., 2023).
- Estimating efficiency savings by each component of THE i.e. government health expenditure, development assistance for health and private expenditure, with a focus on out-of-pocket expenditure. The following actions were taken for each financing source:
    - Government expenditure
        - Estimated government expenditures that are allocated to health worker salaries, purchase of medicines and medical supplies and the procurement of other goods and services apart from medicines and medical supplies, based on the literature
        - Estimated the efficiency savings from HRH efficiency reforms, pooled procurement and other public procurement related reforms, respectively, based on estimates from the literature
        - Run scenarios of efficiency savings from pooled procurement based on feasible uptake scenarios of the Africa Pooled Procurement Mechanism by African Union member states
    - Development assistance for health
        - Estimating the proportion of DAH allocated to HRH capacity building activities using IHME DAH data

          Used estimates from the literature to calculate the efficiency savings from capacity building budgets of donors using IHME DAH data
    - Out of pocket expenditure
        - Estimated the value of savings from reducing OOP and increasing prepayments

It was assumed that the pooled procurement efficiency gains would only be realized from government health expenditures because commodities procured using DAH, such as vaccines, antiretrovirals, malaria and TB medicines and diagnostics, are procured from pooled procurement mechanisms already. It was also assumed that corruption control, an intervention under strengthening PFM in this handbook was embedded in HRH and procurement reforms.

Efficiency gains are modelled as phased, one-off structural improvements that are gradually realized over a five-year period, from 2026-2030, and then maintained from 2032-2050, with savings increasing thereafter only in line with growth in total health expenditure. Therefore, efficiency gains are lower at the beginning and reach the feasible maximum in 2030. The details of the methods are in Annex 1.

Conceptual Framework

Total health financing requirements were estimated as the product of projected population and an inflation- and service-adjusted per-capita cost of essential health services. A base per-capita cost of USD $112.22 per person per year was used as the reference cost in 2026 for providing a package of essential health services. To arrive at this figure, we used estimates from a 2025 World Bank report. The report recommends that range of $75–$105 per capita health spending for LICs and $115–$140 per capita health spending for lower middle-income countries (LMICs). We use median values for the ranges, $90 for LICs and $127.5 for LMICs. These values were allocated to all AU member states by their income status and an average value was taken.

Table A 1: Model parameters

Variable	Metric	Value	Source
Per capita health spending	Dollars	112	Estimates based on Kumar et al. (2025)
Average level of inefficiency in the health sector in Africa	Percentage	23%	Nabyonga-Orem et al., (2023)
Percentage of Government health expenditure spent on medicines	Percentage	25%	(Wirtz et al. 2017)
Percentage of Government budgets spent on salaries	Percentage	55%	(Toure et al., 2023)
Percentage of Government budgets spent on other procurement apart from medicines and medical supplies	Percentage	10%	Conservative reasonable assumption based on residual budget proportion of 20%
Percentage of DAH allocated to human resources for health (capacity building)	Percentage	4%	Calculated estimate from IHME health financing data https://ghdx.healthdata.org/record/ihme-data/development-assistance-health-database-1990-2021
Overall achievable efficiency gains on THE	Percentage	23%	Nabyonga-Orem et al., (2023)
Savings on unit costs when pooled commodity procurement is used	Percentage	33%	Dubois et al., (2021)
Percentage of Government budgets allocated to other procurements other than medicines and medical supplies	Percentage	15%	(5%-30% CI)
Percentage of Government budgets allocated to Human Resources for health (salaries)	Percentage	26%	Kurowski et al., (2001)
Percentage of DAH allocated to Human Resources for health (capacity building)	Percentage	26%	Kurowski et al., (2001)
Efficiency savings due to service delivery integration	Percentage	10%	Range of 10%-15%, the conservative proportion is adopted. Focus is on DAH

Variable	Metric	Value	Source
Efficiency savings due to converting OOP to prepayment	Percentage	10%	WHO, Public Financing for Health in Africa: from Abuja to the SDGs. Range of 10%-40%, conservative value is used
Annual inflation rate	Percentage	1.50%	
Annual service & demographic growth	Percentage	0.25%	
Base year	Year	2025	
End year	Year	2050	

Source: various

Table A 2: Phased in implementation of efficiency

Efficiency savings	Potential savings (%)	Source	2026	2027	2028	2029	2030
Pooled commodity procurement	33%	Dubois et al., (2021)	10%	15%	20%	25%	30%
Procurement of other goods and services	15%	(5%-30% CI)	5%	7%	9%	11%	13%
Human Resources for health (salaries)	26%	Kurowski et al., (2001)	10%	14%	18%	20%	24%
Human Resources for health (capacity building)	26%	Kurowski et al., (2001)	10%	14%	18%	20%	24%
Service delivery integration	10%	Range of 10%-15%, A conservative proportion is adopted. Focus is on DAH	-4%	-2%	0%	5%	8%
Converting OOP to prepayment	20%	Range of 10%-40% (World Health Organization, 2016) Conservative value is used	5%	10%	15%	18%	19%

Source: various

Population projections for Africa for the period 2026–2050 were used. The base per-capita cost was adjusted annually using inflation and service and service delivery growth factors. The rationale for adjusting for inflation is to reflect rising input costs, including wages, medicines, and other health system operating expenses. The rationale for adjusting for real growth in health service demand
is to capture increases in health care utilisation and complexity over time, reflecting demographic change, epidemiological transition, expansion of service coverage, and improvements in quality of care.

The annual inflation rate is applied to account for increases in the cost of health sector inputs.

$$Inflation\ Factor_t = (1 + i)^{\{(t - t_0)\}}$$

where i is the assumed annual inflation rate, is the year of estimation, and is the base year (2025). An annual inflation rate of 1.5% was used. A service and demographic growth factor was applied to reflect demographic change, epidemiological transition, expansion of essential service packages, and quality improvements.

$$Service\ Factor_t = (1 + s)^{\{(t - t_0)\}}$$

where s is the assumed annual growth in service complexity and demand. A value of 0.25 was used for . The adjusted per-capita cost for each year was calculated as:

$$Adjusted\ Cost_t = \$112 \times Inflation\ Factor_t \times Service\ Factor_t$$

The total annual health financing requirements were calculated as:

$$Total\ Financing\ Requirement_t = Population_t \times Adjusted\ Cost_t$$

Projection of imports for DRC

In order to estimate the contribution of the 2% import tax on goods in the DRC, we projected imports using a phased compound growth approach using a standard formula as shown below:

$$X_t = X_{2026}(1 + g_1)^t$$

$$X_t = X_{2031}(1 + g_2)^t$$

$$X_t = X_{2041}(1 + g_3)^t$$

where x_t represents imports in year t and , g_1, g_2 and g_3 are growth rates for the three different phases. The year 2026 was the base period for the first phase, 2031 for the second phase and 2041 for the third phase. The growth rates for the three phases are shown in *Table A 3*.

Table A 3: Growth rates of goods imports for the Democratic Republic of Congo for the period, 2026-2050

Period	Growth assumption
2026–2030	16%
2031–2040	8%
2041–2050	4%

Source: Estimations by the authors

Results

The detailed results are shown in the Table next page.

Table A 4: Modelling results of health efficiency gains for Africa, 2026-2050

	Year											
Variable	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**
Total African population (Billion)	1.57	1.60	1.64	1.67	1.71	1.75	1.78	1.82	1.85	1.89	1.93	1.97
Total budget for basic health care -Africa, (Billion, $)	178.97	186.21	193.65	201.32	209.23	217.38	225.79	234.44	243.35	252.54	261.99	271.71
Projected THE -Africa, (Billion, $)	114.58	118.43	122.72	127.35	132.36	137.65	143.08	148.71	154.49	160.38	166.34	172.38
Projected Government health expenditure, (Billion, $)	48.44	50.33	52.36	54.55	56.98	59.43	61.95	64.58	67.28	70.03	72.80	75.60
Projected DAH, (Billion, $)	12.80	12.57	12.59	12.67	12.81	13.13	13.43	13.72	14.00	14.29	14.57	14.85
Projected THE -Africa less inefficiency, (Billion, $)	88.23	91.19	94.49	98.06	101.92	105.99	110.17	114.50	118.96	123.49	128.08	132.73
Financing gap, (Billion, $)	64.40	67.78	70.93	73.96	76.87	79.73	82.71	85.74	88.86	92.16	95.66	99.34
Government health expenditure on medicines, (Billion, $)	12.11	12.58	13.09	13.64	14.24	14.86	15.49	16.14	16.82	17.51	18.20	18.90
Government expenditure on health worker salaries, (Billion, $)	26.64	27.68	28.80	30.01	31.34	32.69	34.07	35.52	37.00	38.52	40.04	41.58
Government expenditure on other procurement apart from medicines, (Billion, $)	4.84	5.03	5.24	5.46	5.70	5.94	6.19	6.46	6.73	7.00	7.28	7.56
DAH allocated to human resources for health (capacity building), (Billion, $)	0.51	0.50	0.50	0.51	0.51	0.53	0.54	0.55	0.56	0.57	0.58	0.59
Projected OOP, (Billion, $)	33.94	35.13	36.35	37.62	38.93	40.27	41.63	43.02	44.44	45.87	47.31	48.76

	Year											
Variable	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**
Efficiency savings												
Pooled commodity procurement, (Billion, $)	1.21	1.89	2.62	3.41	4.27	4.90	5.11	5.33	5.55	5.78	6.01	6.24
Procurement apart from medicines budget, (Billion, $)	0.24	0.35	0.47	0.60	0.74	0.89	0.93	0.97	1.01	1.05	1.09	1.13
Human Resources for health (salaries), (Billion, $)	2.66	3.88	5.18	6.00	7.52	8.50	8.86	9.23	9.62	10.01	10.41	10.81
Human Resources for health (capacity building), (Billion, $)	0.05	0.07	0.09	0.10	0.12	0.14	0.14	0.14	0.15	0.15	0.15	0.15
Service delivery integration, (Billion, $)	-0.49	- 0.24	-	0.61	0.98	1.26	1.29	1.32	1.34	1.37	1.40	1.43
Converting OOP to prepayment, (Billion, $)	1.70	3.51	5.45	6.77	7.40	8.05	8.33	8.60	8.89	9.17	9.46	9.75
Total efficiency gains	**5.37**	**9.46**	**13.82**	**17.49**	**21.04**	**23.74**	**24.65**	**25.59**	**26.56**	**27.54**	**28.52**	**29.51**

	Year												
Variable	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**
Total African population (Billion)	2.00	2.04	2.08	2.11	2.15	2.19	2.23	2.26	2.30	2.34	2.37	2.41	2.45
Total budget for basic health care -Africa, (Billion, $)	281.70	291.97	302.52	313.36	324.49	335.92	347.64	359.66	371.97	384.59	397.53	410.78	424.34
Projected THE -Africa, (Billion, $)	178.58	184.89	191.30	197.77	204.30	211.05	217.92	224.93	229.68	236.93	244.35	251.95	259.67
Projected Government health expenditure, (Billion, $)	78.50	81.45	84.42	87.44	90.46	93.61	96.81	100.09	103.43	106.83	110.34	113.94	117.57

	Year												
Variable	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**
Projected DAH, (Billion, $)	15.13	15.41	15.68	15.95	16.21	16.48	16.73	16.99	14.89	15.12	15.34	15.57	15.78
Projected THE -Africa less inefficiency, (Billion, $)	137.50	142.37	147.30	152.28	157.31	162.51	167.80	173.20	176.86	182.43	188.15	194.00	199.95
Financing gap, (Billion, $)	103.13	107.08	111.23	115.60	120.19	124.87	129.72	134.73	142.29	147.66	153.18	158.83	164.67
Government health expenditure on medicines, (Billion, $)	19.62	20.36	21.11	21.86	22.62	23.40	24.20	25.02	25.86	26.71	27.59	28.49	29.39
Government expenditure on health worker salaries, (Billion, $)	43.17	44.80	46.43	48.09	49.75	51.49	53.25	55.05	56.89	58.76	60.69	62.67	64.66
Government expenditure on other procurement apart from medicines, (Billion, $)	7.85	8.14	8.44	8.74	9.05	9.36	9.68	10.01	10.34	10.68	11.03	11.39	11.76
DAH allocated to human resources for health (capacity building), (Billion, $)	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.60	0.60	0.61	0.62	0.63
Projected OOP, (Billion, $)	50.21	51.68	53.16	54.63	56.10	57.61	59.14	60.67	62.20	63.76	65.35	66.95	68.58
Efficiency savings													
Pooled commodity procurement, (Billion, $)	6.48	6.72	6.97	7.21	7.46	7.72	7.99	8.26	8.53	8.81	9.10	9.40	9.70
Procurement apart from medicines budget, (Billion, $)	1.18	1.22	1.27	1.31	1.36	1.40	1.45	1.50	1.55	1.60	1.66	1.71	1.76

	Year												
Variable	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**
Human Resources for health (salaries), (Billion, $)	11.23	11.65	12.07	12.50	12.94	13.39	13.84	14.31	14.79	15.28	15.78	16.29	16.81
Human Resources for health (capacity building), (Billion, $)	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.15	0.16	0.16	0.16	0.16
Service delivery integration, (Billion, $)	1.45	1.48	1.50	1.53	1.56	1.58	1.61	1.63	1.43	1.45	1.47	1.49	1.52
Converting OOP to prepayment, (Billion, $)	10.04	10.34	10.63	10.93	11.22	11.52	11.83	12.13	12.44	12.75	13.07	13.39	13.72
Total efficiency gains	**30.53**	**31.56**	**32.60**	**33.65**	**34.70**	**35.79**	**36.89**	**38.01**	**38.90**	**40.06**	**41.24**	**42.45**	**43.67**

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