

# Sustaining Effective Coverage for HIV, Tuberculosis, and Malaria in the Context of Transition in Kenya

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## Table of Contents

Abbreviations .....	iii
List of Tables .....	iv
List of Figures .....	iv
Executive Summary.....	v
Introduction .....	1
Overview of approach.....	2
Kenya’s health policy environment .....	4
Synthesis of key findings.....	5
Quantifying Kenya’s sustainability and transition challenge.....	5
Program vulnerabilities from inefficiencies in the health financing and PFM systems .....	7
Vulnerabilities in budget formulation .....	7
Vulnerabilities in budget execution.....	12
Vulnerabilities in budget monitoring.....	13
Charting Kenya’s sustainability and transition path .....	14
Opportunities for increasing revenue for health and the three diseases.....	14
Opportunities for increasing efficiency in the health system and the disease responses.....	17
Other topics to include in ongoing sustainability and transition dialogue .....	19
Recommendations and next steps .....	19
References .....	22
Annexes.....	25
Annex A. Resource needs table .....	26
Annex B. Desk review and qualitative fiscal space analysis [updated] .....	29
Annex C. Mapped funding flows .....	30
Annex D. Notes on methodology and data availability.....	31

## Currency conversion

USD 1 = KES 102.44

This report was authored by a team at Results for Development (R4D) led by Michael Chaitkin, Meghan O’Connell, and Joseph Githinji under the general direction of Cheryl Cashin and with important contributions from Daniel Arias, Danielle Bloom, Lisa Fleisher, Rifaiyat Mahbub, Sinit Mehtsun, and Meley Woldeghebriel. For more information, please contact Michael Chaitkin at [mchaitkin@r4d.org](mailto:mchaitkin@r4d.org).

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## Abbreviations

Amref	Amref Health Africa
ARVs	Antiretroviral drugs
CoG	Council of Governors
COP	PEPFAR Country Operational Plan
DAH	Development assistance for health
DCM	Differentiated care model
FSW	Female sex worker
GAC	Global Fund grants approval committee
Gavi	Gavi, the Vaccine Alliance
GDP	Gross domestic product
GFF	Global Financing Facility
GGE	General government expenditure
GHE	Government health expenditure
Global Fund	The Global Fund to Fight AIDS, Tuberculosis, and Malaria
GoK	Government of Kenya
HSS	Health system strengthening
HTS	HIV testing services
IDA	International Development Association
IMF	International Monetary Fund
KCM	Kenya Coordinating Mechanism
KEMSA	Kenya Medical Supplies Authority
KEPH	Kenya Essential Package for Health
KES	Kenyan Shilling
KHFS	Kenya Health Financing Strategy 2016–2030 (third draft)
KHSSP III	Kenya Health Sector Strategic and Investment Plan, July 2013–June 2017
KRCS	Kenya Red Cross Society
L-MIC	Lower-middle-income country
MoH	Ministry of Health
NACC	National AIDS Control Council
NASA	National AIDS Spending Assessment
NASCOP	National AIDS & STI Control Programme
NGO	Non-governmental organization
NHA	National Health Accounts
NHIF	National Hospital Insurance Fund
NMCP	National Malaria Control Program
NT	National Treasury
NTDs	Neglected tropical diseases
NTLD-P	National Tuberculosis, Leprosy, and Lung Disease Program
OIG	Global Fund Office of the Inspector General
OOP	Out-of-pocket payments
OVC	Orphans and vulnerable children
PBB	Program-based budgeting
PEPFAR	US President’s Emergency Plan for AIDS Relief
PFMA	Public Finance Management Act of 2012
PHC	Primary health care
PMI	US President’s Malaria Initiative
PMTCT	Prevention of mother-to-child transmission of HIV
R4D	Results for Development
SFI	Sustainable Financing Initiative
SHIF	Social Health Insurance Fund
TB	Tuberculosis
THE	Total health expenditure
USD	United States Dollar
USG	United States Government
VMMC	Voluntary medical male circumcision

## List of Tables

Table 1. Organizations consulted.....	3
Table 2. Components of each disease program.....	3
Table 3. Annual average proposed allocations for the three diseases and HSS for 2018–2020 (KES millions) .....	6
Table 4. Estimated annual funding need and availability over 2018–2020 (KES millions).....	6
Table 5. Possibilities for financial and programmatic responsibilities at the national and county levels.....	8
Table 6. Annual investment profile by program area (FY 2015/16) (USD millions).....	9
Table 7. Annual procurement profile for key commodities (FY 2015/16) (USD millions).....	9
Table 8. Revenue options for fiscal space for health .....	14

## List of Figures

Figure 1. Expenditure on health and the three diseases & composition by revenue source, KFY 2012/13 (KES millions).....	5
Figure 2. Composition of expected external funding for the three diseases and related HSS (2018–2020) .....	6
Figure 3. Estimated annual funding availability and unmet need over 2018–2020 (KES millions).....	6
Figure 4. On- versus off-budget composition of proposed Global Fund investment in HIV for 2018–2020.....	10
Figure 5. On- versus off-budget composition of proposed Global Fund investment in TB and Malaria for 2018–2020 .....	11
Figure 6. Effects of prioritization scenarios on annual gov't funding for HIV, TB, and malaria in 2022 (KES millions) .....	15

## Executive Summary

The Global Fund to Fight AIDS, Tuberculosis, and Malaria has invested nearly US\$900 million in Kenya since 2006, helping to contain the epidemics and scale-up access to critical prevention and treatment services. In that time, Kenya's responses to the three diseases have all seen great achievements and all still face significant challenges. To sustain these gains and further strengthen epidemic control, the Government of Kenya is increasingly exploring strategies to sustain progress and eventually transition away from external funding and programmatic support for health, including for the three diseases.

In partnership with The Global Fund, the Government of Kenya is working to take stock of Kenya's financing landscape for health and the three diseases and to identify opportunities and challenges for sustaining effective coverage of HIV, TB, and malaria services in the long run, mindful of macro-fiscal and institutional constraints. Toward this end, a team of international and Kenyan experts from Results for Development (R4D) collaborated with focal points in the Ministry of Health, National Treasury, Council of Governors Secretariat, and National AIDS Control Council. R4D conducted a thorough desk review and qualitative fiscal space analysis, 31 interviews about financing for the three diseases and the extent of alignment between public financial management systems and health policy objectives, and a validation workshop with government officials (see Box).

Kenya's disease responses face a triple transition challenge: replacing donor funding, closing the resource gap that would exist even with donor funding, and more efficiently delivering on program objectives. With several priority HIV, TB, and malaria interventions heavily supported by donor funding, concerted action is needed to increase government funding for the three diseases and to improve the efficiency of resource use.

Meeting the replacement challenge and Kenya's overall health sector needs will require a combination of mobilizing new revenue for health and efficiency gains; neither alone will suffice. New funding for health will largely depend on macro-fiscal conditions, the government's overall effort to collect revenue, and the extent to which policymakers prioritize health within government budgets at the national and county levels. To sustain current programmatic outcomes for the three diseases, the government will also need to look to efficiency gains that can be reinvested in the health sector. Realizing efficiency gains is difficult and often requires up-front investment.

The Global Fund can leverage efforts to ensure the sustainability of its investments in Kenya by anchoring transition planning for the three diseases to Kenya's forthcoming Health Financing Strategy through 2030, which articulates an ambitious agenda for achieving universal health coverage through a social health insurance scheme. Implementing the strategy will be a long-term project, and there will be many supportive steps along the way through which the government, Global Fund, and others can collaboratively sustain—and ideally expand—Kenya's responses to the three diseases.

### **Box. The validation consultation process**

The validation meeting was an essential component of the project's effort to anchor analysis in the real-time priorities and processes confronting counterparts in government. In addition to eliciting invaluable feedback on and insight into the presented data and analysis for the research team, the meeting provided a space for focal points to discuss with each other their foremost challenges and constraints. Particularly rich were discussions of the prevailing dynamics within the health sector and between health and the National Treasury. Governance, leadership, change management, and information asymmetries between the health sector that delivers services and the Treasury that funds them all emerged as critical themes for future discussion and action within government, in partnership with Global Fund and other donors.

## Kenya's financing challenge for the three diseases

**Without external funding, Kenya's unmet funding need for HIV, TB, and malaria would total KES 84 billion (USD 819 million) annually over the next three years.** In reality, the Global Fund, US Government, and other donors will invest KES 77 billion (USD 750 million) per year in the three diseases, meeting 92% of that need. This represents a significant fiscal challenge: annual donor investment in the three diseases is expected to be 1.3x the Ministry of Health budget and 3.9% of the overall national budget for FY 2017/18.

**During 2018–2020, the Global Fund will account for 18% of total external funding for HIV, TB, and malaria, while the majority (81%) will come from the US government<sup>1</sup>.** The HIV response will attract more than 80% of external funding for the three diseases and be predominantly supported by the USG. Global Fund will be the leading partner for TB, the smallest of the three programs. The two donors will play a more balanced role for malaria, which is the only program of the three in which government invests more than donors.

**Donors mainly invest in (1) treatment and prevention activities, including commodities, and (2) programs catering to priority and vulnerable populations.** Most HIV money flows to ART and a range of general and targeted prevention activities. TB funding focuses on care and prevention alongside investments in TB/HIV co-infection and addressing multidrug-resistant TB. Facility-based treatment services and prevention efforts involving insecticide-treated bed nets and indoor residual spraying are the priorities for malaria funding.

## HIV, TB, and malaria program vulnerabilities stemming from inefficiencies and other challenges in Kenya's health financing and public financial management systems

**Information asymmetry between the national and county levels constrains counties' ability to sufficiently plan for any future assumption of responsibilities by government.** Counties want to be more involved in the planning and budgeting for HIV, TB, and malaria activities, but do not yet feel equipped with sufficient information to do so. The transfer of information from the national to the county level on the resources required to support HIV, TB, and malaria activities would allow counties to develop costed strategic plans and better-informed budgets. The protocol for information flow, including roles and responsibilities for sharing or requesting information on total allocations for disease program activities at the county level, is unclear, but growing county involvement in the GF KCM is promising.

**Financial and programmatic responsibilities of the different levels of government (national versus county) and sectors (public versus private) have yet to be outlined for HIV, TB, and malaria programs in the context of devolution and declining donor funds.** There is uncertainty on which program components the national or county government would be responsible for financing, and which level of government and sector (public vs. private) would implement activities in the context of devolution and declining donor funds. Non-state actors play indispensable roles in both advocating for and delivering HIV, TB, and malaria services. Because they are funded off-budget by the Global Fund and other donors, the long-term sustainability of these services will depend in part on effective collaboration between governments and non-state actors, including suitable budget structures and legal and regulatory frameworks for social contracting at scale. Off-budget funding may not be sufficiently visible to government to inform strategic planning and resource mobilization. In particular, while the GoK is critically involved in decisions about how to invest Global Fund money, the magnitude and purpose of other donor money (e.g. from the USG) may not be well understood.

**The policy environment for contracting out essential services, including for key populations, is uncertain.** The Kenyan Public Procurement and Asset Disposal Act 2015 provides a favorable legislative foundation that allows the government to outsource services. However, in a situation where the government assumes financial but not programmatic responsibility for various program areas, there is uncertainty around the

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<sup>1</sup> This report assumes Global Fund Allocation and Catalytic funding for 2018–20 as proposed in Kenya's funding request, submitted May 23, 2017. The actual budget for Global Fund investments for the next funding cycle, including allocations to each principal recipient, will only be known after grant negotiations and approval by the Global Fund's grants approval committee (GAC).

political appetite to engage in public-private partnerships to support essential services, including for key populations. Importantly, there are not yet adequate systems and mechanisms for monitoring performance of social contracts with non-state providers, who currently deliver a large share of key population programs.

**The Ministry of Health does not feel equipped to present a sufficiently compelling case for increased domestic allocation for the three diseases, particularly HIV, in the context of declining donor funds.** Skepticism exists around the costing of HIV resource needs. A contributing factor is that program-based budgeting has not yet been implemented in a way that sufficiently monitors actual spending against programmatic objectives. Furthermore, the centralized governance structure of HIV, TB, and malaria disease programs negatively affects the perception of efficiency.

**Siloed planning between disease programs and lack of coordination among donors limits opportunities to realize efficiency gains.** National control programs (e.g. HIV and TB) would benefit from increased coordination in planning and implementation of activities for the three diseases, especially at the county level. Activities should be increasingly situated in the context of a well-coordinated and integrated primary health care system to benefit from important linkages to other areas of care (e.g., sexual and reproductive health).

**Chronic delays in procurement and supply chain processes contribute to drug stock-outs and to low but improving absorption of development budgets, especially in the MoH.** KEMSA's recent assumption of overall responsibility for procurement has improved management and fostered a trend towards centralization of procurement for all USG- and Global Fund-funded commodities, with concurrent investment in KEMSA's capacity. Despite these overall improvements, historical challenges related to leadership and governance were reiterated by respondents. To some extent, budget execution for procurement continues to be hindered by a series of bureaucratic delays related to giving specifications for goods to be bought, nominations to tender-evaluation committees, and disbursing funds from National Treasury.

**Fragmented data systems and incomplete and/or low-quality data are bottlenecks to realizing near-term improvements in budget formulation, and long-term (and potentially large-scale) efficiency gains from strategic purchasing.** Accountability measures are not yet sufficient to ensure the availability of complete, on-time, quality data. This limits the ability to structure budgets accurately according to needs for priority populations, programs, and services, and limits the compilation of data needed to support strategic, data-informed purchasing of services.

## Options for addressing program vulnerabilities and the financing challenge

### More money for health

**Meeting the replacement challenge and Kenya's overall needs will require a combination of new revenue for health and efficiency gains; neither alone will suffice.** Mobilization of domestic resources for health tends to be incremental. Meanwhile, opportunities to increase efficiency abound but are difficult to realize and often require up-front investment.

**In practice, the 'replacement challenge' may be greater or less than KES 77 billion depending on efficiency gains, epidemic trends, and different cost structures between donor- and government-financed interventions.**

Resource needs for the three diseases could continue growing, particularly as people newly infected with HIV join the growing population of those on life-long antiretroviral therapy. The global policy environment also lends considerable uncertainty to the trajectory of donor funding for health, so the necessary pace of replacement is unclear.

**Consistent with international best practice, Kenya has identified compulsory revenue options like taxes and mandatory social health insurance contributions as the core of future health financing.** Government funding for

health, therefore, will largely depend on macro-fiscal conditions, government's overall effort to collect revenue, and the extent to which policymakers prioritize health within the government budget.

**Accelerating progress toward Kenya's goal of allocating 13% of government expenditure to health could mobilize an additional KES 36 billion (USD 351 million) annually for HIV, TB, and malaria by 2022.** This would cover 27% of current donor funding for the three diseases, with another KES 87 billion (USD 849 million) available annually for health.

**Budget trends can guide dialogue on prioritizing health within the government budget.** The MoH budget has decreased as a share of the national government budget for several years and is expected to decline further by 2019/20. County allocations to health have grown rapidly, but they are merely substituting for national government resources. Health as a share of overall public spending has held steady or even slightly decreased since 2014/15. Furthermore, health may already be crowding out other sectors at the county level given new liabilities from collective bargaining agreements for public sector doctors and nurses. Government will want to take note of whether new spending at the county level is enabling greater service delivery outputs and outcomes, increasing wages, or both.

### More health for the money

**To sustain current programmatic outcomes, Kenya likely need not replace donor funding dollar-for-dollar.**

Closer integration of siloed health programs into the broader financing, management, and service delivery systems is likely to consolidate shared health sector inputs (e.g., program management, human resources, health information systems). Reforms to enable broader efficiency gains will also be important.

**Aside from enabling conditions, many specific opportunities for efficiency gain have been identified<sup>2</sup>,** including:

- KES 4.8 billion (USD 47 million) more could flow to health this year from improving the MoH's budget execution to the government average, and close to KES 6 billion (USD 59 million) more by FY 2019/20.
- KES 1.1 billion (USD 10 million) annually could be repurposed to treatment and prevention services if 20% of GF and USG program management costs were recouped through streamlining of donor-supported activities that are increasingly integrated into government financing and delivery systems.
- 16% (or more) gain in ART through differentiated care models, in which the nature of prevention and treatment services are tailored to the needs and risks of different types of people (e.g., outreach, ARV distribution, and frequency of facility visit for check-ups and viral load testing).
- 70% in HIV-related training through curriculum harmonization.
- 14% in HIV prevention through better-targeting HIV prevention interventions based on geographic and sociodemographic distribution of risk.

**Government and development partners should be mindful of the complexities of efficiency gains,** including:

- Gains are hard to measure because they may manifest in quality and productivity, not always in cost.
- Not all efficiency gains will be additive. Some may have overlapping effects while others are complementary.
- Most efficiency gains require upfront enabling investments and reforms, so prioritization is important for government efforts and to inform dialogue with donors. Benefits from these investments can cut across the whole health system.

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<sup>2</sup> See pages 14–18 and Annex D. Notes on methodology and data availability of the main report for the data sources and reasoning underpinning these estimates.



## Looking ahead

In addition to identifying many specific challenges and opportunities to be addressed by the Government of Kenya and its development partners, the study offers analytical and process-minded recommendations:

1. Integrate sustainability and transition issues into routine health financing discussions among Health and Treasury officials at the national and county levels.
2. Begin deliberating about national and county roles with respect to program activities that will eventually be transitioned.
3. Chart plans for sustainability and transition for the three diseases along Kenya's path toward universal health coverage, with a priority focus on increasing efficiency.
4. Retain focus on PFM-health financing alignment and analysis at the level of program components.
5. Embrace a spirit of 'urgent incrementalism' to tackle transition challenges over time.

Ultimately, the sustainability and successful transition of externally supported programs will require prolonged commitment from national and county officials, buttressed by strategic investments from development partners, to collaboratively address the three diseases through recurrent processes to plan, implement, and monitor financing for health.

## Introduction

The Global Fund to Fight AIDS, Tuberculosis, and Malaria (the Global Fund) has invested nearly US\$900 million in Kenya since 2006 (The Global Fund 2017), helping to contain the epidemics and scale up access to critical prevention and treatment services. In that time, Kenya's response to the three diseases have all seen great achievements and all still face significant challenges.

68% of Kenyans living with HIV, more than a million people, have initiated life-sustaining antiretroviral therapy (ART). Of those on treatment, 73% of them are virally suppressed. Treatment scale-up has led to a steep reduction in HIV-related deaths, but the more than 50,000 new infections annually mean the number of people living with HIV continues to grow (Kenya Coordinating Mechanism 2017a).

Meanwhile, Kenya surpassed the Millennium Development Goals targets for TB, but county-level treatment success rates range from 52% to 98%, and drug-resistant TB "remains a major public health challenge" (Ministry of Health 2015a). TB case detection has improved significantly, and efforts to address HIV-TB co-infection have bolstered HIV testing rates for TB patients (95%), with similarly high rates of care linkage for those who test positive (Kenya Coordinating Mechanism 2017a).

Finally, malaria-related deaths have decreased since 2005, but 60% of Kenyans still reside in malaria-endemic areas, and malaria prompts 18% of outpatient visits and 10% of hospital admissions. Prevalence of malaria and anemia among children have decreased, and the availability of diagnostics and completeness of incidence reporting have both improved over the last several years (Kenya Coordinating Mechanism 2017b).

To sustain these gains and further strengthen epidemic control, the Government of Kenya (GoK) continues to explore strategies for sustainability and eventual transition away from external funding and programmatic support for health, including the three diseases. In partnership with the Global Fund, GoK has taken stock of Kenya's financing landscape for health and the three diseases and identified opportunities and challenges for sustaining effective coverage of HIV, TB, and malaria services in the long run, mindful of macro-fiscal and institutional constraints.

To assist the GoK with analysis and process facilitation, the Global Fund contracted a team of international and Kenyan experts from Results for Development (R4D), as well as identified focal points in key government agencies: the Ministry of Health (MoH), National Treasury (NT), Council of Governors (CoG) Secretariat, and National AIDS Control Council (NACC).

This report summarizes key findings and identifies priority next steps for consideration by GoK in dialogue with the Global Fund and other development partners. It answers the following questions:

1. What is Kenya's current funding landscape for the three diseases? What needs remain unmet? How reliant are various interventions on funding from the Global Fund and other external sources?
2. In the context of transition, what challenges confront efforts to mobilize domestic resources and increase efficiency? What are the main risks and vulnerabilities in Kenya's HIV, TB, and malaria responses, particularly those related to misalignments between public financial management and health financing systems at the national and county levels?
3. What options to increase resources and efficiency for the three diseases could GoK consider, and what effect might they have?

## Overview of approach

To answer these questions, R4D undertook a technical approach centered on the principles that publicly raised and pooled revenue will ultimately be the core of financial sustainability in Kenya, and that transition planning should be embedded in, and help to strengthen, existing country processes (e.g., the government budget cycle). This aligns with a centerpiece of the Kenya Health Financing Strategy 2016–2030 (third draft) (KHFS): the creation of a social health insurance fund (SHIF) financed through a combination of mandatory contributions from households and employers with allocations from national and county government budgets (Ministry of Health 2016a). The success of KHFS reforms aimed at sustainability, including provider payment reform and achieving universal health coverage (UHC), will depend largely on whether the PFM system accommodates needed changes in how health budgets are formed, the way funds flow through the health system, and how well spending is accounted for to measure results and inform future planning.

The way funds flow through the public financial management (PFM) system and ultimately reach frontline service providers is critical for ensuring access to health services and the provision of high quality care (Cashin et al. 2017). As external funding for health declines, weaknesses in PFM systems may be a major bottleneck to successfully achieving sustainable health financing in Kenya. Tracing the Global Fund's investments in HIV, TB, and malaria through the budget and PFM system provided an entry point to examine the health financing system holistically, with special attention to the interplay between Kenya's PFM systems and health budgeting processes.

R4D landscaped expected medium-term funding for the three diseases, relying primarily on Kenya's new funding request to the Global Fund, which includes partial estimates of resource needs and available financing for HIV, TB, and malaria during the 2018–2020 utilization period (Kenya Coordinating Mechanism 2017a, 2017b)<sup>3</sup>. Gaps were filled using data from other sources, including the National Health Accounts (NHA) (Ministry of Health 2015b)<sup>4</sup>, the US Government's Country Operational Plan and Malaria Operational Plan (PEPFAR 2017; PMI 2016), the (not yet published) National AIDS Spending Assessment (NASA) (NACC 2016), and Kenya's national strategic plans for the three diseases (Ministry of Health 2014b, 2014c; NACC 2014a). Additionally, some estimates of medium-term domestic spending on health and the three diseases relied on a projection model that also factored in macro-fiscal forecasts from the IMF (2017) and National Treasury (2017b). The landscaping is summarized below and in Annex A. Resource needs table. R4D also conducted a desk review highlighting relevant macro-fiscal, health policy, and health financing trends and a qualitative fiscal space analysis examining potential sources of revenue and efficiency gains for the health system (Annex B. Desk review and qualitative fiscal space analysis).

To assess PFM processes through each step of the budget and expenditure cycle and unpack health financing flows, 31 in-depth interviews were conducted between April 17 and July 24, 2017 with national and county-level officials and civil society working in health financing or relevant health programs. A full list of participating organizations can be found in Table 1 below. Interviews were guided by a process guide for assessing alignment between PFM systems and health policy objectives (WHO, OECD, and R4D 2017), which was adapted to the Kenyan context and the three diseases. Respondents provided insights into a series of general and disease-specific questions on budget formulation, budget execution, and monitoring of public and donor funds. Participants were informed that individual responses would be confidential and presented in aggregate to facilitate an environment of openness during the interviews. Additional meetings were held with representatives from several development partners to provide context and background for the health financing, PFM reform, and transition environment.

The desk review and interviews enabled R4D to identify PFM system characteristics or processes that would make eventual financial or programmatic integration of donor-funded activities into government systems

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<sup>3</sup> In addition to the funding request narratives, the KCM provided R4D its budget and landscape databases.

<sup>4</sup> The NHA for 2015/16 was under preparation at the time of writing; other than some summary figures reported in Kenya's funding request to the Global Fund, no data were available. The NHA used in this report captures health expenditure in 2012/13.

challenging; and to identify opportunities for efficiency gains that could be leveraged through policy, managerial, or administrative process improvements.

*Table 1. Organizations consulted*

Government agencies and programs	Council of Governors (CoG) Secretariat County health officials in Homabay, Makueni, and Mombasa Global Fund Kenya Coordinating Mechanism (KCM) Kenya Medical Supplies Authority (KEMSA) Ministry of Health (MoH), including National AIDS and STI Control Program (NASCO) National Malaria Control Program (NMCP) National Tuberculosis and Lung Disease Control Program (NTLD) National AIDS Control Council (NACC) National Treasury
Civil society organizations	Amref Health Africa Impact Research Development Organisation Kenya Association for Prevention of Tuberculosis and Lung Disease (KAPTLD) Kenya Red Cross Society (KRCS) Women Fighting AIDS in Kenya (WOFAK)
Development partners	Development Partners for Health Kenya (DPHK) Embassy of Denmark USAID’s Health Policy Plus Project (HP+) Japan International Cooperation Agency (JICA) United States Agency for International Development (USAID) World Bank

Within each disease program, individual components (see Table 2) were examined to the extent possible to understand their level of donor support, how each relates to the broader health system, and any concerns related to (further) integration with the government system

*Table 2. Components of each disease program*

HIV	TB	Malaria
Treatment, care, and support – ART PMTCT Condoms Programs for MSM Programs for FSW and their clients Programs for PWID and their partners Programs for adolescents and youth in and out of schools Other prevention programs TB/HIV integration Programs to reduce human rights-related barriers to access Program management	TB care and prevention MDR-TB TB/HIV integration Program management	Facility-based treatment Severe malaria Private sector case management Vector Control: LLINs Vector Control: IRS Malaria in pregnancy IEC/BCC Surveillance Drug and health product quality HIS and M&E Program and data quality Policy, planning, coordination, and management of national disease control programs

Abbreviations: ART = antiretroviral therapy; PMTCT = prevention of mother-to-child transmission; MSM = men who have sex with men; FSW = female sex workers; PWID = people who inject drugs; MDR = multidrug-resistant; LLINs = long-lasting insecticide-treated nets; IRS = indoor residual spraying; IEC/BCC = information, education and communication/behavior change communication; HIS = health information system; M&E = monitoring and evaluation

Program components were considered vulnerable if they are (i) currently financed primarily by donors or households (i.e., not domestic government sources); (ii) not identified as a government priority in health sector or disease-specific national strategic plans; (iii) at risk for being ‘lost’ after donors withdraw their funding because, for example, there is a bottleneck with the PFM system that might complicate efforts to integrate that component into existing country systems. Areas of inefficiency were identified where there are duplicated, weak, or fragmented systems leading to underspent budgets, misallocated funds, or other inefficiencies.

Priority challenges, alongside options to increase health sector funding and efficiency, were presented to focal points and designates at a validation consultation workshop in Nairobi (July 26, 2017). Participants’ feedback is reflected in this report.

## Kenya’s health policy environment

Kenya’s long-term development plan, *Vision 2030*, provides an ambitious blueprint for transforming the country into an industrializing, prosperous middle-income country by 2030. It organizes priorities across economic, social, and political pillars, with government-led initiatives operationalized through a series of medium-term plans (Government of Kenya 2007). The Second Medium Term Plan, 2013–2017 (Government of Kenya 2013) emphasizes sustaining economic growth and social progress while implementing devolution, a major feature of the governance reforms codified in the Constitution. The institutional and fiscal features of devolution are guided by the Public Finance Management Act (2012) (PFMA) and the Transition to Devolved Government Act (2012).

Health is among the sectors most affected by devolution; the Constitution bestows upon Kenya’s 47 counties responsibility for delivering most health services, while the national government retains leadership in developing health policy and regulation, as well as managing national referral facilities (*Constitution of Kenya* 2010). Consequently, the performance of Kenya’s health system and challenges stemming from the PFM and health financing systems must be understood in the context of ongoing devolution.

To accelerate attainment of the country’s health goals<sup>5</sup>, and to support realization of the constitutional right “to the highest attainable standard of health” (*Constitution of Kenya* 2010), MoH formulated the Kenya Health Policy 2014–2030, a sectoral framework aligned with *Vision 2030* and centered on the pursuit of universal coverage of critical services (Ministry of Health 2014a).

Consultations are ongoing to finalize the MoH’s Health Financing Strategy, of which a third draft was prepared in October 2016. Like the Kenya Health Policy, the strategy will cover the period through 2030. The draft strategy proposes ambitious steps to mobilize more resources for health and pool them in a social health insurance fund in an effort to increase efficiency, reduce fragmentation, and address numerous other challenges. These include excessive care-seeking at higher-level facilities; insufficient motivation, productivity, and skill among health workers; disproportionate spending on costly curative services; leakage of funds and commodities; counterfeit medicines; and passive purchasing. In addition, the Kenya Essential Package for Health (KEPH) features prominently in the draft strategy. The KEPH is “a set of health services that should ideally be accessible to all Kenyans as a matter of entitlement” (Ministry of Health 2016a); the package would include prevention, screening, detection, and management of HIV, TB, and malaria services. As the strategy approaches finalization and implementation, the GoK and development partners will want to pay close attention to how financing reforms affect the cost, accessibility, and quality of services for the three diseases.

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<sup>5</sup> The Kenya Health Policy 2014–2030 sets three high-level targets for the health system by 2030, relative to performance in 2010: (1) to increase life expectancy from 60 to 72 years; (2) to halve mortality from 10.6 to 5.4 annual deaths per 1,000 persons; and (3) to reduce years lived with disability from 12 to 8 (Ministry of Health 2014a).

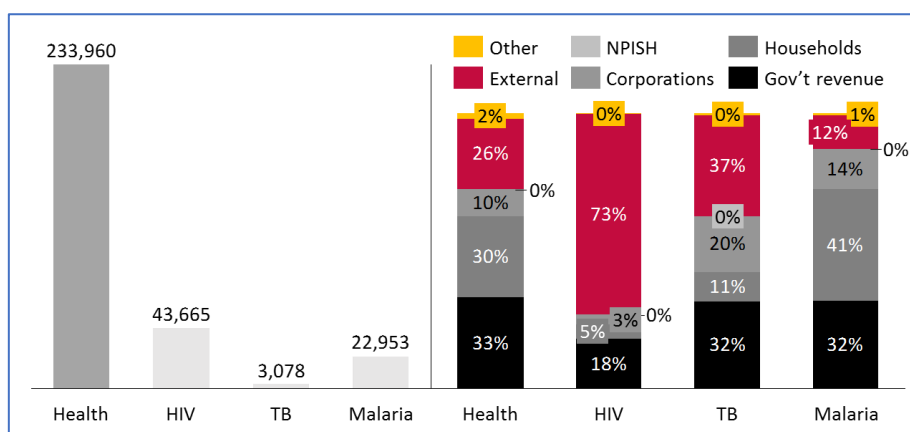
## Synthesis of key findings

In this section, the implementation of Global Fund–supported programs is examined to quantify Kenya’s sustainability and transition challenge and to identify specific financial and programmatic vulnerabilities and opportunities for increased efficiency.

### Quantifying Kenya’s sustainability and transition challenge

A key aspect of financial sustainability is the level of spending provided by government relative to estimated resource needs to achieve program objectives. Heavy reliance on external financing for any disease program risks losing gains achieved in health outcomes as donors decrease their support over time. The most recent National Health Accounts, for Kenyan financial year<sup>6</sup> (KFY) 2012/13, reports almost KES 234 billion in total health expenditure, of which HIV, TB, and malaria account for 19%, 1%, and 10%, respectively. The health sector is predominantly financed from domestic sources, with large contributions from households mainly in the form of out-of-pocket payments (Ministry of Health 2015b). External funding represents about a quarter of total health expenditure and accounts for 73% of HIV spending, 37% of TB spending, and 12% of malaria spending (Figure 1). The forthcoming NHA for KFY 2015/16 will provide more recent estimates; the unpublished NASA estimates for that year suggest the external share of HIV spending decreased to around 60% by KFY 2015/16 (NACC 2016).

Figure 1. Expenditure on health and the three diseases & composition by revenue source, KFY 2012/13 (KES millions)



Source: National Health Accounts for FY2012/13 (Ministry of Health, 2015b).  
Abbreviation: NPISH = Non-profit institutions serving households.

Donor investments in the three diseases and related health system strengthening (HSS) are expected to remain substantial in the medium term (i.e., 2018–2020), averaging nearly KES 77 billion annually (Table 3)<sup>7</sup>. Almost all external funding will come from the USG and the Global Fund, with the former providing most funding for HIV and HSS, the latter for TB, and close to equal contributions for malaria. In total, the Global Fund will provide 18% of external funding for the three diseases (Figure 2)<sup>8</sup>.

Absorbing donor investments poses a formidable ‘replacement challenge’ for the GoK: in KFY 2017/18, KES 77 billion is 2.3x the MoH’s development budget, 1.2x the MoH’s total budget, and 3.9% of the overall

<sup>6</sup> The Kenyan financial year runs from July 1 to June 30.

<sup>7</sup> This report assumes Global Fund Allocation and Catalytic funding for 2018–20 as proposed in Kenya’s funding request, submitted May 23, 2017. The actual budget for Global Fund investments for the next funding cycle, including allocations to each principal recipient, will only be known after grant negotiations and approval by the Global Fund’s grants approval committee (GAC).

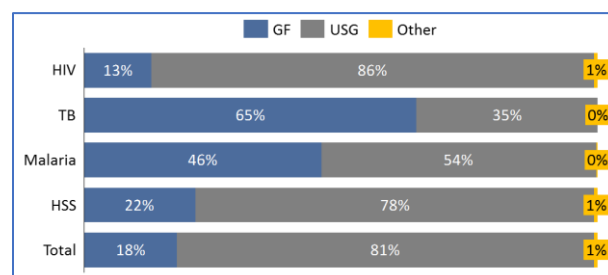
<sup>8</sup> This assumes the allocation and catalytic matching fund portions of Kenya’s funding request are approved in full, but not the above-allocation request. Also assumed is that USG funding will remain steady in the medium term.

national budget<sup>9</sup>. Moreover, even when publicly raised revenue is combined with external funding, Kenya will still fall short of its estimated resource needs by KES 7 billion per year over the next several years (Table 4 and Figure 3). In the absence of donor funding, Kenya would require KES 80–85 billion to meet its estimated annual needs for HIV, TB, and malaria. A more detailed resource needs table is presented in Annex A, and notes on methodology are in Annex D. Notes on methodology and data availability.

Table 3. Annual average proposed allocations for the three diseases and HSS for 2018–2020 (KES millions)

Program	GF	USG	Others	Total
HIV	8,090	53,382	440	61,912
TB	1,573	861		2,433
Malaria	2,913	3,382	18	6,313
HSS	1,340	4,814	40	6,194
<b>Total</b>	<b>13,915</b>	<b>62,439</b>	<b>498</b>	<b>76,851</b>

Figure 2. Composition of expected external funding for the three diseases and related HSS (2018–2020)

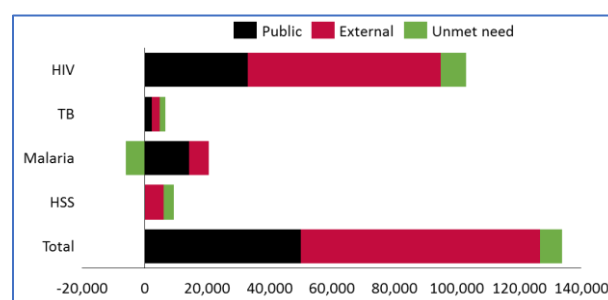


Sources: Funding landscape analyses in Kenya’s Global Fund funding requests (Kenya Coordinating Mechanism 2017a, 2017b)<sup>10</sup>. Abbreviations: HSS = Health system strengthening; GF = The Global Fund; USG = United States Government.

Table 4. Estimated annual funding need and availability over 2018–2020 (KES millions)

Program	Need	Public sources*	External	Unmet need
HIV	103,205	33,094	61,912	8,199
TB	6,555 <sup>†</sup>	2,398	2,433	1,724
Malaria	14,747	14,456	6,313	(6,022) <sup>‡</sup>
HSS	9,333	0	6,194	3,139
<b>Total</b>	<b>133,840</b>	<b>49,949</b>	<b>76,851</b>	<b>7,040</b>

Figure 3. Estimated annual funding availability and unmet need over 2018–2020 (KES millions)



Sources: Unless otherwise noted, data come from the funding landscape analyses in Kenya’s Global Fund funding requests (Kenya Coordinating Mechanism 2017a, 2017b). \*Public sources estimated based on NASA data for FY 2015/16 (NACC 2016), NHA data for FY 2015/16 and other funding data reported in Kenya’s Global Fund funding requests (Kenya Coordinating Mechanism 2017a, 2017b), and authors’ projections for government health expenditure in 2017. <sup>†</sup>The TB funding landscape analysis in Kenya’s Global Fund funding request for HIV, TB, and RSSH did not include a resource needs estimate; this figure is the FY 2017/18 cost estimate for implementing the National Strategic Plan for Tuberculosis, Leprosy and Lung Health, 2015–2018 (Ministry of Health 2014c). <sup>‡</sup>The data suggest that Kenya’s resource needs for malaria are currently being more than met with available funding. However, the costs being covered by malaria-designated spending may be more extensive than those included in the needs estimates. For instance, malaria service delivery is highly integrated in Kenya’s primary health care system, and some major cost drivers (e.g., human resources) may not be accounted for in the needs estimate.

KES 80–85 billion is a notional figure, useful for stimulating discussion but imprecise as an estimate of future revenue requirements. In some respects, it can be considered an upper bound: donor funds may not require shilling-for-shilling replacement to maintain current programmatic outputs and outcomes, and various reforms may bolster the efficiency of individual programs and the health system overall. On the other hand, health needs continually change, and sustaining current coverage rates may require increased investment.

<sup>9</sup> MoH and overall budget figures come from the Budget summary for FY 2017/18, Estimates of Recurrent Expenditure for FY 2016/17 (Vol 1), and Development Budget Book for FY 2016/17 (Vol 2), all published on the National Treasury website: <http://treasury.go.ke/budget.html>.

<sup>10</sup> The Funding Requests present all figures in USD. The exchange rate applied here is 102.4475413 KES per USD, reflecting the yearly average reported by OANDA.com for July 2016 through June 2017.



For example, because new HIV infections currently outnumber HIV-attributable deaths, the population of people living with HIV and corresponding costs are growing. Consequently, maintaining or surpassing current ART coverage rates will require initiating ever more people on treatment.

### Program vulnerabilities from inefficiencies in the health financing and PFM systems

Decreases in donor financing for HIV, TB, and malaria programs will ultimately require the incorporation of the three disease programs into the broader public financing, management, and health service delivery systems. For PFM systems to be aligned with the objectives of health financing and sustained progress towards universal health coverage, sufficient and predictable resources given macro-fiscal realities need to be allocated to meet policy objectives, funds need to be pooled and allocated to purchasing a package of services for priority populations and interventions, and spending needs to be accounted for in ways that support accountability for results and inform future planning.

How funds flow from domestic and external sources through Kenya's PFM system and on to frontline service providers is critical to ensuring access to and quality of services. PFM rules and government institutions affect the allocation of publicly raised health funding, the flexibility with which funds can be used, the effectiveness of spending, and the way health sector results are accounted for. The PFM system—including the processes for raising revenue and formulating budgets, deploying funds to deliver services, and monitoring spending and health system performance—provides all sectors, including health, a domestically owned and integrated platform to manage resources from all sources and across national and sub-national entities (Cashin et al. 2017).

The sections below synthesize findings from in-depth interviews with stakeholders to identify challenges or bottlenecks in Kenya's PFM system that affect funding levels and flows for the three diseases. Interview data were analyzed for common themes on system vulnerabilities and inefficiencies in the context of transition. Some insights are oriented toward sustaining effective coverage of HIV, TB, and malaria interventions, while others suggest broader lessons for the health system.

For budget formulation, these included undefined roles and responsibilities and information asymmetry between levels of government and the public and private sectors; siloed planning; program areas with high donor dependence, fragmentation, and off-budget funding; reliance on OOP payments; and insufficient data and capacity to make a strong case for investment. Challenges in budget execution were primarily related to contracting with non-state providers; barriers to efficient procurement; line-item, input-based budget structures; and misaligned incentives in provider payment that may lead to neglect of case finding and appropriate management. Budget monitoring challenges centered on accountability mechanisms. These findings reflect stakeholder views about the key bottlenecks and constraints in the system, as well as incorporate discussion of the issues at the validation consultation workshop. Interviews also informed a mapping of Global Fund funding flows, which is presented in Annex C. Mapped funding flows.

### Vulnerabilities in budget formulation

**Information asymmetry exists between levels of government.** Interview data from both the national and county levels suggests that a data-informed, multi-sectoral discussion on fiscal and programmatic implications of waning donor funds has yet to begin, and that clear roles and responsibilities have not yet been outlined to guide discussion, policy, and planning for donor transition. Respondents, particularly at the county level, reiterated that the main barrier to initiating this discussion is information asymmetry between the national and county levels.

County governments want to be more involved in the planning and budgeting for HIV, TB, and malaria activities, but they lack information on the full allocation of funds used for county-level activities, which constrains their ability to sufficiently quantify and plan for any future assumption of responsibilities. As one



County Director of Planning and Public Health noted, “Funds come [to the counties] indirectly from the Global Fund. We are not ready to stop depending on the Global Fund since we are not aware of the cost of what we use as a county.” Some counties have little or no current budget allocations for one or more of the three diseases, despite substantial programmatic needs. The transfer of information from the national to the county level on the financial and programmatic resources required to support HIV, TB, and malaria activities would allow counties to participate in a productive discussion on the feasibility of county ownership and the development of local costed strategic plans.

The primary driver of the information asymmetry is, according to respondents, uncertainty around the protocol for information transfer, including undefined roles and responsibilities for sharing or requesting information on total allocations for disease program activities at the county level. Growing county involvement in the KCM is a promising mechanism to establish and strengthen these necessary lines of communication.

**Financial and programmatic roles and responsibilities in the context of transition have not been defined.** Once counties can participate in a data-informed discussion on transition, financial and programmatic roles and responsibilities of the different levels of government (national vs county) and sectors (public vs private) for HIV, TB, and malaria programs must be outlined. Respondents noted a lack of clarity on whether national or county governments would assume responsibility for various program components, as well as whether public or private service providers would deliver various interventions as donor support declines.

Many national level respondents indicated that, as donor funds recede, county governments will need to play an important role in supporting staffing, training, supportive supervision, and resource mobilization, all components that currently fall under the purview of the national government. Discussion is needed about the most appropriate combination of financial and programmatic responsibilities for HIV, TB, and malaria program components outlined in Table 5 below.

Recent work by an inter-agency government team on exploring policy options to help counties enhance their capacity for own-source revenue generation will be a key input into this discussion, as will be an analysis of each county’s potential to ‘unlock’ more revenue. County own-source revenue was seen as a promising approach to domestic resource mobilization, with recognition that an ongoing process to understand the needs and potential of each county is required. It remains unclear the extent to which opportunities and capacity for meaningful own-source revenue generation exist at the county level, and what role these resources could play in sustaining HIV, TB, and malaria interventions.

*Table 5. Possibilities for financial and programmatic responsibilities at the national and county levels*

Financial	Programmatic	
	National	County
National	Funds for the three diseases raised at the national level. Program activities managed by the national disease control programs (or SAGAs) or contracted out by the national government to non-state service providers (e.g., CSOs currently serving as Global Fund recipients or PEPFAR implementing partners).	Funds for the three diseases raised at the national level and transferred to county governments through ring-fenced allocations. Programs implemented through the public sector or contracted out by county governments to non-state service providers.
County	Funds for the three diseases pooled at the national level (e.g., NHIF) with contributions from counties’ equitable share allocations based on disease burden. Implementation by the national disease programs or through contracted providers, both public and private.	Funds for the three diseases appropriated by county governments from their equitable share allocations. Programs implemented through the public sector or contracted out by county governments to non-state service providers.

Source: Authors’ analysis using data from stakeholder interviews.

**Many program areas are highly donor dependent and rely on off-budget funding.** Regardless of the funding arrangement, the HIV response in Kenya remains highly dependent on donor resources, especially from the USG. The PEPFAR annual investment profile for FY 2015/16 shows certain program areas with total or near-total dependence on financial support from donors (Table 6). These include community-based care, treatment, and support; prevention activities (PMTCT, HTS, VMMC, priority populations, key populations), interventions for orphans and vulnerable children (OVC), and health system strengthening (HSS). The GoK contributed 34% of resources for clinical care, treatment, and support for FY 2015/16, up from 23% in 2013, indicating positive progress towards domestic ownership (PEPFAR 2017). However, meeting the total resources needed for treatment, care, and support, estimated at KES 54 billion (USD 526 million) annually over 2018–2020 (Kenya Coordinating Mechanism 2017a), will remain a formidable challenge for the government.

*Table 6. Annual investment profile by program area (FY 2015/16) (USD millions)*

Program areas	Spending	PEPFAR	GF	GoK	Other donors
Clinical care, treatment and support	370	58%	8%	34%	0%
Community-based care, treatment, and support	13	100%	0%	0%	0%
PMTCT	46	50%	0%	48%	2%
HTS	71	60%	1%	39%	0%
VMMC	15	100%	0%	0%	0%
Priority population prevention	12	96%	4%	0%	0%
Key populations	12	70%	28%	0%	1%
OVC	82	48%	0%	0%	51%
Laboratory	42	61%	17%	22%	0%
SI, surveys, and surveillance	25	54%	46%	0%	0%
HSS	8	97%	0%	0%	3%
Total	697				

Source: Reproduction of Table 2.2.1 in PEPFAR (2017).

Abbreviations: PMTCT = prevention of mother-to-child transmission; HTS = HIV testing services; VMMC = voluntary medical male circumcision; OVC = orphans and vulnerable children; SI = strategic information; HSS = health system strengthening.

Commodities underpin much of the overall reliance on external funding (Table 7). The GoK prioritizes ARVs test kits, and methadone for its own spending, but it only accounts for around 10% of total spending on each. In FY 2015/16, PEPFAR and the Global Fund together covered at least 89% of spending on all commodities except condoms.

*Table 7. Annual procurement profile for key commodities (FY 2015/16) (USD millions)*

Commodity category	Spending	PEPFAR	GF	GoK	Other donors
ARVs	160	41%	50%	9%	0%
Rapid test kits	22	62%	28%	11%	0%
Other drugs	6	67%	33%	0%	0%
Lab reagents	11	81%	16%	0%	3%
Condoms	13	0%	34%	0%	66%
Viral load commodities	21	100%	0%	0%	0%
VMMC kits	1	47%	53%	0%	0%
Medication-assisted therapy (methadone)	3	91%	0%	9%	0%
Other commodities	5	49%	51%	0%	0%
Total	243				

Source: Reproduction of Table 2.2.2 in PEPFAR (2017).

Abbreviations: ARVs = antiretroviral drugs; VMMC = voluntary medical male circumcision.

Prevention activities are also vulnerable in the context of transition given little-to-no domestic investment—except in the prevention of mother-to-child transmission (PMTCT) and HIV testing services (HTS)—and the potential political obstacles to prioritizing services for certain populations. Additionally, data indicate that

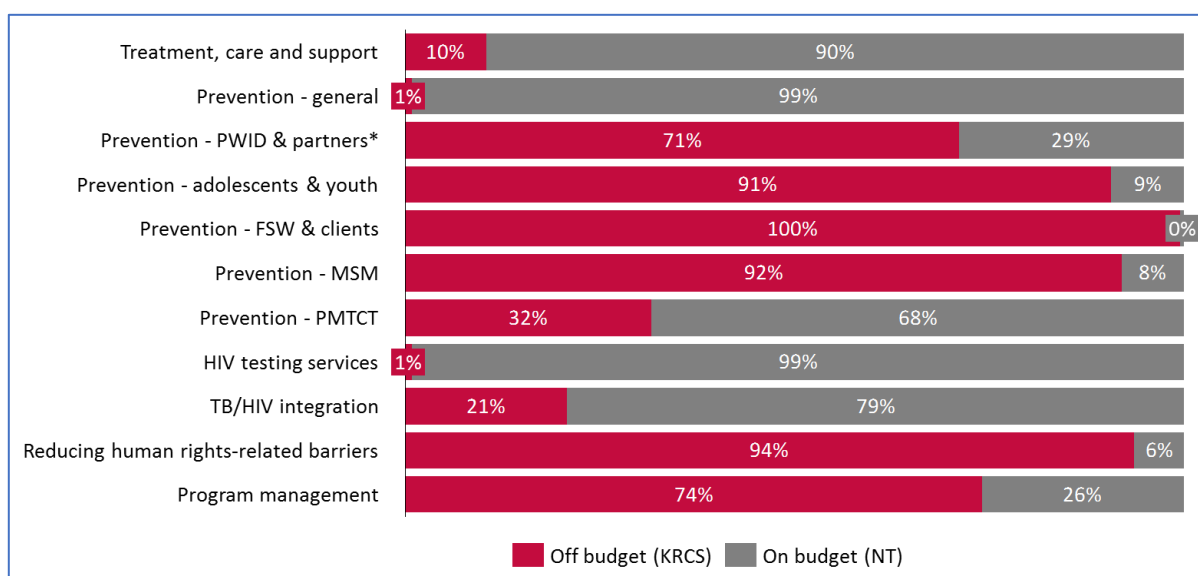
counties generally prioritize costly curative care (inpatient and outpatient), with very limited funding going towards more cost-effective preventive interventions (Maina, Akumu, and Muchiri 2016).

Within this donor funding there are multiple types of extrabudgetary (“off-budget”) funds at play. Here, off-budget funding refers to revenues, expenditures, or financial transactions that are excluded from the government budget, namely the direct allocations from donors to non-state actors that flow outside of the PFM system. A share of Global Fund funding for numerous HIV activities is channeled off-budget to non-state implementers in Kenya, reflecting the nature of the funding requests made by the GoK. Other donors have also implemented extrabudgetary arrangements, such as the USG, a large share of whose funds flow off-budget directly to implementing partners.

Off-budget funds can allow for greater flexibility on the part of non-state actors, who in budget execution can bypass cumbersome government processes. For example, some respondents noted persistent challenges with cash flow and timely disbursement at the county level and expressed a preference for donor funds to be transferred directly to non-state actors, who are less encumbered by government bureaucracy and transaction costs. This arrangement has also allowed the GoK to proactively “let go” of delivering services for which they feel they do not have a competitive advantage over non-state actors with more specialized expertise, capacity, and community relationships.

However, extrabudgetary funding arrangements can also be a vulnerability for the government in terms of strategic management of the budget, maintaining good financial control, and coherence of the health strategy (e.g. if donor funds are not visible) (Cashin et al. 2017). Given the lack of clarity on public-sector responsibilities in the context of transition in Kenya, interventions that currently rely on donor funds that flow entirely outside of the PFM system may be vulnerable to disruption. Addressing this will require the public sector to effectively absorb the funding and contracting arrangements for these services as donor support recedes.

Figure 4. On- versus off-budget composition of proposed Global Fund investment in HIV for 2018–2020



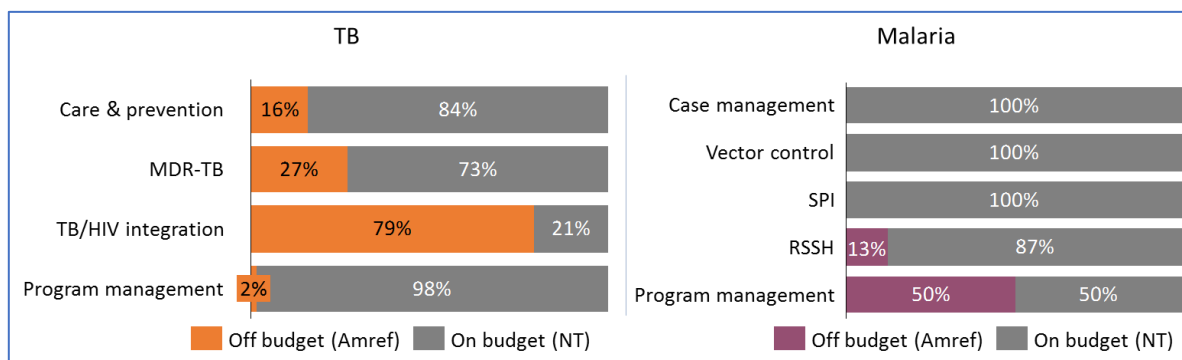
Sources: Authors’ analysis with data accompanying Kenya Coordinating Mechanism (2017a). \*The final budget for interventions targeting PWID and their partners differed significantly from Kenya’s initial funding request, so these values were updated using data provided by the Global Fund Secretariat. Funds for the procurement of needle-and-syringe program kits shifted from NT’s to KRCS.

Abbreviations: PWID = people who inject drugs; FSW = female sex workers; MSM = men who have sex with men; PMTCT = prevention of mother-to-child transmission; KRCS = Kenya Red Cross Society; NT = National Treasury.

The Global Fund’s proposed 2018-2020 off-budget funding for Kenya is principally related to HIV prevention. Figure 4 depicts the breakdown of proposed Global Fund HIV investment between on- and off-budget flows.

Global Fund–supported interventions targeting people who inject drugs (PWID) and their partners, adolescents and youth, female sex workers (FSW) and their clients, and men who have sex with men (MSM) would all be implemented predominantly by the Kenya Red Cross Society (KRCS) with off-budget funds, meaning the money would never appear on the government budget, even as revenue, nor would it pass through the PFM system. Almost all investment in reducing the human rights–related barriers to accessing HIV services would also flow off budget. Global Fund support to some other HIV prevention activities would flow mainly (but not entirely) on budget as revenue, including PMTCT, HTS, and general population–oriented activities. In contrast to HIV, in most TB and malaria program areas, the proposed Global Fund investment for would be channeled on budget to the National Treasury (Figure 5).

Figure 5. On- versus off-budget composition of proposed Global Fund investment in TB and Malaria for 2018–2020



Source: Authors' analysis with data accompanying Kenya Coordinating Mechanism (2017a, 2017b).  
 Abbreviations: MDR = multidrug-resistant; SPI = specific prevention interventions; RSSH = resilient and sustainable systems for health; Amref = Amref Health Africa; NT = National Treasury.

The extent of off-budget support from the Global Fund and PEPFAR raises three important questions that the GoK will need to address through internal dialogue and in consultation with development partners and other stakeholders. First, in the absence of donor funds, will government prioritize funding for interventions currently supported predominantly off budget? Second, do the national and county governments have the PFM capacity to absorb the large volume of off-budget resources from all donors for the three diseases? And third, what capacity and systems exist, or need to be built, to enable the national and county governments to contract with non-state providers that may have a comparative advantage for implementing various HIV, TB, and malaria interventions?

**Inadequate public investment in HIV, TB, and malaria services will increase the risk for catastrophic health expenditure.** Reliance on household out-of-pocket (OOP) spending is already a major concern for malaria service delivery, with OOP spending accounting for 36% of total malaria expenditure (Ministry of Health 2015b). While less concerning in the short term (given donor support), HIV, TB, and malaria services are at a high-risk for increases in OOP spending in the context of donor transition. Overall, OOP spending remains a primary source of funding for health in Kenya. In 2012/13, 29% of current health expenditure was mobilized by household OOP payments (excluding cost-sharing). At the county level, households as a source of financing for health accounted for 37% percent of THE in KFY 2014/15, ranging from 21% to 59% in twelve counties assessed (Maina, Akumu, and Muchiri 2016).

The ambitious social health insurance fund (SHIF) architecture for UHC outlined in the KHFS outlines a path forward for raising revenues to finance health care in a sustainable way and shielding households from catastrophic health spending. Success will depend on high and equitable coverage, resource mobilization, pooling, and purchasing of a benefits package that includes HIV, TB, and malaria services. However, two recent actuarial analyses for inclusion of HIV care and treatment as well and prevention services in the NHIF benefits package outlined steep financial barriers (NACC 2017a, 2017b).

**The MoH is not equipped to make a sufficiently strong case for investing in health.** Even in a context of increasing domestic resource mobilization, line ministries will need to continue to compete for a limited basket of funds from the National Treasury, and increased investment will require a compelling case. Respondents indicated that the Ministry of Health does not feel equipped to present a sufficiently compelling case for increased domestic allocation for the three diseases, particularly HIV, in the context of declining donor funds.

One contributing factor is that, despite requirements by the Public Finance Management Act (2012) to implement program-based budgeting (PBB), which links budget allocations to program outputs, and despite the MoH's efforts to comply, PBB has not yet been implemented in a way that sufficiently monitors actual spending of retained line-item allocations against programmatic objectives. Respondents reported that National Treasury continues to rely on historical allocations to traditional line-items with marginal adjustments year-over-year. Budgeting in this way fails to ensure that funding is matched to program priorities. Successful PBB requires adequate systems and processes to link accounting to program implementation—such systems have not yet been deployed. Additional factors were skepticism among decision makers around the costing of HIV resource needs and that the centralized governance structure of HIV, TB, and malaria disease programs negatively affects the perception of efficiency.

**Siloed planning between disease programs and lack of coordination among donors limits opportunities to realize efficiency gains.** National disease control programs (e.g. HIV and TB) would benefit from increased coordination in planning and implementation, especially at the county level. Activities should be increasingly situated in the context of a well-coordinated and integrated primary health care system to benefit from important linkages to other areas of care (e.g., sexual and reproductive health).

#### Vulnerabilities in budget execution

**Role and mechanisms for social contracting have not been outlined.** Social contracting refers to when governments enter contracts with non-governmental organizations (i.e., organizations with a socially minded mission) to deliver services. The Kenyan Public Procurement and Asset Disposal Act 2015<sup>11</sup> provides a favorable legislative foundation that allows the government to outsource services. However, in a situation where the government assumes financial but not programmatic responsibility for various program areas, it is unclear whether there would be sufficient political will and capacity to provide services to key populations through the public sector, to invest in building capacity of non-state actors such as CSOs to continue to sustainably provide services without donor funding, or to contract those actors to deliver essential services.

In the absence of social contracting, the capacity and comparative advantage of the public sector for delivering services, including specialized services for key populations that have historically been delivered by non-state actors, will need to be explored. To take advantage of the benefits of social contracts, a regulatory framework may need to be developed for the necessary policies and procedures for registration, licensing, and tendering with CSOs to provide services. Investment may also be needed in adequate systems and mechanisms for monitoring provider performance.

**Barriers exist to efficient and strategic purchasing of services and commodities.** Social contracting for HIV, TB, and malaria service delivery could be an opportunity for Kenya to move towards more efficient and strategic purchasing of clinical services and non-personal services such as community-based interventions. By building in the capacity for the health purchaser to specify the criteria for selective contracting with non-state providers and the provisions of the contract (e.g. reporting requirements and service delivery or quality standards), as well as to enforce contracts and impose consequences for violations, the GoK can foster a financing system that incentivizes greater service delivery efficiency and quality.

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<sup>11</sup> See <http://www.kenyalaw.org/lex//actview.xhtml?actid=No.%2033%20of%202015>.

Transition is also an opportunity to improve the efficiency of HIV, TB and malaria commodity procurement. In Kenya, most Global Fund–funded commodities are purchased by KEMSA through tenders that also include government-funded commodities. Some USG-funded commodities are also procured by KEMSA, while others are procured directly by USAID but distributed by KEMSA. This is in line with KEMSA’s assumption of overall responsibility for procurement in 2015, and reflects a trend towards centralization of procurement for all USG- and Global Fund–funded commodities with concurrent investment in KEMSA’s capacity. The results have been improved management of commodity procurement and an ability to obtain competitive prices. Further analysis may be warranted to examine the extent to which USG-funded commodities are tendered separately from those financed by government and the Global Fund, as well as to identify any advantages from further alignment.

As HIV, TB, and malaria commodity purchasing functions continue to be integrated into government systems, existing bureaucratic processes that consistently lead to delays should be examined. To some degree, historical challenges with procurement and supply chain management in Kenya were reiterated by our respondents, despite the overall improvements outlined above. For example, a 2017 report by the Global Fund Office of the Inspector General (OIG) highlighted a series of health system–related root causes of supply chain challenges in 15 countries, including Kenya (Office of the Inspector General 2017). We found overlap in the OIG’s findings of “inadequate and/or ineffective leadership and governance structures to facilitate prioritization, coordination and accountability within the supply chain activities” as a main barrier to increasing the effectiveness of supply chain processes. One result of this is that budget execution for procurement continues to be hindered by a series of delays in defining technical specifications for goods and services to be purchased, the nomination by the MoH of members to ad-hoc tender evaluation committees, and routine bureaucratic workflows that delay disbursements from the National Treasury. A low but improving absorption rate of development budgets (National Treasury 2016) was a key concern brought about by this bureaucratic procurement system.

These delayed processes have the potential to lead to drug stock-outs if orders take too long, and delays in the release of funds also have implications for the GoK’s ability to meet some supplier requirements. For example, the GeneXpert machine for TB diagnosis and resistance testing is currently single-sourced from a supplier that requires pre-payment before delivery. In general, good procurement practice calls for payment of supplies only after receipt and confirmation of quality of the commodities. However, given the equipment only has one supplier, the government partners with non-state actors to procure the machines and avoid any bottlenecks within the government system that might result from the prepayment requirement. The ability to draw on the greater flexibility of non-state actors under such exceptional circumstances is of great value. However, the success of this type of collaboration post-transition will depend on the role of non-state actors as donor funds decline.

#### Vulnerabilities in budget monitoring

**Fragmented data systems and incomplete or low-quality data are bottlenecks to realizing near-term improvements in budget formulation, and long-term (and potentially large-scale) efficiency gains from strategic purchasing.** Under the current structure, Global Fund grants for the three diseases can be traced and linked to government expenditure, since most funds go through government systems and are audited by the Controller and Auditor General (CAG). However, budget execution is only monitored against expenditure in terms of input-based line items, not with respect to health sector objectives for HIV, TB, and malaria (e.g., via PBB).

**There are no clear monitoring or accountability systems at the county level for the use of Global Fund resources.** Devolution under the Constitution of Kenya (2010) instituted county autonomy over their use of funds, effectively eliminating the potential for many national-level accountability mechanisms to ensure that resources at the county level are used to meet nationally defined objectives. Global Fund funds are currently retained at the national level and disbursed in-kind to counties through commodities, training, supportive



supervision, and other activities. These in-kind inputs are therefore not accounted for in county financial management systems, and respondents indicated that program staff have at times devised accountability mechanisms that may or may not reliably capture resource use in the counties. Respondents also indicated that challenges can arise in cases where program activities are both a national and county responsibility. For example, macro and micro planning for malaria bed net distribution is led by the national malaria program with county involvement. Counties are responsible for local activities including local transportation and supervision of the distribution. In the absence of defined funding channels to counties or a county-level accountability framework for Global Fund grants, imprest<sup>12</sup> has been used by national officials to support county-level activities. Ongoing dialogue about how to better account for resource use at the county level is promising.

## Charting Kenya’s sustainability and transition path

Meeting Kenya’s considerable resource needs for the three diseases will require concerted efforts to mobilize more domestic resources for health, utilize health funds more efficiently, and strengthen systems to monitor performance to improve services and inform future planning. This section examines a range of options for increasing revenue and efficiency, as well as notes other important considerations related to health sector governance and change management.

### Opportunities for increasing revenue for health and the three diseases

To sustain priority HIV, TB, and malaria interventions in the context of transition, Kenya will need to domestically mobilize more money for health. Fiscal space for health can derive from increased funding, efficiency, or both. There are numerous potential sources of additional health funding (Remme et al. 2016; Tandon and Cashin 2010). Some revenue sources for health depend on numerous factors largely outside the sector, including the complex interplay among domestic and international markets and policies that influence economic growth and the political economy of and macro-fiscal considerations underlying taxation. The availability and magnitude of other sources depends more directly on deliberations between finance and health officials and within the health sector, including the extent to which health is prioritized in the government budget, the implementation or expansion of earmarked taxes or other sources, and the allocation of health sector resources, including to HIV, TB, and malaria interventions.

Table 8. Revenue options for fiscal space for health

Revenue source	Outlook in Kenya	Potential for new fiscal space	Source(s)
Economic growth	<ul style="list-style-type: none"> <li>GDP growth forecasted at 5–7% annually through 2022</li> </ul>	High	IMF (2017); National Treasury (2017a)
Improved generation of government revenue	<ul style="list-style-type: none"> <li>Gov’t revenue is 20% of GDP</li> <li>Gov’t expenditure is 30% of GDP</li> </ul>	Low to medium	National Treasury (2017a)
Greater prioritization in the government budget	<ul style="list-style-type: none"> <li>Gov’t health spending is 6–8% of total gov’t expenditure</li> <li>HFS sets target of 13% by 2030</li> </ul>	Medium to high	Ministry of Health (2015b, 2016a); Authors’ estimates
Earmarked sources	<ol style="list-style-type: none"> <li>HFS only mentions SHI contributions</li> <li>KASF proposals have little traction</li> <li>Int’l experience shows they may not be additive and can introduce (sometimes severe) rigidities</li> </ol>	Varies by earmarked source	Cashin et al. (2017); Ministry of Health (2016a); NACC (2014b); Results for Development (2017)
External debt & grants	<i>Availability of external funding assumed to be steady or diminishing.</i>	Low	

<sup>12</sup> Imprest is a sum of money advanced to a person for a particular purpose.

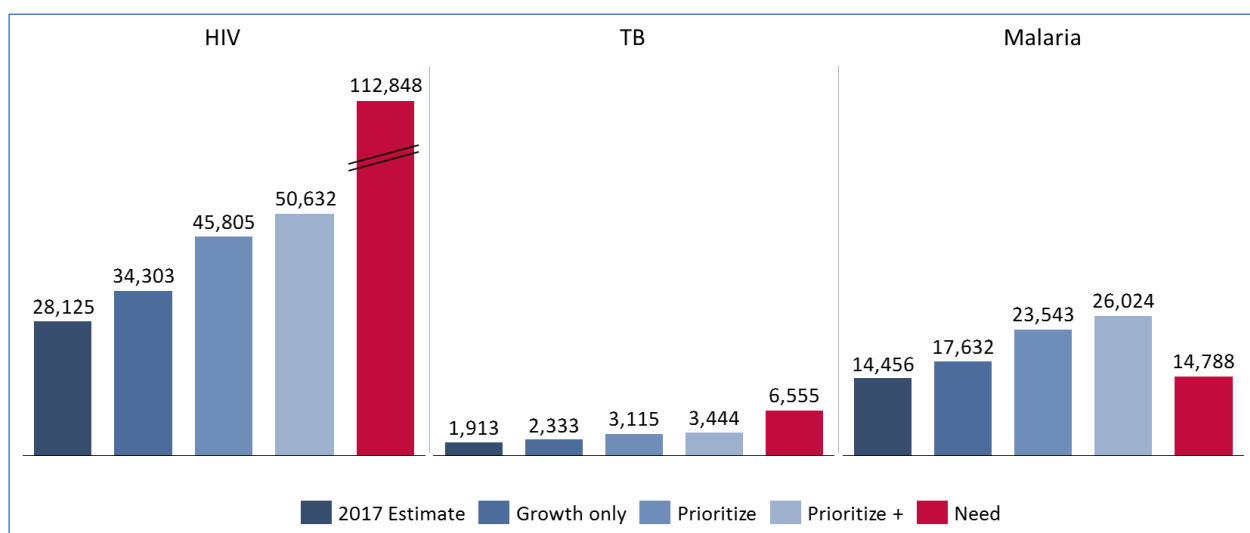
Abbreviations: GDP = gross domestic product, gov't = government, HFS = Health Financing Strategy, KASF = Kenya AIDS strategic framework, int'l = international.

Some revenue sources are more promising than others in Kenya, in terms of their outlook for implementation and their potential to generate new fiscal space (Table 8). A favorable macroeconomic outlook can translate into increased health funding assuming government spends the same or greater share of GDP on health, which in part depends on the extent to which health is prioritized in government budgets at the national and county levels.

A comparison to regional and income-category averages suggests there may be room for Kenya to increase health's share of government spending. There has been little change in prioritization over the last several years. Although counties allocate an increasing share of their budgets to health, concurrent decreases in health's share of the national government's budget mean that, in aggregate, health has held a steady share of 7.5–8% of the government budget since FY 2014/15 (Ministry of Health 2016b). This falls below the averages of 12% for sub-Saharan Africa and 14% for low-income countries (World Bank 2017), as well as contrasts with the KHFS goal of increasing health's share of public spending to 13% by 2030 (Ministry of Health 2016a).

Assuming IMF (2017) and National Treasury (2017a) medium-term forecasts for GDP growth and public spending, the GoK's choices regarding prioritization will greatly affect the availability of resources for the health sector overall and for the three diseases in particular. Figure 6 shows the effects of different prioritization choices on annual publicly pooled funding for HIV, TB, and malaria in 2022<sup>13</sup>. The 'Prioritize +' scenario, in which the GoK accelerates progress toward the KHFS target of 13% for health's share of public spending by 2030, results in an additional KES 36 billion annually for the three diseases in 2022. This equals nearly half of current donor funding. There would also be an additional KES 87 billion yearly for health, which could be allocated to a variety of needs, including any or all of the three diseases. This analysis does not account for any increases in publicly pooled resources mobilized via the NHIF or another social health insurance scheme. See Annex D. Notes on methodology and data availability for more details on methods.

Figure 6. Effects of prioritization scenarios on annual gov't funding for HIV, TB, and malaria in 2022 (KES millions)



Source: Authors' estimates.

<sup>13</sup> Each disease's share of projected government health expenditure is assumed to be the same as the most recent data indicate. For HIV the share derives from the estimated public expenditure on HIV reported for FY 2015/16 in the unpublished NASA (NACC 2016) and public expenditure on health reported for FY 2015/16 from the unpublished NHA (Kenya Coordinating Mechanism 2017b). For TB and malaria the shares are based on those reported for FY 2012/13 in the most recent published NHA (Ministry of Health 2015b).



These estimates suggest that Kenya is already close to meeting its financial needs for malaria and in the medium-term may be able to allocate a smaller share of health resources to malaria-related interventions. However, the Kenya Malaria Strategy expires in 2018, and its replacement could include ambitious targets that require more investment. Additionally, and as noted in Table 4, data on resource needs and availability may not provide apples-to-apples comparisons due to differential accounting for (or exclusion of) major service delivery cost drivers, such as human resources. Further analysis of malaria needs and available resources may be warranted.

Greater prioritization of health within the government budget will require collaboration between finance and health officials at the national and county levels to identify appropriate revenue sources. The KHFS focuses on two: general government revenue and contributions to a future social health insurance fund (SHIF) (Ministry of Health 2016a), the latter essentially serving as an earmarked direct tax. Recent analyses regarding financing HIV treatment and prevention interventions via the National Hospital Insurance Fund (NHIF) similarly conclude that new funding will need to come predominantly from general revenue and publicly pooled insurance contributions (NACC 2017a, 2017b). The MoH is already assessing the revenue potential for SHIF contributions.

Other options have been studied in detail but not gained traction at the sector level or with the National Treasury. For example, the Kenya AIDS Strategy Framework (KASF) proposes an AIDS Trust Fund capitalized with numerous HIV-earmarked revenue streams<sup>14</sup> (NACC 2014b). However, the KHFS makes no mention of disease-specific earmarks or financing mechanisms (Ministry of Health 2016a), signaling that the trust fund and related proposals are not likely to be implemented. This position was reinforced by various health and finance officials and aligns with international evidence on how narrow earmarks are unlikely to bring additive funds and could introduce harmful rigidities into the budget (Cashin et al. 2017; Results for Development 2017).

Recent budget trends can also inform prioritization discussions at the national and county levels, and between them. The MoH budget grew only modestly in FY 2016/17, with a recurrent budget increase of 2% compared to almost 6% on average in the previous three years (Ministry of Health 2016b). If the GoK decides that the national government should assume financial responsibility for the centralized procurement of key commodities, including for HIV, TB, and malaria, the national health budget will need to grow faster.

It may be feasible for some counties to increase their prioritization of health and allocate more resources to the three diseases. In others, however, it is unclear how much additional spending on health is possible without a corresponding increase in the proportion of national revenue distributed to county governments. The Division of Revenue Act for KFY 2017/18 allocates KES 303 billion to counties, equal to 20% of shareable national revenue<sup>15</sup>. During KFYs 2014/15–2016/17, counties on average allocated 25% of their budgets to health (Ministry of Health 2016b), and health's share of county expenditure ranged from 10% to 39% among the 12 counties included in a recent county health accounts analysis (Maina, Akumu, and Muchiri 2016).

There may be limits to how much counties can spend on health. There are signs that health may be crowding out other sectors: between FYs 2015/16 and 2016/17, non-health county budgets decreased in absolute terms (Ministry of Health 2016b), and new collective bargaining agreements for doctors and nurses may create additional liabilities for counties that divert resources from other needs. Additionally, county health spending is substituting for rather than adding to national spending. GoK officials may want to consider strengthening norms, benchmarks, and even incentives to ensure national and county government allocations to health are additive rather than substitutive. Additionally, the health sector should explore

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<sup>14</sup> These include earmarked tax revenue, an AIDS lottery, sumptuary taxes on tobacco and alcohol, levies, and other instruments.

<sup>15</sup> See [http://kenyalaw.org/kl/fileadmin/pdfdownloads/bills/2017/DivisionofRevenueBill\\_2017.pdf](http://kenyalaw.org/kl/fileadmin/pdfdownloads/bills/2017/DivisionofRevenueBill_2017.pdf). An additional KES 20 billion is allocated to counties from their 15% share of the fuel levy and an array of conditional allocations.

provisions to hold health workers accountable to high standards for quality and efficiency in exchange for (and as a means to afford) increased remuneration.

### Opportunities for increasing efficiency in the health system and the disease responses

Efforts to increase health system efficiency and effectiveness—to get more health for the money—will be as important as increased domestic funding to meeting Kenya’s HIV, TB, and malaria objectives. Some efficiency opportunities stem from the structure and governance of the health system overall, while others relate to disease-specific considerations. To pursue these opportunities, the GoK will need to explore a blend of technical solutions, further information gathering and analysis, and dialogue within government and with other stakeholders.

As noted above, addressing certain challenges and bottlenecks can help to cultivate conditions more conducive to efficient funds flow and service delivery. Financial and service delivery planning for the three diseases could be more closely integrated into a strengthened primary health care system. This might entail rethinking planning processes of the national control programs, including how they engage with other health sector actors, especially at the county level. Similarly, chronic delays in procurement may demand reforms to policies and processes related to funds disbursement, definition of technical specifications, and formation of tender evaluation committees. The GoK has already taken some steps to streamline and centralize key procurement processes, including harmonizing technical specifications for commodities needed by multiple programs and empowering KEMSA to directly undertake tendering processes rather than rely on ministerial tendering committees. Finally, more can be done to understand deficiencies in data and accountability systems, such as conducting county-level needs assessments of current budget monitoring practices and the policy, human resources, and technological constraints on more effective PBB implementation.

Alongside attending to key enabling conditions, GoK can exploit other chances to increase health sector efficiency. Improving poor budget execution should be a near-term priority, as it can both increase health spending and render more credible efforts to increase the health budget. The sector is among the worst performers in terms of budget execution: in FY 2015/16, the MoH spent only 70% of its budget—and only 55% of its development budget—compared to overall government budget execution of 81% (National Treasury 2016). Merely improving to the national government average would mean nearly KES 5 billion more would be spent on health in FY 2017/18, and close to KES 6 billion more in FY 2019/20. This alone would cover more than three quarters of the current unmet funding for the three diseases (though in practice these funds would not likely flow exclusively to HIV, TB, and malaria interventions).

There are also several possible interventions to improve the allocative efficiency of the sector and of the individual disease responses. The national disease strategies and donor-supported interventions increasingly emphasize the targeting of interventions to priority geographies and populations, based on prevalence, incidence, risk factors, and other considerations. The efficiency potential is considerable; better targeting interventions based on the geographic and sociodemographic distributions of risk could bolster the effects of HIV prevention by 14% (Anderson et al. 2014). The advantages of a youth-focused strategy for HIV treatment and prevention have also been documented (Alsallaq et al. 2017).

Likewise, differentiated care models (DCMs) show great promise. DCMs entail tailoring service delivery to the needs and risks of different types of people, such as the nature of outreach, modalities for distributing medicines, and the frequency of facility visits for care management and treatment support tests. Potential efficiency gains from implementing DCMs have been estimated at 16% or more for ART (Barker, Dutta, and Klein 2017), and such models can be adapted to a variety of health needs<sup>16</sup>.

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<sup>16</sup> For example, the GoK may want to follow lessons emerging from South Africa’s Central Chronic Medicine Dispensing and Distribution Programme (CCMDD), which strives to make accessing chronic medications, including ARVs, more convenient for stable patients. In addition to bolstering adherence, it is hoped the CCMDD will reduce unnecessary patient visits to health care facilities, helping to alleviate wait times and strain on clinicians.

Targeted interventions can work especially well if implemented in concert with efforts to address structural drivers of disease burden, which typically require attention in one or more non-health sectors. For example, youth account for a large share of new HIV infections, and at school they face a number of stigma-related obstacles to counseling, care, and ART adherence (Wolf, Halpern-Felsher, Bukusi, Agot, et al. 2014; Wolf, Halpern-Felsher, Bukusi, Cohen, et al. 2014). Moreover, insufficient social support beleaguers those confronting HIV-related stigma (Levy et al. 2016). Similarly, women face numerous structural challenges that exacerbate their health risks, including food insecurity (Fiorella et al. 2015; Zakaras et al. 2017) and weak property rights (Dworkin et al. 2013, 2014). Female sex workers (FSWs) are particularly vulnerable. A range of FSW-focused structural interventions can help to avert large shares of new HIV infections in the next decade, including measures to reduce sexual violence (17% of new infections), FSW-led outreach initiatives (20%), and especially decriminalization of sex work (33–46%) (Shannon et al. 2015)

In the longer term, the transition and integration of externally funded programs should create additional opportunities to bolster efficiency. Some donor investments are quite costly, including special oversight and monitoring systems and the frequent use of pricey international consultants for analysis and technical assistance (Clift et al. 2016). GoK will not need to fully absorb these costs because certain program management functions can be folded into existing units at the national, county, and provider levels. Instead, resources can be repurposed to delivering priority interventions. For instance, both the Global Fund and USG currently budget substantial funding for program management. Through the transition, even a 20% reduction in these investments would free up KES 1.1 billion annually.

Another important long-term opportunity, emphasized heavily in the KHFS, is strategic purchasing. Many of the measures already discussed lay pieces of the foundation for strategic purchasing, including strengthening the procurement system, targeting investments based on need and expected return, and undertaking needed regulatory reforms to enable the contracting of non-state service providers. Flexible extrabudgetary financing mechanisms may remain appealing if well aligned with Kenya's overall health financing strategy. Over time, these efforts can evolve from disease- and transition-focused efforts to system-level functions for priority setting and provider payment. Health benefits policies and health technology assessment help to maximize value for money not only in individual disease responses but across the sector. Concurrently, carefully designed provider contracts can incentivize higher quality and efficiency. Like in many countries, low productivity is an enduring challenge in Kenya's health facilities (Di Giorgio et al. 2016). Strong provider payment systems also generate detailed data that can inform effective program management and bolster accountability (JLN 2017).

As the GoK pursues efficiency-oriented reforms, it should be mindful of several important considerations. First, efficiency gains can be challenging to measure because they often manifest in quality or productivity, not in reductions in unit costs. Consequently, the GoK will want to develop strategies for measuring changes in quality and for capitalizing on productivity gains. For instance, if implementing DCMs frees up a share of clinician time, how will newly available capacity be redeployed efficiently?

Second, not all efficiency gains will be additive. Some interventions may have overlapping effects, such as provider payment reforms and updates to treatment protocols calling for more differentiated approaches to chronic care management. Others could be complementary, such as addressing disbursement bottlenecks for procurement transactions and strengthening KEMSA's capacity to negotiate favorable prices with suppliers.

Finally, most efficiency gains require upfront, enabling investments and reforms. This can create fiscal pressure in the near term because efficiency gains may be realized over relatively long time horizons. Fortunately, the benefits of these investments are likely to be felt across the health system, not just in interventions for one or a few diseases.

## Other topics to include in ongoing sustainability and transition dialogue

Though not the focus of this exercise, the validation consultation workshop unearthed several important topics that merit additional dialogue among national and county officials, non-state implementers, and development partners. Change management in the health sector emerged as a prominent challenge, relating to the importance of leadership and the nature of governance arrangements among ministries and between the national and county authorities. Concerns were raised about a mindset of territoriality engendered by the verticalization of program planning, financing, and oversight. Information asymmetries also loom large, not only between national and county governments, as noted above, but also between the MoH and NT. The MoH might do well to bolster the capacity and influence of its planning unit, including ensuring sufficient economics and financing skills alongside clinical expertise. In turn, NT might consider a more proactive attitude toward joint interest in and ownership of the health financing system. Stronger data standards and systems at all levels could also improve transparency, coordinated planning, and the structuring of budgets that accurately reflect the needs of priority populations and programs.

## Recommendations and next steps

The prospect of donor transitions opens space for concerted dialogue and reform to ensure the effective coverage of priority HIV, TB, and malaria interventions is sustained. The GoK has already committed to assuming greater financial and programmatic responsibility for the three diseases. Given increased attention to sustainability and transition planning from the Global Fund and other development partners, and in light of uncertainties regarding future USG commitments to development assistance, now is an opportune moment for Kenya to grapple with the many difficult challenges posed by transition. Based on the analysis above and the GoK's stated development and health sector priorities, a handful of priority recommendations and next steps can be considered by the GoK and its partners:

- 1. Integrate sustainability and transition issues into routine health financing discussions among Health and Treasury officials at the national and county levels.** MoH and national disease program officials understand well the importance of external funding to HIV, TB, and malaria outcomes, and they can do more to sensitize their counterparts in the National Treasury and in county governments to the ways in which the disease responses rely upon donor support and may be endangered by transition. Dialogue should include examination of the financing structure of individual program components and attention to the magnitude and purpose of funds flowing off budget. National and county Treasury officials, in particular, may not viscerally appreciate just how much the three diseases rely on funding that flows to non-state Global Fund PRs and PEPFAR implementing partners, nor the magnitude of those funds relative to government health budgets. These analyses and discussions could become part of the regular health budget formulation processes at both the national and county levels.
- 2. Begin deliberating about national and county roles with respect to program activities that will eventually be transitioned.** The implementation of devolution is ongoing, and the sustainability of priority HIV, TB, and malaria interventions will require clear agreements and expectations about which level of government will assume financial responsibility for which interventions, and what non-governmental stakeholders will be involved in service delivery. National officials from the MoH, the disease programs, and NT, together with county representatives and the CoG Secretariat, should jointly develop a vision for the incorporation of donor-supported activities into the government's recurrent budget planning, implementation, and monitoring processes, as well as clarify for each program component the intended flow of funds and responsibility centers across levels of government. Decisions about whether and how to involve non-state providers in service delivery will also be critical. For instance, even as the GoK mobilizes domestic resources to sustain

outreach and prevention programs for key populations, it will likely determine that non-state actors remain better positioned to implement those programs, and so appropriate contracting and performance monitoring mechanisms will need to be developed.

- 3. Chart plans for sustainability and transition for the three diseases along Kenya's path toward universal health coverage, with a priority focus on increasing efficiency.** Importantly, HIV, TB, and malaria services are already included in the essential package of health services that would, according to the KHFS, be purchased by a future social health insurance fund. As major contributors to Kenya's disease burden, all three should remain prominent in future priority-setting processes structured around a balance of rigorous analysis and stakeholder engagement. Budget impact analysis, economic evaluation, and health technology assessment will be critical inputs to strategic health purchasing, including by helping the GoK to determine which interventions and service delivery models will mount the most efficient responses to the three diseases.

Maximizing value for money will allow for a social health insurance fund to cover more Kenyans, a greater share of their health care costs, and/or a greater number of services. Concurrent to providing access to personal services through a health benefits package, the GoK will need to ensure sufficient investment in population- and community-oriented outreach, prevention, and screening activities, including those targeting key, priority, marginalized, and other high-risk populations. Insufficient attention to prevention and structural drivers will translate into a greater long-term health and financial burden, including from the three diseases. If Kenya undertakes the type of ambitious reforms proposed in the KHFS, the GoK will do well to keep sight of priority interventions beyond those most amenable to inclusion in a benefits package and delivered to individuals in clinics and hospitals.

- 4. Retain focus on PFM-health financing alignment and analysis at the level of program components.** This study provides a framework that can be updated regularly based on changes in the financing landscape and health sector priorities. Kenya's forthcoming NHA for 2015/16, and future efforts to closely track expenditure on health and across the three diseases, can provide additional insights into financing trends over time and areas of potential vulnerability. Collecting more detailed routine data at the county level will also be useful. Periodic reexamination of bottlenecks and constraints in the PFM system can help to evaluate the effect of policy interventions and to identify new priority areas for improvement.

Additionally, modifications to PFM will be required to realize the long-term vision of the KHFS. Implementing a single-payer social health insurance fund and the associated purchaser-provider split could necessitate major revisions, over time, to PFM systems and processes. Although Kenya already has some of the regulatory framework needed to procure or contract services from non-state providers, it may need significant reforms for a government-administered health insurance fund to purchase services from publicly owned and operated health care facilities. In fact, strategic purchasing will require reimagining the conventional PFM axiom of 'funds follow function.'

- 5. Embrace a spirit of 'urgent incrementalism' to tackle transition challenges over time.** Kenya's macro-fiscal situation will constrain how quickly the GoK can replace external funds with domestically raised revenue and assume full responsibility for program implementation, oversight, and improvement. Nonetheless, the GoK is already working together with development partners to ensure some progress is made every year and that the groundwork is being laid for future efforts. These include stepwise increases in the share of ART costs paid with domestically raised revenue and continual efforts to strengthen KEMSA and associated procurement processes. This study proposes what could be some of the next priority reform efforts, and looking to the long-term future, initial steps could already be taken to enable key elements of the transition. For example, though it may

not be possible in the next few years for the GoK to contract non-state providers to deliver outreach and prevention programs to key populations, a small pilot could be undertaken within current rules for procurement, while the incumbent regulatory regime could be studied to identify any obstacles to more widespread public-private partnerships of this kind.

This study offers a framework for examining the challenges of sustaining and eventually transitioning Kenya's HIV, TB, and malaria programs. It also proposes priority areas to be addressed through policy reform and dialogue among government and other health sector stakeholders at the national and county levels. The inevitable transition of externally funded programs creates an opportunity to refine key aspects of Kenya's public financial management and health financing systems so they are suitably aligned to achieve the country's development and health sector goals, including control of the HIV, TB, and malaria epidemics. Ultimately, the sustainability and successful transition of externally supported programs will require prolonged commitment from national and county officials, buttressed by strategic investments from development partners—to collaboratively address the three diseases through recurrent processes to plan, implement, and monitor financing for health.

## References

- Alsallaq, Ramzi A., Jasmine Buttolph, Charles M. Cleland, Timothy Hallett, Irene Inwani, Kawango Agot, and Ann E. Kurth. 2017. "The Potential Impact and Cost of Focusing HIV Prevention on Young Women and Men: A Modeling Analysis in Western Kenya." *PLOS ONE* 12 (4):e0175447. <https://doi.org/10.1371/journal.pone.0175447>.
- Anderson, Sarah-Jane, Peter Cherutich, Nduku Kilonzo, Ide Cremin, Daniela Fecht, Davies Kimanga, Malayah Harper, et al. 2014. "Maximising the Effect of Combination HIV Prevention through Prioritisation of the People and Places in Greatest Need: A Modelling Study." *The Lancet* 384 (9939):249–56. [https://doi.org/10.1016/S0140-6736\(14\)61053-9](https://doi.org/10.1016/S0140-6736(14)61053-9).
- Barker, Catherine, Arin Dutta, and Kate Klein. 2017. "Can Differentiated Care Models Solve the Crisis in HIV Treatment Financing? Analysis of Prospects for 38 Countries in Sub-Saharan Africa." *Journal of the International AIDS Society* 20 (Suppl 4):21648. <https://doi.org/10.7448/IAS.20.5.21648>.
- Cashin, Cheryl, Danielle Bloom, Susan Sparkes, Hélène Barroy, Joseph Kutzin, and Sheila O'Dougherty. 2017. "Aligning Public Financial Management and Health Financing: Sustaining Progress toward Universal Health Coverage." Health Financing Working Paper No. 17.1. Geneva: World Health Organization.
- Clift, Jack, Daniel Arias, Michael Chaitkin, Meghan O'Connell, Arjun Vasani, Teresa Guthrie, Stephen Resch, and Robert Hecht. 2016. "Landscape Study of the Cost, Impact, and Efficiency of Above Service Delivery Activities in HIV and Other Global Health Programs." Washington, DC: Results for Development. [http://www.resultsfordevelopment.org/sites/resultsfordevelopment.org/files/resources/R4D\\_ServDeliveryLandscaping\\_Final-0825\\_web.pdf](http://www.resultsfordevelopment.org/sites/resultsfordevelopment.org/files/resources/R4D_ServDeliveryLandscaping_Final-0825_web.pdf).
- Constitution of Kenya*. 2010. <http://www.kenyalaw.org/lex//actview.xql?actid=Const2010>.
- Di Giorgio, Laura, Mark W. Moses, Nancy Fullman, Alexandra Wollum, Ruben O. Conner, Jane Achan, Tom Achoki, et al. 2016. "The Potential to Expand Antiretroviral Therapy by Improving Health Facility Efficiency: Evidence from Kenya, Uganda, and Zambia." *BMC Medicine* 14 (1). <https://doi.org/10.1186/s12916-016-0653-z>.
- Dutta, Arin, Nicole Perales, and Chris Alando. 2012. "Risk and Impact Analysis for Kenya of Changes in Global Fund Financing Modalities: Revised and Updated Report." Washington, D.C: Futures Group, Health Policy Project and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- Dworkin, Shari L., Shelly Grabe, Tiffany Lu, Abbey Hatcher, Zachary Kwena, Elizabeth Bukusi, and Esther Mwaura-Muiru. 2013. "Property Rights Violations as a Structural Driver of Women's HIV Risks: A Qualitative Study in Nyanza and Western Provinces, Kenya." *Archives of Sexual Behavior* 42 (5):703–13. <https://doi.org/10.1007/s10508-012-0024-6>.
- Dworkin, Shari L., Tiffany Lu, Shelly Grabe, Zachary Kwena, Esther Mwaura-Muiru, and Elizabeth Bukusi. 2014. "What Community-Level Strategies Are Needed to Secure Women's Property Rights in Western Kenya? Laying the Groundwork for a Future Structural HIV Prevention Intervention." *AIDS Care* 26 (6):754–57. <https://doi.org/10.1080/09540121.2013.845286>.
- Fiorella, Kathryn J., Carol S. Camlin, Charles R. Salmen, Ruth Omondi, Matthew D. Hickey, Dan O. Omollo, Erin M. Milner, Elizabeth A. Bukusi, Lia C.H. Fernald, and Justin S. Brashares. 2015. "Transactional Fish-for-Sex Relationships Amid Declining Fish Access in Kenya." *World Development* 74 (October):323–32. <https://doi.org/10.1016/j.worlddev.2015.05.015>.
- Government of Kenya. 2007. "Kenya Vision 2030: The Popular Version."
- . 2013. "Second Medium Term Plan, 2013-2017: Transforming Kenya: Pathway to Devolution, Socio-Economic Development, Equity and National Unity." Kenya Vision 2030. Nairobi: The Presidency and Ministry of Devolution and Planning.
- IMF. 2017. "World Economic Outlook, April 2017." April 2017. <http://www.imf.org/en/Publications/WEO/Issues/2017/04/04/world-economic-outlook-april-2017>.
- JLN. 2017. "Using Data Analytics to Monitor Health Provider Payment Systems: A Toolkit for Countries Working Toward Universal Health Coverage." Joint Learning Network for Universal Health Coverage, Results for Development, PATH, PharmAccess Foundation.

- Kenya Coordinating Mechanism. 2017a. "Kenya Funding Request for HIV and TB, and RSSH: January 2018 to December 2020."
- . 2017b. "Kenya Funding Request for Malaria: January 2018 to December 2020."
- Levy, Matthew E., Patricia Ong'wen, Maureen E. Lyon, Craig R. Cohen, Lawrence J. D'Angelo, Zachary Kwen, and Hilary T. Wolf. 2016. "Low Social Support and HIV-Related Stigma Are Highly Correlated among Adolescents Living With HIV in Western Kenya." *Journal of Adolescent Health* 58 (2):S82. <https://doi.org/10.1016/j.jadohealth.2015.10.177>.
- Maina, Thomas, Angela Akumu, and Stephen Muchiri. 2016. "Kenya County Health Accounts: Summary of Findings from 12 Pilot Counties." Washington, DC: Futures Group, Health Policy Project. <https://www.healthpolicyproject.com/index.cfm?id=publications&get=pubID&pubID=7885>.
- Ministry of Health. 2014a. "Kenya Health Policy 2014-2030." Ministry of Health, Government of Kenya. [https://www.afidep.org/?wpfb\\_dl=80](https://www.afidep.org/?wpfb_dl=80).
- . 2014b. "Kenya Malaria Strategy, 2009-2018 (Revised 2014)." Nairobi: National Malaria Control Programme, Ministry of Health, Government of Kenya.
- . 2014c. "National Strategic Plan for Tuberculosis, Leprosy and Lung Health, 2015-2018." National Tuberculosis, Leprosy and Lung Disease Program, Ministry of Health, Government of Kenya.
- . 2015a. "Annual Report 2015, National Tuberculosis, Leprosy and Lung Disease Program." Nairobi: National Tuberculosis, Leprosy and Lung Disease Program, Ministry of Health, Government of Kenya. <http://nltp.co.ke/annual-reports/>.
- . 2015b. "Kenya National Health Accounts 2012/13." Nairobi, Kenya: Ministry of Health, Government of Kenya. [https://www.healthpolicyproject.com/pubs/523\\_KenyaNHA.pdf](https://www.healthpolicyproject.com/pubs/523_KenyaNHA.pdf).
- . 2016a. "Kenya Health Financing Strategy 2016-2030 (Third Draft)." Ministry of Health, Government of Kenya.
- . 2016b. "National and County Health Budget Analysis FY 2016/17." Nairobi, Kenya: Ministry of Health, Government of Kenya. [http://www.healthpolicyplus.com/ns/pubs/6138-6239\\_FINALNationalandCountyHealthBudgetAnalysis.pdf](http://www.healthpolicyplus.com/ns/pubs/6138-6239_FINALNationalandCountyHealthBudgetAnalysis.pdf).
- NACC. 2014a. "Kenya AIDS Strategic Framework 2014/2015 - 2018/2019." National AIDS Control Council, Ministry of Health, Government of Kenya. <http://www.undp.org/content/dam/kenya/docs/Democratic%20Governance/KENYA%20AIDS%20STRATEGIC%20FRAMEWORK.pdf>.
- . 2014b. "Kenya AIDS Strategic Framework (KASF) – Establishing a Trust Fund to Ensure Sustainable Financing of HIV/AIDS in Kenya: Sustainable Finance Chapter." National AIDS Control Council, Ministry of Health, Government of Kenya.
- . 2016. "Kenya National AIDS Spending Assessment Report for the Financial Years 2012/13-2015/16 (Draft Report)." Nairobi: National AIDS Control Council, Ministry of Health, Government of Kenya.
- . 2017a. "Actuarial Evaluation to Assessing Costs and Feasibility of Integrating HIV Treatment Packages into NHIF to Cover People Living with HIV in Kenya." Nairobi: National AIDS Control Council, Ministry of Health, Government of Kenya.
- . 2017b. "Assessing Cost and Feasibility of Integrating HIV Prevention Packages into NHIF to Cover People Living with HIV in Kenya - Draft Report." Nairobi: National AIDS Control Council, Ministry of Health, Government of Kenya.
- National Treasury. 2016. "2016 Budget Review and Outlook Paper." <http://treasury.go.ke/component/jdownloads/send/23-budget-review-outlook-paper/389-2016-budget-review-and-outlook-paper.html>.
- . 2017a. "Statistical Annex to the Budget Speech for the Fiscal Year 2017/2018." <http://treasury.go.ke/component/jdownloads/send/178-statistical-annex/517-statistical-annex-2017-budget.html>.
- . 2017b. "The Budget Summary for the Fiscal Year 2017/18 and the Supporting Information." <http://treasury.go.ke/component/jdownloads/send/177-budget-highlights/496-budget-summary-on-the-estimates-of-revenue-and-expenditure-for-fy-2017-2018.html>.



- Office of the Inspector General, The Global Fund. 2017. "Audit Report: The Global Fund's In-Country Supply Chain Processes." Geneva, Switzerland.
- PEPFAR. 2017. "Kenya Country Operational Plan (COP17): Strategic Direction Summary." President's Emergency Plan for AIDS Relief. <https://www.pepfar.gov/documents/organization/272016.pdf>.
- PMI. 2016. "Kenya Malaria Operational Plan FY 2017." President's Malaria Initiative. <https://www.pmi.gov/docs/default-source/default-document-library/malaria-operational-plans/fy17/fy-2017-kenya-malaria-operational-plan.pdf?sfvrsn=6>.
- Public Finance Management Act*. 2012. <http://www.kenyalaw.org/lex//actview.xql?actid=No.%2018%20of%202012>.
- Remme, Michelle, Mariana Siapka, Olivier Sterck, Mthuli Ncube, Charlotte Watts, and Anna Vassall. 2016. "Financing the HIV Response in Sub-Saharan Africa from Domestic Sources: Moving beyond a Normative Approach." *Social Science & Medicine* 169 (November):66–76. <https://doi.org/10.1016/j.socscimed.2016.09.027>.
- Results for Development. 2017. "Immunization Financing: A Resource Guide for Advocates, Policymakers, and Program Managers." Washington, DC: Results for Development. [http://www.immunizationfinancing.org/en/home/Immunization\\_Financing\\_Resource\\_Guide\\_2017\\_FULL.pdf](http://www.immunizationfinancing.org/en/home/Immunization_Financing_Resource_Guide_2017_FULL.pdf).
- Shannon, K, SA Strathdee, SM Goldenberg, P Duff, P Mwangi, M Rusakova, S Reza-Paul, et al. 2015. "Global Epidemiology of HIV among Female Sex Workers: Influence of Structural Determinants." *Lancet* 385 (9962):55–71. [https://doi.org/10.1016/S0140-6736\(14\)60931-4](https://doi.org/10.1016/S0140-6736(14)60931-4).
- Tandon, Ajay, and Cheryl Cashin. 2010. *Assessing Public Expenditure on Health from a Fiscal Space Perspective*. HNP Discussion Paper. World bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/13613/560530WP0Box341penditureFiscalSpace.pdf;sequence=1>.
- The Global Fund. 2017. "Kenya Overview." 2017. <https://www.theglobalfund.org/en/portfolio/country/?k=013e944b-94da-41e1-90d1-b22b4f87f1cc&loc=KEN>.
- Transition to Devolved Government Act*. 2012. <http://www.kenyalaw.org/lex//actview.xql?actid=No.%201%20of%202012>.
- WHO, OECD, and R4D. 2017. "Aligning Public Financing Management and Health Financing: A Process Guide for Identifying Issues and Fostering Dialogue." No. 4. Health Financing Guidance Series. Geneva: World Health Organization. <http://www.r4d.org/wp-content/uploads/9789241513074-eng.pdf>.
- Wolf, Hilary T., Bonnie Halpern-Felsher, Elizabeth A. Bukusi, Craig R. Cohen, and Colette L. Auerswald. 2014. "Impact of the School Environment on Retention in Care Among HIV-Positive Youth in Kisumu, Kenya." *Journal of Adolescent Health* 54 (2):S15. <https://doi.org/10.1016/j.jadohealth.2013.10.045>.
- Wolf, Hilary T., Bonnie L. Halpern-Felsher, Elizabeth A. Bukusi, Kawango E. Agot, Craig R. Cohen, and Colette L. Auerswald. 2014. "'It Is All about the Fear of Being Discriminated [against]...the Person Suffering from HIV Will Not Be Accepted': A Qualitative Study Exploring the Reasons for Loss to Follow-up among HIV-Positive Youth in Kisumu, Kenya." *BMC Public Health* 14 (November):1154. <https://doi.org/10.1186/1471-2458-14-1154>.
- World Bank. 2017. "Health Nutrition and Population Statistics." *The World Bank Databank*. <http://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics>.
- Zakaras, Jennifer M., Sheri D. Weiser, Abigail M. Hatcher, Elly Weke, Rachel L. Burger, Craig R. Cohen, Elizabeth A. Bukusi, and Shari L. Dworkin. 2017. "A Qualitative Investigation of the Impact of a Livelihood Intervention on Gendered Power and Sexual Risk Behaviors Among HIV-Positive Adults in Rural Kenya." *Archives of Sexual Behavior* 46 (4):1121–33. <https://doi.org/10.1007/s10508-016-0828-x>.

## Annexes

Annex A. Resource needs table

Disease & Program Component	Annual expected funding for 2018-2020 (KES millions)						Estimated Resource Need (VII)	Unmet resource need (VIII) (VII - VI)	Unmet need without donors (IX) (VII - I)
	Public Sources (I)	Global Fund (II)	USG (III)	Other non-GF Donors (IV)	Total Donor Financing (V) (II + III + IV)	Total Available Financing (VI) (I + II + III + IV)			
<b>HIV</b>									
Prevention									
Male circumcision		3	1,893	16	1,912	1,912	3,929	2,017	3,929
Condoms		221	0	0	221	221	4,046	3,824	4,046
PMTCT	296	186	2,360	19	2,566	2,862	3,688	826	3,392
MSM		231	335	3	569	569	903	333	903
Sex workers and their clients		239	559	5	803	803	2,840	2,037	2,840
PWID and their partners	65	381	706	6	1,093	1,158	996	(162)	931
Adolescents and youth		344	8,512	70	8,926	8,926	6,352	(2,574)	6,352
Other prevention programs	496	545	5,472	45	6,062	6,558	6,352	(206)	5,856
Treatment, care, and support									
ART	1,558	4,640	29,468	243	34,351	35,909	53,887	17,978	52,330
TB/HIV		196	368	3	566	566	3,483	2,917	3,483
Support functions									
Human rights-related barriers		260	5	0	266	266	8,954	8,688	8,954
Program management		842	3,678	30	4,551	4,551	7,776	3,225	7,776
Other		0	25	0	26	26	0	(26)	0
<b>Total HIV</b>	<b>33,094*</b>	<b>8,090</b>	<b>53,382</b>	<b>440</b>	<b>61,912</b>	<b>95,006</b>	<b>103,205</b>	<b>8,199</b>	<b>70,110</b>

Tuberculosis	Public	GF	USG	Other donors	Total donors	Total available	Need	Unmet need	Unmet need without donors
Prevention, Treatment and Care									
TB care and prevention		702			702	702			
MDR TB		296			296	296			
TB/HIV		309			309	309			
Program management		265			265	265			
<b>Total TB</b>	<b>2,398<sup>†</sup></b>	<b>1,573</b>	<b>861</b>		<b>2,433</b>	<b>4,832</b>	<b>6,555<sup>§</sup></b>	<b>1,724</b>	<b>4,157</b>
Malaria	Public	GF	USG	Other donors	Total donors	Total available	Need	Unmet need	Unmet need without donors
Prevention									
LLINs		825	547		1,372	1,372			
IRS		0	700		700	700			
Malaria in pregnancy		0	70		70	70			
IEC BCC		97	99		196	196			
Case management									
Facility-based treatment		587	1,127		1,714	1,714			
Severe malaria		91	125		216	216			
Private sector services		83	0		83	83			
Surveillance									
Entomological monitoring		32	53		84	84			
Routine reporting		16	0		16	16			
Surveys		40	114		154	154			
Support functions									
Drug/health product quality		4	169		173	173			
HIS and M&E		45	91		136	136			
Program and data quality		29	0		29	29			
Policy, planning, coordination and management of national disease control programs		33	99		133	133			
Grant management		170	188		359	359			
<b>Total Malaria</b>	<b>14,456<sup>‡</sup></b>	<b>2,913</b>	<b>3,382</b>	<b>18</b>	<b>6,313</b>	<b>20,769</b>	<b>14,747</b>	<b>(6,022)</b>	<b>291</b>

Health system strengthening (HSS/RSSH)	Public	GF	USG	Other donors	Total donors	Total available	Need	Unmet need	Unmet need without donors
Procurement and SCMS		102			102	102			
HMIS and M&E		536			536	536			
Integrated Service Delivery and quality improvement		296			296	296			
Community response & systems		146			146	146			
Financial management systems		39			39	39			
Human resources for health		220			220	220			
<b>Total HSS/RSSH</b>		<b>1,340</b>	<b>4,814</b>	<b>40</b>	<b>6,194</b>	<b>6,194</b>	<b>9,333</b>	<b>3,139</b>	<b>9,333</b>

Summary	Public Sources (I)	Global Fund (II)	USG (III)	Other non-GF Donors (IV)	Total External Financing (V)	Total Available Financing (VI)	Estimated Resource Need (VII)	Unmet resource need (VIII)	Gap w/o external funding (IX)
HIV	33,094	8,090	53,382	440	61,912	95,006	103,205	8,199	70,110
TB	2,398	1,573	861		2,433	4,832	6,555	1,724	4,157
Malaria	14,456	2,913	3,382	18	6,313	20,769	14,747	(6,022)	291
HSS/RSSH		1,340	4,814	40	6,194	6,194	9,333	3,139	9,333
<b>Total for the 3 diseases</b>	<b>49,949</b>	<b>13,915</b>	<b>62,439</b>	<b>498</b>	<b>76,851</b>	<b>126,800</b>	<b>133,840</b>	<b>7,040</b>	<b>83,891</b>

Source: Unless otherwise noted, these data come from the funding landscapes included with Kenya's funding requests submitted to the Global Fund on May 23, 2017. The funding landscapes are separate Excel workbooks that were provided to R4D by the Kenya Coordinating Mechanism.

#### Notes

*	Kenya's Global Fund funding request for 2018–2020 reports KES 7,404 million in expected annual funding for HIV for publicly raised revenue, divided between the National Hospital Insurance Fund (roughly 2/3) and government (1/2). R4D's analysis of the unpublished NASA data for FY 2015/16 suggests there will be considerably more public expenditure on HIV in the medium-term. The figure here derives from a model we used to project public expenditure on health from 2016 to 2022, using Kenyan and international data and forecasts for GDP growth, share of GDP collected and spent by government, health's share of government spending, and HIV's share of government health spending. We added our projected estimate to the funding request's estimate of NHIF spending on HIV.
†	The funding request reports KES 787 million in expected annual funding for TB for publicly raised revenue, all from the NHIF. R4D's analysis of the NHA data from FY 2012/13 suggests there will be considerably more public expenditure on TB in the medium-term. The figure here derives from our model. We added our projected estimate to the funding request's estimate of NHIF spending on TB.
‡	The funding request for 2018–2020 reports KES 483 million in expected annual funding for malaria for publicly raised revenue, all from government. R4D's analysis of the NHA data from FY 2012/13 suggests there will be considerably more public expenditure on malaria in the medium-term. The figure here derives from our model; we used it in lieu of what appears in funding landscape.
§	The funding request for 2018–2020 did not present a total resource needs estimate for TB. The figure here is the cost estimate for FY 2017/18 for Kenya's National Strategic Plan for Tuberculosis, Leprosy, and Lung Health 2015–2018.

## Annex B. Desk review and qualitative fiscal space analysis [updated<sup>17</sup>]

[Click here to read Annex B.](#)

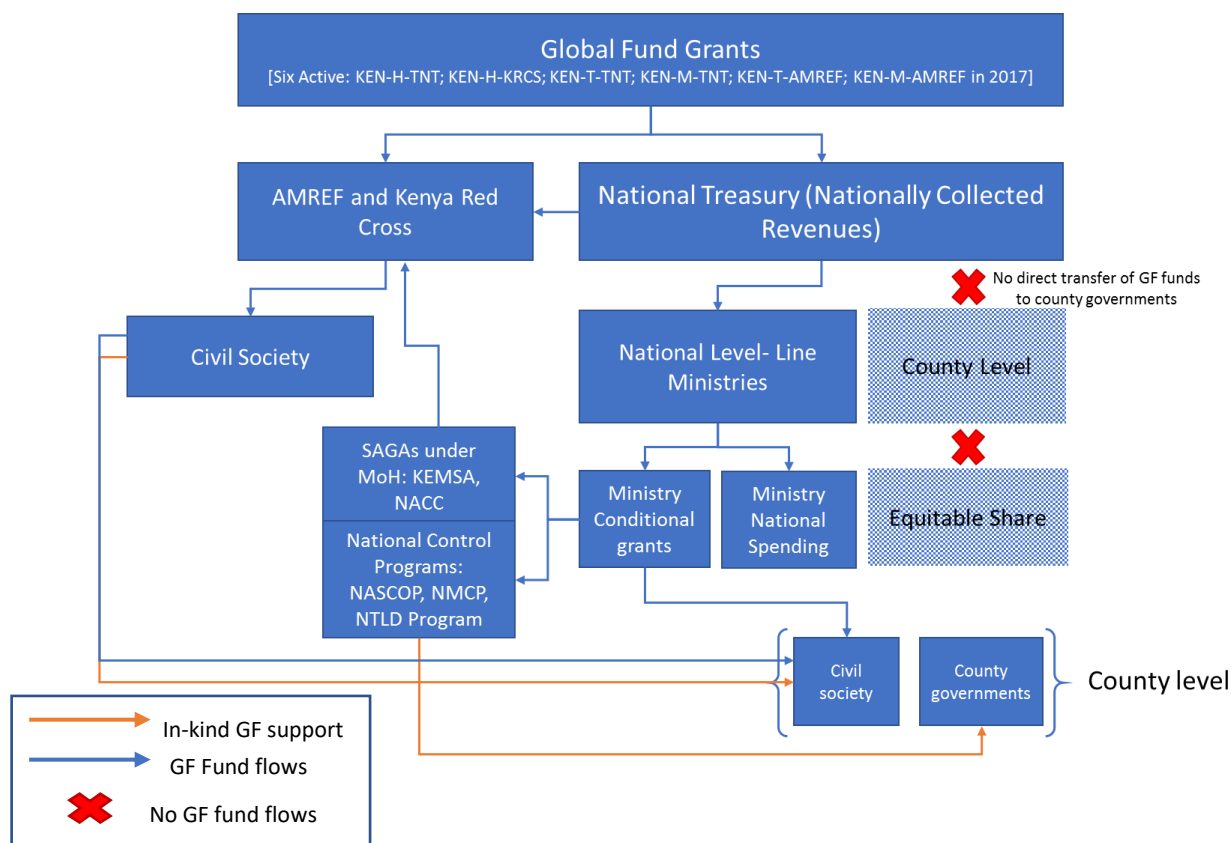
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<sup>17</sup> The original desk review and qualitative fiscal space analysis was originally submitted to the Global Fund on May 12, 2017. The version presented here has been updated based on feedback and review of additional documents and data.

### Annex C. Mapped funding flows

The funding flows diagram below illustrates how Global Fund grants are transferred between the Principle Recipients (PRs)—National Treasury, AMREF, and Kenya Red Cross Society—and various ministries (e.g. MoH), ministerial programs (e.g. NASCOP), and semi-autonomous government agencies (SAGAs) (e.g. KEMSA), who act as sub-recipients (SRs) for the grants. Unlike general government revenue, there is currently no mechanism to transfer GF money directly to county government accounts. Some GF funds eventually flow to counties and their providers as in-kind commodities (e.g., drugs, test kits) and capacity building activities from the national level, or to other decentralized accounts at the county level (e.g., CSO accounts). Funds for CSO principle recipients are sent directly from the GF to the NGO account, while funds for the government are transferred to the National Treasury and subsequently released to the SRs.

*Mapped Global Fund Funding Flows Diagram*



Source: Authors’ representation using data from interviews and Dutta, Perales, and Alando (2012).

Notes: Active grants under GF New Funding Model: KEN-H-TNT: Kenya grant for HIV, Principal Recipient: The National Treasury; KEN-H-KRCS: Kenya grant for HIV, Principal Recipient: Kenya Red Cross Society; KEN-T-TNT: Kenya grant for TB, Principal Recipient: The National Treasury; KEN-M-TNT: Kenya grant for malaria, Principal Recipient: The National Treasury; KEN-T-AMREF: Kenya grant for TB, Principal Recipient: AMREF Health Africa; KEN-M-AMREF: Kenya grant for malaria, Principal Recipient: AMREF Health Africa.



## Annex D. Notes on methodology and data availability

### Expenditure analyses

Expenditure data come from the summary report for Kenya’s National Health Accounts for KFY 2012/13 (Ministry of Health 2015b) and the unpublished National AIDS Spending Assessment for KFY 2015/16 (NACC 2016), which was provided to R4D by NACC in August 2017. All estimates are reported in KES millions unless otherwise noted in the text, tables, or figure titles.

### Estimating disease response funding by program component

Kenya’s new funding request to the Global Fund, submitted on May 23, 2017, is supported by funding landscape tables for each of the three diseases. These were provided to R4D by the Kenya Coordinating Mechanism Coordinator in June 2017. The tables capture the annual estimated resource need and availability from domestic and external sources by year for the 2018–2020 implementation window.

Unfortunately, the landscape tables were incomplete, complicating efforts to analyze the composition of domestic funding by program component. We sought other sources for the magnitude and composition of domestic spending, finding options only for HIV: an annual investment profile for 2015/16 in the PEPFAR Country Operational Plan (COP17) Strategic Direction Summary and the unpublished NASA. In this report, we used the former for our analysis of program component vulnerability because it is publicly available and benefits from access to more detailed information on US government spending, which accounts for a major share of all HIV expenditure. The same source also provided a breakdown of commodity investment. However, we used the NASA estimate for total HIV expenditure from publicly pooled revenue sources for inform our projections of future health and HIV spending as a share of government expenditure.

The TB and malaria funding landscape tables did not detail to which program components most anticipated funding would flow. We did not find suitable alternate sources of data.

### Projecting Government of Kenya spending on each disease

Baseline expenditures for the Government of Kenya by disease response was estimated using figures from the National Health Accounts for FY 2012/13 and the NASA estimates for FY 2015/16. Using these data, it was possible to calculate the share of government health expenditure directed to the HIV, TB, and malaria responses in 2015. These were estimated to be 18.4%, 1.3%, and 9.5%, respectively

Estimates of Kenya’s GDP growth rate and general government expenditure as a share of GDP (GGE/GDP) forecasts from 2015 to 2022 were obtained from the National Treasury and the International Monetary Fund. Our National Treasury focal point advised us to use the average of the two values. We began the projections with the National Treasury’s reported GDP for 2015 in the Statistical Annex for the Budget Policy Statements for FY 2017/18 (Nov 2016). The estimates of GDP, GDP growth rate, and GGE/GDP for the given years were:

	2015	2016	2017	2018	2019	2020	2021	2022
GDP (current, KES billions)	6,224	6,592	6,963	7,379	7,846	8,361	8,907	9,490
GDP growth (%)	5.6	5.9	5.6	6.0	6.3	6.6	6.5	6.5
GGE/GDP (%)	29.8	27.3	28.9	27.2	26.2	25.6	25.6	25.8

To estimate spending for a given year on a given disease, the following formula was used:

$$S_{d,t} = GDP_t * \left(\frac{GGE}{GDP}\right)_t * X_t * \frac{S_{d,t_0}}{GGHE_{t_0}}$$

where  $S_{d,t}$  is spending for disease  $d$  in year  $t$  and  $t_0$  is 2015.  $X_t$  is gross government health expenditure as a share of gross government expenditure, in a given year  $t$ , or:

$$X_t = \left(\frac{GGHE}{GGE}\right)_t$$

To estimate health's share of government spending, we used the most recent National and County Budget Analysis, for FY 2016/17, which reports that 7.6% of the total government budget was allocated to health. Actual spending likely diverges from the budgets, so a better estimate will be available once the NHA data are finalized for FY 2015/16.

This estimate was used to establish projections for 2022 within the "Status Quo" scenario ( $X_{2022} = 7.6\%$ ). For "Priority" and "Priority +", targets for GGHE/GGE reflected targets for health spending in 2022 reflecting linear or accelerated progress toward the Health Financing Strategy's goal of securing 15% of government spending for health by 2030. Under the "Priority" scenario,  $X_{2022} = 9.7\%$ , while under the "Priority+" scenario,  $X_{2022} = 10.8\%$ .

These parameters underpin the figures on potential additional revenue from prioritization included in the study. They also inform estimates of resource availability for the three diseases during the 2018–2020 Global Fund grant implementation period. In cases where the funding landscape tables included estimates of NHIF spending on the three diseases, these were added to the projected amounts for 2017. These may be underestimates of annual available publicly pooled resources for the three-year window because public spending is likely to increase annually over that time. However, because our estimates far exceed what was reported in the funding reports, we preferred the more conservative of our options.