Development finance in transition: Donor dependency and concentration in Kenya’s health sector

AUTHORS
Kaci Kennedy McDade, Gilbert Kokwaro, Kenneth Munge, Osondu Ogbuoji

Working Paper • February 2021
AUTHORS

Kaci Kennedy McDade (kaci.kennedy.mcdade@duke.edu) is a Policy Associate at the Center for Policy Impact in Global Health at the Duke Global Health Institute, Duke University.

Kenneth Munge (kkabubei@worldbank.org) is a Health Economist at the World Bank Kenya Country Office.

Gilbert Kokwaro (gkokwaro@strathmore.edu) is the Director of the Institute of Healthcare Management at the Strathmore University Business School, Strathmore University in Nairobi, Kenya.

Osondu Oghuoji (osondu.oghuoji@duke.edu) is the Deputy Director of the Center for Policy Impact in Global Health and Assistant Research Professor at the Duke Global Health Institute, Duke University.

SUGGESTED CITATION


ACKNOWLEDGEMENTS

The authors would like to thank Gavin Yamey for his insightful comments and Heather Hille for her copyediting and design work.

KEY WORDS

Aid transition, aid dependency, donor dependency, donor concentration, global health, Kenya, PEPFAR, aid for health, health aid.

DISCLAIMER

The views expressed in this paper are entirely those of the authors. They do not necessarily represent the views of their organizations or the partners they work with.
TABLE OF CONTENTS

1 Introduction ................................................................................................................. 6
   Methods ......................................................................................................................... 7
     Overview ...................................................................................................................... 7
     Variables ...................................................................................................................... 7
     Data sources ............................................................................................................... 8
3 Findings ......................................................................................................................... 11
   The role of aid in Kenya ............................................................................................... 11
   Donor dependency in Kenya’s health sector ............................................................... 11
   Donor concentration in Kenya’s health sector ......................................................... 13
   Donor dependency and concentration in key sub-sectors of the health system ........ 14
   Donor dependency and concentration in Kenya’s HIV program ................................ 15
4 Implications of the findings ......................................................................................... 18
5 Potential policy options ............................................................................................... 20

References ......................................................................................................................... 21
Appendix 1. Limitations of GHED capital expenditures data ........................................ 23
Appendix 2. Comparison of WHO GHED EXT and OECD CRS ODA ......................... 24
Appendix 3. Health sub-sector categories ..................................................................... 25
Appendix 4. Health budget data .................................................................................... 26

1 TABLES

Table 1. Overview of data sources ................................................................................... 9
Table 2. Total health expenditures in Kenya by source (2001-2016) in million US$ ................ 12
Table 3. Donor share of health budget ............................................................................ 12
Table A1. GHED capital expenditures by source ........................................................... 23
Table A2. Comparison of measures of external resources .............................................. 24
Table A3. Absolute values of donor share of health budget, billions KSh ...................... 26
Table A4. Absolute values of donor share of health budget, constant 2017 US$ ............. 26

2 FIGURES

Figure 1. ODA to Kenya over time .................................................................................. 11
Figure 2. Donor share of development budget ................................................................. 13
Figure 3. Donor concentration in health ODA, 2017 ....................................................... 13
Figure 4. Donor share of health ODA in Kenya ............................................................... 14
Figure 5. ODA to Kenya by sub-sector .......................................................................... 14
Figure 6. Donor concentration in top ODA sub-sectors, 2017 ...................................... 15
Figure 7. Donor dependency in key sub-sectors, 2017 .................................................. 15
Figure 8. Financing for Kenya’s HIV response, by source ............................................. 16
Figure 9. PEPFAR’s Kenya budget by HIV focus area .................................................... 16
Figure 10. PEPFAR’s planned budget by program area ................................................ 17
ACRONYMS

ARV .................. antiretroviral
CHE .................. current health expenditure
CRS .................. Creditor Reporting System
DAC .................. Development Assistance Committee
EXT .................. external sources of health financing
GGE .................. general government expenditure
GGHE-D .......... domestic general government health expenditure
GHED .......... Global Health Expenditure Database
IBRD .......... International Bank for Reconstruction and Development
IDA ................ International Development Association
LICs ................ low-income countries
LMICs .......... lower-middle income countries
MICs .............. middle-income countries
NHA ............. National Health Accounts
ODA ............ official development assistance
OOP ............. out-of-pocket
OECD .......... Organization for Economic Development and Cooperation
PEPFAR .......... President’s Emergency Plan for AIDS Relief
STDs ............ sexually transmitted diseases
THE ............ total health expenditure
UHC ............ universal health coverage
US .......... United States
UK .......... United Kingdom
USAID ........ US Agency for International Development
WHO .......... World Health Organization
EXECUTIVE SUMMARY

As more countries move from low- to middle-income status, they are perceived as increasingly capable of financing their own health systems. Some donors have begun to transition their support out of such middle-income countries (MICs) to redirect their funds to countries with greater needs. However, this transition may leave a funding gap for MICs that could be difficult to fill when external resources decline. If not carefully managed, such financial shifts could lead to the loss of health gains that occurred while receiving substantial external financial support. Understanding levels of donor dependency (i.e., whether or not a country is likely to have capacity to fill a funding gap caused by donor transition) and donor concentration (i.e., when only a few donors make up the majority of aid) can illuminate areas of potential vulnerability for transition. In this study, we analyzed Kenya’s health system for donor dependency and donor concentration.

Overall, we had five key findings:

2. Kenya faces donor dependency in key sub-sectors of its health system, particularly TB, HIV, and immunizations.
3. Kenya’s health system has a concentrated donor landscape, with four donors funding nearly 90% of all external aid (the United States, the Global Fund to Fight AIDS, Tuberculosis and Malaria, the United Kingdom, and Gavi, the Vaccine Alliance.)
4. Each of the top five recipient sub-sectors for health ODA face donor concentration (STD control including HIV/AIDS, malaria, basic health care, health policy and administration, reproductive health.)
5. Kenya’s HIV program is particularly donor dependent and concentrated, with PEPFAR being the primary funder of Kenya’s HIV response.

These findings led us to identify five key policy actions that can be taken to prepare for an era beyond aid:

1. Proactively prepare for transition, even where transition is not an immediate reality.
2. Increase domestic resources for health.
3. Address health system inefficiencies.
4. Improve tracking and reporting on external reliance on health aid.
5. Key donors should identify clear pathways for sustaining effective coverage.
INTRODUCTION

Development aid to Africa is undergoing rapid transformation. As more African countries move from low-to middle-income status, they are perceived as increasingly capable of financing their own development. Some donors have begun to transition their support out of such middle-income countries (MICs) to redirect their funds to countries with greater needs. However, this transition may leave a funding gap for MICs that could be difficult to fill when external resources decline.\(^1\)

While financing is an important aspect of transition, the overarching goal of transition is to maintain and even improve effective coverage of health services despite shifts in the financing portfolio. If not carefully managed, such financial shifts could lead to the loss of development gains that occurred while receiving substantial external financial support. Although these changes are not limited to Africa, the impact of transition on African countries would be significant over the coming decade given that most are current low and lower-middle income countries (i.e., those that would move towards transition as their economies develop.)\(^2\) Therefore, understanding sectors that still receive significant donor funding or have a concentrated donor environment could help identify particular sectors or sub-sectors of vulnerability if donor resources were to decline.

This study aimed to explore Kenya's health aid landscape to better understand potential vulnerabilities given Kenya's ongoing transition from aid. Kenya was selected due to its transition from being an LIC to an LMIC in 2014, the major role health aid plays within its aid portfolio (31% of total official development assistance [ODA] in 2017)\(^3\), and its anticipated transition out of key multilateral aid support in the coming years. For example, Kenya is considered a World Bank International Development Association (IDA)-blend country, signaling that Kenya is on its way to fully transitioning out of IDA funding to International Bank for Reconstruction and Development (IBRD) funding, which is less concessional in nature.\(^3\) Kenya is also slated to enter Gavi, the Vaccine Alliance’s (Gavi’s) accelerated transition phase in 2022, a five-year period where domestic funding is expected to gradually increase while Gavi funding decreases until a country is considered fully self-financing.\(^4\)

Gavi and World Bank transitions are two examples of what lies ahead for Kenya. However, some donors, particularly bilateral donors, have not published transition criteria or anticipated transition projections. An abrupt and unforeseen transition from a bilateral donor could have stark consequences for financial sustainability and development outcomes. A broader understanding of the external aid landscape and the domestic health financing landscape is important in identifying a) potential subsectors within the health system that may be vulnerable in transition and b) potential donors that may have undue impact on Kenya if they were to reduce resources or exit abruptly.

In this case study, we analyzed the levels and trends of donor support to different areas of the health system in Kenya relative to domestic resources. Specifically, we examined donor dependency (i.e., whether or not a country is likely to have capacity to fill a funding gap caused by donor transition) and donor concentration (i.e., when only a few donors make up the majority of aid). We then explore the potential implications of our findings on the future of health financing in Kenya given ongoing and upcoming donor transitions.

\(^{a}\) According to author’s calculations using OECD CRS data.
2 METHODS

Overview
We conducted a retrospective analysis of the levels and trends of funding to the health sector in Kenya over the fifteen-year period 2002-2017. For each year, we analyzed the sources as well as the allocation of funding. Sources of financing analyzed included external official development assistance (ODA) and domestic expenditures. Funding allocation was analyzed at two levels i) at the health system level, and ii) at the level of allocation to specific disease or program area (e.g., HIV/AIDS.) In particular, we examined donor concentration and donor dependency.

Donor dependency. The key concern with donor dependency is whether or not a country would have the capacity to respond to a donor exit. In particular, dependency assumes a country would likely be unable to absorb the shock of a donor funding decline or exit, for either the health system as a whole or a specific area of the health system, such as its HIV program. We were unable to identify a standard definition of dependency in the literature, and therefore in this paper we introduce the donor dependency ratio. Given that the domestic government would be the primary party responsible for covering funding gaps left by donors, our ratio focuses on external and domestic public government resources only (i.e., the ratio between the two). While there are many other sources of financing for the health system besides these two sources (e.g., private domestic, out-of-pocket [OOP]), other sources do not have the same responsibility as the government to fill a potential gap left by donors. We recognize though that in reality such gaps may in fact get filled by other sources (e.g., by OOP expenditures when costs are passed on to consumers.) In this paper, we consider donor dependence to be a ratio of external funding: domestic public resources above 0.25:1. In other words, we argue that it would be difficult for a government to fill a gap of twenty-five cents or greater for every dollar it currently spends. This measure enables us to isolate the funding sources of interest (i.e., external donors and domestic public), without looking at total health expenditures, which could obscure the severity of potential dependency issues.

Donor concentration. A concentrated donor environment presents some vulnerabilities to a country. If very few stakeholders contribute most of the funding to a pool, then any change in an individual donor’s funding level or behavior could have a large impact on external resources available to a particular sector or sub-sector. Donor concentration also weakens a country’s ability to negotiate better terms for the aid it receives.

We define donor concentration as less than 20% of donors make up more than 50% of ODA. We chose this threshold since we identified no consensus on the definition of concentration in the literature. We use this threshold for all health sector ODA and sub-sector ODA. The total number of donors includes any donor that provided funds for a particular sector/sub-sector within a given year.

Variables
Our variables of interest in this study included the following:

- **Current (recurrent) health expenditure (CHE)**: includes healthcare goods and services that are consumed within a given year.
- **Capital (development) expenditure**: includes investments into health infrastructure, which tend to be for long-term or multi-year use.

---

We opted for these metrics to keep the analysis simple, although a concentration index, similar to the Gini Index for distribution of wealth, could be a measure to use in the future.
• **General government expenditures (GGE):** total government expenditures across all sectors, including health.\(^5\)

• **Domestic general government health expenditures (GGHE-D):** health expenditures that come from the domestic government.\(^5\)

• **External health expenditure (EXT):** health expenditures that come from financial flows originating from outside the country, as measured by the World Health Organization (WHO).\(^6\)

• **HIV expenditure by origin of resource:** HIV expenditures that come from domestic resources (public and private) and external resources.\(^7\)

• **Official development assistance (ODA):** money that is given or loaned on concessional terms from countries or multilateral institutions to support the welfare or development of developing countries, as defined by the Organization for Economic Cooperation and Development (OECD). This does not include private donations or other official financial flows that do not meet the concessionality criteria for ODA outlined by the OECD.\(^8\)

• **Official development assistance (ODA) for health:** ODA that targets general and basic health, as well as population policies/programs and reproductive health (as defined by the OECD purpose codes 120, 130, 16064). ODA is a type of EXT.\(^9\)

• **Total health expenditure (THE):** includes both current and capital expenditures for health from all funding sources.\(^10\)

**Data sources**

Our analysis used five data sources (Table 1). Data are reported in constant 2017 US dollars.

The Global Health Expenditures Database (GHED) provides health expenditure data for all WHO member states.\(^11\) Data is collected across countries in a common manner to breakdown health financing by the various sources and purposes. This database was used in this study to identify CHE, GGHE-D, EXT, GGE, and funding for specific disease areas by source. However, given some limitations noted below, other resources were used to triangulate these findings or assess financing flows at a more granular level.

Domestic financial reports, including Kenya’s National Health Accounts (NHA) and National and County Health Budget Analyses, were also used to further examine Kenya’s financing sources.\(^10,12,13\) While domestic expenditure data are reflected in the GHED, these domestic financial documents provide more nuance on how funds are budgeted, released, and spent. This data was used to identify THE, capital expenditures, and budget data. We used these domestic sources, namely the national health accounts, to give us a better understanding of total health expenditures (i.e., both current and capital expenditures.) Although the WHO GHED includes current health expenditure information at the country level, it does not have reliable data on capital expenditures (more details on this can be found in Appendix 1). Additionally, national data sources include both the county and national level, which is unavailable in the GHED.

We used the Organization for Economic Cooperation and Development (OECD) Creditor Reporting System (CRS) Aid Activity database to analyze aid flows. The OECD Development Assistance Committee (DAC) “collects aid flows at the activity level based on a standard methodology and agreed definitions.”\(^9\) This dataset was used to identify ODA and ODA for health data in the aggregate, by individual donors, and for specific sub-sectors (e.g., reproductive health). Although EXT via the GHED is in theory the best indicator for assessing external flows as a source of health financing, this indicator does not provide a level of granularity needed to assess flow providers and priority areas of those providers. Therefore, for detailed analyses on the providers and priorities for external financial flows, we rely on OECD Creditor Reporting System (CRS) data. However, we acknowledge that ODA flows are only one dimension of EXT and other sources, such as other official finance and private finance, are not captured by ODA. We did a comparison across these sources to determine how large a difference exists between WHO GHED EXT data and OECD
CRS ODA data, as well as see how much private and other official flows from the OECD CRS database contribute to health, and note that the differences between these sources are minimal. Our findings are presented in Appendix 2.

The UNAIDS Financial Dashboard provides data on 85 different indicators focused on HIV financing resources. This database was used in this study to identify HIV expenditure by origin of resource (i.e., domestic or external.)

### Table 1: Overview of data sources

<table>
<thead>
<tr>
<th>Data type</th>
<th>Source</th>
<th>Flow type analyzed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health financing by source</td>
<td>World Health Organization, Global Health Expenditures Database(^{11})</td>
<td>Current health expenditure (CHE) by source</td>
<td>WHO does not report total health expenditure. The primary metric used is CHE. Data for capital health expenditures are available, however, this data has some limitations (see Appendix 1).</td>
</tr>
<tr>
<td></td>
<td>NHA(^{10})</td>
<td>Total health expenditures</td>
<td>The latest NHA report is a 2019 update for FY 2015-2016. Estimates from this report were used to triangulate estimates presented in GHED.</td>
</tr>
<tr>
<td></td>
<td>National and County Level Health Budget Analysis(^{12,13})</td>
<td>Budget allocation data for recurrent and capital expenditures</td>
<td>Although budget allocations are not directly comparable with expenditure data, we assess this domestically reported data for years not yet available in the National Health Accounts (i.e., 2016 onwards). This data source sheds light on budgeted current and capital expenditures.</td>
</tr>
<tr>
<td>Aid flows by donor</td>
<td>OECD CRS Aid Activity Database(^{16})</td>
<td>Disbursements, official development assistance (ODA)</td>
<td>“Health aid” includes purpose codes 120 (health), 130 (population policies and programs), and 16064 (social mitigation of HIV/AIDS). Reported flows do not include funds that remain in the donor country. OECD enables reporting in such a way as to avoid double counting bilateral contributions to multilateral agencies as both bilateral and multilateral aid.</td>
</tr>
<tr>
<td>HIV financing by source</td>
<td>UNAIDS, HIV Financial Dashboard(^{14})</td>
<td>HIV-related expenditures by source of funds</td>
<td>Data were available for 2011-2017, although expenditures data is missing for year 2015.</td>
</tr>
<tr>
<td>HIV financial data from PEPFAR</td>
<td>PEPFAR dashboard(^{15})</td>
<td>Budget data by HIV/AIDS program area</td>
<td>Data on expenditures are only available starting in 2015, therefore we looked at budget data to see a longer time trend. All reported numbers are for fiscal years (Oct 1 – Sept 30)(^{17}), so calendar year on year trends may not align completely. These are allocations and do not necessarily reflect actual expenditure. However, in the absence of better data, we have assessed budget allocation data for illustrative purposes of PEPFAR priority funding areas.</td>
</tr>
</tbody>
</table>

The President’s Emergency Plan for AIDS Relief (PEPFAR) Dashboard provides data on PEPFAR’s financials.\(^{15}\) In particular, it includes both PEPFAR’s planned budget and expenditures by country and HIV focus area (e.g., antiretrovirals [ARVs]). This dataset was used in this study to identify PEPFAR’s spending levels by year as well as spending priorities. Two types of flows are captured for PEPFAR in our analysis: budget data and expenditures data. However, we only use budget data to understand PEPFAR priority areas and activities. The OECD CRS tells us the source of aid (US government) and the overall focus of aid (e.g., HIV) but does not provide detailed line items (e.g., ARVs) in a systematic way. The purpose of PEPFAR
budget data for our analysis is less about the financial amount and more about supplementing the financial data with a clearer understanding of PEPFAR’s funding purpose and priorities.

Data on health sub-sectors (e.g., HIV/AIDS, reproductive health, etc.) came from two primary sources: the **OECD CRS and GHED**. Data for these sources are not necessarily captured in a similar way and therefore are not an apples-to-apples comparison in terms of absolute financial values. However, both sources are useful for different purposes. The OECD CRS enabled us to see donor-specific priority sub-sectors (e.g., the US funds 84% of all Sexually Transmitted Diseases [STD] control ODA) whereas the GHED sheds light on the sources of financing for key sub-sectors (e.g., domestic resources account for 50% of all reproductive health funding in Kenya.) More details on the sub-sectors included in each database can be found in Appendix 3.

We also reviewed relevant literature, such as academic literature, Ministry of Health reports, and other gray literature to add context to the data analysis.
FINDINGS

The role of aid in Kenya

ODA plays a major role in Kenya’s overall financing landscape. On average, Kenya has received roughly US$3 billion per year over the last five years (Figure 1). Health is one of the largest recipient sectors of ODA in Kenya; over the past decade, aid to the health sector has made up roughly a third of total ODA to Kenya. In 2002, the share of health ODA out of total ODA was 21%; this level peaked in 2010 at 38%, yet recent levels remain high at 31%.

Figure 1: ODA to Kenya over time

Source: OECD CRS, constant 2017 US$ billions

Donor dependency in Kenya’s health sector

How does health ODA factor into broader health expenditures in Kenya? There are various data points used to answer this question, as outlined in detail in Appendix 2. The GHED looks at the share of external support (i.e., inclusive of ODA and other financial flows from external sources) out of current health expenditures. GHED reports that in 2016, 19% of current health expenditures were from external sources. However, this indicator may underestimate the role that external finance plays in financing all elements of the health system since it does not include capital expenditures.

The latest National Health Accounts data from 2015/2016 includes data on total health expenditures (i.e., both current and capital expenditures.) This source shows that expenditures from donors made up 23% of THE in 2015/2016, the most recent year for which we have data (Table 2). This data signals a higher level of dependency than the GHED. Although the share of total donor financing for health has declined in recent years, the absolute amount of expenditures has actually increased, from US$788 million in 2012-2013 to US$813 million in 2015-2016. Using these figures, we see that from 2002 to 2016, Kenya faced substantial, albeit declining, donor dependency: donors have consistently exceeded 50% of domestic public expenditures for health during this fifteen-year period, and in certain years (2005-2006 and 2009-2010) exceeded 100% (Table 2).
Table 2: Total health expenditures in Kenya by source (2001-2016) in million US$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>30% $472</td>
<td>29% $621</td>
<td>29% $736</td>
<td>34% $1,068</td>
<td>37% $1,286</td>
</tr>
<tr>
<td>Private</td>
<td>54% $862</td>
<td>39% $833</td>
<td>37% $938</td>
<td>41% $1,294</td>
<td>40% $1,376</td>
</tr>
<tr>
<td>Donors</td>
<td>16% $262</td>
<td>31% $657</td>
<td>35% $882</td>
<td>25% $788</td>
<td>23% $813</td>
</tr>
<tr>
<td>Other</td>
<td>0% $2</td>
<td>0% $8</td>
<td>0% $1</td>
<td>1% $35</td>
<td>0% $1</td>
</tr>
<tr>
<td>Total</td>
<td>100% $1,596</td>
<td>100% $2,119</td>
<td>100% $2,556</td>
<td>100% $3,188</td>
<td>100% $3,476</td>
</tr>
</tbody>
</table>

Donor dependency ratio: 0.6, 1.1, 1.2, 0.7, 0.6

Source: Kenya National Health Accounts FY 2015/16: 2019 Update

Note: Larger numbers for donor dependency ratio imply greater donor dependence.

Budget data from more recent years shows a continuation of this trend (Table 3). We recognize that expenditures and budget data are not directly comparable. However, analyzing the role donor funding plays in the health budget is a next-best alternative to recent absent expenditures data (i.e., after 2016) and can indicate if trends are either holding or changing. Looking at donor funds as a share of the total health budget shows a continued role for donors from 2016 (the latest year of NHA data) through 2019 (Table 3). Although the share of the total budget from donors has declined (from 33% in 2016-2017 to 26% in 2018-2019), the absolute amount of support has increased by over 20% (from 19.7 billion KSh in 2016-2017 to 23.7 billion KSh in 2018-2019.) Overall, the dependency ratio is declining over time, from 0.48 in 2016-2017 to 0.36 in 2018-2019, but continues to exceed our threshold for dependency (Appendix 4).

Table 3: Donor share of health budget

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Donors</td>
<td>33%</td>
<td>29%</td>
<td>26%</td>
</tr>
<tr>
<td>Government</td>
<td>67%</td>
<td>70%</td>
<td>74%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: National and County Health Budget Analysis

Values may not add up due to rounding. See Appendix 4 for more detailed data.

The National and County Health Budget analysis mentioned above flags a particular area of concern: the outsized role of donors within Kenya’s capital (sometimes referred to as development) budget. Specifically, this source shows that donors have made up most of the development budget for several years, most recently 58% in 2018-2019 (Figure 2). The analysis states that “the Ministry of Health should increase the development budget allocations from Government of Kenya resources to reduce over-reliance on donors and reduce the gaps arising from decreasing donor funding.” The development budget includes funds for longer-term infrastructure, such as medical equipment, the government’s contributions to donor-funded programs (i.e., co-financing), construction, refurbishment, and furniture. The recurrent budget includes items funded in a given year related to personnel, operations and maintenance, reimbursements for removal of user fees at facilities, medical drugs, and training. This nuance is lost when looking only at GHED data on donor support as a source of funding out of current health expenditures.
Donor concentration in Kenya’s health sector

Kenya is facing donor concentration within its health ODA landscape. In 2017, four donors (out of a total of 35 for that year) made up 89% of all health ODA: The United States (US) (62%), the Global Fund (18%), the United Kingdom (5%), and Gavi (4%) (Figure 3). The US has been and continues to be the dominant ODA provider in Kenya across all sectors, and in particular, the health sector (Figure 4). In 2017, the US made up 29% of all ODA, 62% of all health ODA, and 84% of health ODA focused on the control of sexually transmitted diseases (STDs), inclusive of HIV. By contrast, in 2002, the US made up 27% of all ODA, 34% of all health ODA, and 71% of health ODA focused on the control of STDs, inclusive of HIV.

Figure 3: Donor concentration in health ODA, 2017

Source: OECD CRS.

Other donors include: Japan (2.4%), Denmark (1.1%), EU Institutions (1.1%), and Germany (0.6%). All other official donors made up less than 0.5%.

Figure 4 shows that the share of health ODA that most donors have provided has declined over time, potentially due to the rising share of funds provided by the US or perhaps the emergence of multilateral players like the Global Fund and Gavi. The US is also a major funder of both of these multilateral organizations: the US is the largest single funder of the Global Fund and one of the top country government funders for Gavi (12% of 2018 contributions.) The role of the US in funding the two major multilateral players in Kenya’s health system further complicates Kenya’s health system: any major financial changes the US makes for Gavi and the Global Fund will also impact Kenya’s overall aid portfolio.
Donor dependency and concentration in key sub-sectors of the health system

Health ODA to Kenya funds various sub-sectors of the health system, but is overwhelmingly focused on STD control, which includes funding for HIV/AIDS (Figure 5). In 2017, STD control made up over 60% of all health ODA. ODA for STD control has grown by nearly 2,000% between 2002 and 2017 (from US$28 million in 2002 to US$559 million in 2017.) Although other health-related sub-sectors receive substantial, and increasing, financial support, ODA for STD control has made up more than 50% of all health aid annually since 2003 (Figure 5). Behind STD control, ODA also focuses on malaria control, basic health care (e.g., routine immunizations), health policy and administrative management, and reproductive health care. Together, these four sub-sectors received 26% of all ODA in 2017.

Donor concentration was apparent in the top five sub-sectors for health ODA mentioned above. In 2017, one donor made up 84% of all STD control ODA (US), two donors made up 99% of malaria ODA (the Global Fund and the US), two donors made up 86% of basic health care ODA (Gavi and IDA), three donors made
up 85% of health policy and administration ODA (Japan, Denmark, Germany), and three donors made up 85% of reproductive health ODA (Germany, UK, US) (Figure 6).

**Figure 6: Donor concentration in top ODA sub-sectors, 2017**

Looking beyond ODA to all sources of financing can tell us if levels of external funds out of total expenditures are or are not concerning. Specifically, if a high share of support for a particular sub-sector comes from external resources, that sub-sector could be particularly vulnerable in times of financing transitions. Sub-sector groupings between OECD CRS and GHED are not identical, and therefore are not directly comparable (see Appendix 3 for details.) However, we present breakdowns of financing sources by disease area from GHED to demonstrate if certain sub-sectors of the health system that are similar to the above-mentioned sub-sectors might be vulnerable for transition. According to 2017 expenditures, external financing made up more than half of all funding for immunizations, TB, and HIV (Figure 7). Although malaria and reproductive health are mostly funded from domestic resources, they both also receive substantial support from external players (20% and 16%, respectively.) With the exception of reproductive health (0.2:1), there is donor dependency across each of these sub-sectors: immunization 3.3:1, TB 2.8:1, HIV 1.7:1, and malaria 0.25:1.

**Figure 7: Donor dependency in key sub-sectors, 2017**

**Donor dependency and concentration in Kenya’s HIV program**

As previously noted, most of Kenya’s health ODA targets STD control, including HIV/AIDS (Figure 5). This trend prioritization of STD control by donors has been the case for nearly two decades. Since this sub-sector receives such a disproportionate share of ODA and shows significant donor concentration and donor dependency, we examine this sub-sector in more detail. Kenya’s HIV response is characterized by high, albeit declining, donor dependency: the donor dependency ratio fell from 3.6:1 in 2012 to 2.2:1 in 2017 (Figure 8). This means that as of 2017, for every dollar spent by the domestic government, donors contributed more than double that amount.

---

*No GHED data is available for immunization financing in Kenya. Therefore, we supplemented with WHO-UNICEF Joint Reporting Form data. Data is not broken down by all sources, so we use domestic expenditures to total expenditures, assuming non-domestic government expenditures are from external sources. Therefore, this figure could overstate level of dependency for immunizations.*
Out of all financing sources, PEPFAR is the primary funder of Kenya’s HIV response, having contributed over 50% of total HIV/AIDS funds and over 80% of all external funds every year since 2012. PEPFAR support spans many different program areas (Figure 9). According to its budgetary data, PEPFAR’s primary areas of support are adult treatment and ARV drugs, which together made up 50% of PEPFAR’s total budget for Kenya in 2018. PEPFAR defines adult treatment as inclusive of “infrastructure, training for clinicians and other providers, clinical monitoring, related laboratory services, and community-adherence activities.”

PEPFAR’s ARV support “includes procurement, delivery, and in-freight of ARV drugs.”

PEPFAR’s budget is at the discretion of US Congressional approval and is subject to short-term funding commitments. PEPFAR has faced budget shocks in the past, as seen in 2013 (Figure 10). During the Obama administration, the Global Health Initiative was established, which aimed to streamline the US global health
portfolio and focus on a broader set of global health issues.\textsuperscript{20} To accomplish this goal, PEPFAR’s budget across all countries, including Kenya, fell dramatically. However, the administration faced significant criticism for this policy decision and ultimately PEPFAR’s planned budget returned back to similar levels as those in previous years.\textsuperscript{21}

Since the budget drop in 2013, PEPFAR’s investments in Kenya have declined in recent years; the 2019 budget for Kenya is 13% lower than the 2018 budget. Previous analyses conducted by the Center for Global Development (CGD) found that Kenya potentially faces a reduction of 44% in actual disbursed funds from PEPFAR from 2017 to 2020.\textsuperscript{22} However, Kenya is considered one of PEPFAR’s 13 acceleration countries, defined as a high-burden country where has PEPFAR committed to accelerating progress to control an epidemic.\textsuperscript{23} Although such a designation does not guarantee increased funding, it is notable that Kenya and Tanzania are the only two bilateral programs of the 13 in CGD’s analysis that are facing large proposed cuts. This is important because PEPFAR does not have a clear transition policy or approach and therefore, budget levels are one of the only ways to estimate the priority level of a country’s future programming.\textsuperscript{23}

\textbf{Figure 10: PEPFAR’s planned budget by program area}

![Figure 10: PEPFAR’s planned budget by program area](image)

Source: PEPFAR dashboard
**IMPLICATIONS OF THE FINDINGS**

While donor transitions often follow economic growth and independence of MICs, there are major risks of reversals in effective coverage and disease resurgence if transition is poorly planned and implemented. For example, Romania saw a resurgence in HIV after the Global Fund’s exit.\(^{24}\) Also, transition does not imply that all external resources for health must or should be fully replaced or matched with domestic resources. Therefore, understanding dimensions of the health system that are currently heavily donor supported or concentrated can illuminate areas of potential vulnerability, and areas that require evidence-informed policy making and implementation.

Our findings show that Kenya is facing both donor dependency and donor concentration in its health system. Although the total share of external support has declined in recent years due to increases from other sources (e.g., domestic government funds), the absolute amount of external support continues to increase. Dependency is also occurring to varying degrees within critical disease areas, such as HIV/AIDS, TB, and immunizations. In addition, Kenya faces a very concentrated donor aid landscape in the health sector: four donors (US government, the Global Fund, Gavi and the UK) account for nearly 90% of all health ODA. Two of these, the Global Fund and Gavi, are recipients of US government contributions, giving the US government an outsized role in the health donor landscape in Kenya. Donor concentration also occurs within each of the top five health ODA recipient sub-sectors: STD control (including HIV/AIDS), malaria control, basic health care (including immunizations), health policy and administration, and reproductive health.

Dependency means that any declines in financing from external sources without either a) a corresponding increase from other sources or b) efficiency gains to reach the same goals with fewer, more streamlined resources could put Kenya at risk of being unable to maintain effective coverage. The collapse of Kenya’s blood banking architecture is an unfortunate recent high-profile event encapsulating this phenomenon. The blood bank was funded by the US for 10 years at gradually decreasing levels, with US support ending in 2019.\(^{25}\) Domestic public expenditure did not increase to levels required to replace this support, resulting in an almost total collapse of this service in 2020 and leaving many patients without critical blood supply and access to essential services.\(^{25}\) Dependency may also point to areas where programmatic issues, such as leadership and management, may also require significant effort to ensure sustainability.

As mentioned, the US government plays an outsized role in financing Kenya’s health system, particularly its HIV response. As such, shifts in US policy, which can be difficult to predict, are a key concern for Kenya. It is concerning that key US agencies such as PEPFAR neither have an explicit transition policy nor make projections about when a country may no longer be supported.\(^{23}\) Although PEPFAR has never fully exited a country to date, it has implemented programmatic changes that dramatically impact the use of its funds, such as implementing domestic funding targets or transferring responsibility for some programmatic elements to recipient governments. Making these policy changes more explicit and coherent would go a long way to smoothing the transition process for Kenya and other countries.

Gavi and the Global Fund are the other major funders of Kenya’s health system, particularly in immunization (Gavi), and HIV, malaria, and TB (the Global Fund). While both of these funders have clear transition policies and approaches, these may not necessarily translate to a successful maintenance or improvement of effective coverage, particularly if they are concerned more with financial matters rather than a broader programmatic lens.\(^{26}\)

This analysis used three methodological approaches to better understand donor dependency and transition. First, the analysis recognizes that aggregate data can mask specific areas of vulnerability for countries in transition. For example, the WHO GHED data focuses on external support as a share of current health...
expenditures, which can be misleading if donors heavily fund capital expenditures in a country. While the GHED data accurately show declining dependency for Kenya’s current expenditures, it excludes the significant resources provided by external players for capital projects. This analysis used various domestic and global data sources to unmask this dependency. There may be value in routinely capturing these capital expenditures in global databases despite the recognized challenges (Appendix 1).

Second, the use of the ratio: external aid to total health expenditure (EXT/THE), can mask dependency since it weights domestic government expenditures for health the same as other sources of domestic financing, such as OOP payments. This indicator should be used with caution as it may underrepresent the extent of a country’s reliance on donor aid for its health system. Comparing domestic government funding for health with external funding for health, as used in this analysis, gives a better sense of how much of a funding gap a country government may need to close particularly in the context of progress towards universal health coverage (UHC).

Finally, dependency on external resources more broadly should also be taken into account when assessing dependency in the health sector given the potential for aid fungibility (i.e., the movement of funds to other sectors or sub-sectors.) Looking solely at external sources channeled to health does not provide a broader context of a country’s financing landscape and could leave countries ill-prepared to manage any financial transition, which could in turn impact the availability of domestic resources for health.

This study did not examine inefficiencies caused by donor resources. These may result from fragmentation and duplication of funding, siloing of programmatic activities, and crowding out of government expenditure. A dedicated assessment of this area is required to examine the implications of transition on inefficiencies and what gains may be made with addressing them.
5 POTENTIAL POLICY OPTIONS

Our study found several areas where action can be taken to better understand Kenya’s reliance on external funding and to prepare for an era beyond aid.

1. Proactively prepare for transition even where transition is not an immediate reality
Given Kenya’s dependent and concentrated donor aid environment, Kenya can proactively seek to better understand its key areas of vulnerabilities. A domestically-formulated transition readiness plan could enable Kenya to i) pinpoint particular dimensions of its health financing system that are most at-risk in an aid transition, not only from a funding but also from a programmatic point of view; and ii) prepare to avoid disruptions to care or increases in financial hardship to service users in case of sudden shocks to the financing of these areas.

2. Increase domestic resources for health
Mobilizing revenue for Kenya’s health system is crucial to managing transition from donor dependency and is integral to making progress towards UHC. While steady progress has been made in this regard, growth in domestic government expenditure on health will need to accelerate to meet local and global commitments and demands of transition. These increases will be required even if efficiency gains are anticipated given the large gap currently covered by donor and private, mainly out of pocket expenditures.

3. Address health system inefficiencies
Addressing inefficiencies in Kenya’s health financing system will ensure available resources are better used and potentially free up additional resources for the system. Donor dependency and concentration may create administrative, financial and programmatic inefficiencies that may exacerbate existing health system inefficiencies. Transition planning should seek to address these inefficiencies in the immediate and long term. Immediate changes may include development of transition plans, improving allocation practices, and coordinating programmatic activities such as program management. Long-term changes include pooling of funds to improve administrative efficiency, and aligning with in-country health service purchasing arrangements while looking to make them more strategic.

4. Improve tracking and reporting on external reliance on health aid
Indicators measuring donor dependency in the health sector tend to focus only on current expenditures. However, many donors fund critical capital investments in recipient countries. It is important that such investments be counted. Many external funds may also be concentrated in vertical programs, such as HIV/AIDS programs, and therefore more disaggregated interpretations are needed for planning purposes.

5. Key donors, such as PEPFAR, Gavi, the Global Fund should identify clear pathways for sustainability
A few donors play a critical role in financing key dimensions of Kenya’s healthcare system, in particular the US (PEPFAR), Gavi, and the Global Fund. Gavi and the Global Fund both have clear transition policies and criteria, which enable long-term planning and preparation. PEPFAR uses the Sustainability Index and Dashboard to measure progress towards sustainability and identify weaknesses in a country’s health system. These approaches should be evaluated and adapted to ensure that they are supporting countries to meet the goals of transition (i.e., maintaining effective service coverage while making progress towards UHC goals.) Regular evaluations would also ensure that these plans match the evolving nature of health systems and public finance globally, as highlighted by the impact of the COVID-19 pandemic.
REFERENCES


APPENDIX 1. LIMITATIONS OF GHED CAPITAL EXPENDITURES DATA

The GHED includes data on capital expenditures. However, these data have several limitations. First, only three years of data are available (2010, 2013, and 2016). Secondly, only in the year 2016 are capital expenditures disaggregated by source (i.e., external versus domestic). Finally, the figures available for 2016 do not remotely resemble the data found in the 2015/2016 NHA 2019 update. For example, NHA data show that donors made up more than half of the development/capital expenditures in 2015-2016 whereas according to the below table, external donors would have made up less than 10% of capital health expenditures. Therefore, we opted not to use this data point in our analysis and instead rely on NHA data for capital and total health expenditures.

Table A1. GHED capital expenditures by source

<table>
<thead>
<tr>
<th>Source</th>
<th>2016, US$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic public</td>
<td>198</td>
</tr>
<tr>
<td>Domestic private</td>
<td>6</td>
</tr>
<tr>
<td>External</td>
<td>21</td>
</tr>
<tr>
<td>Total capital health expenditure</td>
<td>225</td>
</tr>
</tbody>
</table>
APPENDIX 2. COMPARISON OF WHO GHED EXT AND OECD CRS ODA

In our analysis, we use ODA data from the OECD CRS instead of GHED EXT data. EXT is a more comprehensive indicator, including various forms of external financing, such as ODA, other official finance, and private finance. However, this data is at the aggregate level and therefore we are unable to look at EXT flows by donor or focus areas. Although ODA is not as comprehensive in what types of flows it measures, it enables a much deeper understanding of which donors supply resources to a country, and their priority investment areas. Importantly, ODA measures disbursements of funds whereas EXT is often an estimate based on regression analysis.

We did an assessment to compare year on year data for ODA and EXT in the below table. EXT data is only available as EXT per capita in the GHED. To get a total amount comparable to ODA for this comparison exercise, we multiplied the GHED EXT per capita data by that particular year’s GHED population data. Additionally, we extracted private flows and other official flows from the OECD CRS to see if adding these to our ODA figures would change the overall findings. No other types of official flows were available for health during this timeframe and private flows data only became available in OECD CRS beginning in 2009.

Overall, we found that EXT and ODA are fairly similar across our time period of interest, with some years showing higher EXT and others showing higher ODA. Therefore, because of the granular data available for ODA, we chose to primarily rely on this source when assessing external financial flows. Although private finance data is available, given its relatively small share of the total and missing data for 2002-2008, we opted to exclude this from our analysis.

Table A2. Comparison of measures of external resources

<table>
<thead>
<tr>
<th>Year</th>
<th>EXT</th>
<th>Health ODA</th>
<th>Private finance for health</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>103</td>
<td>106</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>137</td>
<td>152</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>186</td>
<td>200</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>195</td>
<td>204</td>
<td>-</td>
</tr>
<tr>
<td>2006</td>
<td>430</td>
<td>323</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>548</td>
<td>357</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>622</td>
<td>480</td>
<td>-</td>
</tr>
<tr>
<td>2009</td>
<td>652</td>
<td>579</td>
<td>9</td>
</tr>
<tr>
<td>2010</td>
<td>703</td>
<td>700</td>
<td>3</td>
</tr>
<tr>
<td>2011</td>
<td>642</td>
<td>769</td>
<td>15</td>
</tr>
<tr>
<td>2012</td>
<td>690</td>
<td>869</td>
<td>15</td>
</tr>
<tr>
<td>2013</td>
<td>690</td>
<td>936</td>
<td>23</td>
</tr>
<tr>
<td>2014</td>
<td>672</td>
<td>826</td>
<td>20</td>
</tr>
<tr>
<td>2015</td>
<td>600</td>
<td>792</td>
<td>24</td>
</tr>
<tr>
<td>2016</td>
<td>577</td>
<td>847</td>
<td>25</td>
</tr>
<tr>
<td>2017</td>
<td>681</td>
<td>928</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: EXT (WHO GHED), Health ODA and private health flows (OECD CRS), $US millions
APPENDIX 3. HEALTH SUB-SECTOR CATEGORIES

The OECD CRS database and GHED both use their own categorization methods for focus areas of financial flows. Both systems are mutually exclusive (i.e., data cannot be counted in more than one category). However, the definitions between these two data sources are not the same. GHED looks at disease areas\(^{30}\) whereas OECD CRS has a much broader classification system that also focuses on functions and services that cut across diseases.\(^ {31}\)

More details on each classification method can be found at the GHED and OECD CRS websites respectively:

- Global Health Expenditure Database Classification System: 
  https://apps.who.int/nha/database/DocumentationCentre/GetFile/57114631/en and

APPENDIX 4. HEALTH BUDGET DATA

The absolute values associated with the data in Table 3 is presented below in Table A3. We also present the same data converted to USD for ease of comparison with other data points in our analysis (Table A4). It is worth noting that the total budget data is substantially less than expenditures data mentioned in this analysis.

### Table A3. Absolute values of donor share of health budget, billions KSh

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% Share</td>
<td>Total</td>
</tr>
<tr>
<td>Recurrent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>Total</td>
<td>29.1</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Donors</td>
<td>19.7</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>11.6</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31.2</td>
<td>52%</td>
</tr>
<tr>
<td>Overall health budget</td>
<td>60.3</td>
<td>100%</td>
<td>60.9</td>
</tr>
<tr>
<td>Donor dependency ratio</td>
<td>0.48</td>
<td>0.42</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Source: National and County Health Budget Analysis FY 2018/19.12
Shown as reported in the National and County Budget Analysis, billions KSh

### Table A4. Absolute values of donor share of health budget, constant 2017 US$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% Share</td>
<td>Total</td>
</tr>
<tr>
<td>Recurrent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>Total</td>
<td>290,002,209</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Donors</td>
<td>196,324,520</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>115,602,255</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>310,930,204</td>
<td>52%</td>
</tr>
<tr>
<td>Overall health budget</td>
<td>600,932,413</td>
<td>100%</td>
<td>595,500,015</td>
</tr>
<tr>
<td>Donor dependency ratio</td>
<td>0.48</td>
<td>0.42</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Source: National and County Health Budget Analysis FY 2018/19.12
Converted values to constant 2017 USD using CPI-U-RS1 Index