



African Region

Domestic resource mobilization for sustainable financing for health in Africa

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World Health
Organization



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WHO Regional Office for Africa, Health Systems and Services Cluster



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Abbreviations and acronyms

AAAA	Addis Ababa Agenda for Action
DHS	Demographic health surveys
Gavi	Global Alliance of Vaccine Initiative in Africa
GDP	Gross domestic product
HIC	High Income Country
LIC	Lower Income Country
LMIC	Lower Middle Income Country
MDGs	Millennium development goals
OOP	Out of pocket payments
PEH	Public expenditure on health
PvtHE	Private health expenditure
SDGs	Sustainable development goals
THE	Total health expenditure
UHC	Universal health coverage
UMIC	Upper Middle Income Country

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Chapter 1. Introduction

Achieving Universal Health Coverage (UHC) and indeed the Sustainable Development Goals (SDGs) are goals that all the of many in the African Region have adopted. Many a country has developed or is developing the National development framework aligned to these goals. Indeed, ever since countries committed to achieving UHC at the UNGASS in 2012, many countries have embarked on systematic action for health system reform to achieve UHC.

The scope of the SDGs is big spanning almost every area of sustainable development. The SDGs and UHC call for multi-sectoral action and inclusive development ensuring that no is left behind. Studies that have attempted to estimate the cost of attaining the SDGs put the price tag between US\$ 1.4 trillion 2013 dollars to 2.5 trillion 2015 dollars every year until 2030 (1, 2).

With regards to UHCs, it has been estimated that , countries will have to spend on average, at least 2014 US\$ US\$ 271 (74–984)per capita or 7.5% (2.1–20.5) of GDP on health to achieve UHC (3). It is further estimated that 75% of the cost will be spent on strengthening the health systems alone. Another study estimates that achieving goal 3 of the SDGs will cost \$67–87 billion each year from 2015–2030. This translates to investment needs for LICs (\$25–29 billion) and LMICs (\$43–59 billion) respectively (2). In general, all estimates show that achieving UHC will require increased investment in health by countries,

In order to foster the implementation of the SDGs, the Addis Ababa Agenda for Action (AAAA 2015) emphasises the need for greater domestic ownership for the development process driven by country owned national development plans increasingly financed by domestic resources(4). It also highlights the importance of private sector engagement

and financing in addition to external support to augment the efforts of countries to achieve the SDGs.

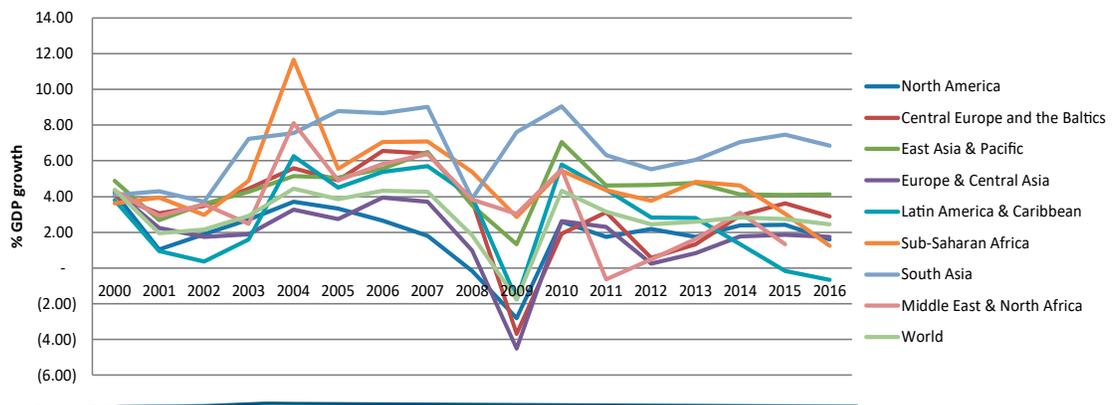
Nowhere is the need for increased and smart domestic spending for health and development for health more important than in the African Region. The political will to improving better financing for health and UHC in the region dates back to commitments such as the Alma Ata declaration of 1978 and more famously, the Abuja declaration of 2001 in which countries committed to spending at least 15% of the government budget on health (5).

Given the primacy and importance of domestic resource mobilization for health, this paper takes stock of the efforts in the region in mobilizing domestic financing for health thus far and proffers some policy considerations for action going forward. In doing so, it reviews:

- Trends in domestic financing for health and the forms that this takes;
- The extent to which current spending approached normative targets or estimated needs;
- The manner in which current spending for health is deployed or used to achieve stated priorities and finally;
- Potential shifts in domestic resource mobilization and spending that need to take place in order to achieve UHC.

Domestic spending in this paper refers to, all resources generated in the country including public domestic spending and private spending. Private expenditure includes out of pocket expenditure, pre-paid expenditure and expenditure by private enterprises on health distinct from expenditure on health care for employees in the form of health insurance.

Figure 1. Regional and global trends in economic growth, 2000-2016



1.1. Macro-economic picture and domestic health spending in the Region

Macro-economic context

‘Africa rising’ has been Africa’s story for the past few years considering fairly stable economic growth even in the midst of global economic recession (orange line in Figure 1) as compared to other regions and trends in the average global economic performance (light green line). Nevertheless data from the World Bank shows that over the last couple of years, the Region has experienced a decline in economic growth (6).

Economic growth in the High Income Country group has been unstable over the last 16 years with some contraction in 2008-09 followed by recovery in the last seven years. In the early years, economic growth in region was largely driven by the Upper Middle Income Countries (UMICs) in

the early and mid-2000s. Nevertheless, following a drop in economic growth in 2008 to 2009, recovery in the UMICs has been slow and has not returned to pre-2008-09 levels. The Lower middle Income Countries (LMICs) and the Lower Income Countries (LICs) have largely experienced stable growth over the few years albeit less than the other countries. On the whole though, economic growth in the region appears to have been driven largely by the UMIC countries given that average growth in the region declined in 2008-09 and to have followed the same trajectory in growth that growth in the UMICs followed since this decline. Thus even though the economy in the region grew, it was mainly concentrated in economies driven by commodities and tourism and therefore is vulnerable to changes in market prices for both.

Figure 2. Trends in economic growth in Africa by income group, 2000–2016

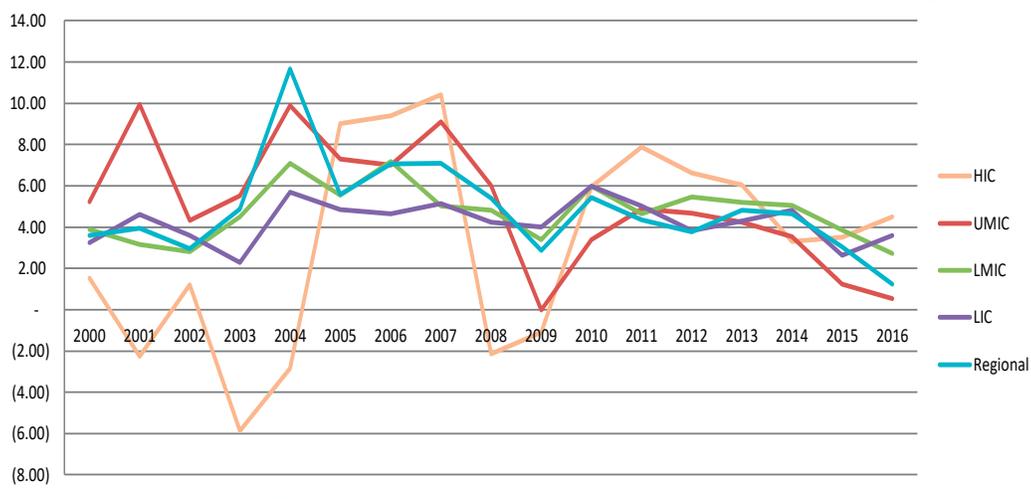
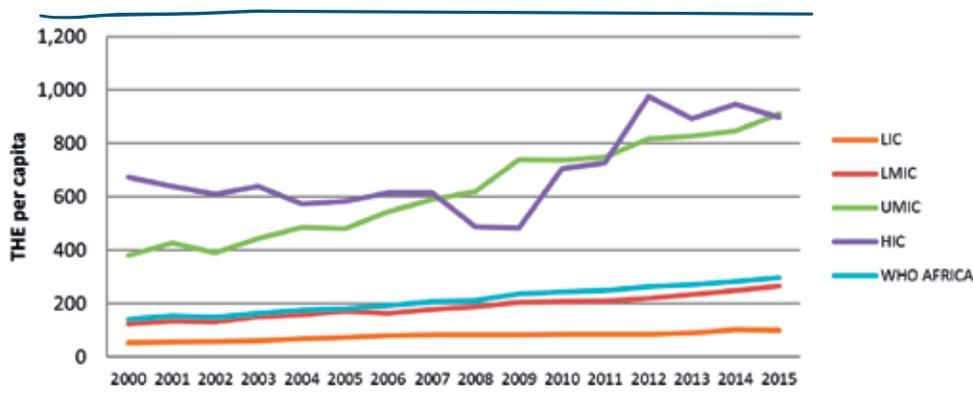


Figure 3. Trends in THE per capita in Africa, 2000–2015



The current economic slowdown in the region has a bearing on what countries in the region can do to ensure sustainable financing for UHC and the SDGs in the short to medium term. It is likely to constrain the range of effective fiscal instruments that are available to increase the fiscal space for health. This space is further constrained given competing priorities outside of health that governments need to invest in in order to attain UHC and the SDGs.

Health Expenditure in Africa

This section reviews the trends in health spending over the last 16 years (2000–2015) using National Health Accounts data for the countries in the region from the Global Health Expenditure Database (GHED). An analysis of the trends in health spending in the WHO region of Africa as the economy measured by average GDP per capita grows shows that, the average total health expenditure per capita increased at an average rate of 6.83% per annum. The greatest growth increase in total health expenditure is observed to have

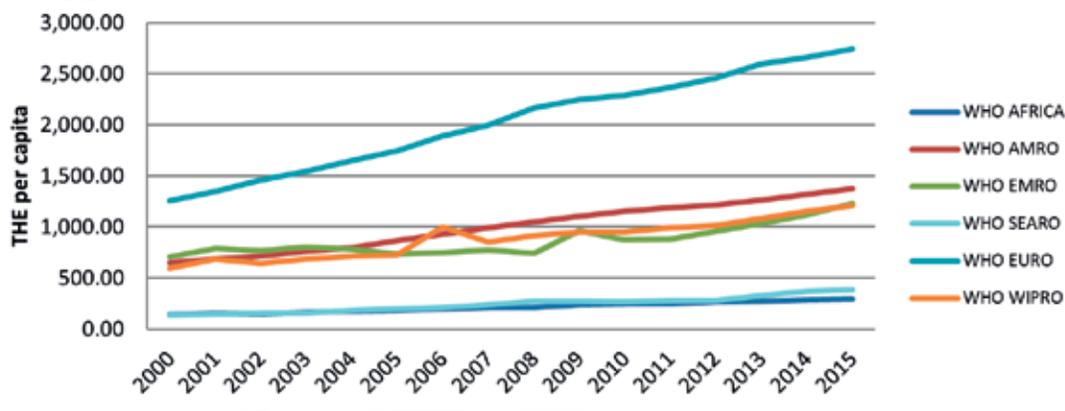
been between 2003 and 2015, at average growth rate of 7.78% p.a. compared to 2000–2002 where growth rate on average was 1.25% p.a. (see figure below).

The growth in THE per capita happened in the context of fairly stable economic growth averaging about 5.20% growth per annum from 2000 to 2015. Growth in total health spending was highest in the HIC and UMICs. On the contrary growth in expenditure on health in the LMICs and LICs was low but stable.

The growth in THE Per Capita was similar to that experienced in the South East Asian region of WHO but less than that in all other WHO regions as shown in Figure 4 below.

Therefore it appears that although health expenditure in Africa increased remarkably, the region was significantly less and slower than spending in other regions. Further still, the growth in THE per capita is not evenly distributed among countries in the region, with richer countries investing more than lower income countries.

Figure 4. Trends in per capita health spending by region, 2000–2015



Chapter 2. Status and issues with domestic resource mobilization

2.1. Status of domestic mobilization and spending compared to spending targets

Sources of health expenditure in the region.

One issue that is fundamental to sustainable health financing is the source of health expenditure. Established evidence shows that some sources of financing like out of pocket payments (OOP) are inequitable (regressive) forms of health financing that are highly associated with catastrophic health spending and impoverishment (7, 8). On the other hand, some forms of financing such as compulsory mechanisms of financing like general tax revenue and health insurance provide a greater protective effect against impoverishment and foster equitable service coverage and access (ibid).

Figure 5 below shows breakdown in health spending by source for each year. The figure shows that from 2000 to 2015, domestic spending from health which includes public expenditure on health (PEH) and private health expenditure

(PvtHE) has steadily been replaced by external financing (Ext HE). For instance, private health spending as a proportion of total health expenditure (PvtHE % THE) declined by 10% from 54.18% to 41.82%.

On the other hand, public spending on health as a share of THE (PEH % THE) also declined from 36.9% to 33.8%. On the other hand, the share of external financing for health increased by almost 13 % from 9.53% in 2000 to 24.42% in 2015 implying that the modest reduction in the burden on households in the Region was largely borne by external financing.

Table 1 below shows the breakdown of THE by country income group in 2015 (see). The table shows that except for high income countries, all income groups have similar PvtHE. However, the financial burden on households is complemented by greater domestic public spending in the

Figure 5. Trends in current health expenditure by source, 2000–2015

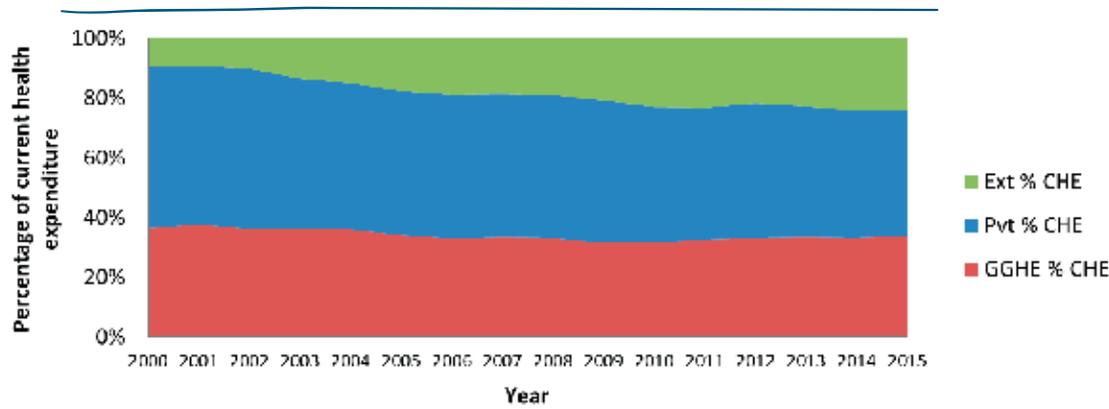


Table 1. Health financing sources by country income group, 2015

Country	PEH%THE	Pvt HE % THE	Ext % THE
Low income countries (LICs) Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, South Sudan, Togo, Uganda, United Republic of Tanzania, Zimbabwe	23.43	42.47	33.58
Lower middle income countries (LMICs) Cabo Verde, Cameroon, Congo, Côte d'Ivoire, Ghana; Kenya, Lesotho, Mauritania, Nigeria, Sao Tome and Principe, Swaziland, Zambia	38.46	42.14	19.37
Upper middle income countries (UMICs) Algeria, Angola, Botswana, Equatorial Guinea, Gabon, Mauritius, Namibia, South Africa	52.36	44.14	3.50
High income countries (HICs) Seychelles	96.99	2.54	0.46

UMICs. In the LICs and LMICs countries private expenditure is complemented to a greater extent by external financing and by domestic public expenditure with the latter playing a bigger role in LMICs and vice versa.

Total Public Domestic Health Spending compared to country wealth

The share of public domestic spending on health as a proportion of total health expenditure signals the extent to which the government is driving investment in health. An analysis of domestic investment in health spending (2015) compared to GDP per capita (Figure below) shows very little correlation between government expenditure as a proportion of GDP and the wealth of the nation. PEH %THE is used as a proxy for domestic ownership of the health spending in this analysis.

The analysis shows that there is very little correlation between the economic performance of the country and domestic investment in health. The red circle shows countries with similar income with varying levels of public spending on health as a share of total health expenditure. There is huge variation in government ownership of health expenditure for countries at the lower end of the income scale (< 5000 GDP per capita ppp) ranging from 10% to 60% of THE for countries with largely similar ability to pay.

Conversely, the orange circle shows countries with varying income levels between 5000 to 15 000 per capita ppp having similar levels of government spending as a share of total spending.

Figure 6. Domestic ownership of health spending (2015) compared to GDP per capita

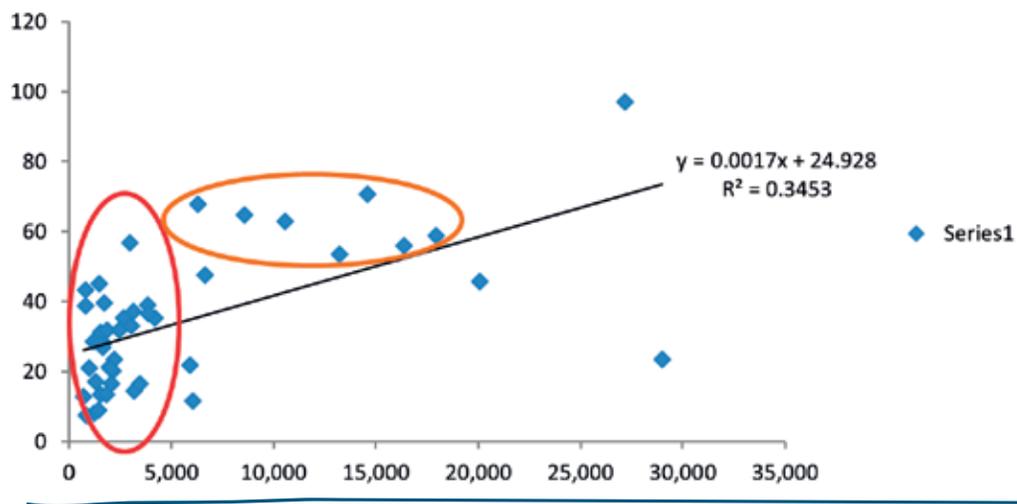
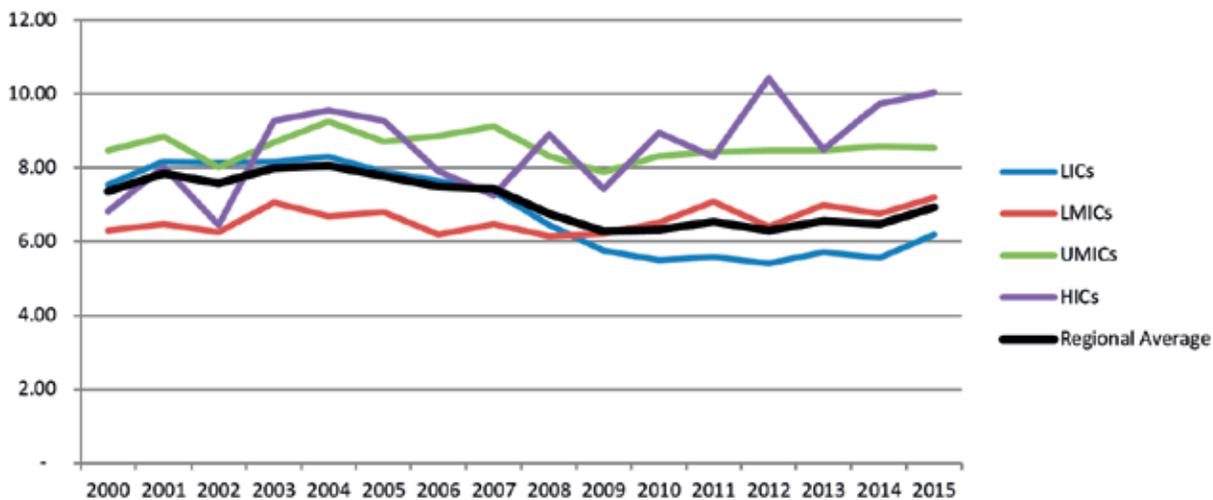


Figure 7. Domestic public expenditure on health as a share of total domestic public spending, 2000-2015



The share of government expenditure on health as a proportion of total government expenditure

The share of PEH as a share of the total government spending has been used to signal the prioritization of health compared to other spending priorities. Even though countries in Africa committed to spending 15% of their budget on health, an analysis of government prioritization of health in the region shows that on the whole PEH as a share of total domestic public spending (GGE) fell from an average of 7.36% in 2000 to 6.9% in 2015. LMICs and the only HIC country (Seychelles) increasingly prioritized expenditure on health as a share of total government spending while expenditure in Upper middle income countries remained fairly constant (See Figure 7). Initial increases in government spending on health as a share of total domestic public spending in LICs from 2000 to 2004 were not sustained with the subsequent share declining to a nadir of 5.14% in 2014 before increasing again in 2015..

Even though countries committed to spending 15% of their budget on health, Figure 8 shows that in 2015, only 1 country, Madagascar, lived up to that promise. The figure further shows that countries varied greatly in the share of health in the government budget.

The red oval shows that countries with similar ability to pay varied in the proportion of government budget that was spent on health. This implies that other factors than economic performance of the country influenced the prioritization of health in the government spending.

Figure 9 shows change in government prioritization of health as a proportion of total government spending by country. It shows that over the last 16 years, decreased government spending on health as a proportion of public spending decreased in 21 (45%) countries.

Health Expenditure as a proportion of GDP

The World Health Organization and others have recommended that for countries to achieve a good level of universal coverage of essential services, countries should

allocate at least 5–6% of their GDP to health (8, 9). This recommendation is based on studies that show that countries that spent approximately 5–6% of GDP achieved universal access to health services than those that spent less (ibid). Figure 10 below shows the changes in average THE and PEH as a proportion of GDP in the region. The graph shows that total health expenditure as a proportion of GDP (THE% GDP) exceeded the spending target proposed by WHO and consistently grew from an average of 5.43% in 2000 to 6.36% in 2015%. Public domestic spending as a proportion of GDP (PEH % GDP) also grew over the last 16 years from an average of 1.87% in 2000 to 2.01% in 2015 but was consistently less than the target.

At a country level, public spending as a proportion of GDP varied greatly from 0.41% in Nigeria to 5.62% in Namibia in 2015. Namibia is the only country that consistently spent more than 5% of its GDP on health during the period under review.

The recent estimates for achieving UHC estimate that on average countries will have to spend on average 7.5 % of GDP in 2030 to achieve UHC. If this is the case, investment in health as a proportion of GDP will have to increase substantially to meet this target.

Per capita expenditure on health

There have been many attempts to define per capita health spending targets for countries in order to achieve health outcomes and goals. In 2003, the Commission on Macroeconomics and Health estimated that countries would have to spend a minimum of US\$ 34 per capita in order to guarantee essential health services for people in their countries and foster progress towards achieving the health-related MDGs [10]. In 2010, the High Level Taskforce on Innovative International Financing for Health Systems further estimated that for countries to accelerate progress towards attaining the MDGs, they would have to spend a minimum of US\$ 60 per capita on average with some requiring only US\$ 40 per capita and other needing far more at US\$ 80 per capita (11).

Figure 8. Share of government spending on health as a proportion of total government spending, compared to country GDP per capita, 2015

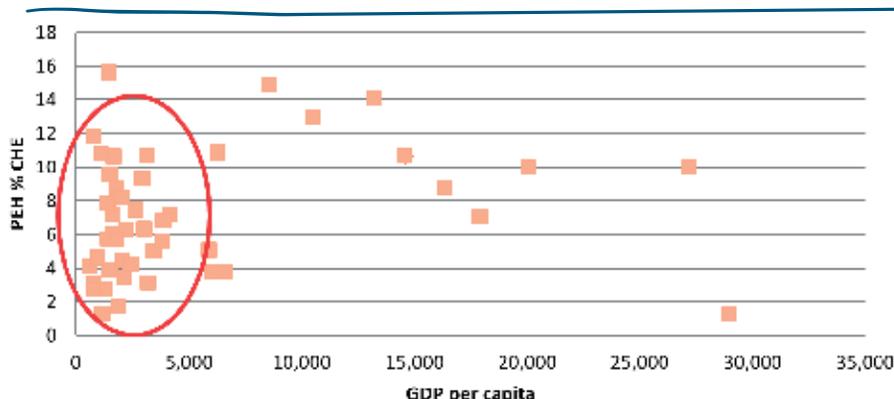


Figure 9. Change in prioritization of health in general government spending, 2000 and 2015

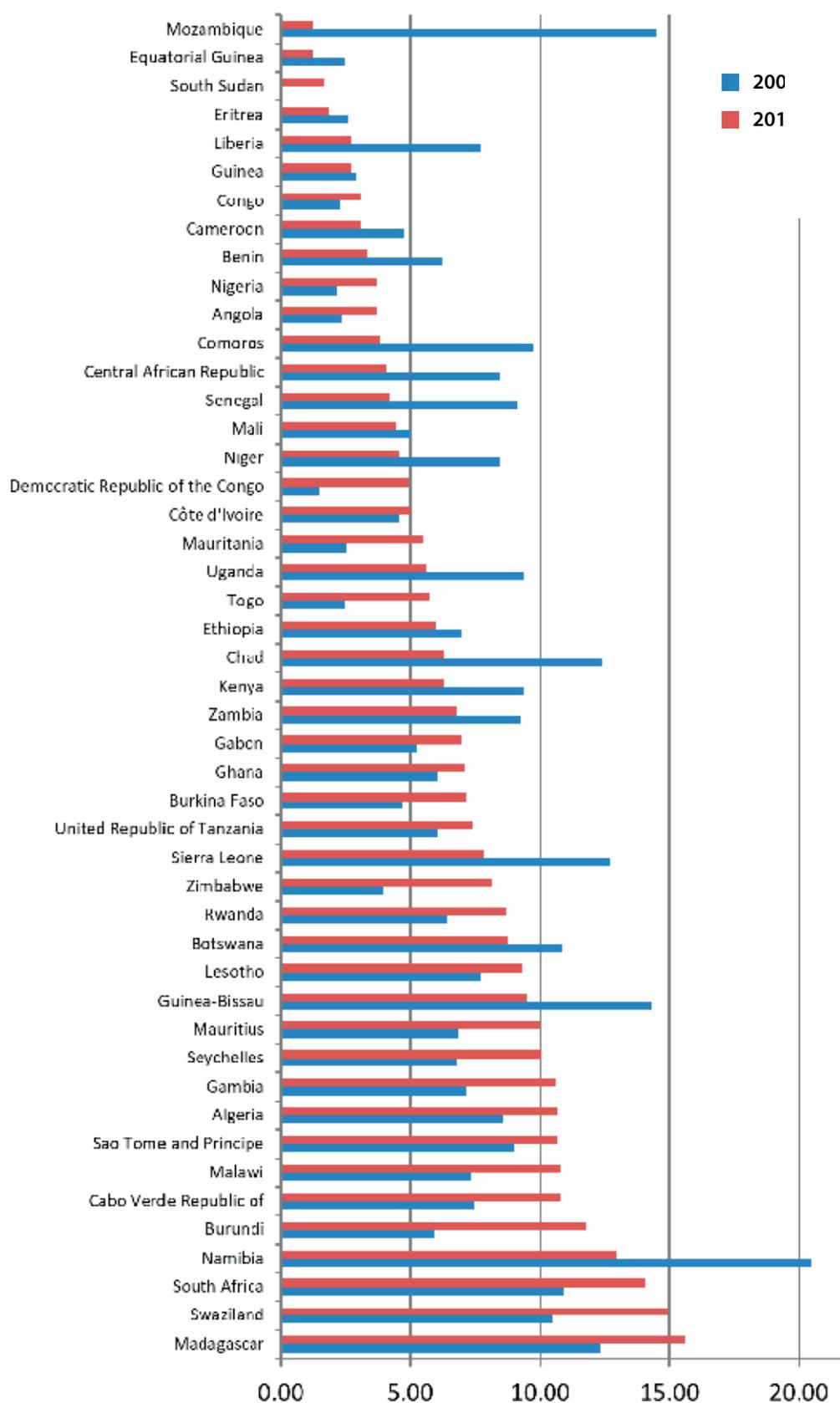
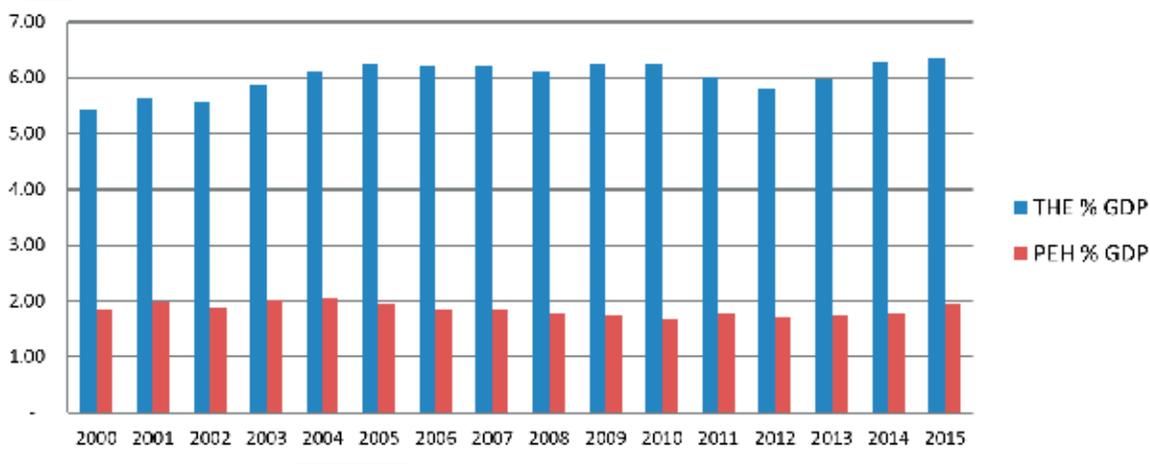


Figure 10. Changes in public domestic spending and total health expenditure as a proportion of GDP, 2000–2015



In 2012, the figure was revised upward to US\$ 86 per capita from government sources by 2015. Recent estimates of resource needs for achieving UHC estimate that on average countries will have to spend US\$ 271 per capita (2014 US\$) by 2030 (3). Figure 11 shows that only eight countries were able to meet the spending target of US\$ 86 per capita in 2015. Countries will need to increase spending on health if they are to close the gap between needed resources and the status quo.

Out of pocket spending on health

Out of pocket (OOP) payments (Figure 12) have been shown to be a highly regressive form of health expenditure given that poorer households pay more as a share of their income than richer ones. These forms of payment have also been shown to be related to financial hardship and impoverishment

Countries where OOP spending is less than 15-20% of THE tend to have low incidence of catastrophic health expenditure (8). In the region, only 12 countries had OOP expenditure less than 20% in 2015. For the majority of the countries, OOP payments account for a huge proportion of private spending. In countries like South Africa, Botswana, Namibia and Swaziland even though private health expenditure is high, Out of pocket spending is comparatively low due to the high expenditure through private health insurance.

Donor financing and sustainability: Case study of Global Alliance for Vaccine Initiative (GAVI) in Africa

The above trends in total current health spending show a substitutive effect in LICs and LMICs with external financing gradually replacing domestic financing for health. This has been largely due to financial support from global health initiatives such as GAVI, Global Fund for AIDS, TB and Malaria, bilateral partners like the United States of America, the United Kingdom of Great Britain and Northern Ireland, multilaterals partners and more. In most cases, support from these partners has taken the form of needed commodities (drugs and diagnostics) for vaccine preventable diseases and other infectious diseases like AIDS, TB and malaria, and for reproductive, maternal and child health.

Recent reports show that this support is declining in many countries due to various reasons, including macro-economic challenges in donor countries and more (12). The implication of this is that with time, external financing has become an unpredictable and unsustainable source of health financing. Country experiences in transitioning from external support for vaccine preventable diseases by GAVI provide insight into some of the issues that are important to consider as countries transition from donor aid to more domestic sources of financing. See Box 1 on page 11.



Figure 11. Per capita expenditure on health by countries in 2015

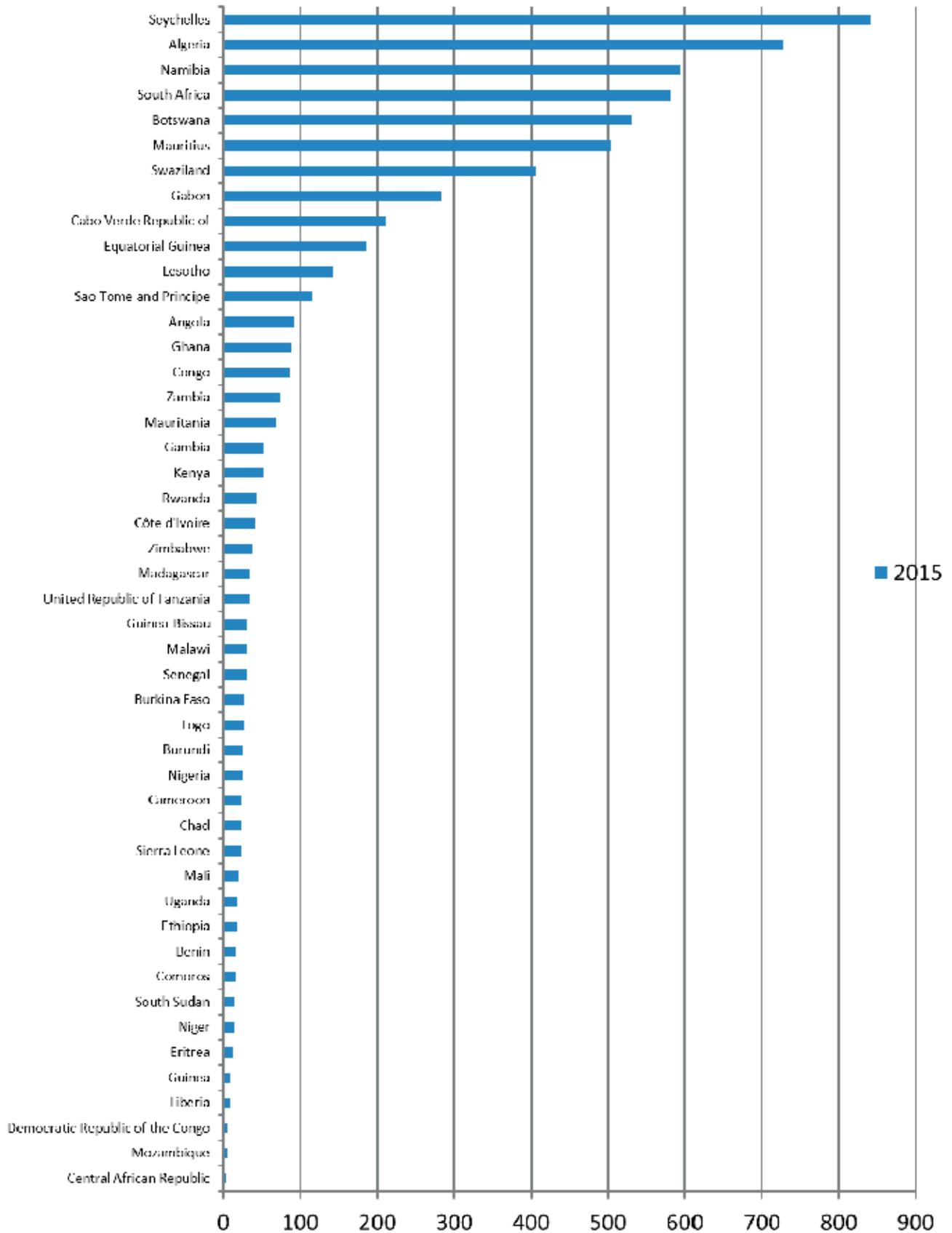
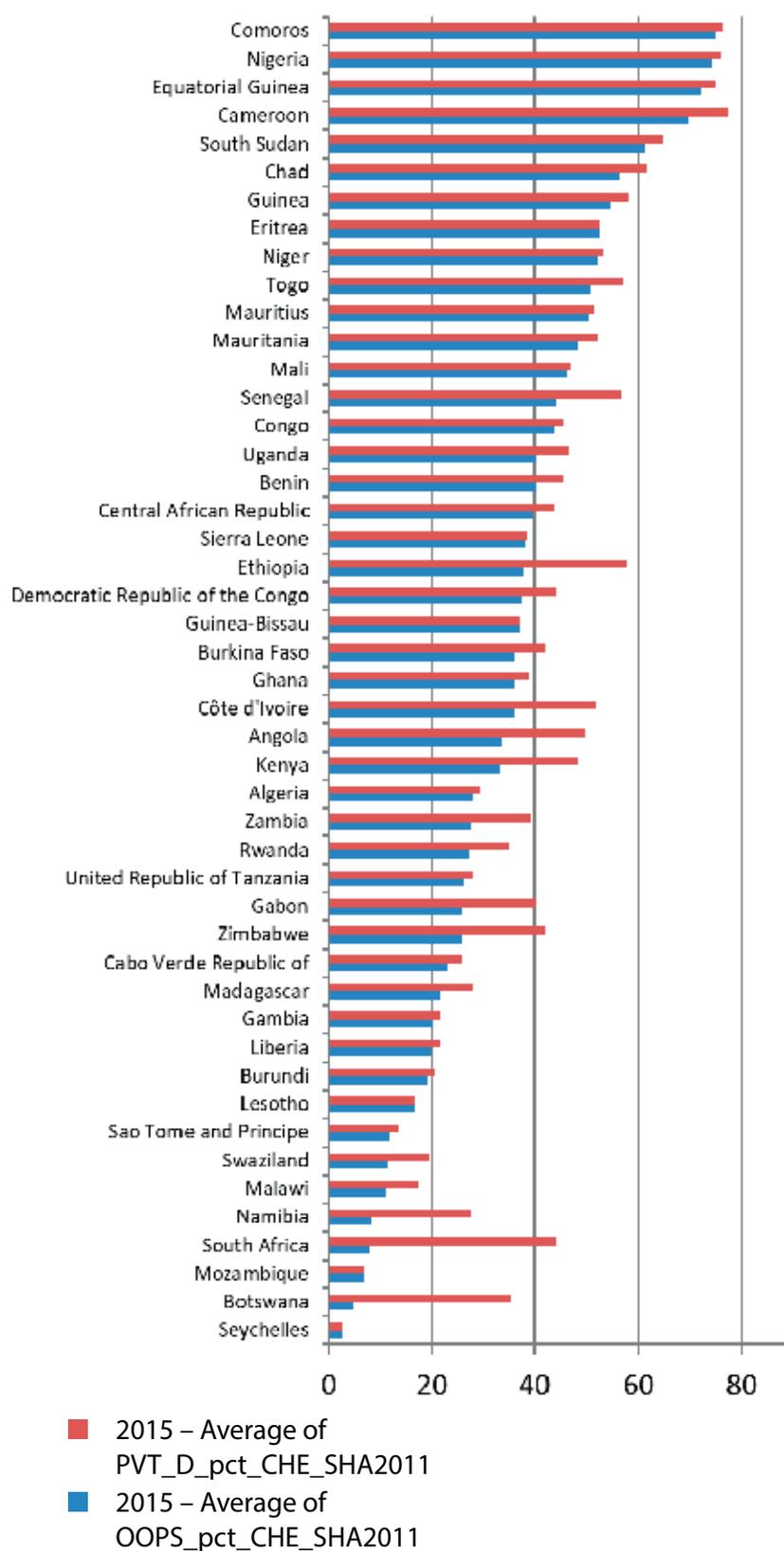


Figure 12. Out of pocket spending on health



Box 1. Transitioning from External financing in Africa, GAVI case study

In 2011, GAVI announced new thresholds for eligibility for GAVI support. Based on the new threshold, countries with a GNI per capita below US\$ 1580 are eligible for receiving support from GAVI for introducing new vaccines, support for health system strengthening for immunization service delivery (13, 14). In addition, GAVI stipulated that eligible countries whose GNI per capita exceeds the World Bank Low income Country threshold, would begin a preparatory transitioning process from GAVI support that included a 15% per annum increase in their co-financing requirement until they reach the eligibility threshold. In the year the eligibility threshold is attained, the country enters an accelerated phase of transition which occurs over a period of 5 years irrespective of the baseline level of co-financing that the country is paying. Following the 5 years of accelerated transition, the country should be 100% fully self-financing but can still benefit from vaccine prices available to GAVI eligible countries for another 5 years.

The table below shows some characteristics of the countries in the region that have begun to transition from GAVI support that highlight some of the issues that are critical for consideration for transitioning from GAVI support.

GAVI Eligibility Phase (2017)	Country	Number of antigens introduced	Birth cohort	DTP3 Coverage	System challenges identified in the joint appraisals
Accelerated	Angola (15, 16)	IPV, MR, Penta, Pneumo, Rota (5)	1,177,093	65%	<ul style="list-style-type: none"> Economic slowdown, challenges meeting, stock outs in BCG, Penta, Measles and Yellow Fever due to delays in meeting co-financing obligations Human resource challenges
	Congo (17, 18)	IPV MR, Penta, Pneumo, Rota, Tetra DTP-Hep B, Yellow Fever (7)	170,683	72%	<ul style="list-style-type: none"> Challenges securing increased investment for vaccines from Government Challenges in meeting co-financing obligations Economic crisis
	Ghana (19-21)	IPV, Measles, Men A, MR, Penta, Pneumo, Rota, Yellow Fever (8)	890,884	92%	<ul style="list-style-type: none"> Challenges meeting co-financing obligations (2014-2015) Crowding out of immunization financing due to wage bill Inadequate financing for immunization
	Nigeria (22, 23)	IPV, Men A, Penta, Pneumo, Penta, Yellow Fever	7,322,279	50%	<ul style="list-style-type: none"> Currently paying 9 million US\$ for vaccine support, needs to pay 364 million US\$ in 2022 to fully finance services Public finance management capacity challenges Inadequate data , In adequate Cold chain Capacity
Preparatory Transition	Sao Tome and Principe (24, 25)	Hep B Mono, HPV, IPV, Measles, MR, Penta, Pneumo, Rota Virus, Yellow Fever	6,448	98%	<ul style="list-style-type: none"> In 2015 government contributed 7% of total spending on vaccines Lack of human resources at the central level Heavy dependence on vaccine financing by partners (traditional vaccines still paid by UNICEF) Challenges in vaccine management.
	Zambia (26, 27)	IPV, Measles, MR, Penta, Pneumo, Rota, Tetra DTP-HIB	673,622	91%	<ul style="list-style-type: none"> Human Resource challenges Weaknesses in Vaccine management
	Cameroon (29, 30)	iPV, MR, Men A, MR 2nd dose, Penta, Pneumo, Rota, Tetra DTP-Hep B, Yellow Fever	864,666	87%	<ul style="list-style-type: none"> Challenges meeting co-financing obligations Weak public finance management systems Ineffective vaccine management systems Poor service delivery

GAVI Eligibility Phase (2017)	Country	Number of antigens introduced	Birth cohort	DTP3 Coverage	System challenges identified in the joint appraisals
	Côte d'Ivoire (31, 32)	IPV, Men A, MR 1st Dose, Penta, Pneumo, Rota, Tetra DTP-Hep B	867,243	85%	<ul style="list-style-type: none"> • Data quality challenges • Weak Cold chain management capacity
	Kenya (33, 34)	IPV, MR, Penta, Pneumo, Rota, Yellow Fever	890,884	90%	<ul style="list-style-type: none"> • Challenges in procurement of vaccines due to inadequate and delayed disbursement of funds for immunization • Challenges meeting co-financing obligations • Decline in government financing for immunization from 20% in 2012 to 9% in 2014. • Stock-outs of vaccines • Weak supply chain capacity
	Lesotho (35, 36)	IPV, MR, Penta, Pneumo, Rota	60,799	92%	N/A
	Mauritania, (37,38)	Hep B Mono, IPV, Men A, MR 1st dose, Penta, pneumo, Rota	137,663	72%	<ul style="list-style-type: none"> • Challenges in meeting co-financing obligations

The table shows that as 2017, four countries are in accelerated transition from GAVI support. Of these, Ghana has been halted from transitioning given that its income status has been re-classified. Six countries are in the preparatory phase of transitioning.

The experience of the countries in the accelerated transition phase in this and other regions shows that in many cases, transition plans and early dialogue with the government is critical for smoother transition. However, the evidence also suggests that countries face context-specific challenges. For instance, countries with similar GNI per capita are but differing sizes of the birth cohorts are have require different co-financing bills as they transition because the total vaccine cost will vary with the size of the cohort. This affects the ease with which countries with large birth cohorts like Nigeria mobilize greater expenditure for immunization. Many countries in the table are struggling to meet their co-financing obligations to GAVI. For some like Sao Tome and Principe, financing for traditional vaccines is still partner supported. Increasing government expenditure for immunization and health will be difficult.

In addition for countries which introduced a large number of vaccines during the time that GAVI was providing support, a large amount of revenue will be required to maintain the immunization vaccine coverage rates attained for each antigen. Thus countries like Sao Tome & Principe, Lesotho and Kenya are likely to require less funding compared to countries of comparable population size and economy that introduced more vaccines.

In countries experiencing rapid economic growth, as was the case with Ghana, the accelerated transition phase may be quite steep depending on the level of domestic co-financing the country had reached in the preparatory phase (a function of the time spent in this phase) and the total vaccine bill that the country will take at the end of the accelerated phase. In the case of Ghana, due to the economic crisis, the country has been reclassified and the transition has been halted. Nevertheless, the country has been struggling to meet its co-financing requirements, defaulting in 2014 and 2015. In addition, the current economic crisis and the health system reforms such as unification of the wage scale across government workers has resulted in declines in financing for immunization through the government budget and the implicit cover of immunization activities under the National Health Insurance Scheme which in turn has further strained the already struggling NHIS.

Lastly, for some countries like Nigeria, Cote D'Ivoire, Cameroon and Mauritania, immunization coverage is still low. This is likely to decrease as is the case in Angola and Congo due to stock-outs resulting from inadequate financing. Thus sustaining gains in immunization coverage will be a challenge. This is further constrained by other challenges in the health system including weak supply chain management, poor capacity for public finance management and lastly, human resource capacities.

Although the stance in the past has been for many countries to adopt immunization specific legal and financing instruments such as immunization laws and trust funds, the current policy by GAVI alliance partners is to promote dialogue and action for sustainable financing mechanisms that guarantee increased financing for health as a whole.

In response to the challenge of transitioning from external financing, there has been a push in LICs and LMICs for governments to develop disease-specific investment cases, legal and financing instruments such as immunization trust funds that ensure sustainable financing for disease programmes so as to ensure that the gains in health outcomes achieved through external financing are maintained. (39, 40). The reality is that these mechanisms have not yielded the financing needed and create the potential for further fragmentation of health financing mechanisms leading to reduction in cross-subsidization, inefficiency due to high administrative costs and fragmented service delivery mechanisms.

2.2. How are domestic resources for health in Africa managed

The way funds are pooled and managed has important implications for financial protection and equity. In general, the bigger the pool, the greater the capacity for cross-subsidization from the rich, healthier, younger to the poorer, sicker and the older who need services and may not afford care.

Too many financing pools fragment the financing landscape and therefore, limit the degree of cross-subsidization, introduces inefficiencies due to high administrative costs and duplications in funding. This section explores the financing arrangements for managing domestic resources for health.

How are domestic resources for health managed?

Using NHA data, Figure 13 below shows that for the greater part, the share of total health spending managed through public government financing arrangements was relatively high at approximately 40% per annum. This proportion did not change much over time. On the other hand, the share of compulsory prepaid spending was small increasing marginally by 5.7% from 2.47% in 2000 to 3.87% in 2015. The share of prepaid health expenditure provides a great opportunity for improving financial protection, cross-subsidization of risk and equity in access for those covered.

The predominant financing mechanism for health insurance varies by country. A few countries like Algeria, Cabo Verde, Gabon, Ghana and Rwanda had social health insurance expenditure greater than 5% as a proportion of total current expenditure.

Figure 13. Financing arrangements for public domestic spending on health in Africa, 2000–2015

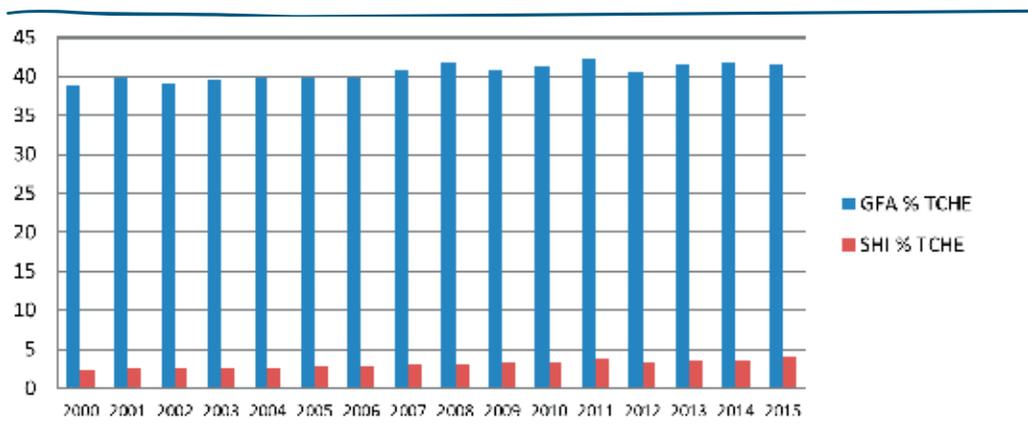
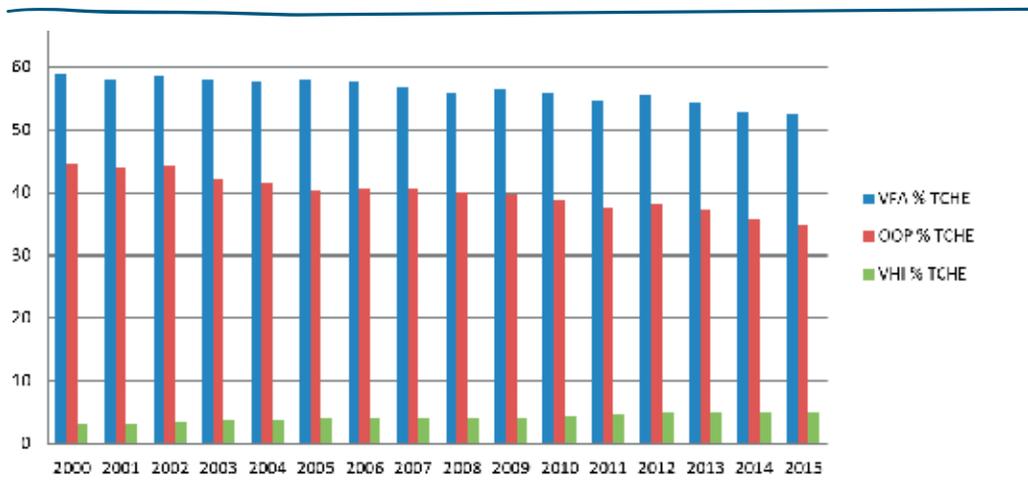


Figure 14. Financing arrangements for private domestic spending on health in Africa, 2000–2015



Managing private domestic expenditure

National Health accounts data was used to explore the financing arrangements for private health expenditure. As Figure 14 shows, the share of voluntary financing arrangements as a proportion of total health spending declined over the years by 8%. Even though this decline was driven more by the decline in financing managed by the households (about 10% reduction) the share of private expenditure managed by households is still high (35%).

On the other hand, the average share of health spending managed by voluntary health insurance (VHI) schemes rose from 3.28% in 2000 to 5.14% in 2015. VHI schemes are able to provide financial protection for those covered by the scheme but are limited by the fact that eligibility is tagged to ability to pay and therefore is not a useful instrument for extending care to the poor.

Countries like Botswana, Namibia, South Africa, Senegal and Zimbabwe had expenditure through voluntary health insurance greater than 10% of total current health spending with South Africa 46% of Total health spending managed through VHI.

Overall, voluntary health insurance is the more predominant form of health insurance (37 countries) compared to compulsory health insurance (22 countries) with 18 countries have both types of financing mechanisms.

Coverage by a prepayment scheme

Domestic health expenditure in the form of health insurance is growing in the Region. The figure below provides a snapshot of health insurance coverage from the available data. Data from recent Demographic Health Surveys (DHS) in the years 2005–2016 was used to determine the coverage by health insurance schemes. Out of 47 countries, data was available for 35 countries only (41-70). Data was unavailable for some countries like Cabo Verde and Botswana that have significant prepaid expenditure as a proportion of total current health expenditure as shown above.

The DHS reports provide disaggregated data on coverage of health insurance by age, sex, place of residence, socio-economic quintile and education status. Disaggregated data by sex was collected and the arithmetic mean of health insurance coverage for both sexes was calculated to determine the total coverage by health insurance.

Fig. 15 Coverage by prepayment scheme in Africa

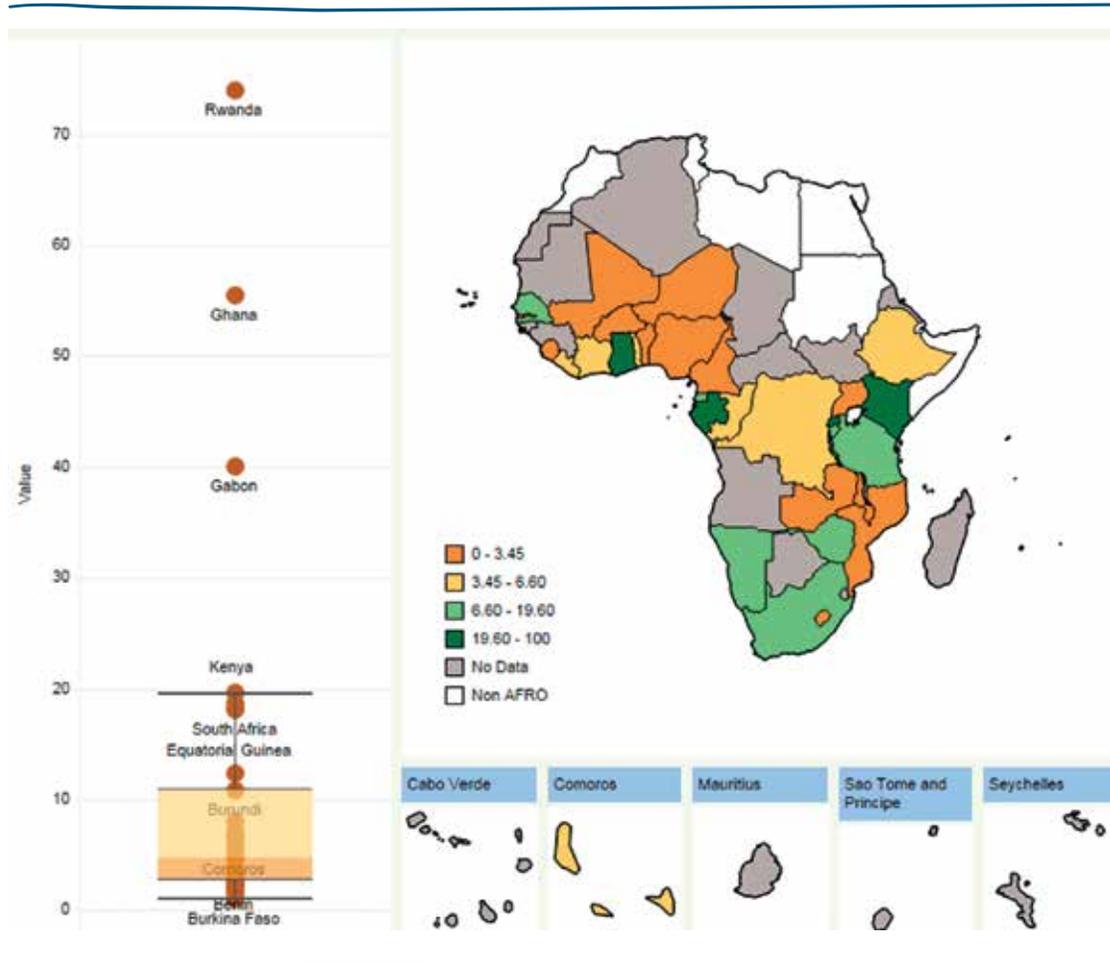


Figure 15 shows that only 4 countries in the region have attained population coverage by health insurance that is greater than 20%. These include Gabon, (40%, 2012), Ghana (55%, 2014), Kenya (20%, 2014) and Rwanda (74%, 2014/15). It is important to note that countries with high voluntary health insurance expenditure such as South Africa, Zimbabwe and Namibia had low overall population coverage. For instance, in Namibia, despite the fact that voluntary health insurance is 24% of current health expenditure in 2013, only 17.6% (DHS 2013) of the population benefits from this expenditure. Similarly in Zimbabwe only 7.0% (DHS 2010/11) of the population benefits from spending through voluntary health insurance which was 16% of current health spending in 2011.

2.3. What is domestic financing paying for?

This section describes the status of outputs and outcomes of domestic expenditure on UHC goals. Issues explored include efficiency in health spending, equity in spending with a special spotlight on decentralized contexts, equity in distribution of health benefits as well as the status of financial protection in the Region.

Except for financial protection, most of the evidence presented in this section pertains solely to domestic public spending.

Effectiveness in resource allocation

Allocation across the input mix

The figure below compares average government health spending for health system inputs as a proportion of total government health spending to planned costs for each input for the period 2010 to 2015 in a sample of countries. Expenditure estimates were obtained from Ministry of Health Survey data. The planned costs are based on the cost of delivering essential health services as estimated in the country health sector strategic plans that were implemented in the period

under review (71, 72). This is under the assumption that costs were estimated for the optimal input mix needed to guarantee delivery and uptake of the package of services.

For the 3 countries with available data, government health expenditure by health system input differs from planned costs per input. All 3 countries spent more on Human Resources (HR) as a proportion of total spending than was planned. HR expenditure as a proportion of total government spending was four times planned costs in Uganda, two-fold in Kenya and lastly 1.5 times in Côte d'Ivoire. Conversely, actual expenditure on health products was consistently lower than planned costs in all the countries.

The difference between planned costs and actual expenditure could be explained by two things. The discrepancies between allocation and spending could stem from misalignment between the budgeting and the planning processes resulting in some items receiving more funding than others. It is also likely due to fungibility of government spending resulting from the fact that other sources are paying for some inputs such as commodities. Donors like GAVI, GFATM, and PEPFAR provide financial support for health commodities like drugs and diagnostics and therefore the government re-directs its limited spending to other inputs such as the wage bill and infrastructure. However, this is both inefficient as it does not guarantee a priori, the right mix of inputs needed to supply the services. It is also unsustainable as the case study on transition from donor support in section 2.1 shows.

Allocation across health services

Figure 16 below shows public expenditure on health by service delivery level based on evidence from National Health Accounts reports for each country. In all countries, there are huge differences in the proportion of government financing spent by level of service delivery. In Namibia (73), Mali

Fig. 16. Comparison of public investment on health system inputs with needs

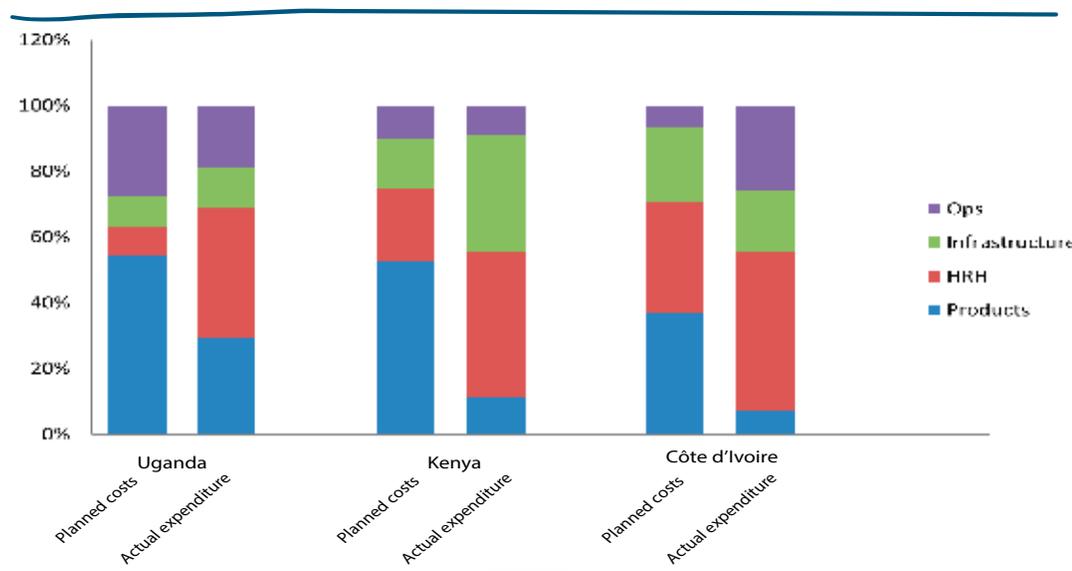
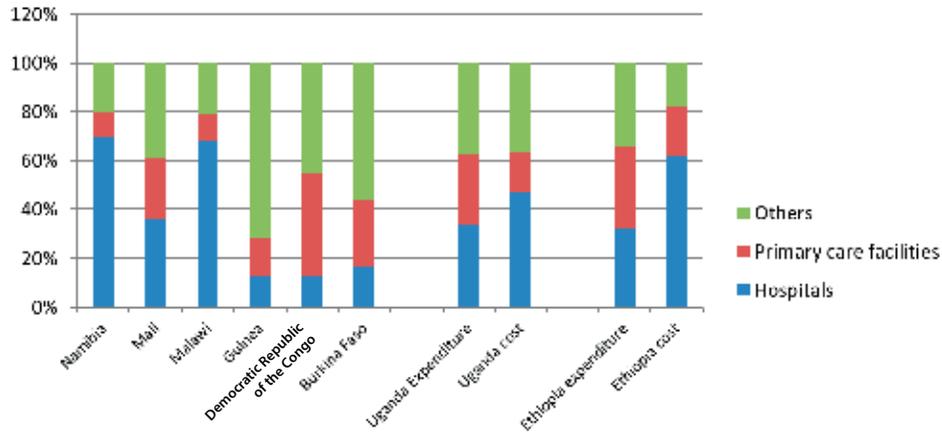


Figure 17. Health expenditure patterns by level of care in a sample of African countries



(74), Malawi (75) and Uganda (76), health expenditure at the primary level is crowded out by health spending on tertiary care level facilities and other costs (including administration, information systems etc.). On the other hand, in the Democratic Republic of the Congo (77), Burkina Faso (78), Guinea (79) and Ethiopia (80), spending at the tertiary level is less than at the primary care level.

However, comparing expenditure to what is need for optimal service delivery and uptake (as evidenced by planned costs) in countries where the data is available shows that at the point of expenditure, countries allocated and spent more on tertiary level care than on primary care despite having prioritized the latter (71, 81).

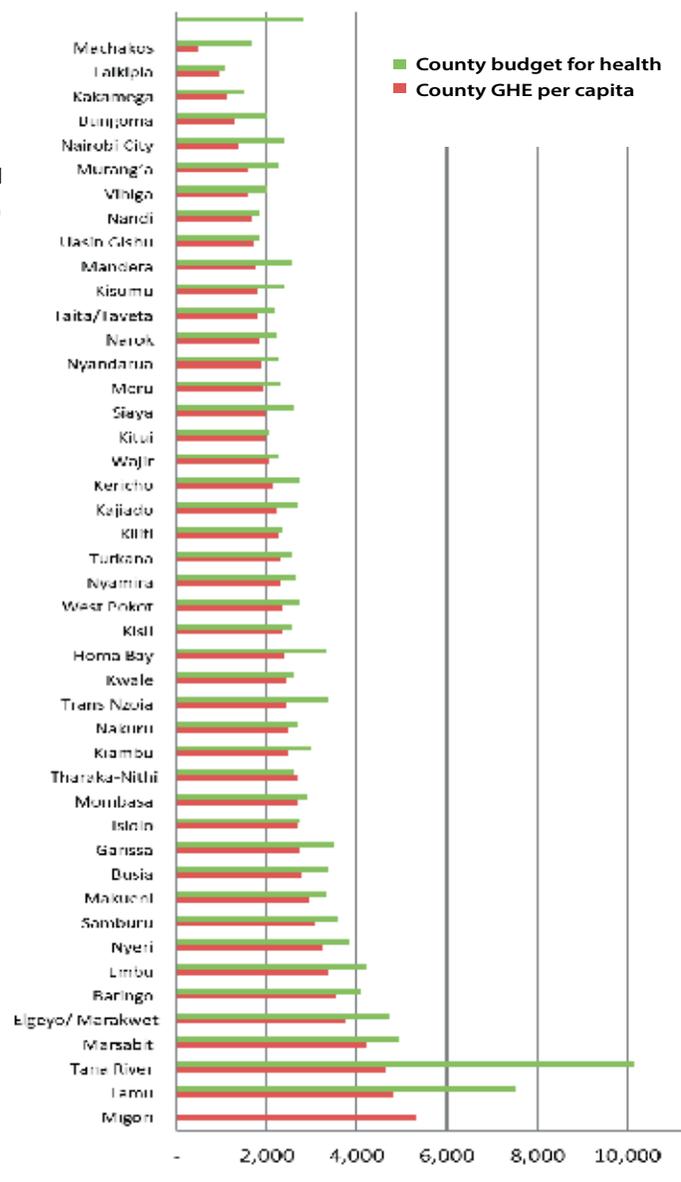
2.4. What is the distributional impact of domestic spending

Geographical equity

Active steps towards ensuring no one is left behind are critical to achieving universal health coverage. This implies targeting health spending in a way that ensures equitable access to all irrespective of who they are; ability to pay or where they reside. Thus, ensuring geographic equity in resource allocation is critical for the attainment of UHC goals. Now where is the issue of geographical equity and effectiveness pertinent than in decentralized settings. Evidence from Kenya sheds more light on issues pertinent to differences in domestic resource mobilization and expenditure for health at the sub-national level. Kenya recently undertook massive reform to devolve its government implying devolution of fiscal, management and service delivery functions to the county level of government.

A review of government expenditure reports shows that in 2016/17 government health expenditure per capita (both central and county government) varied markedly by county with Machakos spending almost 470 Ksh per capita and Migori spending almost 5350 kshs per capita (see Figure 17) (82).

Figure 17. County government budget and expenditure on health per capita



The recent mid term review of the Kenya health sector strategic plan shows variations in health outputs. The review found that in 2015, there was a 50% difference between institutional delivery rates between the top 1 performing counties and the lowest 10 performing counties. In addition, outpatient utilization rates varied from 1.1 visits per capita in the lowest performing county to 4.5 visits per capita in the highest performing county with a national average of 2.2 visits per capita. This signals that there are inequalities in public spending at the county level which may also be resulting in differences in outputs by county.

Further still, the figures show differences in budget execution rates showing that differences in health expenditure by county are not only a function of differences in budget outlays but also due to a difference in absorption capacity at the county level. It is not enough to mobilize the funds to ensure equitable access. The efficiency with which the budget is executed impacts on actual service delivery. Unspent funds at sub-national level compromise geographic equity in service access.

Socio-economic equity in public spending

Public spending is crucial for addressing inequities in access and utilization stemming largely from financial and; to a degree, physical barriers in access. For public spending to be equitable, it must target those most in need of the subsidy, in other words the poor.)

A recent review of the distributional impact of public spending for health in LICs shows that health care in many Sub-Saharan African countries is largely pro-rich (83). The review of studies conducted in Côte d'Ivoire, Ghana, Madagascar, Malawi, Nigeria, South Africa and the United Republic of Tanzania shows that in many cases, while primary care services are largely pro-poor, hospital care (in-patient and out-patient) is largely pro-rich meaning that the poor are unlikely to access secondary or tertiary care should they need it compared to wealthier socio-economic groups. Other studies in the region support the finding (84-86).

Box 2. Ghana health insurance BIA improvements.

Ghana reformed health financing in 2003 following legislation for a National Health Insurance scheme (NHIS) that legislated mandatory insurance for formal sector workers using Social Security and National Insurance Trust (SSNIT contributions (2.5%) and 2.5% (Value Added Tax) VAT contribution for indigents as well as contributions from informal sector together with indigents (87). This was aimed at reducing impoverishing user fees associated with the cash & carry system. Since then 40% of the population has enrolled in the NHIS.

A recent study was conducted to determine whether subsidies by the government including the NHIS resulted in equitable access and utilization of services (88). The study found that despite the reforms, the richest quintile accounted for 23% utilization of health services despite having 16% of the share of need whilst the poorest quintile received 15% of the subsidy and yet it needed 23% of the subsidy.

This shows that while reforms like health insurance have the potential to improve access to and utilization of services there is need for attention to better targeting these services to ensure that those who need them most actually benefit from the reform. This could be through complementary measures that address physical barriers to access ensuring equitable distribution of health service inputs such as health workers and facilities.

Progressivity of domestic spending

Health financing mechanisms must be equitable in the sense that payments or contributions for health must be according to ability to pay with the rich spending more as a proportion of their income and vice versa for the poor. To achieve UHC, countries need to adopt more progressive forms of health financing.

A recent review showed that at a systemic level, most sources of public financing are progressive in nature (83). Studies conducted in countries like Ghana, Tanzania, Uganda, South Africa show that general tax revenue including indirect taxes like VAT are progressive mechanisms for financing health services. In contrast, out of pocket payments were shown to

be regressive meaning that those with lower ability to pay, spend more on health as a share of their income than those with higher ability to pay.

At a scheme level, in countries like Ghana, premium payments for the informal sector to the NHIS were shown to be regressive (ibid). These payments are flat payments that are paid irrespective of ability to pay or income level. Thus, even for pre-payment schemes, attention to the mode of financing or contribution is critical to ensure fair financing and financial protection.

There is therefore a need for countries to pay attention to the nature of financing sources that are being used to finance efforts to achieving UHC so as to ensure that they are equitable and sustainable.

2.5. Financial protection in Africa

Reducing catastrophic spending on health and impoverishment due to utilization of health services is one of the goals of UHC. There have been attempts to generate evidence on the status of financial protection for countries in the region. The World Bank, has to-date conducted the most comprehensive assessment of financial protection for countries in the region using evidence based on the World Health Survey 2003 (89).

The analysis shows that for most countries in the region, catastrophic expenditure was high at both 10% and 25% thresholds irrespective of the approach used (ibid). Out of the 19 countries with available data, only one country had levels of catastrophic spending less than 5% at all thresholds. In some cases, like the Republic of the Congo and Comoros, the levels of catastrophic spending were as high as 41.4% and 42.3% using the budget share approach. Considering this most of the estimates predate a lot of

health financing reforms that countries like Burkina Faso, Gabon, Ghana, Kenya, Rwanda, Sierra Leone, , etc. have taken to improve financial protection through health insurance or abolition of user fees and therefore does not capture the impact of these reforms. It nevertheless provides a useful baseline that can be used by countries to monitor the impact of reforms implemented. More recent studies exist for countries that show much lower but nevertheless unacceptable estimates of catastrophic spending and impoverishment due to utilization of health services. The table below is a summary of studies assessing financial protection in some countries in the region. This is by no means exhaustive. In brief, levels of catastrophic spending and impoverishment have reduced; however, they are still unacceptably high. However, the paucity of up-to-date, country-specific disaggregated evidence on the status of financial protection highlights a gap that needs to be addressed for effective monitoring of progress on reform for improving financial protection and UHC.

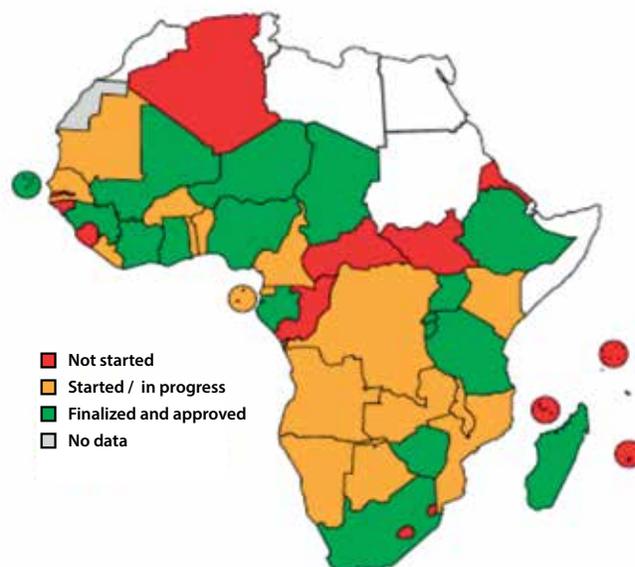
Table 3. Summary of evidence on financial protection from some countries in Africa

Country	Catastrophic expenditure			Impoverishment
	10%	25%	40%	
Senegal	NA	NA	22%	10%
Uganda(90)	NA	NA	2.92% (3.11% poor, 2.82% non-poor)	NA
Ghana (91)	2.6%	0.91%	NA	NA
Kenya (92)			4.52	1.17%
Rwanda(93)	32.2%	17.3%	5.8%	
South Africa	NA	NA	Uninsured: 12% Insured: 7%	4%
United Republic of Tanzania (94)	NA	NA	18%	NA

2.6 Progress on action for increased domestic financing for UHC

Countries have made laudable efforts in ensuring that there are appropriate legal and policy frameworks and plans to ensure sustainable financing for health. As of 2017, 18 countries had developed a health financing strategy or policy while a further 12 were in the process of developing one. In countries where a health financing policy or strategy exists, there are a few that have made significant headway in implementing health financing reforms. For many implementation challenges exist including inadequate institutional capacity, lack of shared understanding of UHC and health financing and what it means for the country amongst relevant stakeholders; poor engagement of other sectors critical for implementation of reform *inter alia*. There is a need to address the gaps in implementation capacity identified above.

Figure 18. Status of policy and legal frameworks for health financing in Africa, 2017





2.7. Summary of findings

Box 4 below provides a summary of the salient issues arising from the review of the status of domestic spending in the Region.

Box 4. Summary of findings from the review

- Recent trends in the region show a slow-down in economic growth driven by a few countries in the region does not augur well for increasing fiscal space for health in the region. Given the projected resource needs for achieving UHC and the SDGs, countries will have to develop creative solutions to ensure sustainable health financing and the other investment priorities required for achieving the SDGs.
- Out of pocket spending in the WHO region of Africa is still unacceptably high despite improvements in the economy. There is need for corrective action to reduce the share of OOP expenditure as a proportion of total health expenditure.
- Public domestic spending on health as a proportion of total health expenditure has declined overtime and falls short of political commitments such as the Abuja Declaration and normative guidance despite growth in the economy in the region. While HIC and UMIC are more dependent on domestic spending, the LICs and to a less extent the LMICs are highly dependent on external financing. Interestingly, countries in the LIC and LMIC category have varied in the degree of public investment in health and as a proportion of their total public spending despite having similar income implying that it is possible to improve public investment and prioritization of health in spite of economic constraints,
- External financing drove the increase in health spending in the region and for the most part replaced domestic spending in particular out of pocket spending. . Evidence from countries that are graduating from external support indicates that the road to transition is not easy fraught with challenges in maintaining service coverage resulting from inability to raise the needed revenue, meet co-financing requirements and broader health system challenges such as weak supply chain management. There is urgent need for building sustainability at a systemic rather than programmatic level centred on increasing domestic mobilization of resources.
- There is scope for improving allocation of mobilized resources across inputs and services in some countries in alignment with planned priorities and to ensure improved equity in utilization of health services so that no one is left behind.. Despite improvements in financial protection, levels of catastrophic expenditure and impoverishment remain unacceptably high. In addition, the paucity of up-to-date evidence undermines regional and country efforts to monitor progress to UHC.



Chapter 3. Key Policy messages for countries in the Region

The review in the previous chapter highlighted a number of key issues that should be addressed in order to ensure sustainable financing for UHC in the region. This chapter provides a few considerations for addressing the issues highlighted.

Reducing out of pocket spending in Africa

With 13 years left on the countdown to 2030, there is urgent need for countries in Africa to address the unacceptably high levels of out-of-pocket (OOP) spending. Countries will need to take active steps to increase public expenditure on health whilst reducing reliance on external financing and OOP.

The evidence has shown that countries that extended service coverage and reduced OOP did so by increasing public expenditure on health. Such countries used compulsory financing mechanisms like increased government tax revenue, payroll taxes to extend care to all is what has worked in countries that have made significant progress towards achieving UHC. These include France, Japan and Thailand. Closer to home, countries like Gabon (95, 96), Ghana (87) and Rwanda (93, 97-99) have taken bold steps in extending care for the formal and informal sector as well as the very poor. Such steps involved complementing general budget expenditure on health with the establishment of health insurance schemes using tax revenue such as Value Added Tax (VAT), in the case of Ghana, and transactional taxes and mobile phone taxes, in the case of Gabon, to ensure extended coverage through health insurance. This additional revenue from the new taxes was used to provide a subsidy by the government to provide cover for the poor and the informal sector. Thus for most countries depending on the starting point, health financing reform will require both compulsory mechanisms and subsidies (7,8).

Lastly, given the inter-linkages between health and other priorities and the constrained public purse, there is scope for consideration of a multi-sectoral approach to health financing that puts development at the centre rather than one that isolates health from other priorities.

Engendering more health for the money

The fiscal realities in the region, the wide scope of the SDGs and the competing priorities needed to achieve and the fact that resources are finite means that countries it is not enough for countries to raise more money, concomitant attention to efficiency and

value for money are necessary to ensure that maximum results are achieved.

Thus, every intervention that fosters efficiency is critical. The WHO report 2010 (8) identifies some critical interventions for reducing waste and inefficiency including rational prescribing, reduction in counterfeit drugs and more. In settings like Africa where vertical funding and delivery of services is rife, there is need to reduce inefficiencies in service delivery. Thus it is critical for countries to identify areas of inefficiency in service delivery and address them. This is critical for achieving integrated service delivery. Diagnostic tools that identify these inefficiencies and potential solutions are available.

In addition as the example from Kenya shows challenges in utilization of mobilized funds undermine the potential for improving health service delivery, equity and health outcomes. It is critical therefore, that the health sector engages effectively in the Public Finance Management Cycle to ensure that all public revenue for health is fully utilized, allocated in a manner that ensures that those cost-effective and effective services are implemented and that the people that need the services the most are able to access them.

Managing transition from external financing

The case study from countries transitioning from GAVI support shows that on the whole, there is need for pro-active measures for governments to own spending on health. Key to this is to implementing sustainable domestic resource mobilization reforms as outlined above. However there is also need for evidence-based decision-making and dialogue to inform adoption of new technologies. Such evidence would include rigorous health technology assessment taking into account the cost-effectiveness and need of the intervention, affordability and budget impact of the intervention as well as proposals for government sources of financing for the technologies once support ends. This will necessarily entail building adequate capacity for these assessments in the region.

In addition, there is need for countries to consider early on integrated serviced delivery models that allow for health system strengthening e.g. strengthening the supply chain management system, strengthening the public finance management system etc. and fosters cross program efficiencies. Identifying these areas of inefficiency or duplication are critical for engendering action early on for integration.

Fostering action for increased domestic resource spending

As section 2.6 showed, there is no dearth of evidence-based policies and strategies on sustainable financing. The bottleneck is in capacity to implement the reform. There is need to build shared understanding and capacity at country level to ensure implementation of evidence-based health financing reform. This should include all eligible stakeholders at all levels of government focusing on the systemic perspective rather than that of a financing instrument. It should also embed understanding on health financing reform in broader health system and socio-economic context so as to enable countries implement feasible solutions for addressing the high OOP payments.

Targeting domestic spending on health to what matters

In order to harness the potential that domestic resources, particularly compulsory forms (general tax and compulsory insurance) for health have to offer, there is need to ensure that domestic spending for health is targeted in a manner that benefits those that need it the most and purchases the identified evidence-based options for maximum impact.

Strategic purchasing instruments like evidence-based resource allocation formulae that take into account differences in need measured by population and health status; that adjust for differences in the ease with which services are provided e.g. connection to the electricity grid, hard-to-reach areas and more provide opportunities for addressing sub-national geographic imbalances.

In addition, the way health providers are paid provides some scope for ensuring cost containment, increasing efficiency and improving equity. In many countries in the region, the traditional approach to paying providers has been through input based mechanisms e.g. paying salaries, paying for equipment etc (7, 100). These mechanisms do not foster improved performance in terms of quality of care and desired outputs. Most countries in the region have moved away from this form of purchasing to more output based mechanisms where the emphasis is on performance or results. These results based financing reforms have been implemented in many countries including Rwanda, Burundi, Democratic Republic of Congo and more with promising results in terms of increasing service coverage, of needed services and quality.

Mixed provider payment mechanisms such as capitation at lower levels of service delivery can also be used to foster greater health spending on more cost-effective services such as prevention and primary care. Output based financing reforms can also be used to incentivize prioritization of prevention services and ensure greater access to those that need them. These may include use of bonuses for health workers who work in hard to reach areas or areas with low service coverage so as to improve service coverage in these areas.

Demand-side financing instruments can be used to address barriers in access and utilization is critical to ensure greater access by the poor. Demand-side interventions like vouchers have demonstrable efficacy in addressing these barriers.

From a multisectoral approach to financing for health, it may also require health sector advocacy for construction of a road to facilitate access to a health facility or electrification of a village to ensure electrification for health facilities and more.

Institutionalization of monitoring

Data and evidence are crucial in the quest to “leave no one behind”. As the review above shows there is a dearth of reliable evidence on where countries lie with regards to progress towards UHC. In order to ensure that available data and evidence for monitoring the impact of health financing reform, there is need for countries to invest in strong information systems, routinization of collection of good quality disaggregated data such as health expenditure data, household or living standards surveys that can be used to generate evidence for monitoring progress towards UHC.

Conclusions

Countries have committed to achieving UHC and the SDGs by 2030. Inherent in these is the need to address all forms of injustice with an explicit focus on “leaving no one behind”. This will require political will to do so and more focus on government-led planning and financing for health.

Government led financing for health will require greater outlays for health from public revenue as well spear heading reforms like health insurance and strategic purchasing mechanisms that put those that are usually left behind are put firmly in the centre of health reform.

References

1. United Nations Conference on Trade and Development (UNCTAD). World Investment Report 2014,. 2014.
2. Schmidt-Traub G. Investment needs to achieve the Sustainable Development Goals: understanding the billions and trillions: Sustainable Development Solutions Network; 2016.
3. Stenberg K, Hanssen O, Edejer TT-T, Bertram M, Brindley C, Meshreky A, et al. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. *The Lancet Global Health*. 2017.
4. United Nations. Addis Ababa Action Agenda of the Third International Conference on Financing for Development. The Third International Conference on Financing for Development; Addis Ababa 2015.
5. World Health Organization. The Abuja declaration: ten years on. Geneva: World health organization. 2011:53.
6. World Bank Group. GDP growth (annual %) Washington DC, 2017 [
7. Joseph Kutzin, Winnie Yip, Cheryl Cashin. Alternative Financing Strategies for Universal Health Coverage. . World Scientific Handbook of Global Health Economics and Public Policy,. 2015:267-309.
8. The World Health Report: Health Systems Financing—The Path to Universal Coverage. Geneva: WHO; 2010.
9. McIntyre D, Meheus F. Fiscal space for domestic funding of health and other social services: Chatham House; 2014.
10. World Health Organization. Investing in health for economic development. Report of the Commission on Macroeconomics and Health Geneva: World Health Organization. 2001.
11. Robert Fryatt, Anne Mills. Taskforce on Innovative International Financing for Health Systems: showing the way forward. *Bulletin of the World Health Organization*. 2010;88(6):476-7.
12. Institute for Health Metrics and Evaluation (IHME). Financing Global Health 2016: Development Assistance, Public and Private Health Spending for the Pursuit of Universal Health Coverage. Washington, Seattle: IHME; 2017.
13. Kallenberg J, Mok W, Newman R, Nguyen A, Ryckman T, Saxenian H, et al. Gavi's Transition policy: moving from development assistance to domestic financing of immunization Programs. *Health Affairs*. 2016;35(2):250-8.
14. Saxenian H, Hecht R, Kaddar M, Schmitt S, Ryckman T, Cornejo S. Overcoming challenges to sustainable immunization financing: early experiences from GAVI graduating countries. *Health Policy and planning*. 2014;30(2):197-205.
15. Angola TGo. Annual Progress report In: HHealth Mo, editor. Angola 2014.
16. Global Vaccine Alliance Initiative (GAVI). Country fact-sheet: Angola 2017 [Available from: <http://www.gavi.org/country/fact-sheets/angola.pdf>].
17. (GAVI) GVAI. Country Fact sheet: Congo Republic 2017 [Available from: <http://www.gavi.org/country/fact-sheets/congo.pdf>].
18. (Brazzaville) TGoRoC. Annual Progress report 2014. In: Health Mo, editor.: Global Alliance of Vaccines Initiative; 2014.
19. Global Vaccine Alliance Initiative (GAVI). Country Fact Sheet: Ghana 2017 [Available from: <http://www.gavi.org/country/fact-sheets/ghana.pdf>].
20. Ghana TGo. Annual Progress Report 2014. In: Health Mo, editor.: Global Alliance of Vaccines Initiative; 2014.
21. Ghana TGo. Joint Appraisal report 2016. In: Ghana MoH-, editor.: Global Alliance for Vaccines Initiative; 2016.
22. Global Alliance for Vaccines Initiative (GAVI). Country Factsheet: Nigeria: Global Alliance for Vaccines Initiative; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/nigeria.pdf>].
23. Nigeria TGo. Joint Appraisal Report 2016. In: Nigeria MoH, editor.: Global Alliance for Vaccines Initiative; 2016.

24. (GAVI) GAFVI. Country Fact Sheet: Sao Tome & Principe: Global Alliance for Vaccines Initiative; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/sao-tome-and-principe.pdf>].
25. Principe TGoStA. Joint Appraisal Report 2016 2016 [Available from: <http://www.gavi.org/country/sao-tome-and-principe/documents/jas/rapport-de-l-%C3%A9valuation-conjointe-sao-tome-et-principe-2016/>].
26. (GAVI) GAFVI. Country Fact Sheet: Zambia: Global Alliance for Vaccines Initiative;; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/zambia.pdf>].
27. Global Alliance for Vaccines Initiative (GAVI). Country Fact Sheet: Zambia: Global Alliance for Vaccines Initiative; 2017.
28. Zambia TGo. Joint Appraisal Report 2016: Global Alliance for Vaccines Initiative; 2016 [Available from: <http://www.gavi.org/country/zambia/documents/jas/joint-appraisal-zambia-2016/>].
29. Global Alliance for Vaccines Initiative (GAVI). Country Factsheet: Cameroon: Global Alliance for Vaccine Initiative; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/cameroon.pdf>].
30. Canerooj TGo. Joint Appraisal report 2016. In: Cameroon MoH, editor.: Global Alliance for Vaccines Initiative (GAVI);, 2016.
31. Global Alliance for Vaccines Initiative (GAVI). Country Fact Sheet: Cote D'Ivoire: Global Alliance for Vaccines Initiatiev; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/cote-divoire.pdf>].
32. D'Ivoire TGoC. Joint Appraisal Report 2016. In: D'Ivoire MoHC, editor.: Global Alliance for Vaccines Initiative (GAVI); 2016.
33. Global Alliance for Vaccines Initiative (GAVI). Country Factsheet: Kenya: Global Alliance for Vaccines Initiative; 2017 [Available from: <http://www.gavi.org/country/fact-sheets/kenya.pdf>].
34. Kenya TGo. Joint Appraisal Report 2016. In: Kenya MoH, editor.: Global Alliance for Vaccines Initiative; 2016.
35. Lesotho TKo. Joint Appraisal Report 2016. In: Health Mo, editor.: Global Alliance for Vaccines Inititative; 2016.
36. Global Alliance for Vaccines Initiative (GAVI). Country Factsheet: Lesotho: Global Alliance for Vaccines Initiative (GAVI);, 2017 [Available from: <http://www.gavi.org/country/fact-sheets/lesotho.pdf>].
37. Country Factsheet: Mauritania [Internet]. Global Alliance for Vaccines Initiative. 2017 [cited 07/12/2017]. (Available from: <http://www.gavi.org/country/fact-sheets/mauritania.pdf>).
38. Mauritania TGo. Joint Appraisal Report 2016. In: Mauritania MoH-, editor.: Global Alliance for Vaccines Initiative; 2016.
39. McQuestion M, Gnawali D, Kamara C, Kizza D, Mambu-Ma-Disu H, Mbwangue J, et al. Creating sustainable financing and support for immunization programs in fifteen developing countries. *Health Affairs*. 2011;30(6):1134-40.
40. Saxenian H, Cornejo S, Thorien K, Hecht R, Schwalbe N. An analysis of how the GAVI alliance and low-and middle-income countries can share costs of new vaccines. *Health affairs*. 2011;30(6):1122-33.
41. Ghana Statistical Service (GSS), Ghana Health Service (GHS), International. I. Ghana Demographic and Health Survey 2014. Rockville, Maryland, USA: GSS, GHS, and ICF International; 2015.
42. Central Statistical Office/Swaziland, Macro International. Swaziland Demographic and Health Survey 2006-07. Mbabane, Swaziland: Central Statistical Office/ Swaziland and Macro International; 2008.
43. Central Statistical Office/Zambia, Ministry of Health/ Zambia, University of Zambia Teaching Hospital Virology Laboratory, University of Zambia Department of Population Studies, Tropical Diseases Research Centre/Zambia, ICF International. Zambia Demographic and Health Survey 2013-14. Rockville, Maryland, USA: Central Statistical Office/Zambia, Ministry of Health/ Zambia, and ICF International; 2015.
44. Centre National de la Statistique et des Études Économiques - CNSEE/Congo, ICF International. Congo Enquête Démographique et de Santé 2011-2012. Calverton, Maryland, USA: CNSEE and ICF International; 2012.
45. Direction Générale de la Statistique - DGS/Gabon, ICF International. Gabon Enquête Démographique et de Santé 2012. Calverton, Maryland, USA: Direction Générale de la Statistique - DGS/Gabon and ICF International; 2013.
46. Direction Générale de la Statistique et de la Prospective - DGSP/Comores, ICF International. Comores Enquête Démographique et de Santé et à Indicateurs Multiples (EDSC-MICS II) 2012. Rockville, Maryland, USA: DGSP and ICF International; 2014.
47. Health Mo, Social Services – MoHSS/Namibia, ICF International. Namibia Demographic and Health Survey 2013. Windhoek, Namibia: MoHSS/Namibia and ICF International; 2014.
48. Institut de Statistiques et d'Études Économiques du Burundi – ISTEERU, Ministère de la Santé Publique et de la Lutte contre le Sida -MSPLS - Burundi, ICF International. Burundi Enquête Démographique et de Santé 2010. Bujumbura, Burundi: ISTEERU, MSPLS, and ICF International; 2012.
49. Institut National de la Statistique - INS/Cameroun, ICF International. Cameroun Enquête Démographique et de Santé et à Indicateurs Multiples (EDS-MICS) 2011. Calverton, Maryland, USA: INS/Cameroun and ICF International; 2012.

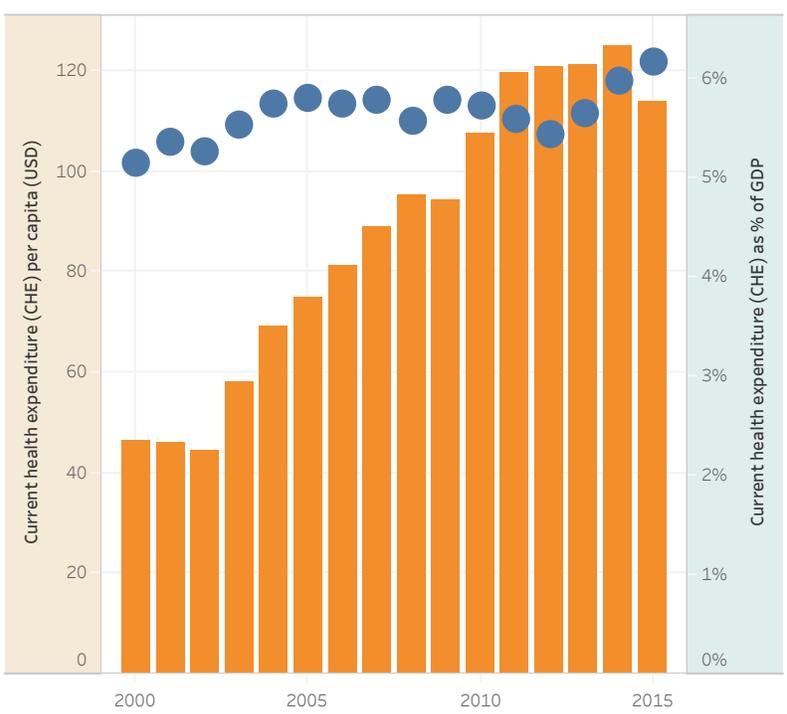
50. Institut National de la Statistique – INS/Côte d'Ivoire, ICF International. Côte d'Ivoire Enquête Démographique et de Santé et à Indicateurs Multiples 2011-2012. Calverton, Maryland, USA: INS/Côte d'Ivoire and ICF International; 2013.
51. Institut National de la Statistique – INS/Niger, ICF International. Niger Enquête Démographique et de Santé et à Indicateurs Multiples (EDSN-MICS IV) 2012. Calverton, Maryland, USA: INS/Niger and ICF International; 2013.
52. Institut National de la Statistique – INSTAT/Madagascar, ICF Macro. Madagascar Enquête Démographique et de Santé 2008-2009. Antananarivo, Madagascar: INSTAT and ICF Macro; 2010.
53. Institut National de la Statistique et de la Démographie – INSD/Burkina Faso, ICF International. Burkina Faso Enquête Démographique et de Santé et à Indicateurs Multiples (EDSBF-MICS IV) 2010. Calverton, Maryland, USA: Institut National de la Statistique et de la Démographie – INSD/Burkina Faso and ICF International; 2012.
54. Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, Population NCF, Development/Kenya. Kenya Demographic and Health Survey 2014. Rockville, MD, USA; 2015.
55. Ministère de la Planification d'Etat/MT, Ministère de la Santé – MS/Togo, ICF International. Togo Enquête Démographique et de Santé 2013-2014. Rockville, Maryland, USA: MPDAT/Togo, MS/Togo and ICF International; 2015.
56. Ministère du Développement de l'Analyse Économique et de la Prospective Institut National de la Statistique et de l'Analyse Économique – INSAE/Bénin, ICF International. République du Bénin Enquête Démographique et de Santé (EDSB-IV) 2011-2012. Calverton, Maryland, USA: INSAE/Bénin and ICF International; 2013.
57. Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité – MPSMRM/Congo, Ministère de la Santé Publique – MSP/Congo, ICF International. République Démocratique du Congo Enquête Démographique et de Santé (EDS-RDC) 2013-2014. Rockville, Maryland, USA: MPSMRM, MSP, and ICF International; 2014.
58. Ministerio da Saude – MISAU/Moçambique, Instituto Nacional de Estatística – INE/Moçambique, ICF International. Moçambique Inquérito Demográfico e de Saúde 2011. Calverton, Maryland, USA: MISAU/Moçambique, INE/Moçambique and ICF International; 2013.
59. Ministerio de Sanidad y Bienestar Social y Ministerio de Economía PeIPGE, ICF International. Guinea Ecuatorial Encuesta Demográfica y de Salud (EDSGE-I) 2011. Calverton, Maryland, USA: Ministerio de Sanidad y Bienestar Social, Ministerio de Economía, Planificación e Inversiones Públicas/Guinea Ecuatorial and ICF International; 2012.
60. Ministry of Health CD, Gender, Elderly, Children – MoHCDGEC/Tanzania Mainland, Ministry of Health – MoH/Zanzibar, National Bureau of Statistics – NBS/Tanzania, Office of Chief Government Statistician – OCGS/Zanzibar, ICF. Tanzania Demographic and Health Survey and Malaria Indicator Survey 2015-2016. Dar es Salaam, Tanzania: MoHCDGEC, MoH, NBS, OCGS, and ICF; 2016.
61. Ministry of Health/Lesotho, ICF International. Lesotho Demographic and Health Survey 2014. Maseru, Lesotho: Ministry of Health/Lesotho and ICF International; 2016.
62. National Bureau of Statistics - NBS/Tanzania, ICF Macro. Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: NBS/Tanzania and ICF Macro; 2011.
63. National Institute of Statistics of Rwanda, Finance Mo, Economic Planning/Rwanda, Ministry of Health/Rwanda, ICF International. Rwanda Demographic and Health Survey 2014–15. Kigali, Rwanda: National Institute of Statistics of Rwanda, Ministry of Finance and Economic Planning/Rwanda, Ministry of Health/Rwanda, and ICF International; 2016.
64. National Population Commission – NPC/Nigeria, ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria: NPC/Nigeria and ICF International; 2014.
65. Programme National de Lutte contre le Paludisme - PNLPM/Mali, Institut National de la Statistique – INSTAT/Mali, INFO-STAT/Mali, Institut National de la Recherche en Santé Publique – INRSP/Mali, ICF International. République du Mali Enquête sur les Indicateurs du Paludisme (EIPM) 2015. Bamako, Mali: PNLPM, INSTAT, INFO-STAT, INRSP, and ICF International; 2016.
66. Statistics Llo, Geo-Information Services – LISGIS, Health Mo, Social Welfare/Liberia, National AIDS Control Program/Liberia, ICF International. Liberia Demographic and Health Survey 2013. Monrovia, Liberia: LISGIS and ICF International; 2014.
67. Statistics Sierra Leone – SSL, ICF International. Sierra Leone Demographic and Health Survey 2013. SSL and ICF International: Freetown, Sierra Leone; 2014.
68. The Gambia Bureau of Statistics – GBOS, ICF International. The Gambia Demographic and Health Survey 2013. Banjul, The Gambia: GBOS and ICF International; 2014.
69. Uganda Bureau of Statistics – UBOS, ICF International. Uganda Demographic and Health Survey 2011. Kampala, Uganda: UBOS and ICF International; 2012.

70. Zimbabwe National Statistics Agency – ZIMSTAT, ICF International. Zimbabwe Demographic and Health Survey 2010-11. Calverton, Maryland, USA: ZIMSTAT and ICF International; 2012.
71. Uganda MoH. Health Sector Strategic and Investment Plan II. Government of Uganda; 2010.
72. Kenya MoH. Kenya Health Sector Strategic and Investment Plan 2013-2017. In: Health Mo, editor. 2015.
73. Services MoHaS. Namibia 2014/15 National Health Accounts Report. In: Services MoHaS, editor. 2017.
74. Publique MDLSEDLH. Comptes de la santé du Mali, édition 2013. In: Cellule de Planification et de Statistique Secteur Santé DSEPLF, editor. 2016.
75. Ministry of Health. The Malawi national health accounts report 2012/2013–2014/2015. In: Development DoPaP, editor. Lilongwe, Malawi, 2016.
76. Uganda MoH. Uganda health accounts national health expenditure: Financial Years 2012/13 and 2013/14. In: Budget DoPa, editor. Kampala, Uganda, 2015.
77. République démocratique du Congo. Rapport sur les comptes de la santé RDC 2015. In: Programme National des Comptes nationaux de la Santé (PNCNS), editor. Kinshasa, RDC2017.
78. Santé Mdl. Comptes de la santé 2015. Ouagadougou, Burkina Faso, 2017.
79. santé Mdl. Comptes nationaux de la santé années 2011-2012-2013. In: Développement BDSE, editor. Conakry, Guinea, 2016.
80. Federal Democratic Republic of Ethiopia, Ministry of Health. Ethiopia health accounts, 2013/2014. Addis Ababa, Ethiopia, 2017.
81. Health TFDRoEMo. Health Sector Transformation Plan (HSTP): 2015/16 - 2019/20. Addis Ababa, Ethiopia2015.
82. Kenya Ro. Annual County Governments Budget Implementation Review Report FY 2016/17. In: Budget OotCo, editor. Nairobi, Kenya, 2017.
83. Asante A, Price J, Hayen A, Jan S, Wiseman V. Equity in health care financing in low-and middle-income countries: a systematic review of evidence from studies using benefit and financing incidence analyses. *PloS one*. 2016;11(4):e0152866.
84. James Akazili, John Gyapong, Diane McIntyre. Who pays for health care in Ghana? *International journal for equity in health*. 2011;10(1):1.
85. Robert Marten, Diane McIntyre, Claudia Travassos, Sergey Shishkin, Wang Longde, Srinath Reddy, et al. An assessment of progress towards universal health coverage in Brazil, Russia, India, China, and South Africa (BRICS). *The Lancet*. 2014;384(9960):2164-71.
86. Mills A, Ataguba JE, Akazili J, Borghi J, Garshong B, Makawia S, et al. Equity in financing and use of health care in Ghana, South Africa, and Tanzania: implications for paths to universal coverage. *The Lancet*. 2012;380(9837):126-33.
87. McIntyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, et al. Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. *Bulletin of the World Health Organization*. 2008;86(11):871-6.
88. Akazili J, Garshong B, Aikins M, Gyapong J, McIntyre D. Progressivity of health care financing and incidence of service benefits in Ghana. *Health policy and planning*. 2012;27(suppl_1):i13-i22.
89. Bredenkamp C, Wagstaff A, Buisman L, Prencipe L, Rohr D. Health Equity and Financial Protection Datasheets. 2012.
90. Xu K, Evans DB, Kadama P, Nabyonga J, Ogwal PO, Nabukhonzo P, et al. Understanding the impact of eliminating user fees: utilization and catastrophic health expenditures in Uganda. *Social science & medicine*. 2006;62(4):866-76.
91. Akazili J, Gyapong J, McIntyre D. Who pays for health care in Ghana? *International Journal for Equity in Health*. 2011;10:26-.
92. Barasa EW, Ravishankar N, Maina T. Assessing the impoverishing effects, and factors associated with the incidence of catastrophic health care payments in Kenya. *International journal for equity in health*. 2017;16(1):31.
93. Saksena P, Antunes AF, Xu K, Musango L, Carrin G. Mutual health insurance in Rwanda: evidence on access to care and financial risk protection. *Health policy*. 2011;99(3):203-9.
94. Brinda EM, Andrés RA, Enemark U. Correlates of out-of-pocket and catastrophic health expenditures in Tanzania: results from a national household survey. *BMC international health and human rights*. 2014;14(1):5.

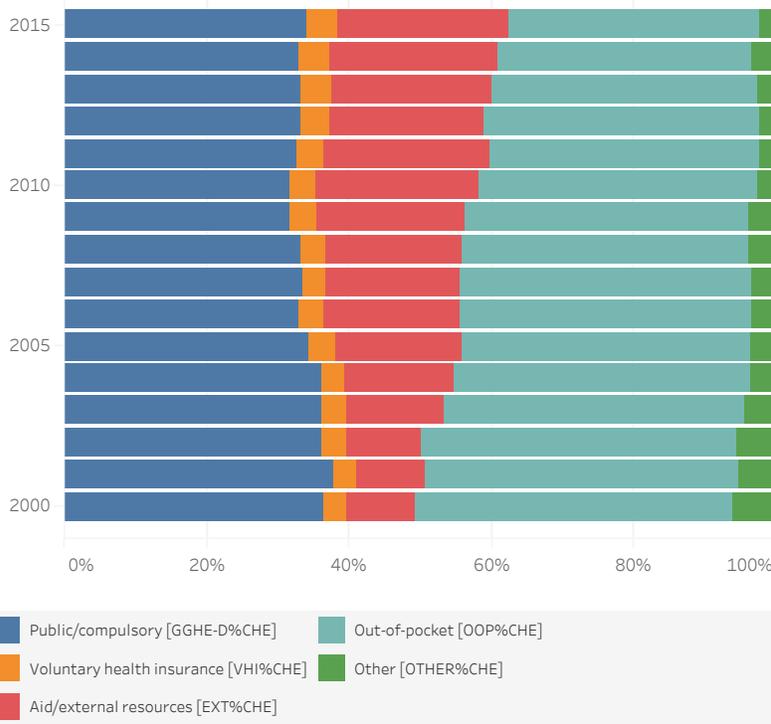
African Regional Health Expenditure Dashboard

Population (2015, thousands):	993,163
Average Current Health Expenditure (CHE) as % of GDP:	6.18%
Average Current Health Expenditure (CHE) per capita USD (2015) :	\$114
Average GDP per capita USD (2015) :	\$2,200

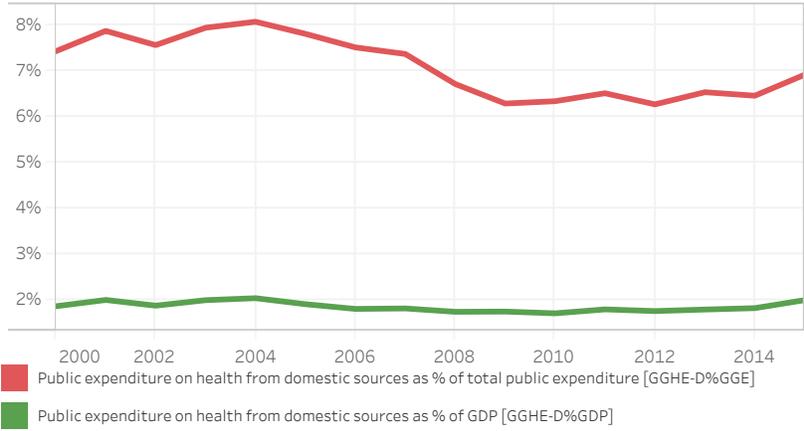
Current health expenditures per capita and as share of GDP



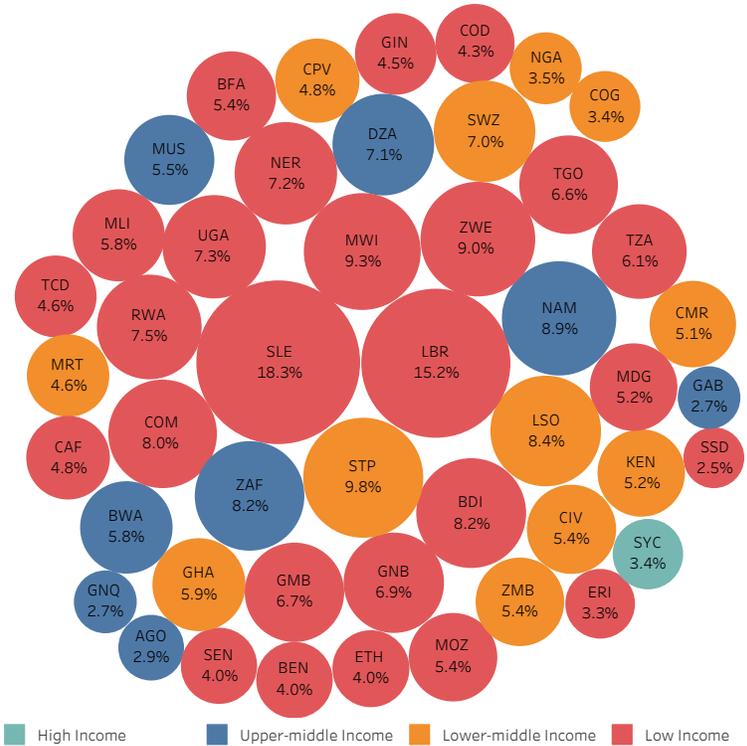
Structure of current health expenditures by financing source



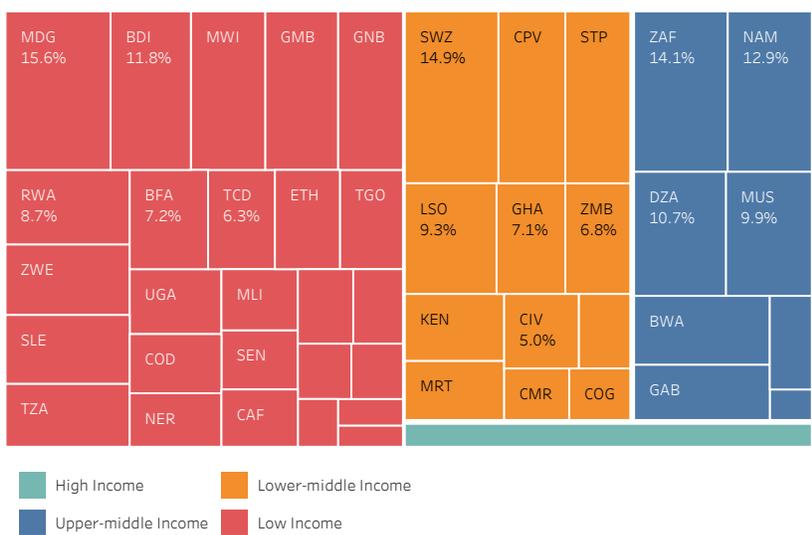
Public expenditures on health from domestic sources as % of total public expenditure and as % GDP



Current Health Expenditure as % of GDP [CHE%GDP] in 2015



Public expenditure on health from domestic sources as % of total public expenditure [GGHE-D%GGE] in 2015



Note: regional averages are unweighted

Source: WHO Global Health Expenditure Database, 2017

