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Research Article

What Are Governments Spending on Health in East and Southern Africa?

Moritz Piatti-Fünfkirchen*, Magnus Lindelow, and Katelyn Yoo

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Abstract—Progress toward universal health care (UHC) in Africa will require sustained increases in public spending on health and reduced reliance on out-of-pocket financing. This article reviews trends and patterns of government spending in the East and Southern Africa regions and points out methodological challenges with interpreting data from the World Health Organization's (WHO) Global Health Expenditure Database (GHED) and other sources.

Government expenditure for health has increased for most countries, albeit at a slower rate than gross domestic product (GDP). In most countries there has been a prioritization away from health in government budgets, putting the onus on the private sector and donors to fill the gap. Donor support is important in the region but reliance on external spending is not consistent with countries' stated ambitions of universal health coverage.

A number of methodological challenges with estimating health expenditures are identified. Capturing health expenditures adequately across agencies and levels of decentralization can be challenging, and off-budget funds and arrears are evasive. Measurement error can be significant because actual expenditure information can be hard to come by and is often dated and unreliable. Furthermore, how external financing is captured will affect government health expenditure estimates. These factors have contributed to differences in expenditure estimates between the WHO GHED and country-specific public expenditure reviews and complicate interpretation. The article concludes that it is critical to strengthen national data capacity and international efforts to promote quality and consistency of data. The GHED is an invaluable resource for monitoring and benchmarking health expenditures. It is best used in combination with deep dive country expenditure assessments.

Keywords: Abuja target, Africa, expenditure measurement, health expenditure, health financing

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INTRODUCTION

Progress toward universal health coverage (UHC) and the Sustainable Development Goals (SDGs) will not be achieved without adequate resources. According to a recent estimate, an additional 371 billion USD will be needed per

year for low-income and middle-income countries to reach the health-related SDG targets. This would represent an increase in health spending as a share of gross domestic product (GDP) from a current mean of 5.6% to a mean of 7.5%, with significant financing gaps, in particular in low-income countries.¹

These recent estimates follow in the vein of similar efforts during the Millennium Development Goals era to cost the achievement of targets and identify financing gaps. For example, the Commission on Macroeconomics and Health developed estimates for the cost and financing needs to expand coverage of a limited set of priority services.² More recently, the High-Level Task Force on Innovative Financing for Health Systems estimated that a total of 54 USD per capita was needed by 2015 to achieve the health Millennium Development Goals for low-income countries, which implied an increase of 39 USD relative to the contemporary level of spending of 25 USD per capita.³

Rallying calls for increased spending on health inevitably raises the question of how incremental spending can be financed. In most health systems in low- and middle-income countries (LMICs), out-of-pocket spending to pay for services, pharmaceuticals, and other health care costs makes up a large share of spending—estimated at 40% of total current health spending in 2015.⁴ It is well established that reliance on out-of-pocket spending to finance health systems is associated with barriers to access and higher prevalence of impoverishing and catastrophic health expenditures.^{5,6} Hence, progress toward UHC in LMICs will require a transition in financing, away from out-of-pocket payments toward mandatory prepayment (taxes, other government revenues, and statutory health insurance) as the main form of domestic financing for health care.

Several efforts have been made to estimate levels of government spending required to make considerable progress toward UHC. The 2010 World Health Report⁶ suggests that broad-based access to a core set of services and effective financial protection requires government spending on health in the region of around 5%. McIntyre and Methus reach a similar conclusion based on updated analysis of patterns of spending, service coverage, and outcomes.⁷ This is a long way from current levels of domestic government spending in LMICs (1.4% and 2.5% of GDP in 2015, respectively). Some targets have also been established for the share of government budgets dedicated to health. Most notable, African heads of state committed in 2001, through the Abuja Declaration, to allocate at least 15% of their annual budget to improve the health sector.⁸

The analytic foundations for government health expenditure targets have been questioned on numerous grounds. Savedoff noted that there is no “right” or “optimal” level of health spending

that applies across all countries and that factors such as the nature of the health challenges, policy objectives in the health sector, health system efficiency, fiscal capacity, and competing demands on public resources need to be considered.⁹ Along similar lines, Jowett et al. make the point that there is wide variation in coverage and outcomes at any level of government health spending, suggesting that, although the level of government spending is important, other factors also come into play in determining health system performance.¹⁰

Even if there is no “magic” target for government health spending, robust data and monitoring of government health spending are critical. Levels of government spending on health—in absolute terms and as a share of GDP and overall budget—indicate government commitment to health. These data can be used to benchmark with peer countries and monitor changes over time. Moreover, in the context of sub-Saharan Africa (SSA), where an explicit target for government health spending has been established, data are needed to assess progress toward this target. This is particularly important given concerns that development assistance for health displaces government spending,^{11,12} longstanding concerns about the sustainability of development assistance for health in Africa, and recent commitments under the Addis Ababa Action Agenda to increase domestic resource mobilization to finance government services.¹³

Against this backdrop, this article aims to provide an overview of levels of government spending on health in East and Southern Africa (ESA). It starts by outlining key issues relating to the definition of government spending and then presents summary data from the World Health Organization’s (WHO) Global Health Expenditure Database (GHED), which has long been the primary source of comparative analysis of government spending.⁴ The article discusses challenges that arise with interpreting the data. The authors draw on public expenditure reviews for selected countries to explore methodological and data issues in the analysis of government health expenditures.

DEFINITIONS, DATA, AND METHODS

This article uses the revised System of Health Accounts 2011 (SHA 2011) framework for concepts and definitions and draws primarily on the WHO GHED to analyze spending trends and patterns in the ESA region.¹ An overview of the data is provided in the Data Annex. The GHED is a data set that provides health expenditure estimates for 190 countries from the year 2000 onwards and follows the SHA 2011 health expenditure accounting framework.⁴ As defined in SHA 2011, health expenditures are considered to include “all activities with the primary purpose of improving, maintaining and preventing the deterioration of the health status of

persons and mitigating the consequences of ill-health through the application of qualified health knowledge” (p.52).¹⁴

Estimates on financing sources and arrangements (i.e., financing schemes²) are used to review trends and patterns in government financing and expenditures on health in ESA, including the role of development assistance for health. Domestic general government health expenditures (GGHE-D) are considered to include transfers from government domestic revenue (FS.1), social insurance contributions (FS.3), and compulsory prepayment (FS.4).¹⁵ Transfers from government domestic revenue include intra-governmental transfers in terms of budgetary allocations, transfers by government on behalf of specific groups (e.g., government may buy voluntary insurance covering the copayment for the poor), subsidies (e.g., subsidies for compulsory health insurance schemes managed by private companies), and other transfers (e.g., in-kind transfers and transfers to nonprofit institutions). Social insurance contributions are receipts³ that secure entitlement to social health insurance benefits. Any contributions or subsidies from government on behalf of specific groups are excluded to avoid double counting. Compulsory private insurance premiums are payments that have been mandated by government and secure entitlement to benefits.¹⁴ Estimates of GGHE-D therefore do not include support from external sources, such as direct foreign transfers (FS.7) and transfers distributed by government from foreign origin (FS.2). These are categorized separately from GGHE-D and considered as overseas development assistance for health. This article uses estimates of recurrent expenditure⁴ for the analysis because they are more consistent over time and drive the provision of services today, whereas capital expenditures finance the accumulation of assets required for future service delivery. The ratio of capital to recurrent expenditures in the SSA region is on average 1:8, with capital expenditures accounting for 1.7% of general government expenditures (GGEs) and recurrent expenditures accounting for about 6.8% of GGE. Throughout the article, average figures over a three-year period, rather than latest year available, are reported to minimize annual fluctuation.

The article also draws on a repository of health sector public expenditure reviews (PERs),^{16–26} which are field-based in-depth assessments of the health expenditure profile of any given country, to reflect on GHED expenditure estimates and comment on what is driving some of the differences observed. There are guidelines and good practice notes on PER methodology but, contrary to the SHA11, there is no single unique methodology that is followed in all countries.

Trends and Patterns in Health Expenditures

Domestic Government Health Expenditure

In the ESA region, GGHE-D averaged 2.3% of GDP in 2013–2015. This is higher than that of peers in other parts of SSA (the average for SSA is 1.8%) but lower than the proposed target of 5%.^{27,28,5} Government schemes are by far the largest share of GGHE-D, making up on average 97% of total public health expenditures in ESA (90.1% in SSA). Social health insurance schemes make up 2.4% and 9.9% of GGHE-D, respectively.

GGHE-D is positively correlated with per capita GDP, albeit with significant variation across countries (Figure 1). In terms of trends over time, GGHE-D has decreased as a share of GDP in many countries in the ESA region, falling from 2.6% to 2.3% of GDP between 2000–2002 and 2013–2015. The decrease was more pronounced in low-income countries, where the share of spending in GDP fell from 2.1% to 1.6% of GDP.

Despite the decline in the share of domestically financed government health spending in GDP and rapid population growth, total per capita GGHE-D has increased in most countries over the last 15 years. On average in the ESA region per capita GGHE-D has increased from 60 USD in 2000–2002 to 97 USD in 2013–2015 (62% increase, compared to a 54% increase in SSA, from 30 USD to 60 USD). Both of these are, however, significantly below global per capita GGHE-D increases, which almost tripled from 271 USD to 769 USD over the same time period. The rate of increase in per capita GGHE-D varies significantly by level of income. Low-income countries in ESA have seen only a modest increase in per capita GGHE-D allocations from 8.7 USD in 2000–2002 to 10.3 USD in 2013–2015. Health expenditures in countries at higher levels of income have increased at a significantly faster rate than that of lower income countries, which already allocated less toward health (Figure 2). Thus, there is a widening gap in per capita health expenditures across countries in the region.

Domestic Resource Mobilization and Prioritization of Health Expenditures

Government spending on health reflects both overall domestic resource mobilization and the degree of prioritization to health.²⁹ Countries’ abilities to collect revenue tends to increase with the level of income as the economy gets formalized. Revenue collection in ESA, excluding grants, is around 23.3% of GDP, which is higher than the SSA average of 21.7% but below the global average of 24.9%. Low- and lower-middle-income countries in the region collect comparatively less. Madagascar, Ethiopia, and Burundi, for example, collect 10.2%, 10.9%, and 13.1% of GDP in revenue, respectively (Figure 3).

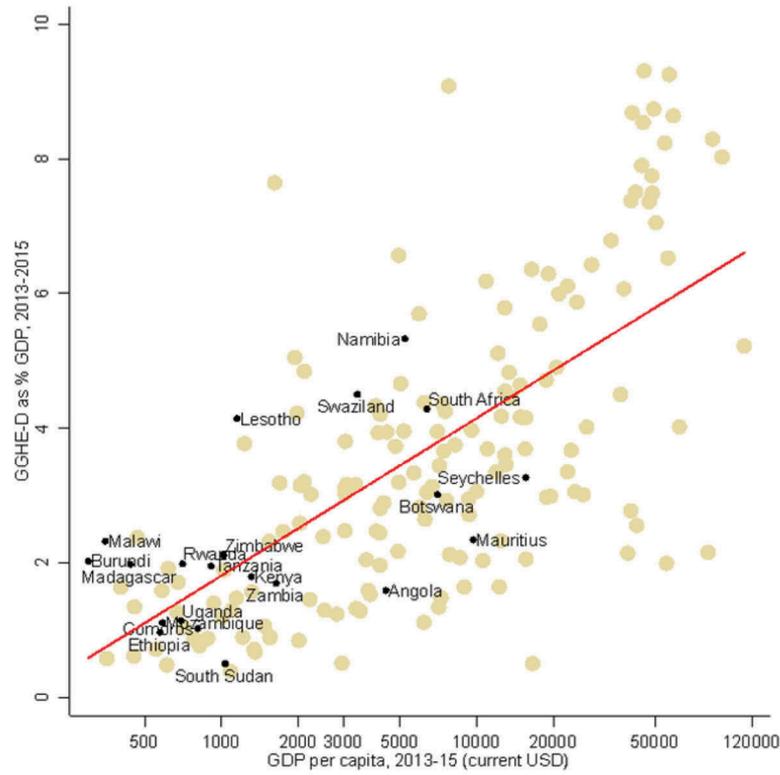


FIGURE 1. GGHE-D as a percentage of GDP by Level of Income, Average 2013–2015. Source: WHO GHED, based on SHA 2011; World Development Indicators (WDI).

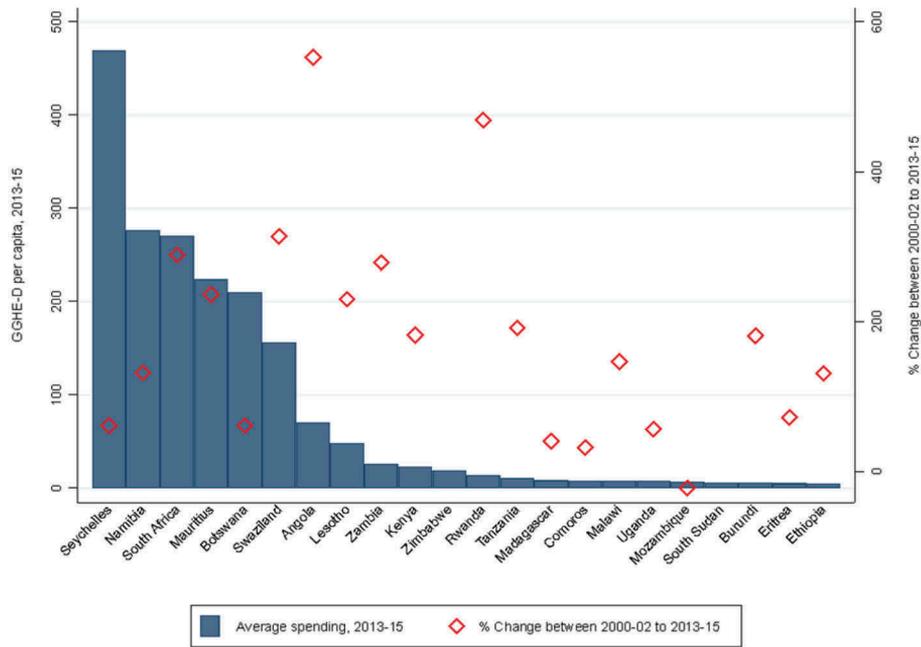


FIGURE 2. Level and Change of GGHE-D per Capita. Source: WHO GHED, based on SHA 2011; World Development Indicators (WDI).

Similarly, budgetary allocations are positively associated with level of income, albeit with a lot of variation across the region. With regards to international benchmarks, Swaziland is the only country in ESA that has met the Abuja target of 15% of general government expenditure in 2013–2015, with South Africa reaching close to 14%. The majority of countries, however, fall significantly behind, as shown in Figure 4.

Further, recent years have seen a prioritization away from health in many countries. The share of government expenditure on health is estimated to have decreased from 8.4% to 6.7% in the region between 2000 and 2015 (Figure 5). This trend appears to be more pronounced for low-income countries and is unique to SSA and the East Asia Pacific region. In conclusion, per capita GGHE-D is increasing in absolute terms, though not evenly across the region, and has not kept pace with economic growth. Domestically financed government expenditures on health fall well short of Abuja targets in most countries and of resource requirements to reach the health SDGs.

External Financing for Health

The reduction in GGHE-D as a share of GDP and government budgets discussed in the previous section has in part been compensated for by the availability of donor financing. Development assistance is an important source for financing recurrent health expenditures in the region and constitutes at times 30% of total recurrent expenditures or more in some low-income countries. On average it has increased from 22.6% to 25.5% of total recurrent expenditures between 2005–2007 and 2013–2015. In per capita terms, development assistance for health was 17.0 USD in ESA in 2013–2015 (compared to 14.9 USD in SSA as a whole). There is, however, large variation in ESA across countries, with Swaziland and Botswana receiving 35 USD to 45 USD per capita and other countries such as Angola, South Sudan, and Ethiopia receiving less than 5 USD per capita (Figure 6). HIV/AIDS is likely to be an important factor driving these differences with high levels of external support to high prevalence countries in Southern Africa.

Especially in low-income countries, donor assistance plays a significant role and has often matched or exceeded

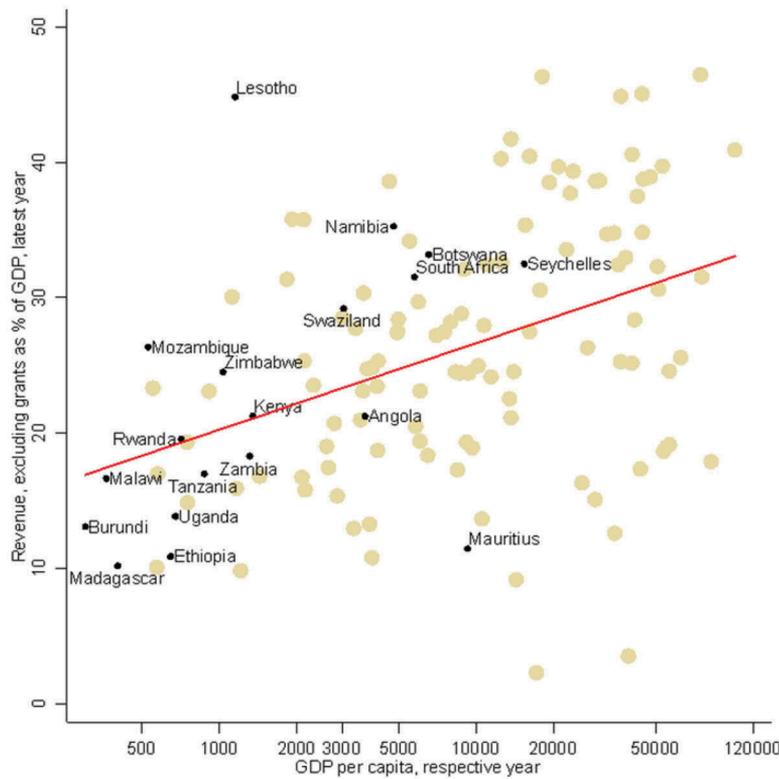


FIGURE 3. Revenue Performance (Excluding Grants) by Level of Income. Note: Revenue as a percentage of GDP used for latest year available; GDP per capita average of 2013–2015. Source: WHO GHED, based on SHA 2011; World Development Indicators (WDI).

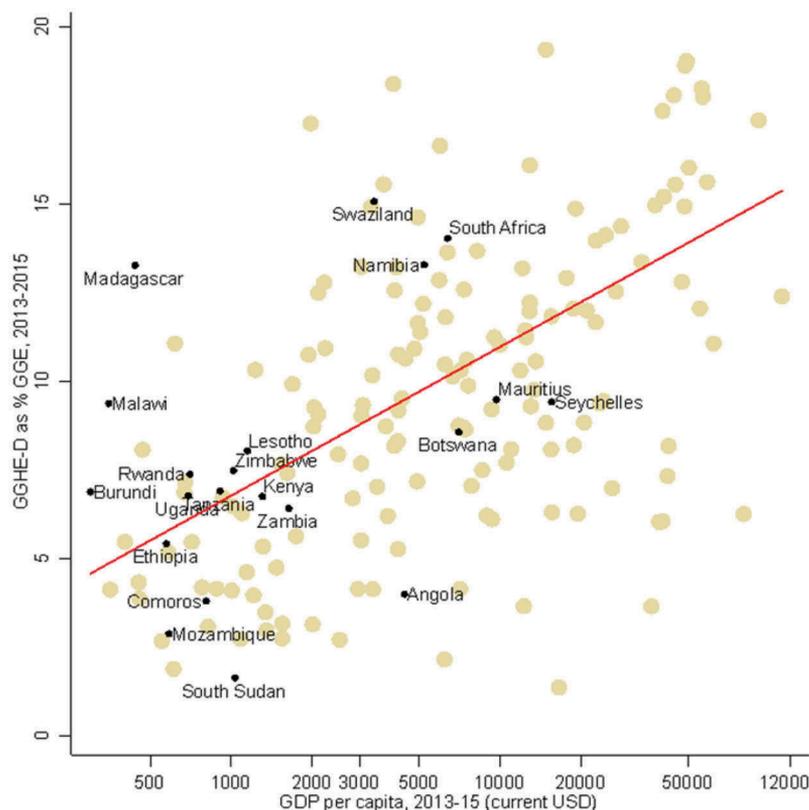


FIGURE 4. Budget Allocations to Health by Level of Income. Note: Revenue as a percentage of GDP used for latest year available; GDP per capita average of 2013–2015. Source: WHO GHED, based on SHA 2011; World Development Indicators (WDI).

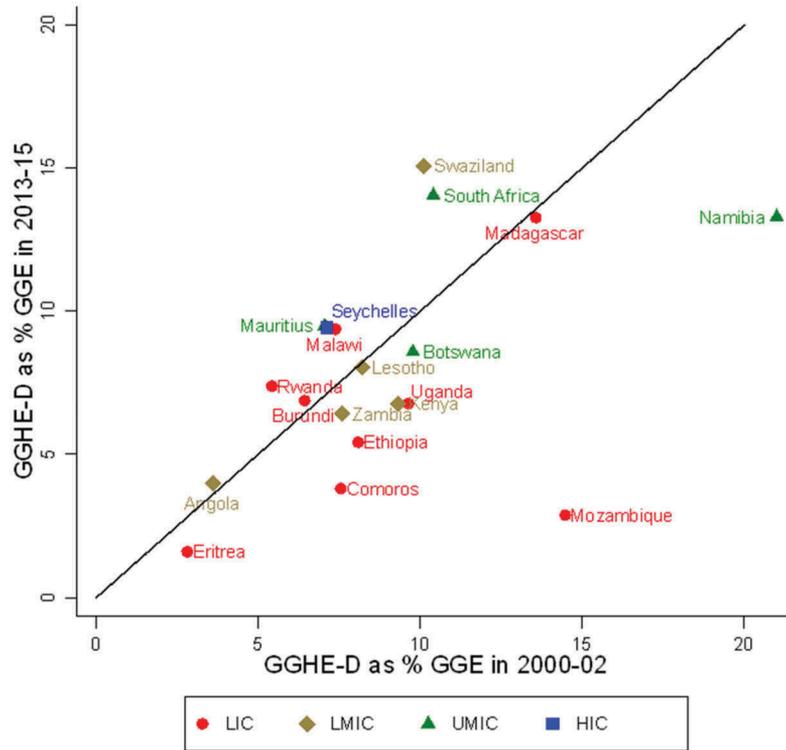
government contributions to health (Figure 7). Lu et al. estimate the extent of additionality of donor funds in the health sector and find that for every dollar of development assistance to government, the government implicitly reduces spending from its own sources by 46 cents.³⁰ In ESA, however, an increase in external financing has tended to be associated with increases in government spending (reflected by countries in the northeastern quadrant of Figure 8). Only in a few outlier countries such as Uganda and the Comoros has there been a shift away from health following increased donor inflows. On the downside, there are a number of countries where both donor support and government allocations have significantly reduced, as shown in the southwestern quadrant in Figure 8.

The modality through which development assistance is provided has shifted significantly toward greater use of country systems. The share of development assistance routed through government channels⁶ has increased from 34.3% in 2005–2007 to 41.3% in 2013–2015. This trend is precipitated by donor countries signing up to the Paris accord and the Accra agreement for action in the mid-2000s, emphasizing the importance of alignment and donor harmonization with

country processes. There does not appear to be a clear association between countries' levels of income and the modality through which aid is provided.

MUDDYING THE WATERS: ISSUES IN ANALYZING GOVERNMENT HEALTH EXPENDITURES

The SHA 2011 provides a thorough basis for conceptualizing financial flows in a health system, and the WHO GHED has introduced significant changes to better capture financing sources and schemes. The GHED is hence an invaluable source of data for country-specific and cross-country analysis of health expenditures. However, in undertaking such analysis, it is important to be aware of a number of conceptual and data issues that can have implications for the interpretation of findings. This has been discussed to some extent in the literature. Witter et al., for example, point to issues such as the difficulty in measurement, capturing actual expenditures as opposed to budgets, differentiating between domestic and domestically managed funds, and conceptual challenges of budget support. They also argue that discretionary and non-discretionary funding should be treated differently.³¹



Source: Global Health Expenditure Database - WHO.

FIGURE 5. Change in Domestic Financing for Health. Source: WHO GHED, based on SHA 2011.

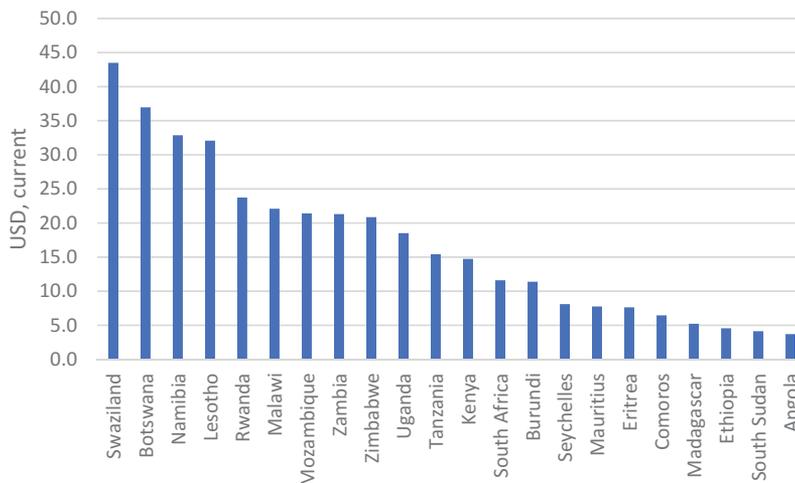


FIGURE 6. Per Capita Development Assistance for Health, All Sources 2013–2015. Source: GHED based on SHA 2011.

To explore these issues, this section considers three questions: What is missing from government health expenditure estimates? What are the key measurement issues that may affect estimates

and undermine comparability across countries and over time? How is external financing for health accounted for? Although there is specific guidance on how these questions should be

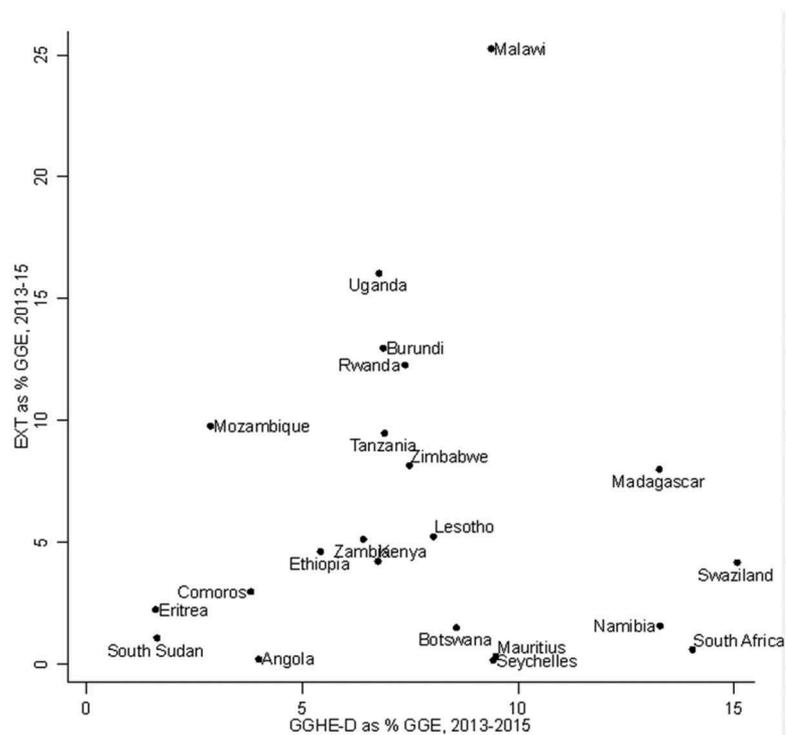


FIGURE 7. Relative Importance of Domestic and Donor Financing for Health. Source: WHO GHED, based on SHA 2011.

addressed, data limitations and country-specific complexities may hamper a consistent approach in data collection and compilation. To illustrate the resulting challenges in presenting and contrasting country data on health expenditures, this section also compares data from the WHO GHED with those from recently completed PERs from selected countries.

What Is Missing from Government Expenditure Estimates?

Although the SHA 2011 clearly defines scope of health expenditure as “all activities with the primary purpose of improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge” (p.52).¹⁴ this definition is often difficult to operationalize. Health expenditures can originate from multiple agencies, including ministries of finance, defense, education, and agriculture; HIV/AIDS commissions; and others. However, in many countries, the budget structure is not sufficiently detailed to clearly identify expenditures on health by these agencies. As a result, estimates of government health expenditures risk underestimating total spending by excluding expenditures by some agencies—such as hospitals operated by other ministries.

Similarly, estimates of government health spending should include health expenditures at the local government level. These

can, however, be difficult to capture in countries where financial management information systems are insufficiently deployed and expenditures are transacted manually. Extrabudgetary funds⁷ can be difficult to capture, because they are funds that are outside the parameters and controls of conventional budgetary rules and procedures.³² Social security funds tend to fall into this category. The SHA 2011 makes clear provisions for this, but adequate capture may be difficult because they are placed outside the budget and not subject to regular financial management processes including reporting. Again, the potential omission of health expenditures by local government or extrabudgetary funds can result in expenditures being underestimated. Similarly, tax expenditures, or the deduction from the income tax base of payments for certain medical expenses, can constitute a sizable share of GGHE-D and lead to estimation bias if they are insufficiently captured.³³ In some middle-income countries such as South Africa and Namibia, these could potentially play a key role but are inherently difficult to monitor and capture.

What Are the Key Measurement Issues That May Bias Estimates?

There is clear guidance in the SHA 2011 that expenditure estimates should be used based on actual expenditure data, rather than budget or budget release data. These are, however, not always

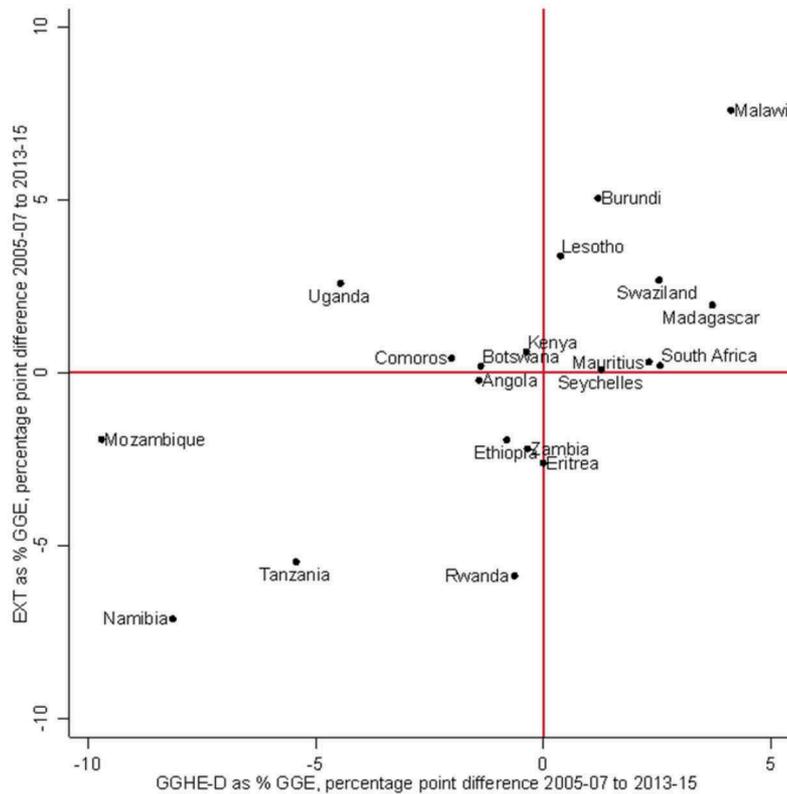


FIGURE 8. Change in GGHE-D and Donor Support for Health, 2005–2007 to 2013–2015. Source: WHO GHED, based on SHA 2011.

made readily available and often only become available with significant delay and sometimes only in print format. The WHO GHED does not always clearly state whether estimates were drawn from allocations and outturns. This can significantly bias estimates. A recent study estimates that the proportion of unspent health budget ranges from 10% to 30% of authorized allocations in African countries, with some outliers getting close to 60% (Democratic Republic of Congo) unspent.²⁹

Further, in decentralized systems with low accounting capacity, government spending is likely to be inadequately captured. Recent evaluation of the financial management systems in Zambia and Malawi found that transactions are often captured outside the system.^{34,35} If not recorded adequately, this can lead to an underestimation of total expenditures or give the wrong impression of low budget execution. Furthermore, in countries such as Tanzania, the chart of accounts is inconsistent across levels of government. This complicates the aggregation of expenditure estimates, especially if not survey based.

Central government reporting on expenditures can be prone to error in countries where spending authority has been decentralized. Central governments frequently provide transfers to local governments and consider these as expenses. However, at the local government level, actual

expenditures may differ from the transfer received as a result of low absorption capacity or a diversion of funds to other uses. Thus, as noted in the Zambia PER, using central government transfers as a proxy for local government expenditures will likely be inaccurate, with a tendency toward overestimation of government spending on health.²⁵

Arrears in the health sector can be significant and are important to include because goods and services have been delivered even though payment has not yet been made. As shown in the Seychelles PER, they are particularly problematic if denominated in a foreign currency and exposed to exchange rate fluctuations.²³ However, because such commitments usually happen outside the treasury system, it can be difficult to monitor or capture arrears.³⁶ If arrears payments are captured, this happens at a later stage than the actual transaction, and often they cannot easily be mapped to their original functional classification.

How Is External Financing for Health Accounted For?

As we have seen, donor support constitutes a significant share of recurrent health expenditures, especially in low- and lower-middle-income countries. Conceptualizing the

role of donor support and capturing it adequately can, however, be challenging.

The first question is whether and what part of externally financed health expenditures should be considered “public” or “government” expenditure. One criterion used for determining this is whether external financing is “on budget” or “distributed by government,” although this does not ensure alignment with government priorities. For example, donor support can be off budget but on plan, meaning that donors support comprehensive plans but are outside government budgetary processes. They may, however, be fully aligned with government priorities and the government is expected to assume these donor-funded expenses over time. Such expenses could arguably be considered government expenditure, despite not being on budget. In some countries, donors do channel their funds through the budget but continue ring-fencing their funds; they also use external processes for execution, accounting, and reporting. Putting vertical project funds on budget does not necessarily guarantee government ownership and commitment to sustainability. Until recently, GHED estimates of government spending included some externally financed expenditures, although not consistently, resulting in higher estimates of government spending as a share of GDP than reported in this article. This was a source of confusion that was addressed by SHA 2011, which provides a clear picture of the level of domestically financed government spending. It is, however, much harder to determine what share of external financing can reasonably be considered part of government spending. An assessment of this would likely need to be country specific and based on in-depth analysis and dialogue.

Capturing donor support is likely to suffer from measurement error in instances when the GHED draws on Organization for Economic Cooperation and Development Development Assistance Committee (OECD DAC) data. This is based on donor reporting and does not reflect recipient country inputs. Because development partners include administrative and other expenses in reporting to the OECD, this is likely to produce a higher estimate than that produced through a survey-based National Health Accounts (NHA). Mixing spending estimates at the GHED from NHA and OECD DAC estimates undermine the value of the data because the interpreter would have to refer individually to metadata to assess where the estimates come from and how reliable they are likely to be.

Lastly, it is unclear how general budget support to the treasury is captured because it is not possible to determine what source a transaction has been financed with. Sector budget support can usually be captured, country systems permitting, and the source of expenditures can be mapped confidently. Furthermore, sector budget support is often channeled through the capital account to allow for earmarking, regardless of the purpose of funds. This complicates clear differentiation between recurrent and capital

expenditures. In Tanzania, for example, the donor health sector basket fund for service delivery at the district level is channeled through the development budget line despite there being explicit instruction that these funds may not be used for capital expenditures. If development and recurrent accounts serve an administrative rather than a functional purpose, this can undermine accurate expenditure reporting.²⁴

Comparing Expenditure Estimates to Public Expenditure Reviews

Public expenditure reviews provide an alternative, in-depth assessment of government expenditures on health, and estimates of government expenditures frequently deviate from the GHED. A review of expenditure estimates from the nine countries for which both GHED and PER data were available suggests that much of this disconnect can be explained by differences in scope, accuracy of measurement, and accounting for the role of donor financing determine.⁸

Comparing recurrent expenditures estimates from the WHO GHED with those available from PERs in the region shows close alignment in some countries but significant discrepancies in others (Figures 9 and 10). Discrepancies do not appear to follow a clear pattern. In Kenya, Madagascar, and Zimbabwe, GHED estimates are considerably higher than PER estimates, for example. On the other hand, Lesotho is a clear outlier, with PER estimates being significantly higher than those of GHED estimates. Estimates for Malawi, the Seychelles, Mauritius, Tanzania, and Zambia are within a percentage point.

Where is there alignment in expenditure estimates, and what drives the differences? Not all WHO GHED estimates are backed up by field-based health accounts exercises, and at times there is a considerable time lapse between the NHA and extrapolated years in the GHED. This is likely to impact the accuracy of estimates. Lesotho, for example, does not have an NHA, and the PER recurrent expenditure estimate as a share of GGE is 4 percentage points higher. It is unclear what the basis for Lesotho estimates in the GHED are, given the absence of a survey to project from. Important expenditure items such as the financing of nongovernmental organizations who receive subsidies and deliver services may thus have alluded the GHED. The 2007 NHA for Madagascar precedes the 2013 estimate by six years, and the expenditure estimate exceeds PER estimates by 6.1 percentage points. The Madagascar PER finds that the health budget has been contracting, which an extrapolation based on previous years would not have been able to capture. Donor fund contributions were estimated to have increased by 300% in Lesotho since 2005–2007, an outlier in the region. This is likely to be

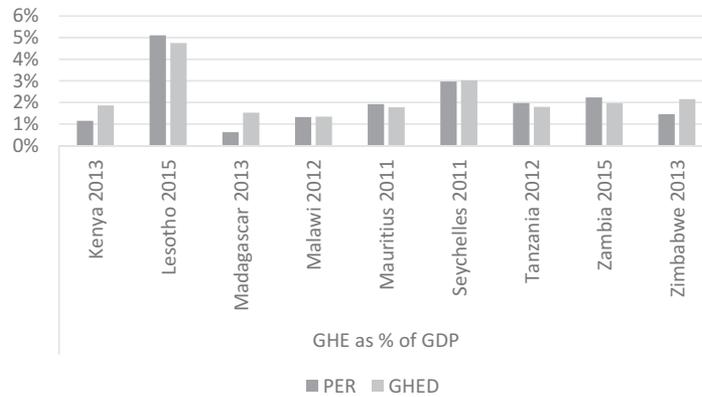


FIGURE 9. Comparing GHED to PER Recurrent Expenditure Estimates: GHE as a Percentage of GDP. Source: WHO GHED, based on SHA 2011 and Various World Bank PERs.

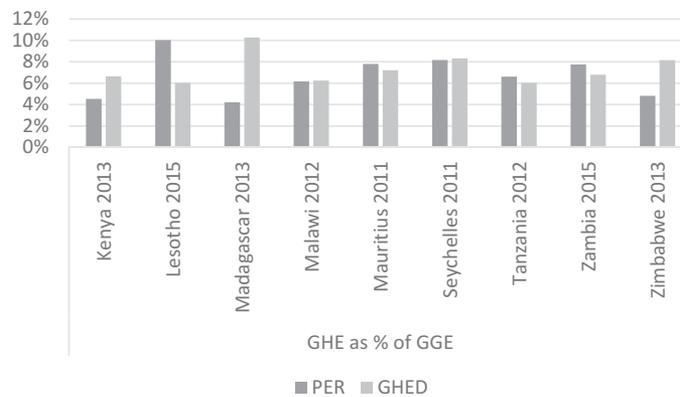


FIGURE 10. Comparing GHED to PER Recurrent Expenditure Estimates: GHE as a Percentage of GGE. Source: WHO GHED, based on SHA 2011 and Various World Bank PERs.

overestimated by drawing on OECD DAC data because no survey-based NHA was available.

Differences in scope are likely to bias expenditure estimates in the Kenya, Madagascar, and Zimbabwe PERs downwards because they only account for Ministry of Health expenditures and thus explain some of the disconnect with the GHED. For example, the GHED tries to capture health-related cross-sectoral expenditures including nutrition, which are not captured in these PERs. Other relevant agency expenditures including the military, AIDS commissions, and subsidies going directly to extrabudgetary funds are also outside the scope and therefore are not captured. Some PERs, like Zambia and the Seychelles, have taken a more inclusive approach attempting to capture expenditures from these agencies and the scope is thus more closely aligned with the GHED.

A number of PERs note the difficulty in obtaining reliable expenditure data. Though expenditure estimates in Malawi appear to be similar, they are likely to be drawn

from equally poor data. The Malawi PER, for example, only uses budget and not expenditure data. The Malawi 2011 Public Expenditure and Financial Accountability (PEFA) assessment finds that health sector expenditure was repeatedly and significantly below the budget. Budget performance was 8.0%, 0.2%, and 10.0% below target between 2009 and 2011,³⁷ and expenditure estimates based on budgets only in the Malawi PER are thus likely to be overestimated in that range.

In Tanzania, the PER is cognizant of differentiating between the functional allocation of recurrent and capital expenditures. This required a forensic review of the budget documentation, which is outside the scope of the GHED. Because expenditures were remapped to recurrent expenditures, this may in part explain the higher PER estimate. Similarly, in Zambia, it required a detailed review to identify local government expenditures that were off the books, which may explain the larger PER estimates than that provided through the GHED.

CONCLUSION

Per capita expenditure from domestic sources on recurrent health activities varies widely across countries in the East and Southern Africa region and is on average 97 USD, significantly above SSA averages. Per capita expenditure has grown across the region, though at a faster rate in higher-income countries. Thus, there is a widening gap in per capita health expenditures. Though absolute spending on health has increased, this has been at a slower rate than GDP, and domestically financed government spending on health as a share of GDP is low and declining.

Countries' available budgets for health are a function of their capacities to raise resources and their willingness to prioritize health in the budget. Though overall per capita GGHE-D is increasing, it has not kept pace with GDP growth, reflecting an apparent prioritization away from health. Reaching the Abuja target of allocating 15% of total government expenditure to health has for many countries become a distant and unrealistic goal. Domestically financed government expenditures on health fall well short of Abuja targets in most countries and of resource requirements to reach the health SDGs.

Donor funds play a key role in the region and make up a significant share of total recurrent health expenditures, at times surpassing government contributions. The availability of donor funds appears to be closely associated with whether government is prioritizing health. In contexts where governments have increased spending, there has been increased donor activity and, conversely, where government health expenditure has contracted, so has donor expenditure. Donor dependence is high for many low- and lower-middle-income countries and is not consistent with their stated ambitions of progress toward UHC.

The GHED for 2000–2015 is the first attempt to capture comprehensive health expenditure data based on the SHA 2011, which has brought about significant improvements from previous attempts. If done correctly, there should be no differences in expenditure estimates between GHED and PER estimates, though they serve different purposes and at times draw on different data. This article, however, highlighted important conceptual and data issues with the GHED, in particular with regards to scope, measurement, and the role of external financing, which may drive some of the observed deviations in expenditure estimates. These issues are important because they undermine the credibility and effectiveness of the data for advocacy and policy dialogue. Given their consistent methodological application, they lend themselves best for trend and cross-country analysis. More transparency on data and methods in how the individual country GHED estimates are derived and shortcomings would increase credibility and help the analyst in interpretation. It will remain important to continue

efforts to strengthen national data capacity and international efforts to promote quality and consistency of data.

Finally, although this article focused on the level of government spending on health, it is important to remember that spending is ultimately a means to achieve results in the health sector. From this perspective, questions of how effective spending is in achieving better results is just as important as overall levels of spending. This points to the importance of in-depth analytical work to inform policy. The GHED is an invaluable resource for monitoring and benchmarking health expenditures. For advocacy and policy dialogue, it is most effectively used in combination with in-depth country assessments.

NOTES

- [a] Countries in the ESA subregion follow the United Nations Development Program definition and include Angola, Botswana, Burundi, Comoros, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Somalia, South Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. Analysis is done for countries for which data were available.
- [b] Health care financing schemes are perceived as the main “building blocks” of the structure of a country's health financing system: they are the main types of financing arrangements through which people can get access to health care; for example, government schemes, social insurance, and voluntary insurance.
- [c] These could be from employers on behalf of their employees or from the employees, the self-employed, or the nonemployed on their own behalf.
- [d] Recurrent expenditures are defined as the “final consumption expenditure of resident units on health care goods and services, including the health care goods and services provided directly to individual persons as well as collective health care services.”¹⁴ The SHA 2011 explicitly discourages the aggregation of recurrent and capital expenditures. The 2018 GHED data release explicitly differentiates between recurrent expenditures and capital formation for the first time.
- [e] The WHO has never formally adopted 5% of national income as a recommended level of health spending. Instead, the WHO committed itself to monitoring the number of countries where at least 5% of Gross National Product (GNP) is spent on health.
- [f] These are transfers from foreign origin distributed through the general government and captured by the government budget.
- [g] Expenditures that are not included in the annual budget or are not subject to the same general level of reporting, regulation, or audit as other public finance items.
- [h] Metadata from the GHED are not sufficiently detailed to allow for a granular comparison of GHED and PER methods that would shed light on what drives the observed differences.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

No potential conflict of interest was reported by the authors.

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DATA ANNEX

Country	Indicator	Average 2000–2002	Average 2013–2015
Botswana	GGHE-D as % GGE	9.77	8.57
	GGHE-D as % GDP	4.07	3.02
	GGHE-D per capita in USD	129.71	210.14
	External health expenditure per capita in USD	1.42	36.98
	External health expenditure as % GGE	N/A	1.51
	GDP in current USD per capita	3,177.47	6,989.50
Burundi	GGHE-D as % GGE	6.43	6.87
	GGHE-D as % GDP	1.59	2.02
	GGHE-D per capita in USD	2.07	5.84
	External health expenditure per capita in USD	N/A	11.40
	External health expenditure as % GGE	N/A	12.97
	GDP in current USD per capita	130.71	286.33
Comoros	GGHE-D as % GGE	7.54	3.80
	GGHE-D as % GDP	1.53	1.02
	GGHE-D per capita in USD	6.19	8.22
	External health expenditure per capita in USD	1.86	6.45
	External health expenditure as % GGE	N/A	2.98
	GDP in current USD per capita	401.68	804.95
Eritrea	GGHE-D as % GGE	2.81	1.60
	GGHE-D as % GDP	1.54	0.65
	GGHE-D per capita in USD	3.20	5.53
	External health expenditure per capita in USD	2.79	7.64
	External health expenditure as % GGE	N/A	2.25
	GDP in current USD per capita	208.37	840.33
Ethiopia	GGHE-D as % GGE	8.09	5.42
	GGHE-D as % GDP	1.97	0.97
	GGHE-D per capita in USD	2.29	5.31
	External health expenditure per capita in USD	0.85	4.55
	External health expenditure as % GGE	N/A	4.63
	GDP in current USD per capita	116.51	550.19
Kenya	GGHE-D as % GGE	9.31	6.75
	GGHE-D as % GDP	2.07	1.80
	GGHE-D per capita in USD	8.27	23.36
	External health expenditure per capita in USD	1.00	14.74
	External health expenditure as % GGE	N/A	4.22
	GDP in current USD per capita	400.53	1,301.78
Lesotho	GGHE-D as % GGE	8.20	8.03
	GGHE-D as % GDP	3.27	4.15
	GGHE-D per capita in USD	14.65	48.37
	External health expenditure per capita in USD	N/A	32.07
	External health expenditure as % GGE	N/A	5.25
	GDP in current USD per capita	449.12	1,175.30
Madagascar	GGHE-D as % GGE	13.56	13.27
	GGHE-D as % GDP	2.33	1.98
	GGHE-D per capita in USD	6.11	8.61
	External health expenditure per capita in USD	2.70	5.22
	External health expenditure as % GGE	N/A	8.00
	GDP in current USD per capita	262.26	438.66

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Country	Indicator	Average 2000–2002	Average 2013–2015
Malawi	GGHE-D as % GGE	7.38	9.37
	GGHE-D as % GDP	1.81	2.32
	GGHE-D per capita in USD	3.31	8.19
	External health expenditure per capita in USD	3.22	22.10
	External health expenditure as % GGE	N/A	25.26
	GDP in current USD per capita	197.00	351.34
Mauritius	GGHE-D as % GGE	7.05	9.48
	GGHE-D as % GDP	1.69	2.34
	GGHE-D per capita in USD	66.62	224.14
	External health expenditure per capita in USD	N/A	7.75
	External health expenditure as % GGE	N/A	0.33
	GDP in current USD per capita	3,942.48	9,559.11
Mozambique	GGHE-D as % GGE	14.47	2.88
	GGHE-D as % GDP	3.34	1.11
	GGHE-D per capita in USD	8.56	6.72
	External health expenditure per capita in USD	N/A	21.42
	External health expenditure as % GGE	N/A	9.78
	GDP in current USD per capita	257.26	585.97
Namibia	GGHE-D as % GGE	21.00	13.28
	GGHE-D as % GDP	6.91	5.33
	GGHE-D per capita in USD	119.29	277.01
	External health expenditure per capita in USD	8.38	32.86
	External health expenditure as % GGE		1.58
	GDP in current USD per capita	1,724.51	5,215.73
Rwanda	GGHE-D as % GGE	5.42	7.38
	GGHE-D as % GDP	1.23	1.99
	GGHE-D per capita in USD	2.51	14.30
	External health expenditure per capita in USD	3.74	23.74
	External health expenditure as % GGE		12.29
	GDP in current USD per capita	204.58	718.96
Seychelles	GGHE-D as % GGE	7.10	9.42
	GGHE-D as % GDP	3.73	3.27
	GGHE-D per capita in USD	290.45	470.05
	External health expenditure per capita in USD	N/A	8.10
	External health expenditure as % GGE		0.16
	GDP in current USD per capita	7,798.59	14,384.90
South Africa	GGHE-D as % GGE	10.40	14.03
	GGHE-D as % GDP	2.58	4.29
	GGHE-D per capita in USD	69.64	271.05
	External health expenditure per capita in USD	2.99	11.60
	External health expenditure as % GGE		0.60
	GDP in current USD per capita	2,685.79	6,330.78
Swaziland	GGHE-D as % GGE	10.11	15.07
	GGHE-D as % GDP	2.57	4.50
	GGHE-D per capita in USD	37.86	156.65
	External health expenditure per capita in USD	1.20	43.49
	External health expenditure as % GGE		4.17
	GDP in current USD per capita	1,474.97	3,478.07

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Country	Indicator	Average 2000–2002	Average 2013–2015
Uganda	GGHE-D as % GGE	9.63	6.77
	GGHE-D as % GDP	2.11	1.14
	GGHE-D per capita in USD	4.98	7.84
	External health expenditure per capita in USD	4.92	18.50
	External health expenditure as % GGE		16.04
	GDP in current USD per capita	236.25	684.10
Zambia	GGHE-D as % GGE	7.59	6.41
	GGHE-D as % GDP	2.14	1.70
	GGHE-D per capita in USD	6.99	26.50
	External health expenditure per capita in USD	7.93	21.31
	External health expenditure as % GGE		5.13
	GDP in current USD per capita	326.75	1,586.26

Source: WHO GHED, based on SHA 2011.