
AUGUST 2016

2016 AFRICA DATA REPORT

*HEALTH FINANCING, OUTCOMES, AND
INEQUALITY IN SUB-SAHARAN AFRICA*



ONE

CONTENTS

Introduction	3
Chapter 1: Domestic Financing for Health	4
Chapter 2: Health Outcomes in Sub-Saharan Africa	8
Chapter 3: African Profiles	15
Kenya	17
Mali	20
Nigeria	23
Rwanda	26
Senegal	29
Tanzania	32
Chapter 4: Reaching the Poorest 20%	35
Chapter 5: Transparency and Accountability in Health	38
Methodology	42
Annex	48



INTRODUCTION

This year's Africa DATA Report focuses on a critical building block of development investment: health. Perhaps no other intervention is so critical to achieving the Sustainable Development Goals (SDGs). Health and nutrition interventions save lives; they also help to achieve better educational outcomes, build a more productive workforce and drive economic gains. For Africa, a continent with a burgeoning youth population, there will need to be an increased focus on investing in human capital to drive greater development progress. Ensuring that these dividends are focused on the poorest and most vulnerable groups, and on creating decent healthcare for everyone, will be the key to achieving the Global Goals.

This report presents the latest snapshot of progress in sub-Saharan Africa on key health-related SDG indicators, both between and within countries. It highlights comparisons of outcomes and interventions across countries and the depth of inequality between the poorest 20% of the population and the richest 20%, on each health indicator assessed. The report shows that in order to achieve the SDGs, and improve the health and well-being of everyone, African governments should:

- Increase domestic investments in the health sector, working towards the Abuja commitment of spending 15% of government budgets on health, but more importantly increase per capita spending on health to a level that can provide essential services to all;
- Ensure that investments in health maximise impact for all citizens, working towards implementation of universal health coverage (UHC), but particularly that they focus greater attention on the needs of the poorest people;
- Improve transparency and accountability of government spending and procurement in health, and collect better disaggregated data on results to aid in decision making.

Chapter 1 begins by analysing the latest domestic spending data on health in sub-Saharan Africa, noting that very few countries have ever met the Abuja commitment to spend 15% of government budgets on health. Further, even countries which have met the commitment, or have come close, often have such small government budgets that per capita spending on health rarely breaks \$50 a year, which is significantly below the target calculated as necessary to provide basic crucial health services. As Chapter 2 shows, in many cases this leads to poor and stagnating health outcomes and interventions. However, some countries, such as Ghana and Rwanda, have shown tremendous innovation and efficiency in their health spending and, combining this with effective policies, are reaping the results. In Chapter 3, ONE profiles six African countries that together account for more than one-third of sub-Saharan Africa's GDP and also more than one-third of the region's extreme poor – Kenya, Mali, Nigeria, Rwanda, Senegal and Tanzania. In Chapter 4 we showcase some of the health programming and interventions that target and reach the poorest people – including broader social protection policies and movements towards UHC. Lastly, budget transparency, accountability and data availability are key challenges to contend with when analysing this type of data, as noted in Chapter 5. We do not hide these shortcomings, and recognise that all findings, from spending levels to reported results, are only as accurate as the data behind them, and thus must be scrutinised and continually refined. The data revolution launched in September 2015 during the UN General Assembly is driving greater investments to ensure better data collection and accessibility.

DOMESTIC FINANCING FOR HEALTH

Combined with smart pro-poor policies, sustained government investments in the health sector will be pivotal to achieving a healthy and productive population and reaching the Sustainable Development Goals in 2030. Investment in the health sector is crucial, since diseases and untreated illnesses hinder broader development progress in many low-income countries, especially in sub-Saharan Africa. Sub-Saharan Africa has the highest rates of child mortality, with one out of every 12 children dying before their fifth birthday.¹ It also faces the highest risk of malaria, accounting for roughly 90% of cases and deaths globally.² Reducing malaria risk will save lives and take pressure off governments' finances. Malaria control activities that led to reduction in malaria case incidences between 2001 and 2014 saved an estimated \$900 million on malaria case management costs in sub-Saharan Africa.³

While limited in many sub-Saharan African countries, domestic resources – governments' own revenues and budgets – are on average the largest and most sustainable sources of financing for development. Domestic tax revenues in Africa grew steadily from \$302.9 billion in 2009 to \$461.2 billion in 2014.⁴ However, government revenues as a percentage of GDP in sub-Saharan Africa are projected to average around 17% between 2015 and 2020, well below the 23% average established between 2004 and 2014.⁵ Especially in oil-exporting countries, government revenues are likely to deteriorate due to volatile commodity prices in recent years. It is estimated that sub-Saharan African GDP growth declined to 3.5% in 2015, but that it will increase again to 4% in 2016 and to 4.7% in 2017.⁶ As such, external resource flows remain critical to support the region's development agenda. Net flows of official development assistance (ODA) to sub-Saharan African countries from OECD Development Assistance Committee (DAC) countries reached \$38.5 billion in 2015.⁷ Health spending accounts for a significant share of this ODA – in 2014,⁸ almost 17% or \$7 billion.⁹ Foreign direct investment (FDI) inflows to sub-Saharan Africa were worth \$46 billion in 2014,¹⁰ though FDI inflows directed towards key sustainable development sectors such as health are extremely low.¹¹

While government expenditure is not the only source of financing for health, it is one of the most important sources of funds, particularly for the poorest people. Investing in the health sector does not only lead to a healthy population. It also increases social and financial protection and leads to prosperity in the long run.¹² Recognising these benefits, African Union (AU) member states met in Abuja, Nigeria in 2001 to agree on a set of commitments to tackle health risks and infectious diseases. They also agreed to spend at least 15% of their annual budgets towards improving the health sector. **Fifteen years have passed since the Abuja Declaration was signed, and yet the vast majority of AU countries have not met their commitments. Since 2002, fewer than half of African countries have met the Abuja target in any given year.** Furthermore, as analysed below, per capita government spending on health remains vastly below what is required.

FIGURE 1.
GENERAL GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2012-14 AVERAGE

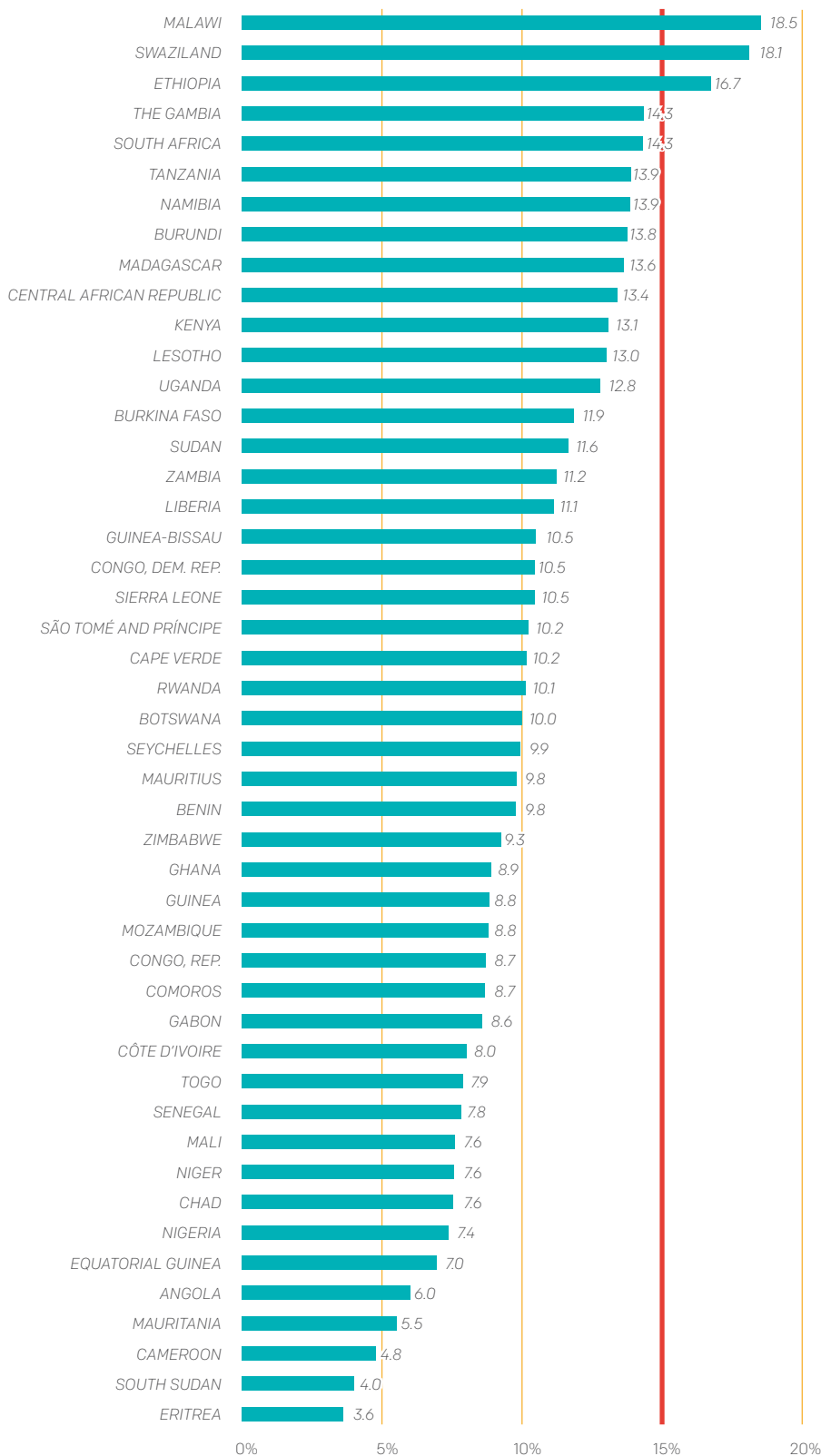


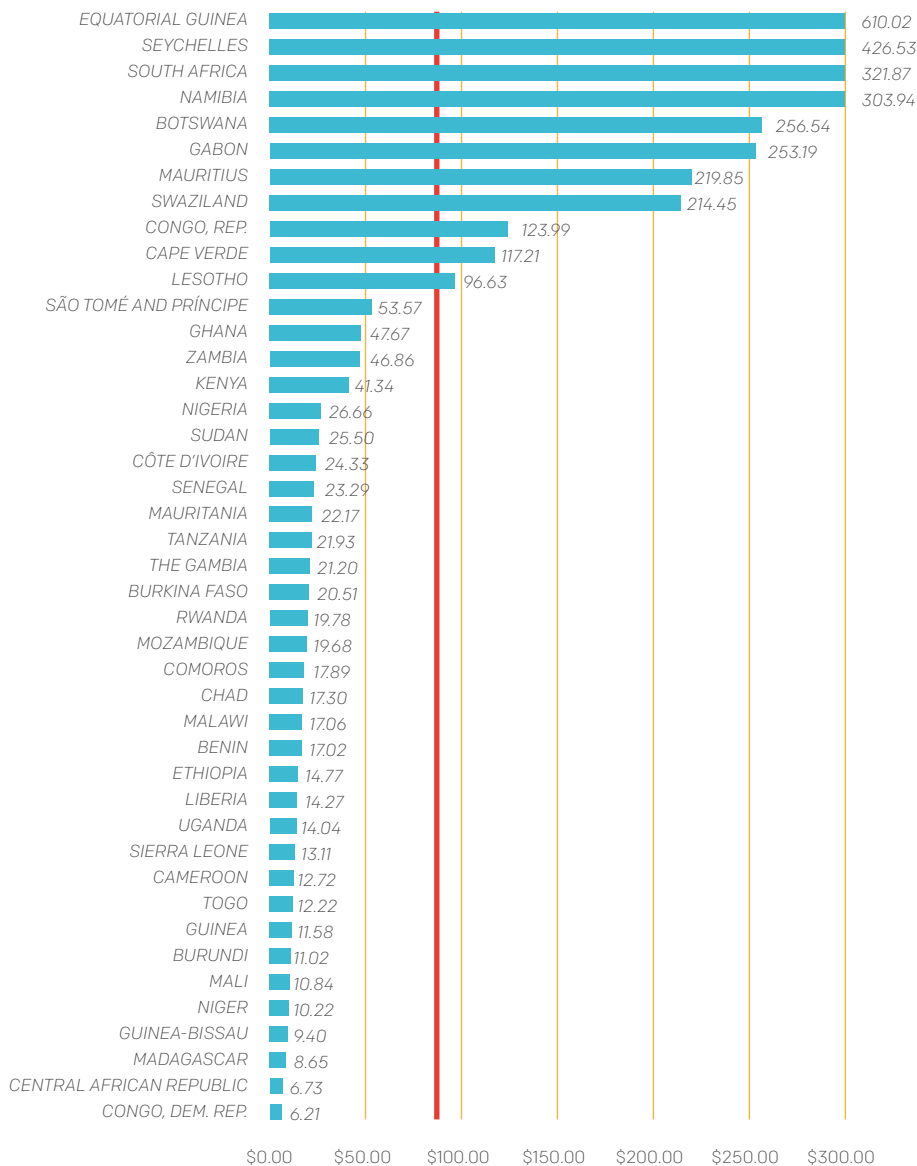
Figure 1 indicates whether sub-Saharan African countries have achieved their Abuja commitment by presenting average annual government expenditures on the health sector over the period 2012–14, where 2014 is the latest year for which data are available. Due to sometimes very large data fluctuations from year to year, it is preferable to view health spending as an average over a number of years. **Only three countries – Malawi, Swaziland and Ethiopia – have surpassed the 15% target, on average, during this time.** Twenty-one countries have spent between 10% and 15%, 20 countries have spent between 5% and 10%, and three countries have spent less than 5%. The average health spending of all sub-Saharan African countries combined accounts for 10.3% of government spending between 2012 and 2014. This represents a slight increase in health spending compared with the 2002–04 average of 9.9%.¹³

However, even countries allocating a high proportion of their annual budget to health do not necessarily allocate sufficient funds per capita, and vice versa, as countries with small national budgets have far fewer resources than countries with high fiscal capacity.

Figure 2 overleaf analyses general government health expenditure per capita on average from 2012 to 2014, deflated to 2012 prices in order to compare with the \$86 per capita minimum spending level calculated by the High Level Task Force on Innovative International Financing for Health Systems and Chatham House to provide basic health services¹⁴ (see Methodology section).

Source: WHO Global Health Expenditure Database and ONE's own calculations.

Note: Somalia is not included in this analysis because the WHO does not have any health expenditure data for the country.

FIGURE 2.**GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2012-14 AVERAGE**

Over the period 2012–14, 32 countries spent less than the recommended \$86 per capita on essential health services, compared with 11 countries that spent more than the recommended amount. Eight of these 11 countries allocated more than \$200 per person per year towards health. The average per capita government expenditure on health in sub-Saharan Africa increased from \$48 in 2002 to \$83 in 2014 (2012 prices).

In order to bridge the gap and reach the target of \$86 per capita, \$54.5 billion in additional funds was needed across all countries in the region in 2014 – \$10.5 billion in Nigeria alone.¹⁵ If every country spending below \$86 per capita on health met this target, the additional funds could pay for 545 million additional antiretroviral treatments to fight HIV, 5.4 billion insecticide-treated bed nets to protect people from malaria or 2.6 billion vaccinations to protect children from other diseases in Africa.¹⁶

Sources: WHO National Health Account (NHA) Indicators for nominal General Government Health Expenditure per Capita (US\$); World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section); and ONE's own calculations.

Note: The axis on this graph was capped at \$300 to improve readability. Moreover, Angola, Eritrea, Somalia, South Sudan, and Zimbabwe were not included for data availability reasons (see Methodology section).

BOX 1.**DATA CHALLENGES: HEALTH SPENDING**

Tracking health spending across sub-Saharan African countries is challenging, and thus these data can be used as a guide but not relied upon completely. The data in Figure 2 are drawn from the WHO Global Health Expenditure Database, which is the only source to provide internationally comparable numbers on health expenditures. WHO aims to update the data annually, adjusting and estimating the numbers based on publicly available reports and sending them out to national ministries of health for validation prior to publication, but users are advised that country data may still differ in terms of definitions, collection methods, population coverage and estimation methods used. In practice, for example, not all data are up to date or verified based on when National Health Account (NHA) reports were last completed. Thus, WHO data can differ from data published by countries in their national budget reports. For example, Rwanda's budget documents indicate that the country exceeded the Abuja commitment to allocate 15% of its annual budget towards health in the financial year 2011/12, spending 16.05% on health services.¹⁷ However, WHO data show Rwanda's health spending for 2011 and 2012 at only slightly above 10%. For more information please refer to the Methodology section.

A close-up photograph of a young girl with a joyful expression, holding a large stack of books. She is wearing a green t-shirt with the word 'Weareru' and 'nc' visible. The background is a blurred natural setting.

BOX 2.
OTHER KEY AFRICAN SPENDING COMMITMENTS

African Union member states have also made domestic spending commitments in other sectors, including agriculture and education, and these have been tracked in previous DATA reports and will continue to be monitored as data become available.

Maputo/Malabo Declaration¹⁸

In 2003 in Mozambique, member states of the AU agreed to allocate 10% of their annual budget spending to agriculture. This agreement became known as the Maputo Declaration, and the 10% target was renewed in the 2014 Malabo Declaration. Thirteen years after the Maputo Declaration was signed, however, the majority of member states are still struggling to reach the 10% target.¹⁹ Only one country, Malawi, met the 10% target over the past three years (2012–14 average), with more than half of the countries spending less than 5% on agriculture. For the period average between 2012–14, four countries missed the benchmark by less than one percentage point, namely Burkina Faso (9.9%) Mozambique (9.7%), Ethiopia (9.4%) and Liberia (9.3%). For spending figures for all sub-Saharan African countries, please refer to the Annex.

Incheon Declaration²⁰

In 2015, over 130 education ministers (amongst other heads of delegation) adopted the Incheon Declaration to boost education and literacy for the next 15 years, building upon the Jomtien Declaration adopted in 1990 and the Dakar Declaration of 2000. The signatories committed to increase public spending on education with regard to country development, and re-emphasised the target of allocating at least 4–6% of GDP and/or at least 15–20% of government spending to education.²¹ Thirteen countries have met the 20% recommendation on government education spending in the latest year that data are available, with 14 countries allocating between 15% and 20% towards education. Thus 27 out of 47 sub-Saharan African countries with available data have met the 15–20% recommendation given the most recent data available. For spending figures for all sub-Saharan African countries, please refer to the Annex.

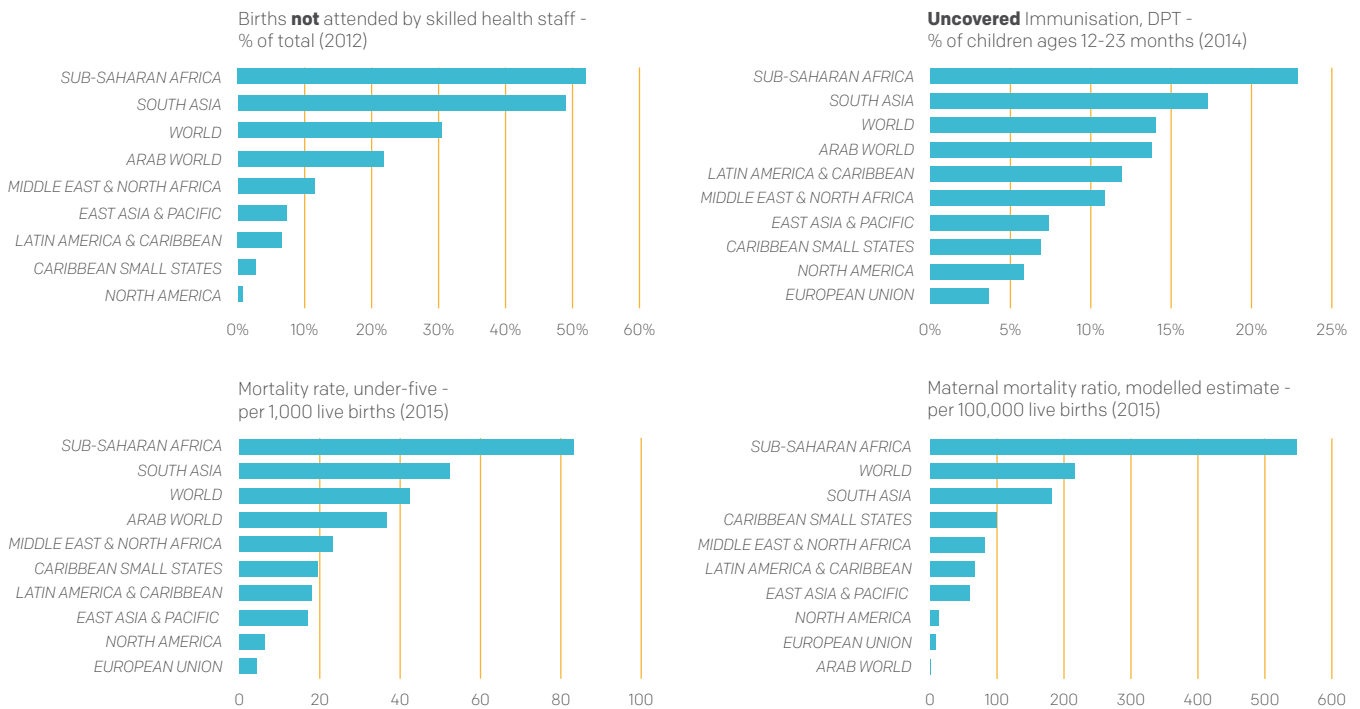
HEALTH OUTCOMES IN SUB-SAHARAN AFRICA

Investments in the health sector by governments have had significant positive impacts on citizens' life expectancy and general overall health.²² In Africa, a study found that for every 10% increase in government health expenditure per capita, there has been a 25% reduction in under-five mortality and a 21% reduction in infant mortality.²³ In addition, a 2005 study concluded that around 11% of economic growth in low- and middle-income countries between 1965 and 1990 was due to reductions in adult male deaths.²⁴ Moreover, a 2013 study found that, between 2000 and 2011, upwards of 5.7% of GDP growth in sub-Saharan Africa was attributable to improved health.²⁵ Also, a recent 2016 study showed that for every US dollar invested in immunising children in low- and middle-income countries, \$16 is expected to be saved in healthcare costs in the future.²⁶

In this chapter, ONE takes a snapshot of where countries in the region currently stand on key health-related SDG indicators, to see how much progress is needed and why increased investment in health, especially for poor populations, is crucial to achieving the 2030 SDG targets.

When comparing global progress across various health-related SDG indicators, it is evident that sub-Saharan Africa is the furthest behind of any region in the world. Under-five and maternal mortality rates, the number of births not attended by skilled health staff and the number of one-year-olds who have not received a DPT immunisation²⁷ are all close to double the world average.

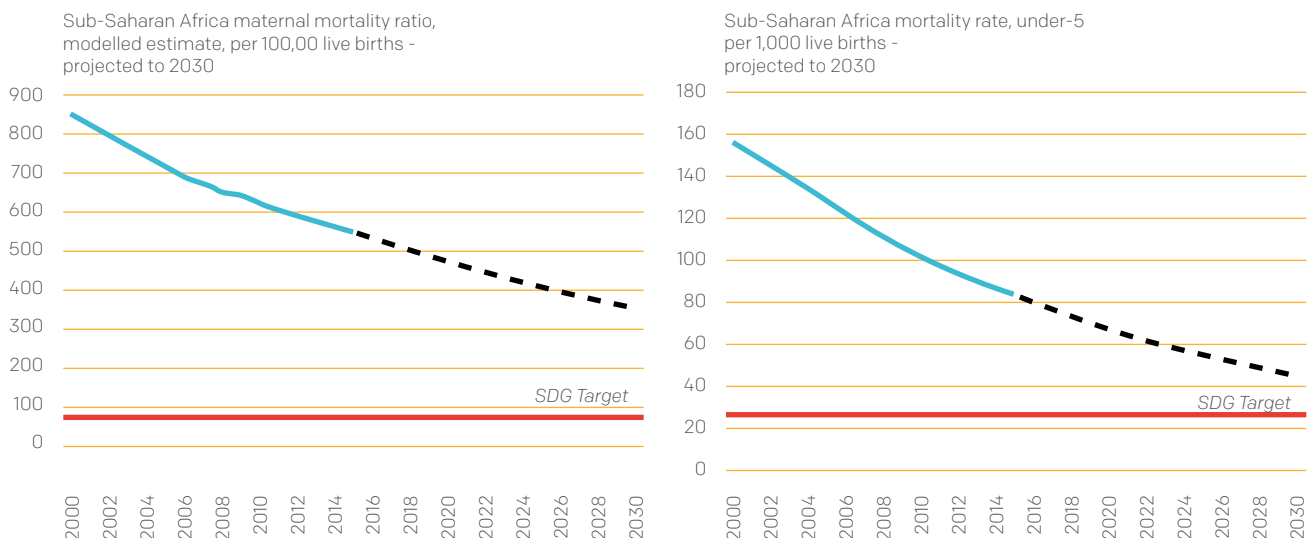
FIGURE 3.
HEALTH OUTCOMES AND INTERVENTIONS, BY REGION



Sources: World Bank Health, Nutrition and Population database and ONE's own calculations.
Note: The European Union does not have recent data for births attended by skilled health staff.

Furthermore, ONE projects that, on current trends, under-five and maternal mortality rates in the region will decrease, but only to 44 (per 1,000 live births) and 353 (per 100,000 live births) respectively by 2030. This means that sub-Saharan Africa will not hit the SDG targets of 25 or fewer under-five mortalities (per 1,000 live births) and 70 or fewer maternal mortalities (per 100,000 live births) by 2030, unless investment in health increases significantly.

FIGURE 4.
SUB-SAHARAN AFRICA CHILD AND MATERNAL MORTALITY 2030 PROJECTIONS AGAINST SDG TARGETS



Sources: World Bank Health, Nutrition and Population Database and ONE calculations.
Note: Projections calculated by using the average rate of decline for under-five mortalities (4.06%) and maternal mortality rates (2.86%) since 2000 for sub-Saharan Africa. The latter corroborates projections by the Overseas Development Institute, which predicts that sub-Saharan Africa will reach 338 maternal deaths per 100,000 live births by 2030²⁸

Table 1 presents eight key health-related SDG indicators, which in Table 2 are used to compare sub-Saharan African countries on health outcomes and interventions. These indicators for analysis were selected based on their relation to the SDGs, data availability for a majority of countries in the region and whether comparable data existed disaggregated by wealth quintile, for further analysis of health inequality. An exception was made for the indicators for maternal mortality and new HIV infections, which lack disaggregation by wealth, because these are particularly significant for sub-Saharan Africa.

TABLE 1.
SDG TARGETS, INDICATORS AND DATA

SDG TARGET	SDG INDICATOR	DATA ANALYSED
2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the WHO Child Growth Standards) among children under five years of age	Malnutrition prevalence, height for age (% of children under five)
	2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under five, disaggregated by type (wasting and underweight)	Malnutrition prevalence, weight for age (% of children under five)
3.1 By 2030, reduce the global maternal mortality ratio to fewer than 70 per 100,000 live births	3.1.1 Maternal deaths per 100,000 live births	Maternal mortality ratio (modelled estimate, per 100,000 live births)
	3.1.2 Proportion of births attended by skilled health personnel	Births attended by skilled health staff (% of total)
3.2 By 2030, end preventable deaths of newborns and children under five years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-five mortality to at least as low as 25 per 1,000 live births	3.2.1 Under-five mortality rate (deaths per 1,000 live births)	Mortality rate, under-five (per 1,000)
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases (NTDs) and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	New HIV infections among adults 15–49 (per 1,000 uninfected population)
3.7 By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.2 Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	Teenage mothers (% of women aged 15–19 who have had children or are currently pregnant)
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged populations)	Immunisation, DPT (% of children aged 12–23 months) ²⁹

Table 2, opposite, compares 31 sub-Saharan African countries against the best and worst performers, on average, for all of the indicators (see Methodology section).³⁰ Overall, the ranking appears to follow the general consensus on country performance on health outcomes and interventions. Rwanda, ranked first, has made huge strides in health since the 1994 genocide, in part due to the government’s Vision 2020 development plan and universal health insurance provided by the state, which focuses particular attention on providing for vulnerable populations.³¹ Ghana, ranked second, has witnessed substantial improvements in health outcomes and interventions since it implemented its National Health Insurance Scheme (NHIS) in 2003.³² However, it is worth noting that the health systems of Rwanda and Ghana are currently at risk: the US President’s Emergency Plan for AIDS Relief (PEPFAR) and the ,the Global fund to Fight AIDS, Tuberculosis and Malaria have started to reallocate funds away from Rwanda towards countries with higher levels of disease-specific needs, while the NHIS in Ghana is in financial crisis as legislated health benefits have put pressure on the budget, oil prices (and therefore government revenues) have decreased and payment mechanisms have encouraged greater demand in hospitals. These effects may well be apparent in future rankings. At the other end of the scale, countries such as Nigeria, Angola, Sierra Leone, Guinea, Mali, and Niger are ranked the lowest on average across health indicators, all having struggled with complex or insufficient healthcare systems.

TABLE 2.**SUB-SAHARAN AFRICA RANKING OF HEALTH OUTCOMES AND INTERVENTIONS
(LATEST YEAR DATA AVAILABLE FOR EACH INDICATOR). 1 = BEST OUTCOMES ON AVERAGE**

	Rank	Malnutrition prevalence, stunting – % of children under five	Malnutrition prevalence, underweight – % of children under five	Births not attended by skilled health staff – % of total	Mortality rate, under-five – per 1,000 live births	Teenage mothers – % of women aged 15–19 who have had children or are currently pregnant	Uncovered immunisation, dpt – % of children aged 12–23 months	Maternal mortality ratio, modelled estimate – per 100,000 live births	New hiv infections among adults 15–49 – per 1,000 uninfected population
RWANDA	1	44.3	11.7	9.3	41.7	5.4	1	290	1.1
GHANA	2	18.8	11.0	26.3	61.6	14.2	2	319	0.7
SÃO TOMÉ AND PRÍNCIPE	3	31.6	14.4	7.5	47.3	22.8	5	156	0.1
SENEGAL	4	19.4	12.8	40.9	47.2	17.6	11	315	0.1
GABON	5	17.5	6.5	12.9	50.8	27.6	30	291	1.4
NAMIBIA	6	23.1	13.2	11.8	45.4	18.6	12	265	9.1
REPUBLIC OF CONGO	7	25.0	11.8	16.9	45	32.9	10	442	1.4
KENYA	8	26.0	11.0	38.2	49.4	18.1	19	510	2.3
THE GAMBIA	9	25.0	16.4	36	68.9	17.5	4	706	1.1
SWAZILAND	10	31.0	5.8	11.7	60.7	22.6	2	389	18.9
ZIMBABWE	11	27.6	11.2	20	70.7	23.5	9	443	9.2
TANZANIA	12	34.8	13.6	57.4	48.7	24.1	3	398	2.6
TOGO	13	27.5	16.2	55.4	78.4	16.5	13	368	1
BENIN	14	34.0	18.0	22.8	99.5	16.5	30	405	0.6
UGANDA	15	33.7	14.1	42	54.6	24.1	22	343	6
ZAMBIA	16	40.0	14.8	35.8	64	28.5	14	224	7.5
CAMEROON	17	32.6	15.1	35.3	87.9	25.2	13	596	3.8
MALAWI	18	42.4	16.7	12.6	64	36.2	9	634	4.5
LESOTHO	19	33.2	10.3	22.1	90.2	19.6	4	487	20.1
BURUNDI	20	57.5	29.1	39.7	81.7	11.6	5	712	0.1
CONGO, DEM. REP.	21	42.6	23.4	19.9	98.3	27.2	20	693	0.6
CÔTE D'IVOIRE	22	29.6	15.7	40.6	92.6	29.6	33	645	2.1
BURKINA FASO	23	35.1	26.2	77	88.6	26.8	9	371	0.5
LIBERIA	24	32.1	15.3	38.9	69.9	31.3	50	725	0.6
MOZAMBIQUE	25	43.1	15.6	45.7	78.5	37.5	22	489	7.4
NIGERIA	26	32.9	19.8	61.9	108.8	22.5	34	814	2
ANGOLA	27	29.2	15.6	50.1	156.9	42.5	20	477	2.1
SIERRA LEONE	28	37.9	18.1	40.3	120.4	27.9	17	1,360	0.7
GUINEA	29	35.8	16.3	60.7	93.7	34.3	49	679	1.1
MALI	30	38.5	27.9	59.9	114.7	39.3	23	587	1.3
NIGER	31	43.0	37.9	70.7	95.5	40.4	32	553	0.1

Sources: World Bank Health, Nutrition, and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

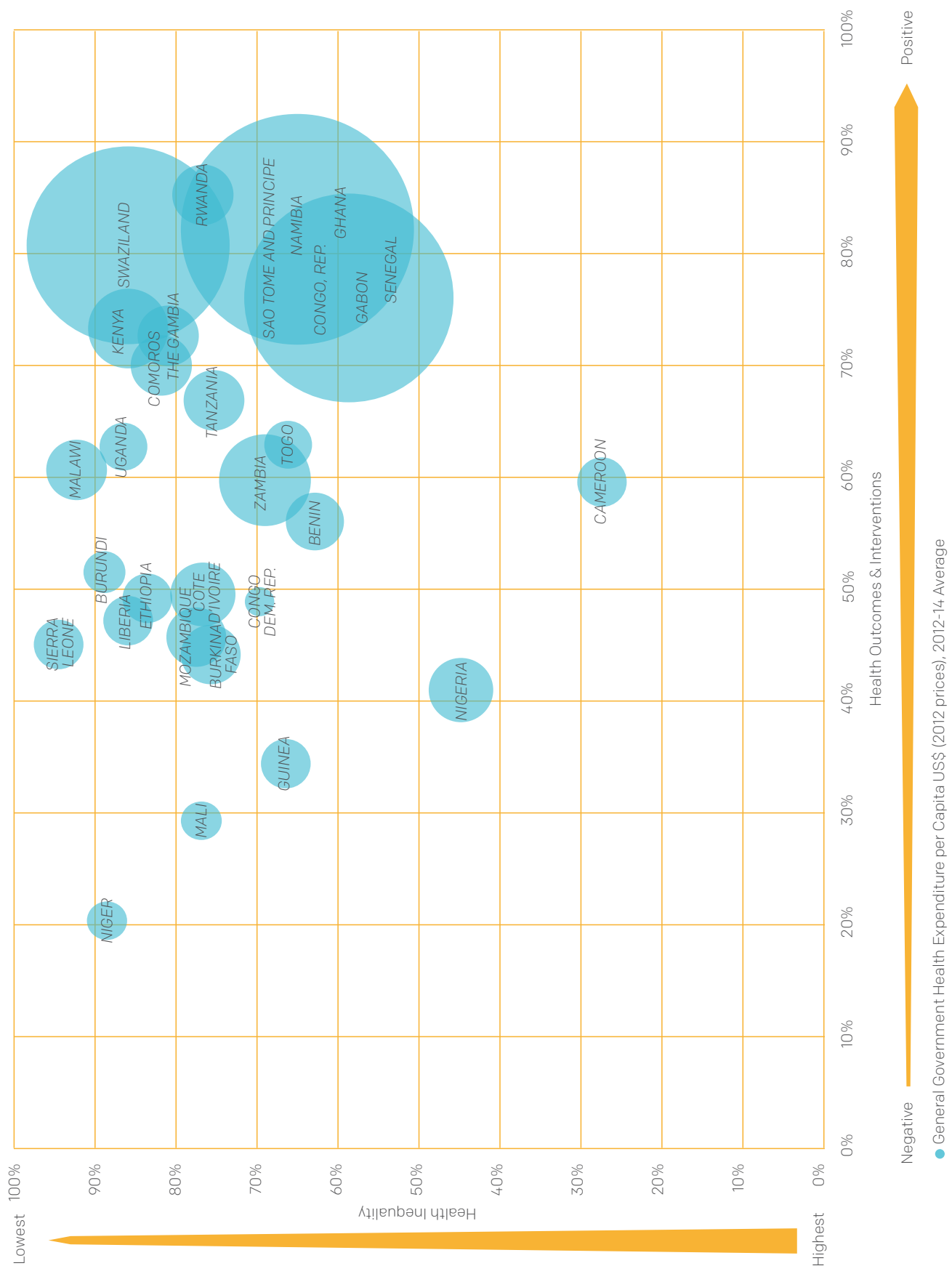


Inequalities in Health

In addition to assessing average results for health outcomes and interventions, it is crucial to highlight how economic status affects health and creates inequality in health outcomes. While health inequality for the majority of developing countries has been declining since the launch of the MDGs, progress on some health outcomes and interventions has been more rapid for the wealthy than for the poor in a significant number of countries. A 2014 study found that this was the case for 40–50% of 64 developing countries analysed for child malnutrition and mortality, and for immunisations it was the case for 40% of the countries analysed.³³ Crucially, it has been estimated that child mortality would be reduced by one-fifth and maternal mortality by almost one-third if these inequalities were eliminated.³⁴

By using the same method to measure best and worst performers in health outcomes and interventions, ONE has also measured average health inequalities within countries between the top and bottom 20% income earners (quintile 5 and 1, respectively). For this analysis we used six of the health-related SDG indicators noted in Table 1 – with the exceptions of maternal mortality and new HIV infections, due to the lack of disaggregated wealth data for these indicators. In total, 30 sub-Saharan African countries have data available for each of the six indicators, as well as average government health expenditure per capita data from 2012 to 2014 (2012 US\$ prices). Figure 5 compares the measure of health outcomes and interventions (along the x-axis) against the measure for health inequality for these countries (along the y-axis), while taking into account their average government health expenditure per capita from 2012 to 2014 (2012 US\$ prices) (see Methodology section for further explanation of how this was calculated).

FIGURE 5.
RELATIONSHIP BETWEEN HEALTH OUTCOMES/INTERVENTIONS, HEALTH INEQUALITY, & GOVERNMENT HEALTH EXPENDITURE PER CAPITA US\$ (2012 PRICES), 2012-14 AVERAGE



Sources: World Bank Health, Nutrition, and Population Database; WHO Global Health Expenditure Database; and ONE's own calculations (see Methodology section).

The results in Figure 5 show **a positive relationship between health outcomes and interventions and government health expenditure per capita**, as country bubbles grow larger from left to right.

There appears to be no discernible relationship between government health expenditure per capita and health inequality. Moreover, health inequality does not appear to be related to health outcomes and interventions. On one hand, countries such as Sierra Leone are shown to have low health inequality alongside poor overall health outcomes and interventions – signalling that all citizens, no matter their economic status, have poor health on average in respect to the selected indicators. On the other hand, countries like Swaziland have low health inequality and perform well on health outcomes and interventions – signalling that all citizens have relatively good health on average in respect to the selected indicators.³⁵ See the Annex for a full comparison of countries' health inequalities across the indicators. The lack of relationship of health inequality to health expenditure and to health outcomes and interventions could be explained by the findings of the study³⁶ noted earlier: progress for some key health indicators has been faster for the wealthy compared with the poor, thereby increasing relative health inequality while average health outcomes and interventions improve.

Nevertheless, inequality in health persists: children under five whose families are in the bottom 20% of income earners in Gabon are five times more likely to be malnourished than those whose families are in the top 20% of income earners. In Cameroon, women in the bottom 20% of income earners are 33 times more likely to give birth without the assistance of a skilled professional compared with women in the top 20% of earners.

The next section explores findings across six African countries in more detail, highlighting the unique contexts that lead to various outcomes and inequalities. On the whole, across African countries significantly more investment is needed to improve overall health outcomes and access to health interventions. Furthermore, it is essential to assess the progress being made for the bottom 20% of income earners within countries. Doing so will ensure that not only are the health-related SDGs achieved but, more importantly, that all citizens are benefiting from development gains and no-one is being left behind.

BOX 3.
DATA CHALLENGES: SDGS

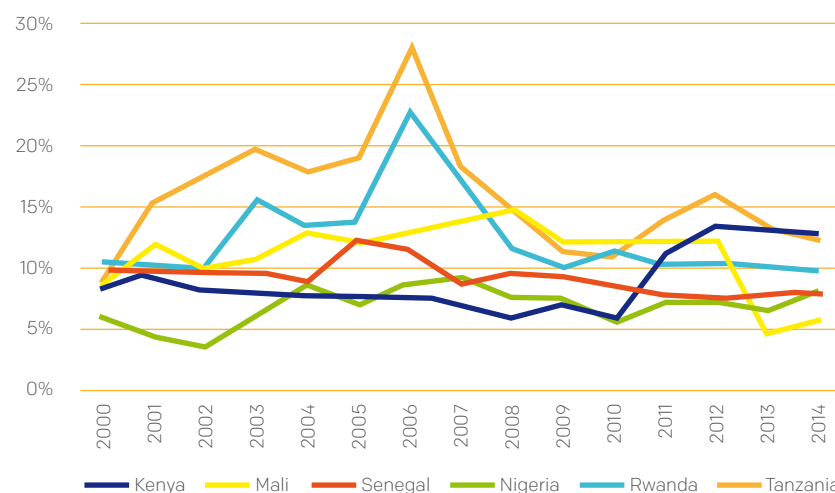
As has been widely noted, there are substantial data gaps in the monitoring and evaluation (M&E) of the SDG targets and indicators. For the health SDGs in particular, many targets have old or incomplete data, or lack data altogether. Moreover, few indicators are broken down by wealth quintile, gender and/or geographic location. This disaggregation of data is essential for the tracking of progress against the SDGs for the most disadvantaged populations. Chapter 5 discusses other limitations on currently available data and the need for more transparent and accessible data on both spending and results. See the Methodology section for further explanation.



AFRICAN PROFILES

While Africa on the whole lags far behind other regions in terms of health outcomes, there is significant variation within countries in their overall progress against health outcomes and interventions, particularly for the poorest 20% of people in each country. This section looks in more depth at six African countries – Kenya, Mali, Nigeria, Rwanda, Senegal and Tanzania. These six, out of 48 sub-Saharan African countries, are of particular importance. Together, they have a combined GDP of \$713 billion, 41% of the region’s total. They account for 33% of the region’s population (326 million out of 1 billion) and 36% of its poor people, with an aggregate 135 million people living in extreme poverty.

FIGURE 6. COUNTRY PROFILES; GENERAL GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE

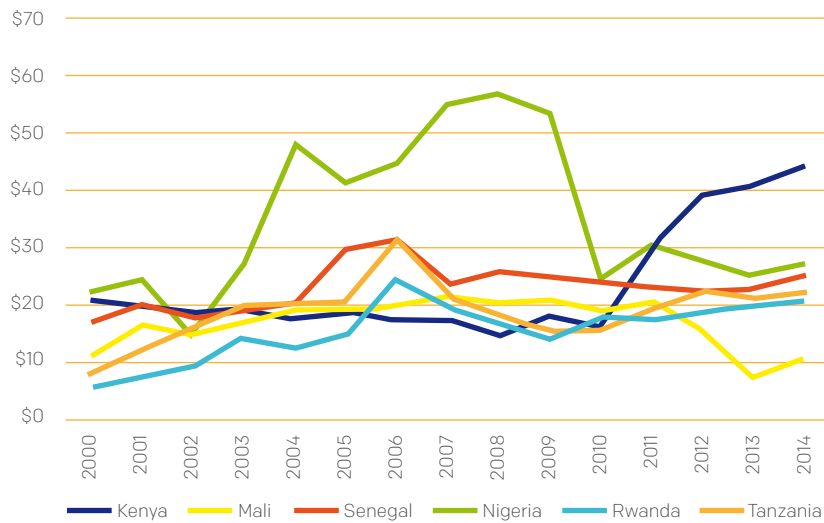


Source: WHO Global Health Expenditure Database.

In terms of spending, the six countries profiled have not met the Abuja commitment to allocate 15% of total government spending on health in recent years, with the exception of Tanzania in 2012 (Figure 6). Kenya’s spending on health has noticeably improved since 2010, while Mali’s proportion of health spending has dropped significantly since the 2012 coup d’état. The proportion of health spending for Nigeria, Senegal and Rwanda has remained relatively steady in the past few years.

Per capita government health spending has also been noticeably low for all six countries, with similar trends, far below the recommended Chatham House target of \$86 per person annually (Figure 7). Nigeria’s per capita spending spiked between 2004 and 2009 at a high of \$57.20, but in 2010 it fell back below \$30 per capita. As with the proportion of health spending, Kenya’s per capita spending has been increasing since 2010, while Mali’s has been decreasing since 2011, with a slight increase in 2014. Spending by the other three countries has remained consistently low over the past 15 years.

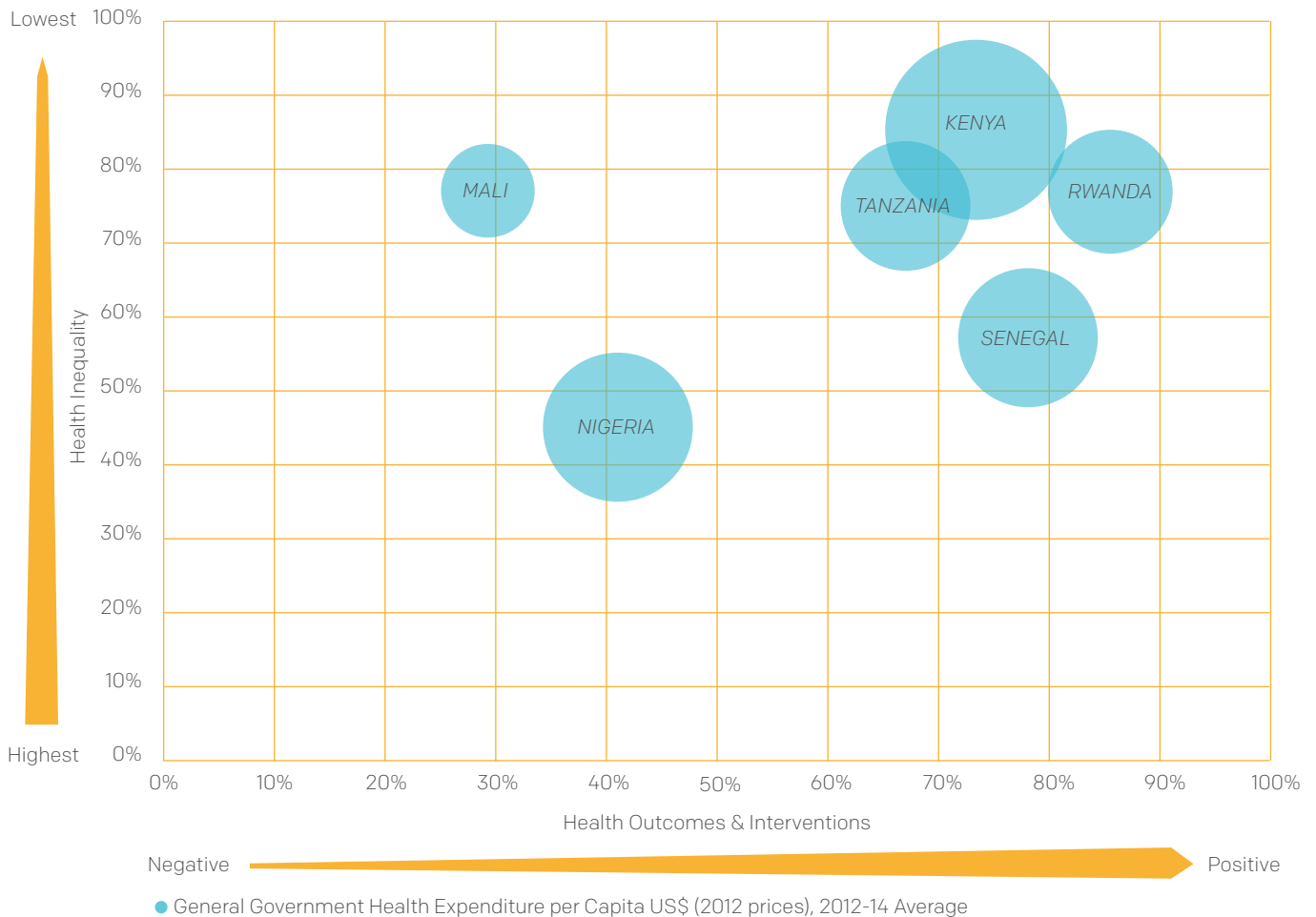
FIGURE 7.
COUNTRY PROFILES; GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES)



Progress on health outcomes and interventions has been mixed. Rwanda has shown tremendous progress in the past 20 years. Across the indicators, on average, the country ranks above countries with much greater resources. Nigeria, on the other hand, is the largest economy in Africa yet struggles to provide decent services for its population, and has some of the highest inequalities in health outcomes and interventions of any country in sub-Saharan Africa (Figure 8).

Sources: WHO Global Health Expenditure Database for nominal General Government Health Expenditure per Capita (US\$); World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section); and ONE's own calculations.

FIGURE 8.
PROFILED COUNTRIES RELATIONSHIP BETWEEN HEALTH OUTCOMES/INTERVENTIONS, HEALTH INEQUALITY, & GOVERNMENT HEALTH EXPENDITURE PER CAPITA US\$ (2012 PRICES), 2012-14 AVERAGE



Sources: World Bank Health, Nutrition, and Population Database; WHO Global Health Expenditure Database; and ONE's own calculations (see Methodology section).

KENYA

TABLE 3.
KENYA ECONOMIC AND SOCIAL INDICATORS

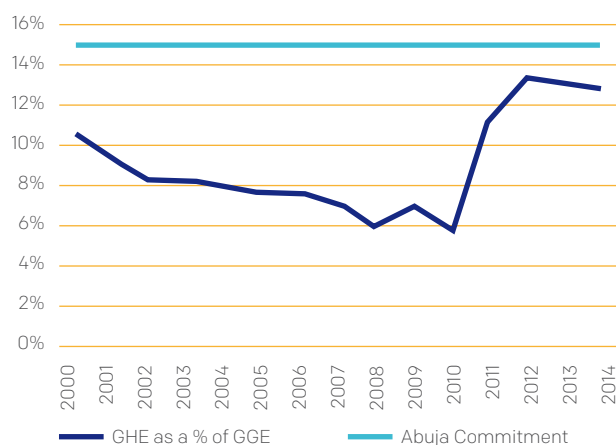
GDP at market prices (current US\$ millions)	2014	60,936.51
Five-year GDP growth (%)	2010-14	6.02
Average annual GDP forecast (%)	2016-18	5.95
GDP per capita (current US\$)	2014	1,358.26
Country classification		Lower-middle-income
Population, total (millions)	2015	46.05
Gini index (World Bank estimate)	2005	48.51
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2005	33.60
Poverty gap at \$1.90 a day (2011 PPP) (%)	2005	11.70
Number of poor at \$1.90 a day (2011 PPP) (millions)	2005	11.88

Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

In 2014, a national statistical exercise to update and improve the way that Kenya's GDP is calculated revised the size of the country's economy upwards by 23.5% – making it the fifth largest economy in sub-Saharan Africa.³⁷ Although the rebasing exercise led to Kenya's graduation from a 'low-income' country to a 'lower middle-income' one, the most recent data show that a third of its population still survive on less than \$1.90 a day.

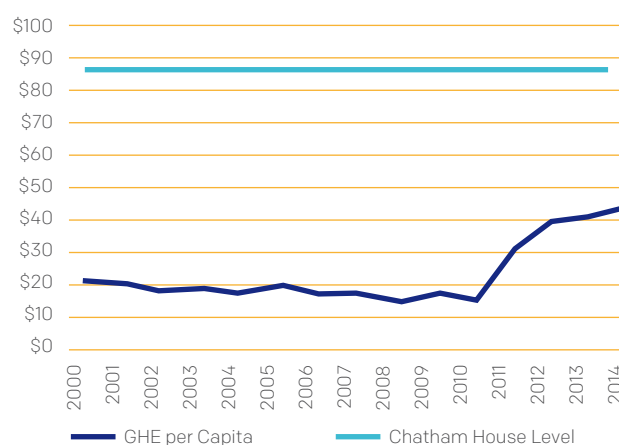
Kenya's long-term development blueprint, Vision 2030, provides strategic focus to the health sector by emphasising the right to health.³⁸ Restructuring the health delivery system towards preventive healthcare has been a key objective of the Kenyan government.³⁹ Its plans to achieve this involve the devolution of funds and responsibility for delivery of health services from a centralised structure to the county level through district hospitals, health centres and clinics, as well as the introduction of community-level health units.

FIGURE 9.
KENYA GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 10.
KENYA GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

The Kenyan government's spending on health as a share of total government expenditure has more than doubled in the past five years, from just under 6% in 2010 to approximately 13% in 2014. In spite of this upward trend, however, Kenya is yet to fulfil its Abuja commitment to devote 15% of its budget to health. Likewise, the government's health expenditure per capita has nearly tripled from around \$15 to close to \$45 over the same period. Nonetheless, despite this encouraging progress, Kenya is far below Chatham House's recommended health spending level of \$86 per person.

TABLE 4.
KENYA SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA AVAILABLE	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2000	41	2014	26	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2000	17.5	2014	11	Eradicate
Births not attended by skilled health staff (% of total)	2003	58.4	2014	38.2	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	18	2014	19	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	107.9	2015	49.4	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2003	23	2014	18.1	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	759	2015	510	70
New HIV infections (all age groups)	2000	90,000	2014	56,000	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

Increased investments in health and innovative policies and interventions have been instrumental in improving outcomes. For instance, in 2003 the government introduced the Constituency Development Fund to improve physical access to care; it has also promoted health awareness and education programmes and has rolled out electronic health information systems in low-income settings.⁴⁰ Between 2000 and 2015, child mortality declined by more than half, from 108 to 49 deaths per 1,000 live births, and under-five stunting rates fell from 41% to 26%. Moreover, the number of new HIV infections decreased by 37% between 2000 and 2014. However, progress on maternal mortality has been modest, with the rate declining from 759 to 510 deaths per 100,000 live births between 2000 and 2015. This mixed record underlines the fact that Kenya will need to make significantly better progress, particularly in boosting human and financial resources, to achieve the SDGs.

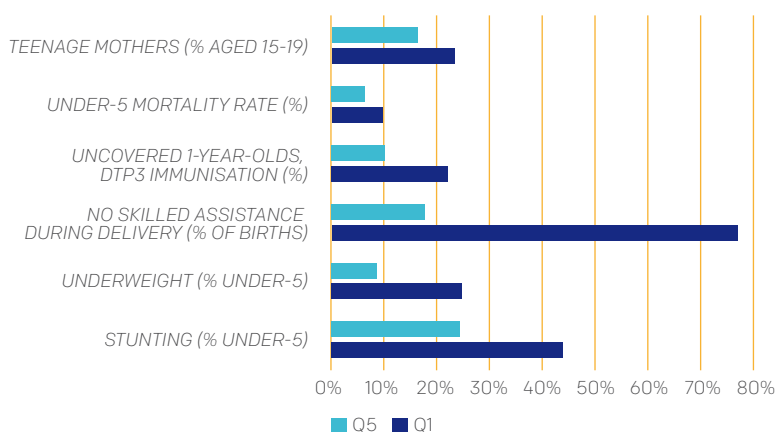


FIGURE 11.
KENYA HEALTH INEQUALITY, BY INCOME QUINTILE 1 (POOREST) AND 5 (WEALTHIEST) (2009)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

Kenya has relatively low health inequality, compared with other sub-Saharan African countries. The most pronounced disparity, common in all of these profiled countries, is in the lack of skilled assistance during birth, with births in the top quintile four times more likely to be attended by a professional compared with births in the bottom quintile.

In terms of budget transparency, the number of budget documents produced and published in Kenya has improved with time. The country scored 48 out of 100 on the 2015 Open Budget Index – above the global average score of 45 – ranking 46th out of 102 countries.⁴¹ While seven out of eight of the key budget documents⁴² were published in 2015, however, they did not provide comprehensive information. Progress has been limited on increasing the comprehensiveness of the executive’s budget proposal, making the mid-year review available to the public and publishing an enacted budget that contains significant budget information.⁴³

TABLE 5.
KENYA BUDGET TRANSPARENCY

KENYA	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	48	58	49	49	48
Open Budget Index Ranking	24 th (out of 59 countries)	23 rd (out of 85 countries)	43 rd (out of 94 countries)	46 th (out of 100 countries)	46 th (out of 102 countries)
Which budget documents are published?	n/a	n/a	Pre-Budget Statement Executive’s Budget Proposal Enacted Budget In-Year Reports Audit Report	Pre-Budget Statement Executive’s Budget Proposal Enacted Budget Citizens Budget In-Year Reports Audit Report	Pre-Budget Statement Executive’s Budget Proposal Enacted Budget Citizens Budget In-Year Reports Year-End Report Audit Report
Which budget documents are produced for internal use?	n/a	n/a	Mid-Year Review	Mid-Year Review	Mid-Year Review
Which budget documents are not produced or are published late?	n/a	n/a	Year-End Report	Year-End Report	–
Are the budgets published in machine-readable format?			Citizens Budget	–	No

Source: International Budget Partnership.



MALI

TABLE 6.
MALI ECONOMIC AND SOCIAL INDICATORS

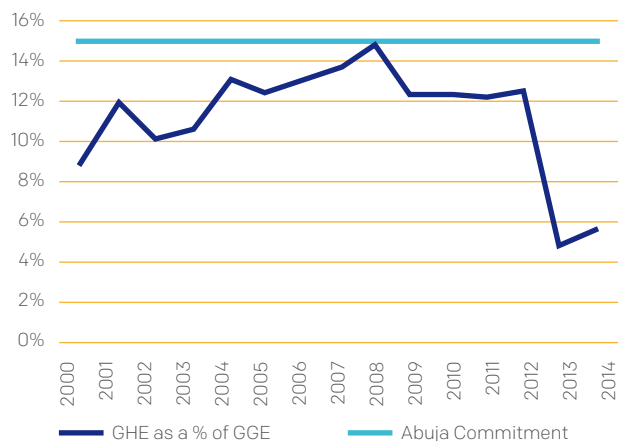
GDP at market prices (current US\$ millions)	2014	12,037.23
Five-year GDP growth (%)	2010-14	3.49
Average annual GDP forecast (%)	2016-18	5.02
GDP per capita (current US\$)	2014	704.51
Country classification		Low-income
Population, total (millions)	2015	17.60
Gini index (World Bank estimate)	2009	33.04
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2009	49.25
Poverty gap at \$1.90 a day (2011 PPP) (%)	2009	15.19
Number of poor at \$1.90 a day (2011 PPP) (millions)	2009	7.24

Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

Mali was once hailed as a beacon of democracy in West Africa, but a military coup in 2012, insurgency in the northern region and a humanitarian crisis have created insecurity, political turmoil and economic instability over the past few years. With a fragile peace agreement in place since June 2015, Mali's economy is forecast to rebound to an average growth rate of 5% over the next three years. Nevertheless, it remains among the most impoverished countries in Africa, with almost half of the population living on less than \$1.90 a day.

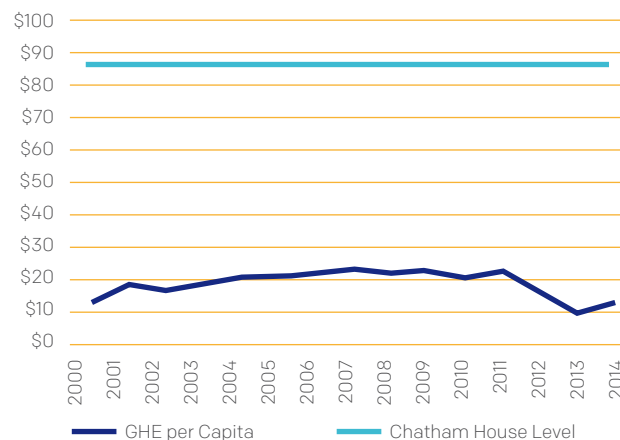
The Health and Social Development Plan and the five-year implementation plan known as the Health Sector Development Program (PRODESS) aim to address the deficiencies of Mali's health system, including the quality and geographic inaccessibility of health services. Government representatives from the Ministry of Health and other ministries, as well as donors and implementers, have raised considerable concerns over minimal results within the health sector, which they have attributed to the disconnect between priorities, needs and capacity.⁴⁴ The current PRODESS III for 2014–18 seeks to address shortfalls by prioritising health systems strengthening and improving maternal and child health.⁴⁵

FIGURE 12.
MALI GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 13.
MALI GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

There was an encouraging upward trend in government expenditure on health following Mali's 2002 pledge to meet the Abuja commitment to devote 15% of its budget to health. However, there has since been a marked decline in government spending on health from a high of approximately 15% in 2008 to less than 6% in 2014, leaving the country a long way from meeting its Abuja commitment. Likewise, the government's health expenditure per capita decreased from around \$20 to \$10 between 2011 and 2014, significantly below Chatham House's recommended level of \$86 needed to provide basic health services. In fact, Mali had the sixth lowest government spending on health per person, on average between 2012 and 2014, out of all the African countries with available data.

TABLE 7.
MALI SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA AVAILABLE	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2001	42.7	2006	38.5	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2001	30.1	2006	27.9	Eradicate
Births not attended by skilled health staff (% of total)	2001	75.6	2013	59.9	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	57.0	2014	23	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	219.6	2015	114.7	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2001	40.4	2013	39.3	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	834.0	2015	587	70
New HIV infections (all age groups)	2000	8,000	2014	12,000	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

Insufficient government investment and a severe shortage of health professionals (for every 1,000 people there are only 0.1 physicians and 0.4 nurses and midwives)⁴⁶ have contributed to slow progress and poor health outcomes in Mali. Conflict, particularly in the northern regions, has also weakened health infrastructure. The maternal mortality rate remains high, despite a decline from 834 to 587 deaths per 100,000 live births between 2000 and 2015. Moreover, the number of new HIV infections increased by 50% between 2000 and 2014. Noteworthy progress has been made in reducing child mortality by nearly half and uncovered immunisation by more than half. Nonetheless, Mali will need to redouble its efforts across all indicators if it is to achieve the SDG targets.

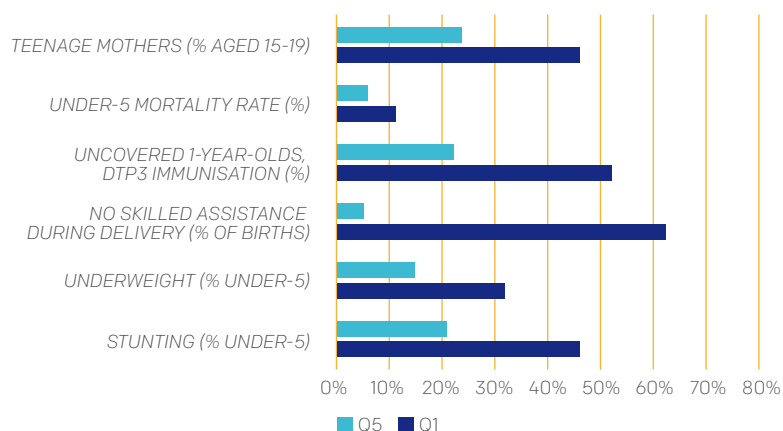


FIGURE 14.
MALI HEALTH INEQUALITY, BY INCOME QUINTILE 1 (POOREST) AND 5 (WEALTHIEST) (2013)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

Health inequality within Mali is extensive across all indicators. There is a pronounced disparity in average health outcomes and interventions between the poorest 20% of earners and the richest 20% of earners. The most notable inequality is in the lack of skilled assistance during birth: women in the bottom 20% are nearly 12 times less likely to be assisted by a skilled professional when giving birth compared with their counterparts in the top 20%.

In terms of budget transparency, Mali has improved its score with each Open Budget Index, though it still provides limited budget information. In 2015, the country scored 46 out of 100 on the Index and ranked 49th out of 102 countries. While the government has improved the comprehensiveness of the executive's budget proposal, there has been little progress in producing mid-year review and audit reports or in making the year-end report public.⁴⁷

TABLE 8.
MALI BUDGET TRANSPARENCY

MALI	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	n/a	n/a	35	43	46
Open Budget Index Ranking	n/a	n/a	61 st (out of 94 countries)	57 th (out of 100 countries)	49 th (out of 102 countries)
Which budget documents are published?	n/a	n/a	Executive's Budget Proposal Enacted Budget Mid-Year Review Year-End Report	Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports
Which budget documents are produced for internal use?	n/a	n/a	Pre-Budget Statement In-Year Reports Audit Report	Pre-Budget Statement	Year-End Report
Which budget documents are not produced or are published late?	n/a	n/a	Citizens Budget	Mid-Year Review Year-End Report Audit Report	Mid-Year Review Audit Report
Are the budgets published in machine-readable format?					No

Source: International Budget Partnership.



NIGERIA

TABLE 9.
NIGERIA ECONOMIC AND SOCIAL INDICATORS

GDP at market prices (current US\$ millions)	2014	568,508.26
Five-year GDP growth (%)	2010-14	5.74
Average annual GDP forecast (%)	2016-18	5.06
GDP per capita (current US\$)	2014	3,203.30
Country classification		Lower-middle-income
Population, total (millions)	2015	182.20
Gini index (World Bank estimate)	2009	42.97
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2009	53.47
Poverty gap at \$1.90 a day (2011 PPP) (%)	2009	21.76
Number of poor at \$1.90 a day (2011 PPP) (millions)	2009	82.99

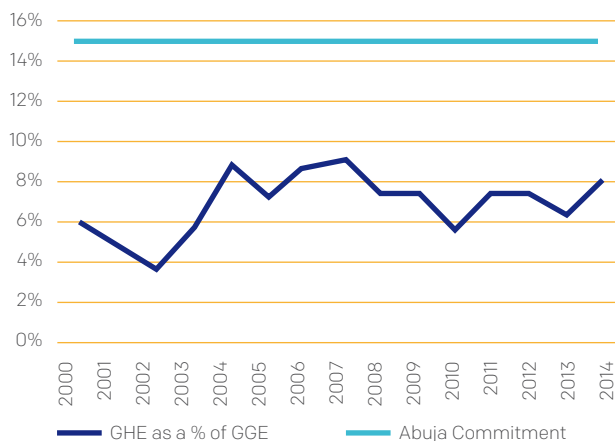
Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

Nigeria has the largest economy in Africa and is also the biggest oil exporter on the continent, with oil accounting for roughly 75% of government revenues. While growth averaged 5.74% from 2010 to 2014, weakening oil prices since then and security issues at the end of 2014 have put pressure on the country's public finances. It has the largest population in Africa (182 million), accounting for 18% of sub-Saharan Africa's population. More than half of Nigeria's population live in extreme poverty and lack access to basic services, amounting to 83 million people living on less than \$1.90 a day.

Despite hosting the African Union meeting in 2001 in Abuja where African nations committed to increase their share of government health expenditure as a percentage of general government expenditure to 15%, Nigeria has yet to come close to meeting this target. In 2014, its health spending as a percentage of government expenditure was reported by WHO to be 8.1%. However, given the fact that the most recent national health accounts report for Nigeria was produced in 2009, this health spending figure is a modelled estimate.

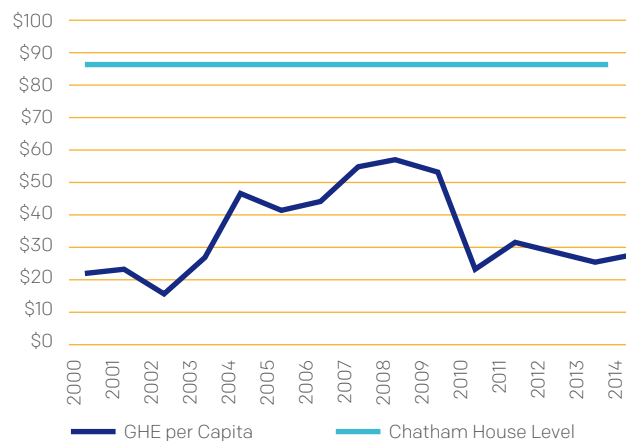
Assessing Nigeria's recently passed Appropriation Act 2016, ONE calculated that only 4.3% of the government budget is allocated to health-related government agencies at the federal level.⁴⁸ Assessing government health spending per capita, Nigeria, like most in Africa, is far from the level of \$86 recommended by Chatham House. In 2014, its health expenditure per capita was \$26.85. Due to this lack of funding, its healthcare system remains inadequate, as shown by poor coordination, fragmented services, scarcity of medicines and supplies, old and decaying infrastructure, lack of access to care by all, poor-quality care and inequity of resource distribution.⁴⁹

FIGURE 15.
NIGERIA GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 16.
NIGERIA GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

Despite progress on all health-related SDG indicators since 2000, weak investment in health by the government has resulted in Nigeria having some of the worst measures of health interventions and outcomes in Africa. Approximately 750,000 children (109 per 1,000 live births) under the age of five⁵⁰ and 58,000 women giving birth (814 per 100,000 live births) died in 2015.⁵¹ This could be due to the weak progress on skilled assisted births and adolescent motherhood. Additionally, it is worth noting that given the large population of the country, the number of new HIV infections is large compared to other African countries despite progress from 2000 to 2014. Proportionally, however, the number of new HIV infections among adults is relatively small (2 per 1,000 uninfected adults) compared to other African countries.

TABLE 10.
NIGERIA SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2003	43.0	2014	32.9	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2003	27.2	2014	19.8	Eradicate
Births not attended by skilled health staff (% of total)	2003	64.9	2013	61.9	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	71.0	2014	34	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	186.8	2015	108.8	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2003	25.2	2013	22.5	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	1170.0	2015	814	70
New HIV infections (all age groups)	2000	330,000	2014	230,000	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

Of all the African countries with data available by wealth quintile for ONE's six selected health indicators, Nigeria ranks as having some of the highest health inequalities, on average. This is especially apparent for skilled assistance during birth deliveries, with the poorest 20% of earners more than seven times less likely to have a skilled provider during birth; and in motherhood, with adolescent girls in the poorest 20% of earners almost nine times more likely to be pregnant or to have given birth than their peers in the richest 20% of earners.

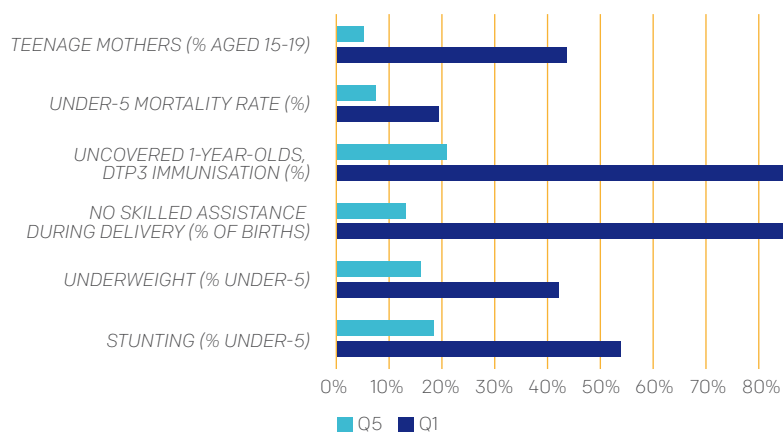


FIGURE 17.
NIGERIA HEALTH INEQUALITY,
BY INCOME QUINTILE 1 (POOREST)
AND 5 (WEALTHIEST) (2013)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

In terms of budget transparency, Nigeria's 2015 Open Budget Index score is 24 out of 100, ranking it 85th out of 102 countries. The country's inconsistent publication of documents in a given year is the core reason, among others, why it is ranked so low globally. It has made minimal improvement on budget transparency since the International Budget Partnership developed the Index, recording consistently low scores since 2006.^{52, 53}

TABLE 11.
NIGERIA BUDGET TRANSPARENCY

NIGERIA	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	20	19	18	16	24
Open Budget Index Ranking	52 nd (out of 59 countries)	61 st (out of 85 countries)	73 rd (out of 94 countries)	80 th (out of 100 countries)	85 th (out of 102 countries)
Which budget documents are published?	Pre-Budget Statement Executive's Budget Proposal Enacted Budget	Executive's Budget Proposal Enacted Budget	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports	Pre-Budget Statement Executive's Budget Proposal Enacted Budget In-Year Reports Year-End Report	Executive's Budget Proposal Enacted Budget Citizens Budget Year-End Report
Which budget documents are produced for internal use?	Audit Report	Pre-Budget Statement Mid-Year Review Year-End Report Audit Report	Mid-Year Review Year-End Report Audit Report	Mid-Year Review Audit Report	Mid-Year Review Audit Report
Which budget documents are not produced or are published late?	Citizens Budget In-Year Reports Mid-Year Review Year-End Report	Citizens Budget In-Year Reports	-	Citizens Budget	Pre-Budget Statement In-Year Reports
Are the budgets published in machine-readable format?					No

Source: International Budget Partnership.

RWANDA

TABLE 12.
RWANDA ECONOMIC AND SOCIAL INDICATORS

GDP at market prices (current US\$ millions)	2014	7,890.19
Five-year GDP growth (%)	2010-14	7.12
Average annual GDP forecast (%)	2016-18	7.60
GDP per capita (current US\$)	2014	695.69
Country classification		Low-income
Population, total (millions)	2015	11.61
Gini index (World Bank estimate)	2010	51.34
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2010	60.25
Poverty gap at \$1.90 a day (2011 PPP) (%)	2010	23.70
Number of poor at \$1.90 a day (2011 PPP) (millions)	2010	6.20

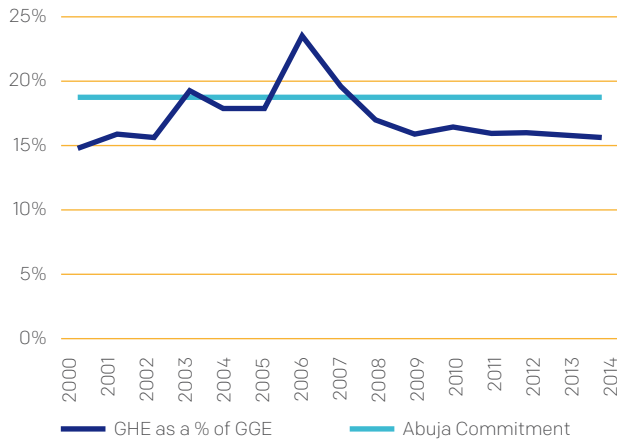
Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

Over the past 20 years since the Rwandan genocide, the country has seen remarkable gains, resulting in annual GDP growth rates consistently above the average for other sub-Saharan countries. Cash crops, the mining industry and economic reforms have played an important role in Rwanda's rise to become one of Africa's fastest-growing economies, which has also helped lead to a reduction in poverty and better living standards for its people.⁵⁴ Nevertheless, an extreme poverty rate of 60% – significantly above the sub-Saharan African average of 42.7%⁵⁵ – shows that Rwanda still has a long way to go in meeting the Global Goals.

Since the Abuja agreement in 2001, Rwanda has surpassed the goal to allocate 15% of its annual budget to health in three years – 2003, 2006 and 2007. Unfortunately, it has since failed to reach the benchmark, according to WHO data. However, according to its Ministry of Health, the country surpassed the Abuja commitment in the financial year 2011/12, spending 16.05% on health services;⁵⁶ this demonstrates some of the inconsistencies between the WHO reporting standard and countries' own reported budgets, as outlined in Chapter 1.

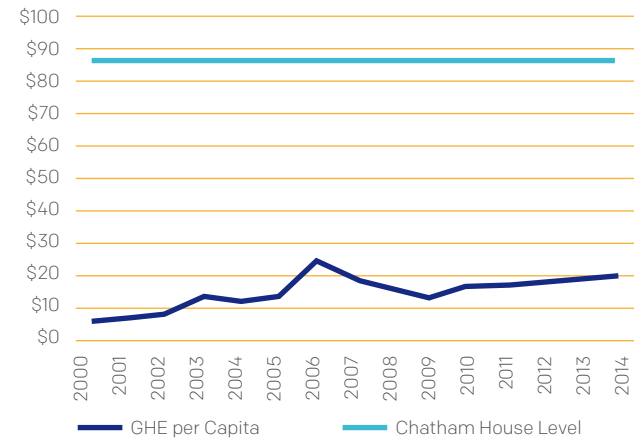
Government health expenditures per capita depend heavily on external financing and private sources.⁵⁷ However, per capita spending unfortunately remains very low, at \$20 per person in 2014, far below the \$86 benchmark set out by Chatham House. The share of donors' contributions to overall health expenditures amounted to 59% in 2011/12.⁵⁸ This additional support, combined with smart policies, has been critical to the impressive gains that Rwanda has made in health.

FIGURE 18.
RWANDA GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 19.
RWANDA GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

Rwanda has a strong track record on overall health outcomes and interventions across all indicators, with the exception of stunting. With a rate of 44.3%, it performs badly on reducing the number of children who are stunted – only Burundi (57.5%) has a higher percentage amongst sub-Saharan African countries. Rwanda has shown great progress and performs very well on under-five mortality compared with other countries in the region (41.7 per 1,000 live births). In terms of immunisation, it is not only one of the best performers in terms of DTP coverage, but has also achieved good results in continuity of care.⁵⁹ The coverage of skilled assistance during delivery of slightly more than 90% is impressive compared with other countries in the region, second only to São Tomé and Príncipe. Lastly, between 2000 and 2014 the country was able to decrease new HIV infections by 65%.

TABLE 13.
RWANDA SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA AVAILABLE	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2000	48.3	2010	44.3	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2000	20.3	2010	11.7	Eradicate
Births not attended by skilled health staff (% of total)	2000	73.3	2015	9.3	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	10.0	2014	1	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	183.8	2015	41.7	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2000	6.8	2013	5.4	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	1,020.0	2015	290	70
New HIV infections (all age groups)	2000	18,000	2014	6,200	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

When looking at inequality in the health sector, Rwanda ranks poorly, however. Children from the poorest 20% of earners are twice as likely to be stunted as children from the richest 20% of earners. When looking at under-fives underweight, the ratio is even worse. Children from the poorest 20% are three times more likely to be underweight than children from the richest 20%. This shows that access to food remains a big obstacle for the poorest 20% in Rwanda.

Even though the country ranks well in numbers of births attended by skilled health staff, there is a significant gap between the poorest and richest 20%. The poorest 20% of women are 3.3 times more likely to deliver a baby without skilled staff present. The large gap between the lowest and the highest income quintile on this measure can be explained by the high workload of community health workers (CHWs), lack of training for CHWs and the geographical inaccessibility of certain regions.⁶⁰

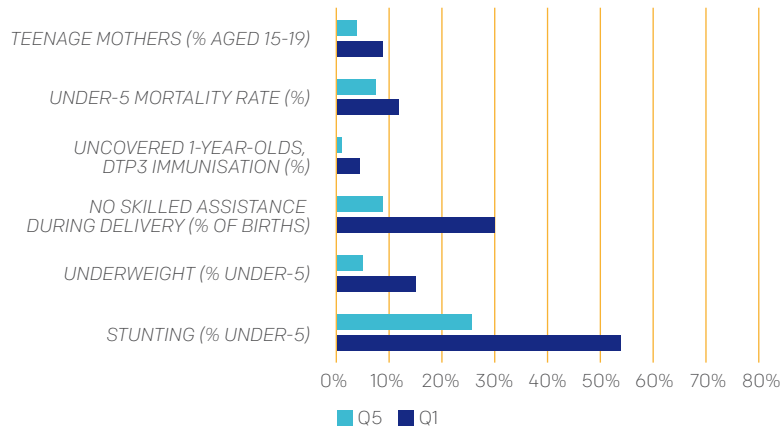


FIGURE 20.
RWANDA HEALTH INEQUALITY, BY INCOME QUINTILE 1 (POOREST) AND 5 (WEALTHIEST) (2010)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

In terms of budget transparency, Rwanda published all budget documents in 2015, but its Open Budget Index score of 36 out of 100 is below the global average of 45, as minimal information was provided in the documents. It is also pivotal to provide opportunities for the public to engage in budget processes to increase transparency, and Rwanda's government performs weakly in offering these opportunities. In this regard, the country ranked 76th out of 102 countries in 2015.⁶¹

TABLE 14.
RWANDA BUDGET TRANSPARENCY

RWANDA	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	n/a	1	11	8	36
Open Budget Index Ranking	n/a	80 th (out of 85 countries)	80 th (out of 94 countries)	90 th (out of 100 countries)	76 th (out of 102 countries)
Which budget documents are published?	n/a	Enacted Budget	Pre-Budget Statement Enacted Budget Citizens Budget Year-End Report Audit Report	Enacted Budget Year-End Report	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports Mid-Year Review Year-End Report Audit Report
Which budget documents are produced for internal use?	n/a	Pre-Budget Statement Executive's Budget Proposal In-Year Reports Mid-Year Review Year-End Report Audit Report	Executive's Budget Proposal In-Year Reports Mid-Year Review	Pre-Budget Statement Executive's Budget Proposal In-Year Reports Mid-Year Review Audit Report	-
Which budget documents are not produced or are published late?	n/a	Citizens Budget	-	Citizens Budget	-
Are the budgets published in machine-readable format?					No

Source: International Budget Partnership.

SENEGAL

TABLE 15.
SENEGAL ECONOMIC AND SOCIAL INDICATORS

GDP at market prices (current US\$ millions)	2014	15,657.55
Five-year GDP growth (%)	2010-14	3.73
Average annual GDP forecast (%)	2016-18	5.27
GDP per capita (current US\$)	2014	1,067.13
Country classification		Lower-middle-income
Population, total (millions)	2015	15.13
Gini index (World Bank estimate)	2011	40.28
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2011	37.98
Poverty gap at \$1.90 a day (2011 PPP) (%)	2011	12.79
Number of poor at \$1.90 a day (2011 PPP) (millions)	2011	5.07

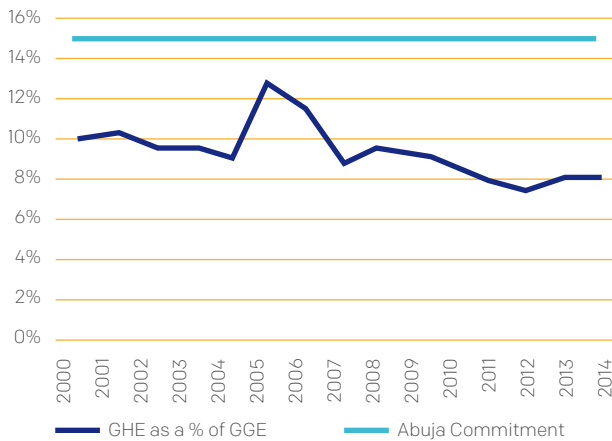
Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

Over the past few years, Senegal has consistently remained below the sub-Saharan African average for annual GDP growth. The global economic crisis, the outbreak of the Ebola virus disease in neighbouring countries and the overall economic regulatory and legal framework that makes it difficult for the private sector to thrive are seen as reasons for its low GDP growth. However, growth is predicted to increase to at least 5% over the next few years, led by the services sector, telecommunications and financial services.⁶² Nonetheless, with almost 38% of Senegalese living in extreme poverty, the country has a long way to go in ending poverty and meeting the SDGs.

The national health development plan for 2009–18 aims to enable universal access to high-quality health services.⁶³ Even though the government aimed to provide universal health coverage (UHC) to 65% of the population by 2015, the healthcare system currently in place reaches only an estimated 20% of the population.⁶⁴ However, since Senegal lacks a robust monitoring mechanism to track progress on reaching UHC goals, it is unclear how many Senegalese are actually covered.⁶⁵ At the same time, the country lacks a general health insurance scheme that would enable higher levels of coverage, especially for those most in need.⁶⁶ In order to allocate more resources for pro-poor health services, Senegal will need to tackle hospital debt, which has immensely hindered the development of the health sector in the past decade. Funding available for investments in health has shifted to cover hospitals' financial losses; in 2010, 79% of Senegal's health expenditures were allocated to hospitals and administration, while only 21% were allocated for basic care.⁶⁷

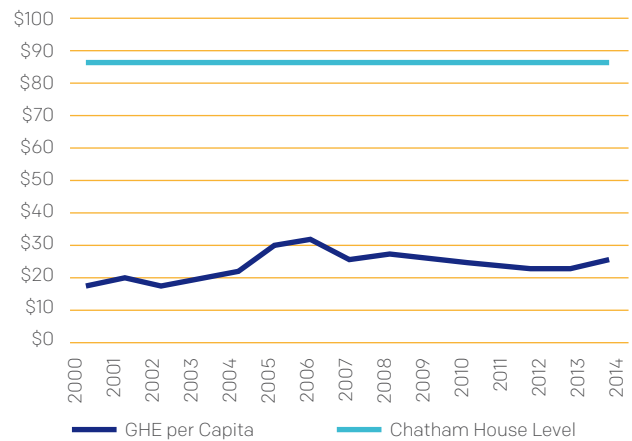
With the exception of a brief spike in 2005, Senegal's government health expenditure as a proportion of overall government expenditure has seen an overall decline since the 2001 Abuja summit. From 12.4% in 2005, health spending dropped to 8% in 2014, even further from the Abuja commitment. However, reports by the Senegalese Ministry of Health paint a different picture, putting average annual health expenditure between 2009 and 2012 at 14.6% of overall expenditure.⁶⁸ Senegal's per capita health spending has also remained low: despite an overall increase from \$17 in 2002 to \$25 in 2014, it is still far below the level of \$86 per capita recommended by Chatham House.

FIGURE 21.
SENEGAL GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 22.
SENEGAL GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

Faced with rapid population growth, Senegal has managed to decrease the prevalence of stunting in children since 2000. With an under-five stunting rate of 19.4%, it is one of the best performers in this category, though its performance is worse in reducing the number of underweight children (12.8%) compared with other countries where data are available. It has not improved on the proportion of skilled health staff present during birth delivery since 2000, though it has one of the best immunisation coverage rates compared with other countries. Additionally, the number of new HIV infections has decreased substantially since 2000, illustrating that Senegal is well on-track to eradicate the disease.

TABLE 16.
SENEGAL SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA AVAILABLE	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2000	29.5	2014	19.4	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2000	20.3	2014	12.8	Eradicate
Births not attended by skilled health staff (% of total)	2000	42.2	2014	40.9	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	48.0	2014	11	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	134.9	2015	47.2	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2005	18.9	2014	17.6	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	488.0	2015	315	70
New HIV infections (all age groups)	2000	6,800	2014	1,000	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

Although for overall health outcomes Senegal is amongst the best of the sub-Saharan African countries for which data are available, it has significant gaps in terms of health equality. The percentage of teenage mothers in the poorest 20% of earners is more than four times higher than in the richest 20% of earners. Stunting and underweight occur roughly 3.5 times more often in the lowest quintile compared with the highest. The biggest gap between the poorest and richest can be seen in the figures for unskilled assistance during birth: the poorest 20% are 4.2 times less likely to have skilled assistance than the wealthiest 20%.

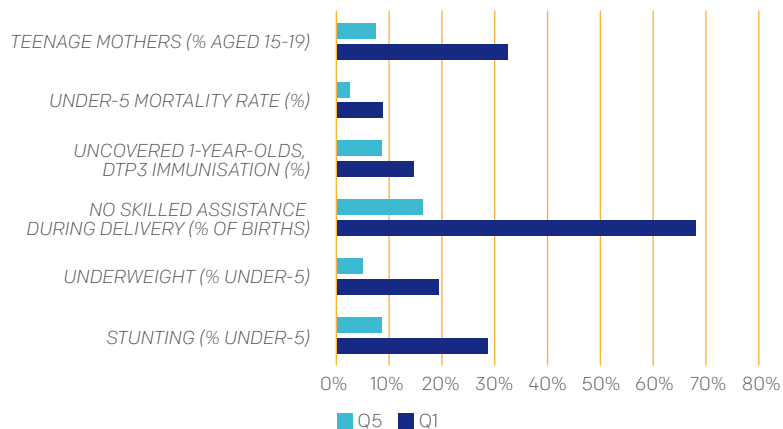


FIGURE 23
SENEGAL HEALTH INEQUALITY, BY INCOME QUINTILE 1 (POOREST) AND 5 (WEALTHIEST) (2014)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

In terms of budget transparency, Senegal's Open Budget Index score in 2015 was 43 out of 100, just below the 2015 global average of 45 – ranking 61st out of 102 countries. The country significantly increased its score (by 33 points between 2012 and 2015) by publishing the executive's budget proposal, enacted budget and citizens budget, as well as improving the comprehensiveness of the pre-budget statement. However, overall it provided limited budget information and did not publish documents on time.⁶⁹

TABLE 17.
SENEGAL BUDGET TRANSPARENCY

SENEGAL	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	n/a	3	3	10	43
Open Budget Index Ranking (out of 102 countries)	n/a	77 th (out of 85 countries)	86 th (out of 94 countries)	88 th (out of 100 countries)	61 th (out of 102 countries)
Which budget documents are published?	n/a	Enacted Budget In-Year Reports Audit Report	Enacted Budget In-Year Reports Audit Report	Pre-Budget Statement In-Year Reports	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports
Which budget documents are produced for internal use?	n/a	Pre-Budget Statement Executive's Budget Proposal Mid-Year Review Year-End Report	Pre-Budget Statement Executive's Budget Proposal Mid-Year Review Year-End Report	Executive's Budget Proposal Enacted Budget Mid-Year Review Year-End Report	–
Which budget documents are not produced or are published late?	n/a	Citizens Budget	Citizens Budget	Citizens Budget Audit Report	Mid-Year Review Year-End Report Audit Report
Are the budgets published in machine-readable format?					No

Source: International Budget Partnership.

TANZANIA

TABLE 18.
TANZANIA ECONOMIC AND SOCIAL INDICATORS

GDP at market prices (current US\$ millions)	2014	48,056.68
Five-year GDP growth (%)	2010-14	6.73
Average annual GDP forecast (%)	2016-18	7.13
GDP per capita (current US\$)	2014	955.14
Country classification		Low-income
Population, total (millions)	2015	53.47
Gini index (World Bank estimate)	2011	37.78
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	2011	46.60
Poverty gap at \$1.90 a day (2011 PPP) (%)	2011	14.35
Number of poor at \$1.90 a day (2011 PPP) (millions)	2011	21.96

Sources: World Bank Development Indicators; World Bank Poverty and Equity Database; World Bank Global Economic Prospects Database; and ONE's own calculations.

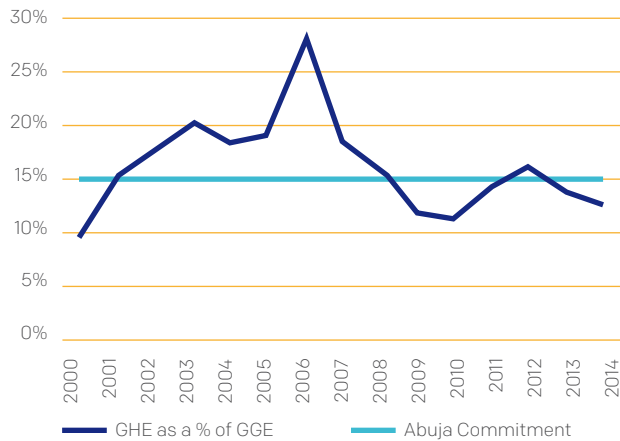
Despite recent economic growth, many Tanzanians have not benefited from this growth as nearly half of the population live on less than \$1.90 per day. High youth unemployment and rising income disparities are key challenges for a fast-growing population of 53.4 million.

Tanzania continues to grapple with structural weaknesses, such as poor health infrastructure, shortages of health workers and lack of financial resources. High morbidity and mortality rates, especially in children, have been linked to poor sanitation, shortages of safe drinking water and malnutrition.⁷⁰ Thus, the Tanzanian government has tried to strengthen the health system by making a tailored, targeted effort to better fund health services, enhance the quality of healthcare and invest in health systems strengthening.

After peaking at 28% in 2006, the government's spending on health as a share of total government expenditure declined steeply to 11% in 2010. There was a modest upward trend between 2010 and 2012, but government spending on health as a proportion of total government expenditure again slipped below the Abuja commitment in 2014, to 12.3%. Government health expenditure per capita also remains low, showing little overall change between 2005 and 2014. Even at its highest – \$31 in 2006 – per capita spending on health was far below the Chatham House recommendation of \$86 per person.

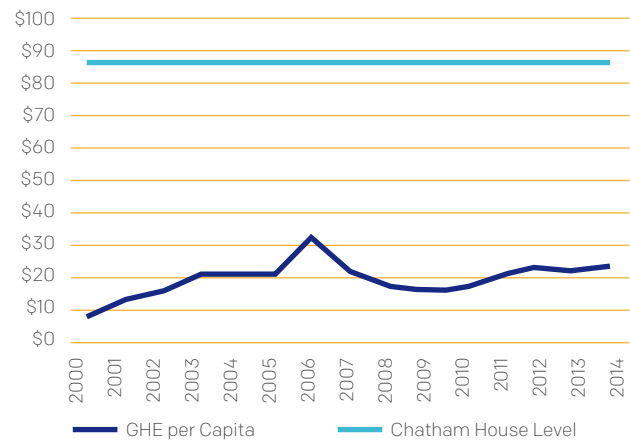


FIGURE 24.
TANZANIA GOVERNMENT HEALTH EXPENDITURE AS A % OF GENERAL GOVERNMENT EXPENDITURE, 2000-14



Source: WHO Global Health Expenditure Database.

FIGURE 25.
TANZANIA GENERAL GOVERNMENT HEALTH EXPENDITURE PER CAPITA IN US\$ (2012 PRICES), 2000-14



Sources: WHO NHA Indicators for nominal General Government Health Expenditure per Capita (US\$), World Bank Development Indicators for Official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country) to calculate deflators to convert figures into 2012 constant US\$ (see Methodology section).

Significant progress has been achieved in reducing the under-five mortality rate from 131 to 49 deaths per 1,000 live births between 2000 and 2015. Similarly, the maternal mortality rate fell by more than half in the same period, from 842 to 398 deaths per 100,000 live births. The government's investments in high-impact and cost-effective nutrition interventions, along with the adoption of policies in a wide range of economic and social sectors, were instrumental in reducing stunting from 44% in 2004 to 35% in 2011. Additionally, the number of new HIV infections has been more than halved between 2000 and 2014. Tanzania has made little progress, however, in increasing the percentage of births attended by skilled health personnel.

TABLE 19.
TANZANIA SDG HEALTH INDICATORS

INDICATOR	2000 OR CLOSEST YEAR	RESULT	MOST RECENT YEAR DATA AVAILABLE	RESULT	SDG TARGET
Malnutrition prevalence, stunting (% of children under-5)	2004	44.4	2011	34.8	Eradicate
Malnutrition prevalence, underweight (% of children under-5)	2004	16.7	2011	13.6	Eradicate
Births not attended by skilled health staff (% of total)	2005	59.4	2012	57.4	Complete coverage
Uncovered Immunisation, DPT (% of children aged 12-23 months)	2000	21.0	2014	3	Complete coverage
Mortality rate, under-5 (per 1,000)	2000	130.6	2015	48.7	25
Teenage mothers (% of women aged 15-19 who have had children or are currently pregnant)	2005	26.0	2012	24.1	No specified target
Maternal mortality ratio (modelled estimate, per 100,000 live births)	2000	842.0	2015	398	70
New HIV infections (all age groups)	2000	150,000	2014	62,000	Eradicate

Sources: World Bank Health, Nutrition and Population Database; WHO Global Health Observatory Database; and ONE's own calculations.

Health inequality within Tanzania remains wide across all indicators. The proportions of underweight and stunted children under five in the poorest 20% of earners are roughly twice as high as in the richest 20% of earners. An even larger disparity can be found in unskilled assistance during delivery, with births in the poorest quintile nearly six times more likely to be unattended by skilled health personnel.

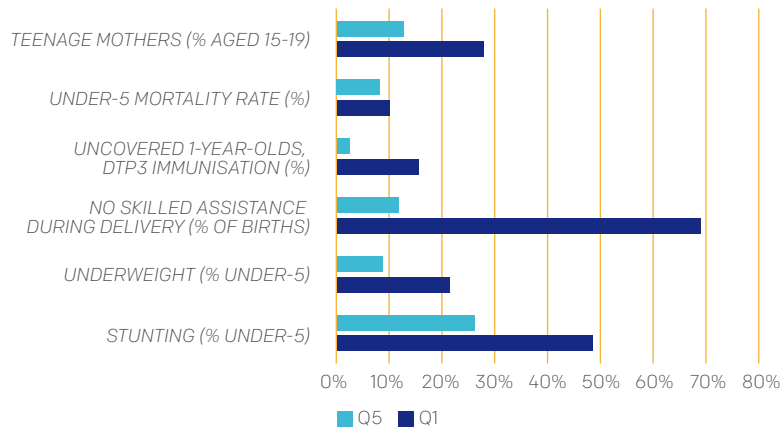


FIGURE 26.
TANZANIA HEALTH INEQUALITY, BY INCOME QUINTILE 1 (POOREST) AND 5 (WEALTHIEST) (2010)

Source: World Bank Health, Nutrition and Population by Wealth Quintile Database.

In terms of budget transparency, Tanzania scored 46 out of 100 in the 2015 Open Budget Index, close to the global average of 45 – ranking the country 54th out of 102 countries. The government has increased the availability of budget information, but improvements are still required in the production and the comprehensiveness of some of the budget documents, such as the enacted budget. Opportunities for public engagement in the budget process remain limited.⁷¹

TABLE 20.
TANZANIA BUDGET TRANSPARENCY

TANZANIA	2006	2008	2010	2012	2015
Open Budget Index Score (out of 100)	48	36	45	47	46
Open Budget Index Ranking	25 th (out of 59 countries)	52 nd (out of 85 countries)	50 th (out of 94 countries)	51 st (out of 100 countries)	54 th (out of 102 countries)
Which budget documents are published?	n/a	Executive's Budget Proposal Enacted Budget In-Year Reports Audit Report	Executive's Budget Proposal In-Year Reports Audit Report	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports Audit Report	Pre-Budget Statement Executive's Budget Proposal Enacted Budget Citizens Budget In-Year Reports Audit Report
Which budget documents are produced for internal use?	n/a	Pre-Budget Statement	Pre-Budget Statement Enacted Budget	—	—
Which budget documents are not produced or are published late?	n/a	Citizens Budget Mid-Year Review Year-End Report	Citizens Budget Mid-Year Review Year-End Report	Mid-Year Review Year-End Report	Mid-Year Review Year-End Report
Are the budgets published in machine-readable format?					No

Source: International Budget Partnership.

REACHING THE POOREST 20%

As the data show, the poorest 20% of people in every country examined have considerably worse health outcomes than the national average, and they are in danger of being left behind in efforts to meet the Global Goals. Various programmes have had success in improving health outcomes for the poorest and most vulnerable people, especially social protection programmes, including cash transfers, and the use of information and communications technology (ICT) and management information systems (MIS) to target and reach those most in need. Thus, ONE recommends the following interventions to help increase access to health services and improve health outcomes for the poorest people.

- **Ensure that investments in health maximise impact for all.**

Over the past decade, many countries in Africa have improved access to health services – particularly in tackling diseases – but much more needs to be done to fill the gaps that exist in national health systems more broadly.

Governments must make sure that investments in health maximise impact for all by increasing the quality and effective coverage of health services for their entire populations. African governments should ensure that the poorest 20% are put at the heart of their national health strategies, whether it is training staff in the most vulnerable and remote communities, providing mobile-based information services or collating accurate health statistics across all districts to ensure that the needs of the poorest are not forgotten. To this end, implementing the 2012 Tunis Declaration on Value for Money, Sustainability and Accountability in the Health Sector⁷² and the 2014 Luanda Commitment on Universal Health Coverage, and putting in place supportive local, regional and national health strategies,⁷³ will help put countries on the right track to deliver for the poorest.

Several countries have put in place systems and processes to try to ensure that there is a health coverage plan for the poorest people, involving financial plans, additional services, improved coverage or a mixture of these. Ghana, for example, has a tax-funded national health insurance system which aims to minimise the financial impact of health issues on poorer individuals – although this is in danger of failing if sufficient resources are not budgeted. Nigeria's National Health Act of 2014 aims to provide health coverage to the most vulnerable populations and strengthen primary healthcare centres in Nigeria. However, the National Assembly has not yet dedicated the 1% of the country's Consolidated Revenue Fund stipulated to finance the Basic Health Care Provision Fund, which is necessary to make the Act fully operational.

- **Introduce and scale up social protection programmes that benefit the poorest and most vulnerable, including through cash transfers.**

Well-designed and well-implemented social protection programmes are an important component of accelerating poverty reduction, improving social equity and reaching the poorest and most vulnerable people. Social protection schemes that are not necessarily health interventions, such as cash transfers where the government makes direct payments to those most in need, have been shown to improve health outcomes, as well as having positive spill-over effects.

BOX 4.

SOCIAL PROTECTION SCHEMES IN SOUTH AFRICA AND KENYA

South Africa's Child Support Grant⁷⁶

When Nelson Mandela came into power in South Africa, his priority was to redistribute social services fairly, particularly to care-givers of poor children. In 1997, under the new Child Support Grant, the poorest 30% of children under seven years old were to receive R70 (\$15) per month. Roll-out of the programme was slow and it only reached 22,000 children in the first year, but the government soon expanded eligibility guidelines to include older children and marginally higher income thresholds. Furthermore, the government increased the grant to R350 (\$22)⁷⁵ in 2016, delivering grants to 11.9 million children – three-quarters of all those eligible.⁷⁶

The grant has contributed to improvements in health and well-being that transcend children's nutrition and growth. Children who received the grant in early life reported less drug and alcohol use in adolescence and were more likely to abstain from sex, leading to reduced numbers of teenage pregnancies.⁷⁷

Kenya's Social Cash Transfer Programme⁷⁸

In the early 2000s, 1.7 million children in Kenya lost one or both parents - many from AIDs - and many had to deal with serious illness in their homes. In 2004, UNICEF and the Government of Kenya conducted a pre-pilot programme involving cash transfers in three districts, which provided 500 ultra-poor households caring for these vulnerable children with a monthly transfer of KSh500 (\$6.50). The results were promising, as the families bought food and school supplies. On the back of this success and with further scaling-up projects, 240,000 households and 480,000 children in Kenya were benefiting from cash transfers by 2015.

The transfers resulted in a 36% reduction in absolute poverty and an increase in food and health expenditure in the short term. There was also an 80% reduction in the chances of sexually active girls having had multiple sexual partners in the past year – a key driver of the HIV epidemic. Boys whose care-givers had received transfers were 26% less likely to exhibit signs of depression and 30% more likely to report hope for the future.

- **Utilise information and communications technology (ICT) and management information systems (MIS) to reach the poorest and most vulnerable, and to improve access to health services and service delivery.**

When implemented strategically, ICT and MIS can play an instrumental role in improving access to public services and health outcomes by targeting those most in need, as well as increasing the efficiency and improving the monitoring and evaluation of programmes. ICT and MIS also enable citizens to participate and provide feedback, which is essential in order to tailor services towards their needs. However, the most vulnerable – particularly girls and women – are often those without access to ICT. The benefits of ICT can be further amplified by addressing digital divides.

BOX 5.

ICT AND MIS HEALTH SERVICES REACHING THE MOST VULNERABLE IN MALAWI AND KENYA

Village Reach, Chipatala cha pa Foni (CCPF): mHealth for Maternal and Child Health in Malawi⁷⁹

Chipatala cha pa Foni or 'Health Centre by Phone' started as a two-year mHealth pilot programme implemented in Malawi by NGO VillageReach between 2011 and 2013. The service targeted women of childbearing age, pregnant women and guardians of children under five in the most rural parts of the country, and offered a 'hotline' service providing information about pregnancy, early childcare and warning signs that medical attention may be needed.

Dramatic improvements were seen in the number of antenatal care visits during the first trimester, the number of women beginning breastfeeding within one hour of birth and the increased usage of mosquito nets by children and pregnant women.⁸⁰ The service is currently available in four districts in Malawi, serving 300,000 women and children. The Ministry of Health is currently preparing to scale it up to national coverage.

Kenya Social Protection Single Registry⁸¹

As a national management information system, the Kenyan Social Protection Single Registry manages and provides integrated oversight of the principal social assistance cash transfer programmes in the country. The Single Registry can also recognise the individual targets of each social protection mechanism, ensuring that the system can analyse the needs and services provided in households, local communities and regions, and can adjust strategies accordingly to benefit those most in need.

A review of the social protection sector in Kenya carried out by the Kenyan government found that the MIS and its safety net programmes had had a positive impact on the health of young children (0–5 years of age), including a reduction in diarrhoea, a 12% increase in measles vaccinations and a 10% increase in the numbers of people seeking preventive healthcare.⁸² Notably, the impact evaluation that was conducted in 2009 reported a 13% reduction in the proportion of households living below \$1 per day.



TRANSPARENCY AND ACCOUNTABILITY IN HEALTH

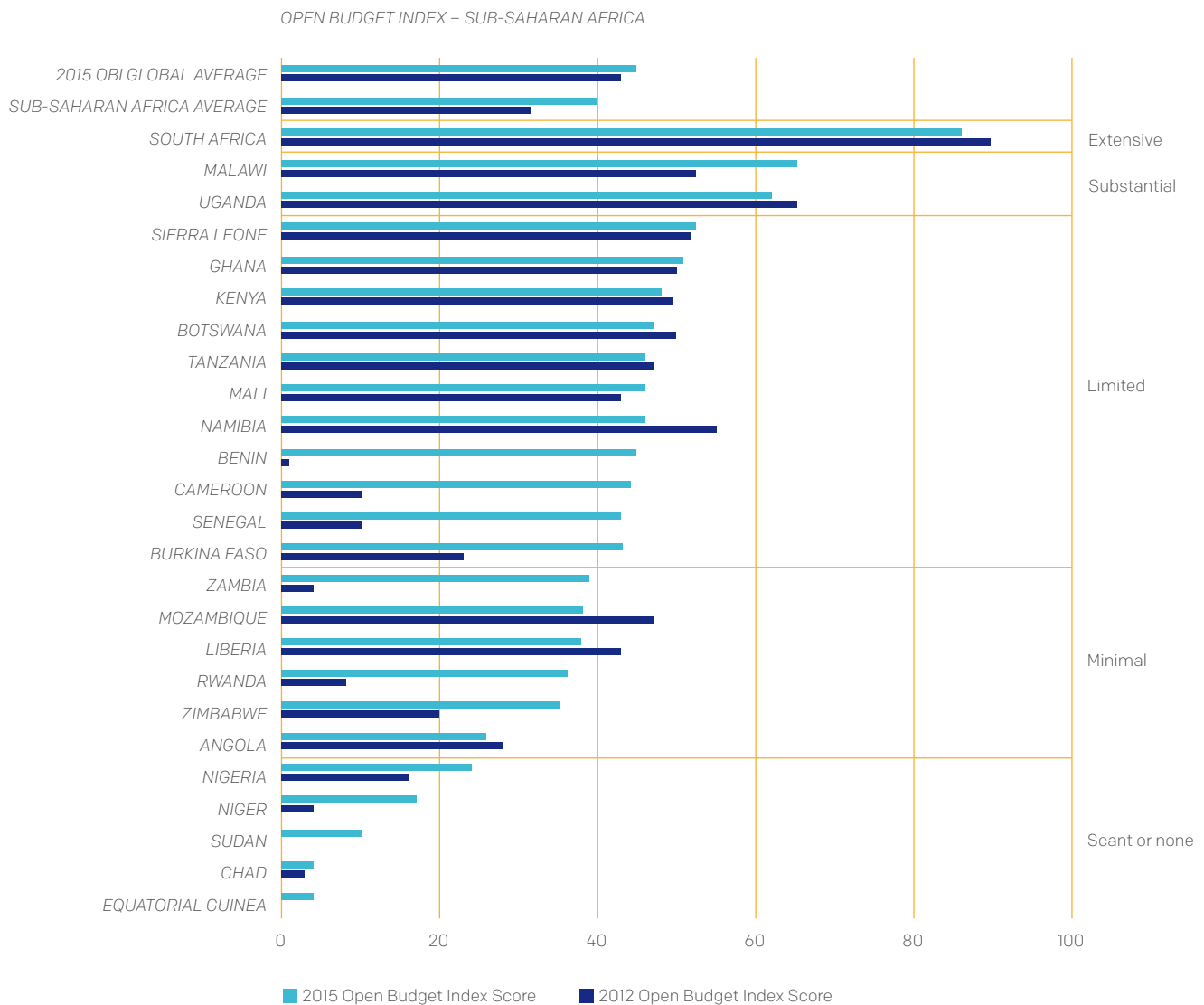
As noted throughout this report, the lack of transparent and accessible data on spending, on procurement and on results makes it impossible to 'follow the money' – limiting people's ability to hold governments to account on expenditures and service provision and to keep corruption in check and fight poverty.

Data on government spending in health, and other sectors, can be difficult to access, analyse or understand. Comparable data, measuring the same things across different countries, are even harder to come by. Government contracts are often negotiated in secret and are hidden from the public, and national statistical offices, responsible for collecting and reporting data, are underfunded and too often captured by government interests. This section reviews the main challenges in assessing investments, progress and outcomes in the health sector, and presents solutions for improving transparency and accountability.

Open Budgets

Budget transparency and oversight over how resources are allocated and spent create powerful disincentives for officials to misuse or misappropriate funds, since their actions are more likely to be scrutinised. This is likely to lead to less corruption. If budgets are open to the public and to effective legislative scrutiny, there is also less room for deviation from policy decisions and reversals of budget allocations. Sadly, the Open Budget Index, which assesses countries based on the budget information they publish, shows only three sub-Saharan African countries – South Africa, Uganda and Malawi – publishing sufficient budget information in 2015. Eleven countries in the region provided limited or no budget data at all, as seen in Figure 27, and sub-Saharan African countries average a score of 40 out of 100, below the global average of 45.

FIGURE 27.
OPEN BUDGET INDEX RANKING FOR SUB-SAHARAN AFRICAN COUNTRIES



Source: International Budget Partnership.

Open Contracts

Public procurement is critical to economic growth and development. It is also the number one corruption risk for governments. On average, half of government spending in Africa is on public procurement,⁸³ yet the OECD estimates that corruption can drain up to 25% of national procurement budgets.⁸⁴ Government public procurement and contracting should be ‘open by default’ and contracts should be published. This procurement is the bricks and mortar of public benefit, where taxpayers’ money gets converted into the roads, schools and hospitals that citizens care about. Open contracting will also achieve:

- A level playing field for companies, encouraging the growth of new markets, and creating opportunities for often marginalised businesses (typically businesses without relations inside government);
- Better analytics to shape more informed decisions and help choose the best solution for a given job;
- Higher-quality goods, services and infrastructure, when businesses and citizens can track and engage meaningfully in the contracting process; and
- Improved integrity in financial management systems and procurement, building investor and partner confidence in government institutions.

BOX 6.

DATA CHALLENGES AND ISSUES OF CORRUPTION IN NIGERIA

The quality and accuracy of health-related data in Nigeria presents a challenge for government and donors to properly assess exactly how much financing is needed and where to direct it to achieve health-related SDGs. The absence of a common data collection system has led to a lack of coordination in collecting health information, which has resulted in various stakeholders receiving fragmented information.⁸⁵ The World Bank's Program-for-Results financing approach is addressing some M&E concerns in the health sector, by encouraging administrators to evaluate and reach their milestones in order to have funding for the next phase.

Furthermore, the quality of the country's health expenditure and integrity of the public procurement system are crucial in ensuring that targets are met. Unfortunately, rampant corruption has been fuelled by a lack of transparency in public contracts. It has been estimated that the cost of corruption in Nigeria will reach almost \$2,000 per citizen by 2030 if the issue is not dealt with immediately.⁸⁶ The disclosure of data and documents by the Nigerian government is severely lacking at all stages of the contracting process. The Open Data Barometer currently ranks Nigeria 67th out of 92 countries, with a score of 14.13 out of 100, which indicates that limited data are made available by government, including procurement information.⁸⁷ The results of bid and contract evaluations, the identity of contract recipients, the status of contract implementation and contracts themselves are information that is only made available on request. Needs assessments, procurement plans, beneficial ownership information and audit reports are not disclosed at all, even when requested. Overall, it is crucial that public procurement and contracting are made open to prevent corruption and to ensure that taxpayers' money is allocated and spent on its intended purposes.

At the Anti-Corruption Summit in London in May 2016, President Buhari of Nigeria made a commitment to work towards the full implementation of the Open Contracting Data Standard (OCDS) in the health sector, among others.⁸⁸ This commitment must be delivered rapidly in order to ensure better transparency and accountability for health funds and the impact they seek to achieve.

Tracking Results

Ensuring that public spending and procurement in health are transparent, and also effective, requires that these functions are monitored alongside data on results. Of course, health data can only be disclosed and tracked when they are collected in the first place. Globally each year, almost half of births and two-thirds of deaths and causes of deaths are not formally registered.⁸⁹ In sub-Saharan Africa alone, 85 million children go unregistered.⁹⁰ This lack of registration undermines the ability of people to access legal rights and government services and the ability of governments to plan their investments effectively. Moreover, as global donors and bilateral agencies continue to express an urgent need to address health inequalities, the lack of disaggregated data by gender, geographic location and income has made it difficult to establish appropriate health interventions, programmes and policies. In particular, disaggregated data are lacking across sub-Saharan Africa for key health indicators such as HIV prevalence and maternal mortality by wealth quintile. As a founding member of the Global Partnership on Sustainable Development Data,⁹¹ ONE is campaigning for new investments in data to ensure that everyone is counted – particularly women and girls.

Following the Money from Resources to Results

Last year, ONE launched the Follow the Money portal, which showcases almost 40 case studies of how transparency and access to open budget data have changed people's lives (see Box 7 and Box 8 below).⁹² But for these changes to happen, more information on government revenues and budgets needs to be made available to the public on a much larger scale.

BOX 7.**THE POWER OF MONITORING IN THE REPUBLIC OF CONGO**

The Republic of Congo is a country rich in natural resources, yet in 2011 almost a third of the population were living on less than \$1.90 a day.⁹³ In 2013, Publish What You Pay (PWYP) Congo initiated a monitoring project focused on how oil money was being spent on national healthcare. Civil society activists requested information from the government, including health budget information and documents on national health projects run by the government. Their analysis of these documents exposed how more than half of national health projects had not been started, 16% lay abandoned, just 16% had been completed, and only 9% were actually functioning. Despite multiple conflicts of interest, and corruption and incompetence, no contracted companies had faced any sanctions. The report made national headlines and had a real impact. When news of the monitoring reached contractors who had abandoned construction of a large dialysis centre in the port of Pointe-Noire, work started again within two weeks. In Moukondo, a village in the west of Congo, an abandoned construction site for a health centre for impoverished people saw workers turn up and rebuild the roof following PWYP's visit. Since the release of the PWYP report, the government has issued regulations that require projects to take account of the planning process conducted by local community groups.⁹⁴

BOX 8.**ACCOUNTABILITY IN NIGERIA**

In 2010, hundreds of children were dying in northern Nigeria due to lead poisoning, in the worst case of its kind in history, globally. The Nigerian government promised \$5.3 million to clean up the lead pollution and provide medical care, but by mid-2012 there was no sign of the promised funds. Connected Development (CODE), a Nigerian NGO operating in West Africa, whose main goal is to empower marginalised communities by improving access to information, boosting research and exchange of views and pushing for the implementation of international development policies, stepped in to track the funds and to empower local communities to hold the government to account by improving their access to information and helping their voices to be heard. It launched 'Follow the Money Nigeria' and published stories from the affected areas in a social media campaign that included a 'tweet-a-thon'. In less than a year the powerful public media campaign had reached over one million people and put pressure on government officials to release the promised \$5.3 million, which was used for remediation measures. In July 2014, CODE reported that the clean-up was complete and that over 1,000 children had been screened and enrolled in lead treatment programmes.⁹⁵

Transparent and open budget data are absolutely crucial for accountability, yet are not sufficient on their own. To make better use of open data, data must be reported and presented in machine-readable formats in order for them to be easily turned into online applications, infographics and portals and to be used by the media and citizens. There is a vast amount of data available globally, either stored in satellites or in server rooms around the world. It is pivotal to identify where these data are stored, then open them up and make them readable. At the same time there is a need to increase data literacy so that the poorest people can actually understand data and make use of them. While vast databases might not be user-friendly for most citizens, the public sector, civil society and the private sector must strive to provide tools that meet the needs of the poor. These include (but are not limited to) online portals, web technologies, capacity building, infrastructure expansion and language diversity.

METHODOLOGY

How is government health spending measured as a percentage of government budgets?

In this report, ONE measured general government health expenditure as a percentage of total government expenditure, in order to track the performance of African governments against the Abuja commitment to spend 15% of their general budgets on health. ONE used data from WHO's Global Health Expenditure Database from 2000 to 2014, with the latest available year of data being 2014. From this database, general government health expenditure is defined as the sum of health outlays paid for in cash or supplied in-kind by government entities, such as the ministry of health, other ministries, parastatal organisations or social security agencies (without double-counting government transfers to social security and extra-budgetary funds). It includes all expenditure made by these entities, regardless of the source, and so includes any donor funding passing through them. It includes transfer payments to households to offset medical care costs and extra-budgetary funds to finance health services and goods. It includes current and capital expenditure. General government expenditure is defined as the sum of total operations of all public entities. It includes the consolidated outlays of all levels of government: territorial authorities (central/federal government, provincial/regional/state/district authorities; municipal/local governments), social security and extra-budgetary funds. The revenue base of these entities may comprise multiple sources, including external funds and loans. It includes current and capital expenditure.

Data on estimated health expenditure are collected by triangulating information from several sources including international references – such as EUROSTAT, the IMF, OECD and United Nations – and national sources – primarily countries' national health account (NHA) reports – to ensure that the outlays constitute the bulk of government expenditure on health. Some figures may be underestimated when it is not possible to obtain data on expenditure for local government, extra-budgetary entities or data from specific sources reported independently, such as external funds.

It is important to note that the most comprehensive and consistent data on health financing are generated from national health accounts. Not all countries have or update NHAs, however, and in these instances, data are obtained through technical contacts in-country or from publicly available documents and reports and harmonised to the NHA framework⁹⁶ for many African countries. Thus, for years where NHA reports have not been recently completed, health expenditure figures may be estimated. For example, Nigeria's most recent NHA report is for 2009, and so only triangulation and modelling techniques have been used to estimate the country's health expenditure data since then (Table 21).

COUNTRY	MOST RECENT NHA REPORT PRODUCED
ANGOLA	NOT AVAILABLE
BENIN	2012
BOTSWANA	2009–10
BURKINA FASO	2009
BURUNDI	2013
CAMEROON	2011
CAPE VERDE	2010–11
CENTRAL AFRICAN REPUBLIC	NOT AVAILABLE
CHAD	NOT AVAILABLE
COMOROS	2011
CONGO, DEM. REP.	2013
REPUBLIC OF CONGO	2009–10
CÔTE D'IVOIRE	2013
EQUATORIAL GUINEA	NOT AVAILABLE
ERITREA	NOT AVAILABLE
ETHIOPIA	2010–11
GABON	2010–11
THE GAMBIA	2013
GHANA	2012
GUINEA	NOT AVAILABLE
GUINEA-BISSAU	NOT AVAILABLE
KENYA	2012–13
LESOTHO	NOT AVAILABLE
LIBERIA	2009–10
MADAGASCAR	2010
MALAWI	2011–12
MALI	2004
MAURITANIA	2011–13
MAURITIUS	NOT AVAILABLE
MOZAMBIQUE	2004–06
NAMIBIA	2012–13
NIGER	2012–13
NIGERIA	2006–09
RWANDA	2006
SÃO TOMÉ AND PRÍNCIPE	NOT AVAILABLE
SENEGAL	2006–08
SEYCHELLES	2013
SIERRA LEONE	2013
SOUTH AFRICA	NOT AVAILABLE
SOUTH SUDAN	NOT AVAILABLE
SUDAN	NOT AVAILABLE
SWAZILAND	NOT AVAILABLE
TANZANIA	2012–13
TOGO	2008
UGANDA	2011–12
ZAMBIA	2003–06
ZIMBABWE	2010

TABLE 21.
SUB-SAHARAN AFRICAN
COUNTRIES' YEAR OF MOST
RECENT NATIONAL HEALTH
ACCOUNT REPORT

Source: WHO Global Health Expenditure Database Documentation Centre.

How is government health spending per capita measured?

In 2009, the High Level Taskforce on Innovative International Financing for Health Systems (HLTF) undertook a costing exercise with the World Health Organization (WHO), the United Nations International Children's Emergency Fund (UNICEF), the World Bank, the United Nations Population Fund (UNFPA) and others to estimate the costs of scaling up interventions and health system support to achieve the health-related MDGs. At the time, it was estimated that health expenditure per capita would need to be \$54 annually, in 2005 prices. In 2014, a Chatham House report updated that cost estimate in 2012 prices, suggesting that in order to achieve the goal of universal primary healthcare (PHC), low-income countries should spend at least \$86 per capita on health.⁹⁷

In this report, ONE used data from WHO's Global Health Expenditure Database from 2000 to 2014, with the latest available year of data being 2014. General government expenditure on health is defined in the sub-section above: "How is government health spending measured as a percentage of government budgets?" Per capita general government expenditure on health is expressed at an average exchange rate for that year in US dollar current prices. To convert this indicator from current prices to 2012 constant prices, in order to compare sub-Saharan African countries with the \$86 general government health expenditure target, ONE utilised the method used by the Development Assistance Committee (DAC) of the OECD to create deflators for each country. The equation for calculating deflators for each country for each year is as follows:

$$\left(\frac{XR_{Country}^{2012}}{XR_{Country}^D} \times \frac{Def_{Country}^D}{Def_{Country}^{2012}} \right) \times 100$$

$XR_{Country}^{2012}$ = Local Currency Unit per 1 US\$ exchange rate of a particular country for 2012

$XR_{Country}^D$ = Local Currency Unit per 1 US\$ exchange rate of a particular country for year to be deflated

$Def_{Country}^D$ = GDP Deflator of a particular country for year to be deflated

$Def_{Country}^{2012}$ = GDP Deflator of a particular country for 2012

This deflator equation takes into consideration exchange rate fluctuations between local currency units (LCUs) and the US dollar (US\$) as well as domestic inflation within countries. Data used for this equation included the World Bank Development Indicators' official exchange rate (LCU per US\$, period average) and GDP deflator (base year varies by country).

Countries for which a deflator and subsequent figure for general government health expenditure per capita (US\$) in 2012 prices could not be calculated were Angola (No GDP Deflator data by World Bank for 2003-15), Eritrea (No GDP Deflator data by World Bank for 2012-15), Somalia (No Health Expenditure data from WHO), South Sudan (No Exchange Rate per US\$ by World Bank), and Zimbabwe (No Exchange Rate per US\$ by World Bank for 2009-15).

Due to sometimes high data fluctuations from year to year, ONE averaged spending levels per capita over the past three years, 2012–14, in Chapter 1 to compare sub-Saharan African countries against one another. Despite limitations, the WHO data are the only source for internationally comparable levels of government spending (date accessed: 15 May 2016).

What were the SDG indicators analysed in this report?

This report analyses eight nutrition- and health-related data series for sub-Saharan Africa in order to measure six SDG targets and eight SDG indicators. These data are gathered from the World Bank's Health, Nutrition and Population database and the WHO's Global Health Observatory database. Country progress is assessed for the indicators for the overall country outcomes in the most recent year that data are available, along with disaggregated data by wealth quintile for the latest year. The only exceptions are the measurements of maternal mortality and new HIV infections, for which overall country outcomes were assessed but health data by wealth quintile were unavailable.

The indicators were chosen to provide a small cross-section of core SDG indicators that were deemed important for assessing general health and development in countries. The indicators are a mix of health outcomes (e.g. child mortality) and health interventions (e.g. immunisations). Many other possible indicators were left out, because they did not include sufficient data points for sub-Saharan African countries, they did not have recent enough data (at least as recent as 2006) or they did not also have disaggregated data by wealth quintile. An exception was made to measure maternal mortality and new HIV infections in overall health outcomes, which did not have disaggregated data by wealth quintile, as these are significant issues for sub-Saharan Africa (date accessed: 21 June 2016).

See Table 1 in Chapter 2 for the full list of SDG targets, indicators and data used in this report.

What were the social and economic indicators analysed in the country profiles?

In the country profiles in this report, nine economic and social-related indicators were gathered from the sources indicated in Table 22. These indicators were included to provide a background of understanding of how each country is performing in terms of economic growth and poverty alleviation (date accessed: 21 June 2016).

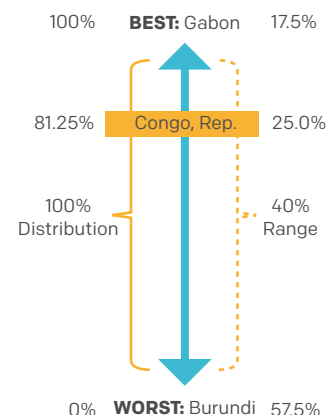
TABLE 22.
COUNTRY PROFILES; ECONOMIC AND SOCIAL INDICATORS, DATA SERIES, AND SOURCES

COUNTRY PROFILE INDICATORS	DATA SERIES/SOURCE
GDP at market prices (current US\$ millions)	GDP at market prices (current US\$)/World Bank Development Indicators
Five-year average GDP growth (%)	GDP growth (annual %)/World Bank Development Indicators
Average annual GDP forecast (2016–18) (%)	GDP growth, constant 2010/World Bank Global Economic Prospects Database
GDP per capita (current US\$)	World Bank Development Indicators
Country classification	World Bank list of economies
Population, total (millions)	Population, total/World Bank Development Indicators
Gini index (World Bank estimate)	World Bank Development Indicators
Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)	World Bank Poverty and Equity Database
Poverty gap at \$1.90 a day (2011 PPP) (%)	World Bank Poverty and Equity Database
Number of poor at \$1.90 a day (2011 PPP) (millions)	World Bank Poverty and Equity Database

How did ONE create the health outcomes and interventions ranking?

To compare sub-Saharan African countries, ONE ranked them based on their data for the eight SDG targets and indicators listed in Table 1. If a country did not have data for each of these data series and/or data were older than 2006, the country was omitted from the analysis. This was the case for Botswana, Cape Verde, Central African Republic, Chad, Comoros, Ethiopia, Equatorial Guinea, Eritrea, Guinea-Bissau, Madagascar, Mauritania, Mauritius, Seychelles, Somalia, South Africa, Sudan and South Sudan. This left 31 sub-Saharan African countries with data from 2006 or later. The steps below were followed to rank each of these 31 countries based on the SDG-related data specified above.

- For each data series, a 100% distribution was created based on the range of results from each data series for all 31 countries. For example, for data on malnutrition prevalence, height for age (% of children under five), Burundi had the highest result (57.5%) and Gabon the lowest result (17.5%) of the 31 countries in the sample, producing a range of 40% (57.5–17.5%). Within this range we placed all countries on a 100% distribution (100% being awarded to the country with the best result and 0% to the country with the worst result). For example, the Republic of Congo had a result of 25.0% for this data series; therefore it was given a distribution score of 81.25% $[1 - ((25.0 - 17.5) / 40.0)]$.



2. For the data series on births attended by skilled health staff (% of total) and immunisation, DPT (% of children aged 12–23 months), we took the reciprocal to produce births not attended by skilled health staff (% of total) and **uncovered** immunisation, DPT (% of children aged 12–23 months). We did this so that these data series could be cross-compared with other negative health outcome and intervention data used in our analysis.
3. After each country had been assigned a distribution score for each of the eight indicators, we took the simple average of their distribution scores across all the data series to create an **average distribution score of health outcomes and interventions**, and then ranked the countries based on this average result (1 being the country with the best health outcomes and interventions, on average, across our data series selection).

See Annex Table 23 for details of each country’s health outcome and intervention indicators, the most recent year that the data were taken from, distribution scores of each indicator and the average distribution score of each country.

A caveat to this analysis is that ONE used the most recent year of data provided by each country that had data available for all data series that were as recent as at least 2006. Because of this, in some instances countries are compared along the same data series for differing years. This provides a weakness in the analysis, as the possibility of inaccuracy arises due to the inability to measure countries for specific indicators at a static year in time. However, given the lack of data for consecutive years, this was the best alternative for analysing countries.

Moreover, due to the fact that data were not available or were older than 2006 for 17 countries for all of the eight data series, and these countries were subsequently cut from the analysis, a comprehensive assessment of health outcomes and interventions across the sub-continent was not possible. Lastly, this ranking system does not weigh particular indicators and data more heavily than other indicators in the way that some population-based health index studies have.⁹⁸ This means that all indicators and data are treated equally.

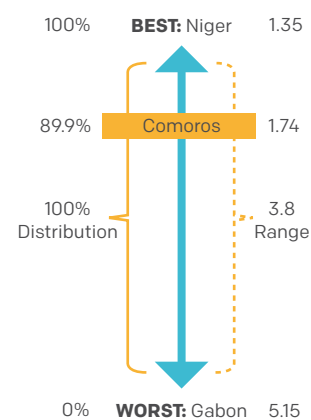
How did ONE create Figure 5 and Figure 8 – ‘Relationship between health outcomes/interventions, health inequality and government health expenditure per capita (2012 prices)’?

The sizes of the bubbles in these figures measure government health expenditure per capita (2012 prices), averaged between 2012 and 2014, for each country; the calculation is explained above in: “How is government health spending per capita measured?” The x-axis measures the average health outcomes and interventions distribution score for each country; the calculation is explained above in: “How did we create the health outcomes and interventions ranking?” However, the distribution score measure of average health outcomes and interventions for these figures excludes maternal mortality and new HIV infections indicators, as these data are not disaggregated by wealth quintile – leaving six indicators in the analysis for these figures.

For the y-axis, ONE measured countries in a similar manner to the health outcomes and interventions ranking system employed to measure health inequality. However, instead of creating an average distribution score of the eight health outcomes and interventions for each country, an average distribution score was created from the ratio of six health outcomes and interventions in income quintile 1 versus income quintile 5 (Q1/Q5); maternal mortality and new HIV infections were left out due to a lack of disaggregated data by wealth quintile.

The specific steps below were followed to create the measure of health inequality (y-axis) for the SDG-related data, by wealth quintile, specified in Table 1. If a country did not have data for each of these data series by wealth quintile, data were older than 2006 and/or the country did not have data for government health expenditure per capita, 2012-14 average (2012 US\$ prices), the country was omitted from the analysis. This was the case for Angola, Botswana, Cape Verde, Central African Republic, Chad, Equatorial Guinea, Eritrea, Guinea-Bissau, Lesotho, Madagascar, Mauritania, Mauritius, Seychelles, Somalia, South Africa, Sudan, South Sudan and Zimbabwe. This left 30 sub-Saharan African countries with the appropriate data to be analysed.

1. For each of the 30 countries left in the sample, ONE calculated health inequality ratios for each data series by dividing the results for wealth quintile 1 by wealth quintile 5 (Q1/Q5). Then a distribution score was given for each country's health inequality ratio for each data series, based on the range of health inequality ratios from each data series. For example, for the malnutrition prevalence, height for age (% of children under five) data series, Gabon had the highest health inequality ratio of 5.15 (Q1: 29.9%; Q5: 5.8%) and Niger had the lowest result health inequality ratio of 1.35 (Q1: 46.9%; Q5: 36.9%) of the 30 countries in the sample, producing a range of 3.8 (5.15–1.35). Within this range we placed all countries on a 100% distribution (100% being awarded to the country with the lowest health inequality ratio and 0% to the country with the highest health inequality ratio). For example, Comoros had a health inequality ratio of 1.74 for this data series, so it was given a distribution score of 89.9% $[1 - ((1.74 - 1.35) / 3.8)]$.



2. For the data series on births attended by skilled health staff (% of total) and immunisation, DPT (% of children aged 12–23 months), we took the reciprocal to produce births not attended by skilled health staff (% of total) and **uncovered** immunisation, DPT (% of children aged 12–23 months). We did this so that these data series could be cross-compared with other negative health outcome and intervention data used in our analysis.

3. We took the average of each country's six health inequality distribution scores to create an **average distribution score of health inequality**, and then used this average result to create the y-axis measure.

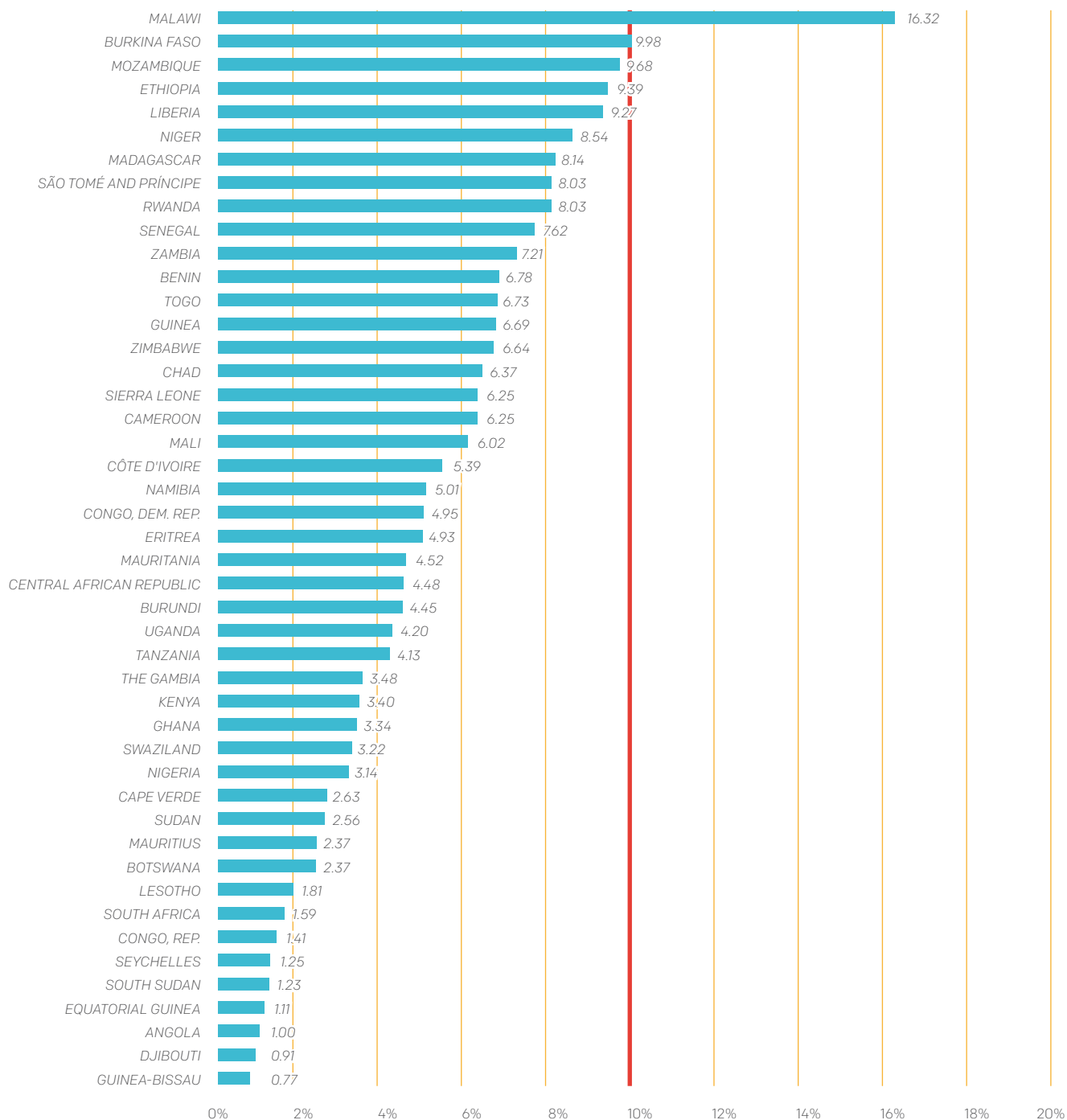
See Annex Table 24 and Table 25 for details of the measure of health outcomes and interventions (along the x-axis) and the measure for health inequality for these countries (along the y-axis).

A caveat to this analysis, as with the rankings for health outcomes and interventions, is that we used the most recent year of data broken down by wealth quintile provided by each country that had data available for all six data series and were as recent as at least 2006. Due to this, in some instances countries are compared along the same data series for differing years. This provides a weakness in the analysis, as the possibility of inaccuracy arises due to the inability to measure countries for specific data series at a static year in time. However, given the lack of data for consecutive years, this was the best alternative for analysing countries. Moreover, due to the fact that data were not available or were older than 2006 for 18 countries for all of the six data series (broken down by wealth quintile), and these countries were subsequently cut from the analysis, a comprehensive assessment of health inequality across the sub-continent was not possible.

Lastly, this health inequality measure does not weigh particular indicators and data more heavily than other indicators in the way that some population-based health index studies have.⁹⁹ This means that all indicators and data are treated equally

ANNEX

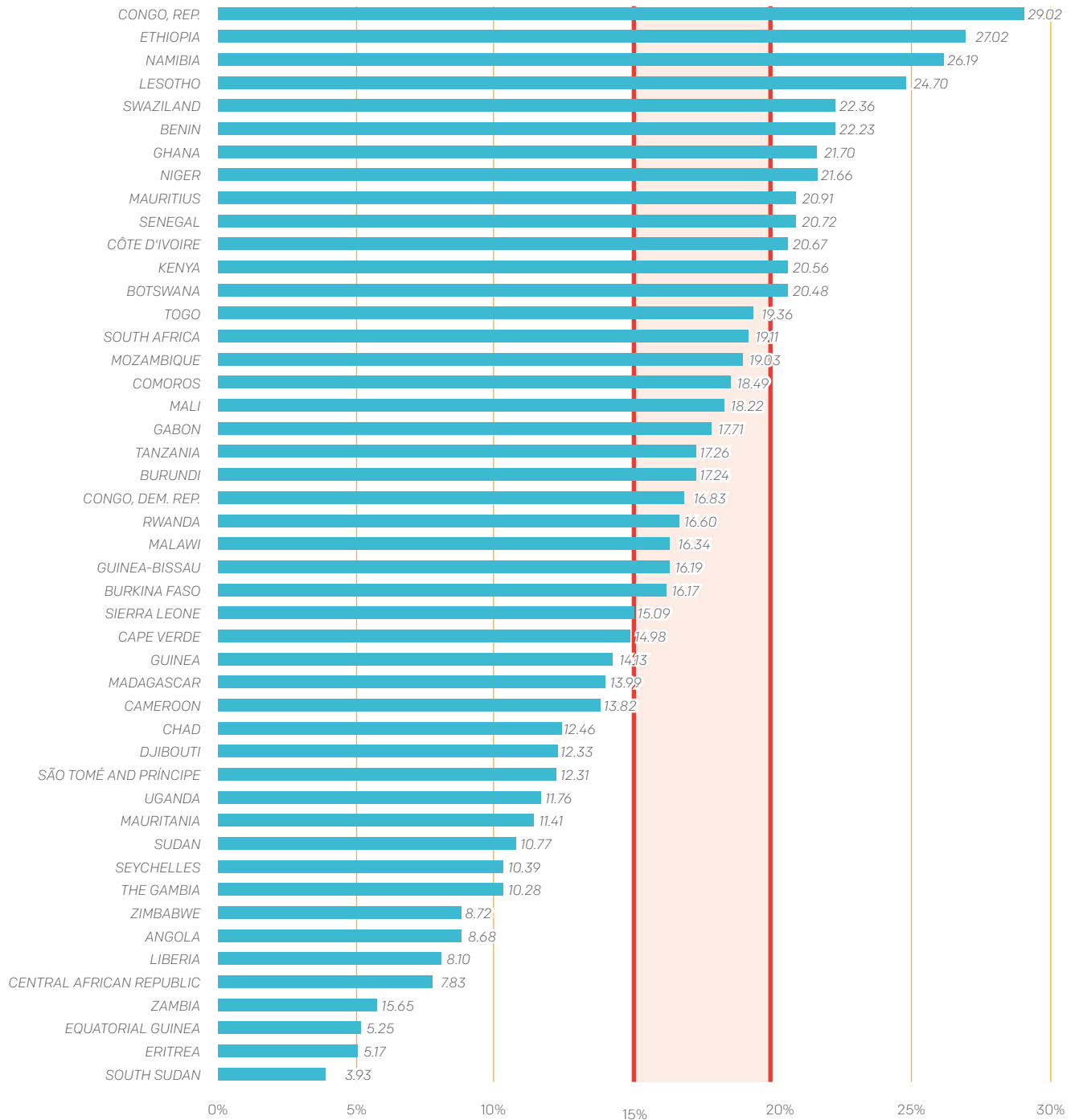
FIGURE 28.
GOVERNMENT SPENDING ON AGRICULTURE AS % OF TOTAL GOVERNMENT EXPENDITURE,
2012-14 AVERAGE



Sources: ReSAKSS (www.resakss.org) based on SPEED Database (IFPRI 2015), African Union Commission (AUC, 2008); World Development Indicators (World Bank, 2015); and national sources.

Note: No data available for Comoros, Gabon, Somalia. 2007-09 for Equatorial Guinea.

FIGURE 29.
GOVERNMENT SPENDING ON EDUCATION AS % OF TOTAL GOVERNMENT EXPENDITURE
(MOST RECENT YEAR)



Source: UNESCO data from <http://data.uis.unesco.org/Index.aspx> (accessed 2 March 2016).

Note: Most recent data available; grey bars indicate pre-2010 data; no data available for Somalia.

TABLE 23.**SUB-SAHARAN AFRICA RANKING OF HEALTH OUTCOMES AND INTERVENTIONS INDICATORS (LATEST YEAR DATA AVAILABLE FOR EACH INDICATOR) AND INDICATOR DISTRIBUTION SCORES 1 = BEST OUTCOMES ON AVERAGE**

	Rank	Average Distribution Score	Malnutrition prevalence, stunting - % of children under 5			Births not attended by skilled health staff - % of total			Mortality rate, under-5 - per 1,000 live births			Teenage mothers - % of women ages 15-19 who have had children or are currently pregnant			Maternal mortality ratio-modelled estimate, per 100,000 live births			Uncovered immunization, DPT - % of children ages 12-23 months			New HIV infections among adults 15-49 - per 1,000 uninfected population		
			Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score
RWANDA	1	87.0%	2010	44.30	33%	2010	11.70	82%	2015	4.70	100%	2013	5.40	100%	2015	290.00	89%	2014	1.00	100%	2014	1.1	95%
GHANA	2	86.7%	2014	18.80	97%	2014	11.00	84%	2015	6.160	83%	2014	14.20	76%	2015	319.00	86%	2014	2.00	98%	2014	0.7	97%
SÃO TOMÉ AND PRÍNCIPE	3	84.8%	2008	31.60	65%	2008	14.40	73%	2015	4.730	95%	2009	22.80	53%	2015	156.00	100%	2014	5.00	92%	2014	0.1	100%
SENEGAL	4	81.8%	2014	19.40	95%	2014	12.80	78%	2015	4.720	95%	2014	17.60	67%	2015	315.00	87%	2014	11.00	80%	2014	0.1	100%
GABON	5	80.7%	2012	17.50	100%	2012	6.50	98%	2015	50.80	92%	2012	27.60	40%	2015	291.00	89%	2014	30.00	41%	2014	1.4	94%
NAMIBIA	6	80.2%	2013	23.10	86%	2013	13.20	77%	2015	45.40	97%	2013	18.60	64%	2015	265.00	91%	2014	12.00	78%	2014	0.1	55%
CONGO, REP.	7	79.6%	2011	25.00	81%	2011	11.80	81%	2015	45.00	97%	2012	32.90	26%	2015	442.00	76%	2014	10.00	82%	2014	1.4	94%
KENYA	8	75.0%	2014	26.00	79%	2014	11.00	84%	2015	49.40	93%	2014	18.10	66%	2015	510.00	71%	2014	19.00	63%	2014	2.3	89%
THE GAMBIA	9	74.3%	2013	25.00	81%	2013	16.40	67%	2015	68.90	76%	2013	17.50	67%	2015	706.00	54%	2014	4.00	94%	2014	1.1	95%
SWAZILAND	10	72.7%	2010	31.00	66%	2010	5.80	100%	2015	60.70	84%	2007	22.60	54%	2015	389.00	81%	2014	2.00	98%	2014	18.9	6%
ZIMBABWE	11	72.5%	2014	27.60	75%	2014	11.20	83%	2015	70.70	75%	2011	23.50	51%	2015	443.00	76%	2014	9.00	84%	2014	9.2	55%
TANZANIA	12	70.9%	2011	34.80	57%	2011	13.60	76%	2015	48.70	94%	2012	24.10	50%	2015	398.00	80%	2014	3.00	96%	2014	2.6	88%
TOGO	13	70.7%	2014	27.50	75%	2014	16.20	68%	2015	78.40	68%	2014	16.50	70%	2015	368.00	82%	2014	13.00	76%	2014	1	96%
BENIN	14	67.0%	2014	34.00	59%	2014	18.00	62%	2015	22.80	78%	2012	16.50	70%	2015	405.00	79%	2014	30.00	41%	2014	0.6	98%
UGANDA	15	66.8%	2011	33.70	59%	2011	14.10	74%	2015	42.00	50%	2015	24.10	50%	2015	343.00	84%	2014	22.00	57%	2014	6	71%
ZAMBIA	16	65.5%	2013	40.00	44%	2013	14.80	72%	2015	64.00	81%	2014	28.50	38%	2015	224.00	94%	2014	14.00	73%	2014	7.5	63%
CAMEROON	17	65.0%	2011	32.60	62%	2011	15.10	71%	2015	87.90	60%	2011	25.20	47%	2015	596.00	63%	2014	13.00	76%	2014	3.8	82%
MALAWI	18	64.5%	2014	42.40	38%	2014	16.70	66%	2015	64.00	81%	2014	36.20	17%	2015	634.00	60%	2014	9.00	84%	2014	4.5	78%
LESOTHO	19	64.0%	2014	33.20	61%	2014	10.30	86%	2015	90.20	58%	2009	19.60	62%	2015	487.00	73%	2014	4.00	94%	2014	2.01	0%
BURUNDI	20	59.4%	2010	57.50	0%	2010	29.10	27%	2015	81.70	65%	2012	11.60	83%	2015	712.00	54%	2014	5.00	92%	2014	0.1	100%
CONGO, DEM. REP.	21	58.9%	2013	42.60	37%	2013	23.40	45%	2015	98.30	51%	2014	27.20	41%	2015	693.00	55%	2014	20.00	61%	2014	0.6	98%
COTE D'IVOIRE	22	58.2%	2012	29.60	70%	2012	15.70	69%	2015	92.60	56%	2012	29.60	35%	2015	645.00	59%	2014	33.00	35%	2014	2.1	90%
BURKINA FASO	23	57.2%	2010	35.10	56%	2010	26.20	36%	2015	88.60	59%	2014	26.80	42%	2015	371.00	82%	2014	9.00	84%	2014	0.5	98%
LIBERIA	24	55.6%	2013	32.10	64%	2013	15.30	70%	2015	69.90	76%	2013	31.30	30%	2015	725.00	53%	2014	50.00	0%	2014	0.6	98%
MOZAMBIQUE	25	53.1%	2011	43.10	36%	2011	15.60	69%	2015	78.50	68%	2011	37.50	13%	2015	489.00	72%	2014	22.00	57%	2014	7.4	64%
NIGERIA	26	50.5%	2014	32.90	61%	2014	19.80	56%	2015	108.80	42%	2013	22.50	54%	2015	814.00	45%	2014	34.00	33%	2014	2	91%
ANGOLA	27	50.4%	2007	29.20	71%	2007	15.60	69%	2015	156.90	0%	2011	42.50	0%	2015	477.00	73%	2014	20.00	61%	2014	2.1	90%
SIERRA LEONE	28	49.9%	2013	37.90	49%	2013	18.10	62%	2015	120.40	32%	2013	27.90	39%	2015	1360.00	0%	2014	17.00	67%	2014	0.7	97%
GUINEA	29	46.9%	2012	35.80	54%	2012	16.30	67%	2015	93.70	55%	2012	34.30	22%	2015	679.00	57%	2014	49.00	2%	2014	1.1	95%
MALI	30	45.2%	2006	38.50	4.8%	2006	27.90	31%	2015	114.70	37%	2013	39.30	9%	2015	587.00	64%	2014	23.00	55%	2014	1.3	94%
NIGER	31	38.5%	2012	43.00	36%	2012	37.90	0%	2015	95.50	53%	2012	40.40	6%	2015	553.00	67%	2014	32.00	37%	2014	0.1	100%

Sources: World Bank Health, Nutrition, and Population Database; WHO Global Health Expenditure Database; and ONE's own calculations.

Notes: No data for all indicators or old data (previous to 2006) for Botswana, Cape Verde, Central African Republic, Chad, Comoros, Ethiopia, Equatorial Guinea, Eritrea, Guinea-Bissau, Madagascar, Mauritania, Mauritius, Seychelles, Somalia, South Africa, Sudan and South Sudan.

TABLE 24.

X-AXIS MEASURE OF HEALTH OUTCOMES AND INTERVENTIONS FOR FIGURE 5 AND 8

	Malnutrition prevalence, stunting - % of children under 5			Malnutrition prevalence, underweight - % of children under 5			Births not attended by skilled health staff - % of total			Mortality rate, under-5 - per 1,000 live births			Teenage mothers - % of women aged 15-19 who have had children or are currently pregnant			Uncovered immunisation, DPT - % of children aged 12-23 months		
	Average Distribution Score	Most Recent Data	Result	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score	Most Recent Data	Result	Distribution Score
RWANDA	85.4%	2010	44.30	33%	2010	11.70	82%	2015	9.30	98%	2015	41.70	100%	2013	5.40	100%	2014	100%
GHANA	83.9%	2014	18.80	97%	2014	11.00	84%	2014	26.30	76%	2015	61.60	75%	2014	14.20	75%	2014	98%
NAMIBIA	82.1%	2013	23.10	86%	2013	13.20	77%	2013	11.80	94%	2015	45.40	95%	2013	18.60	62%	2014	78%
SWAZILAND	80.9%	2010	31.00	66%	2010	5.80	100%	2014	11.70	95%	2015	60.70	76%	2007	22.60	51%	2014	98%
SÃO TOMÉ AND PRÍNCIPE	78.8%	2008	31.60	65%	2008	14.40	73%	2014	7.50	100%	2015	47.30	93%	2009	22.80	50%	2014	92%
SENEGAL	78.0%	2014	19.40	95%	2014	12.80	78%	2014	40.90	57%	2015	47.20	93%	2014	17.60	65%	2014	80%
CONGO, REP.	76.9%	2011	25.00	81%	2011	11.80	81%	2012	16.90	100%	2015	45.00	96%	2012	32.90	21%	2014	82%
GABON	76.1%	2012	17.50	100%	2012	6.50	98%	2012	12.90	93%	2015	50.80	88%	2012	27.60	37%	2014	41%
KENYA	73.3%	2014	26.00	79%	2014	11.00	84%	2014	38.20	60%	2015	49.40	90%	2014	18.10	64%	2014	63%
THE GAMBIA	72.7%	2013	25.00	81%	2013	16.40	67%	2013	36.00	63%	2015	68.90	65%	2013	17.50	65%	2014	94%
COMOROS	69.9%	2012	32.10	64%	2012	16.90	65%	2012	17.8	87%	2015	73.5	60%	2012	11.3	83%	2014	61%
TANZANIA	66.9%	2011	34.80	57%	2011	13.60	76%	2012	57.40	35%	2015	48.70	91%	2012	24.10	47%	2014	96%
TOGO	62.9%	2014	27.50	75%	2014	16.20	68%	2014	55.40	38%	2015	78.40	53%	2014	16.50	68%	2014	76%
UGANDA	62.7%	2011	33.70	59%	2011	14.10	74%	2011	42.00	55%	2015	54.60	84%	2015	24.10	47%	2014	57%
MALAWI	60.8%	2014	42.40	38%	2014	16.70	66%	2014	12.60	93%	2015	64.00	72%	2014	36.20	12%	2014	84%
ZAMBIA	59.7%	2013	40.00	44%	2013	14.80	72%	2014	35.80	63%	2015	64.00	72%	2014	28.50	34%	2014	73%
CAMEROON	59.6%	2011	32.60	62%	2011	15.10	71%	2014	35.30	64%	2015	87.90	41%	2011	25.20	43%	2014	76%
BENIN	56.1%	2014	34.00	59%	2014	18.00	62%	2014	22.80	80%	2015	99.50	27%	2012	16.50	68%	2014	41%
BURUNDI	51.5%	2010	57.50	0%	2010	29.10	27%	2010	39.70	58%	2015	81.70	49%	2012	11.60	82%	2014	92%
COTE D'IVOIRE	49.5%	2012	29.60	70%	2012	15.70	69%	2012	40.60	57%	2015	92.60	35%	2012	29.60	31%	2014	35%
ETHIOPIA	49.2%	2014	40.40	43%	2014	25.20	40%	2014	84.5	0%	2015	59.2	78%	2011	12.4	80%	2014	55%
CONGO, DEM. REP.	48.9%	2013	42.60	37%	2013	23.40	45%	2014	19.90	84%	2015	98.30	28%	2014	27.20	38%	2014	61%
LIBERIA	47.2%	2013	32.10	64%	2013	15.30	70%	2013	38.90	59%	2015	69.90	64%	2013	31.30	26%	2014	0%
MOZAMBIQUE	45.8%	2011	43.10	36%	2011	15.60	69%	2011	45.70	50%	2015	78.50	53%	2011	37.50	8%	2014	57%
SIERRA LEONE	45.2%	2013	37.90	49%	2013	18.10	62%	2013	40.30	57%	2015	120.40	0%	2013	27.90	36%	2014	67%
BURKINA FASO	44.2%	2010	35.10	56%	2010	26.20	36%	2010	77.00	10%	2015	88.60	40%	2014	26.80	39%	2014	84%
NIGERIA	41.0%	2014	32.90	61%	2014	19.80	56%	2013	61.90	29%	2015	108.80	15%	2013	22.50	51%	2014	33%
GUINEA	34.3%	2012	35.80	54%	2012	16.30	67%	2012	60.70	31%	2015	93.70	34%	2012	34.30	17%	2014	2%
MALI	29.3%	2006	38.50	48%	2006	27.90	31%	2013	59.90	32%	2015	114.70	7%	2013	39.30	3%	2014	55%
NIGER	20.4%	2012	43.00	36%	2012	37.90	0%	2012	70.70	18%	2015	95.50	32%	2012	40.40	0%	2014	37%

Source: World Bank Health, Nutrition, and Population Database and ONE's own calculations.

Note: No data for all indicators or old data (previous to 2006) for Angola, Botswana, Cape Verde, Central African Republic, Chad, Equatorial Guinea, Eritrea, Guinea-Bissau, Lesotho, Madagascar, Mauritania, Mauritius, Seychelles, Somalia, South Africa, Sudan, South Sudan and Zimbabwe.

TABLE 25.
Y-AXIS MEASURE OF HEALTH INEQUALITY FOR FIGURE 5 AND 8. Q1 = WEALTH QUINTILE 1, Q5 = WEALTH QUINTILE 5

	Average distribution score	Malnutrition prevalence, stunting - % of children under 5				Malnutrition prevalence, under-weight - % of children under 5				Births not attended by skilled health staff - % of total				Mortality rate, under-5 - per 1,000 live births				Teenage mothers - % of women aged 15-19 who have had children or are currently pregnant				Uncovered immunization, DPT - % of children aged 12-23 months								
		Q1	Q5	Q1:Q5 ratio	Distribution score	Most recent data	Q1	Q5	Q1:Q5 ratio	Distribution score	Most recent data	Q1	Q5	Q1:Q5 ratio	Distribution score	Most recent data	Q1	Q5	Q1:Q5 ratio	Distribution score	Most recent data	Q1	Q5	Q1:Q5 ratio	Distribution score					
SIERRA LEONE	94.15%	42.6	28.1	1.5	96%	2013	17.3	10.3	1.7	98%	2013	46.8	15.0	3.1	96%	2013	186.0	144.0	1.3	97%	2013	35.7	14.2	2.5	84%	2013	214	277	0.8	93%
MALAWI	91.96%	48.7	33.6	1.4	98%	2014	21.4	12.9	1.7	99%	2014	16.9	5.3	3.2	96%	2014	98.0	70.0	1.4	92%	2010	31.1	15.6	2.0	91%	2010	8.7	5.7	1.5	77%
BURUNDI	88.68%	70.0	41.4	1.7	91%	2010	40.7	17.0	2.4	87%	2010	44.8	16.9	2.7	98%	2010	152.0	80.0	1.9	67%	2010	9.9	8.1	1.2	100%	2010	5.6	5.8	1.0	89%
NIGER	88.29%	46.9	34.5	1.4	100%	2012	40.7	25.7	1.6	100%	2012	86.0	26.7	3.2	96%	2012	144.0	114.0	1.3	98%	2012	49.2	24.3	2.0	90%	2012	4.76	15.8	3.0	45%
UGANDA	86.30%	37.3	20.8	1.8	89%	2011	18.1	8.4	2.2	91%	2011	54.8	8.6	6.4	86%	2011	123.0	72.0	1.7	77%	2011	34.4	15.8	2.2	88%	2011	26.2	25.3	1.0	88%
SWAZILAND	85.89%	41.9	14.0	3.0	57%	2010	8.4	3.6	2.3	88%	2010	35.0	6.0	5.8	88%	2010	115.0	92.0	1.3	99%	2007	32.5	14.6	2.2	88%	2010	10.3	16.4	0.6	96%
LIBERIA	85.73%	35.3	19.9	1.8	89%	2013	18.3	8.5	2.2	91%	2013	54.1	11.3	4.8	91%	2013	130.0	99.0	1.3	96%	2013	47.0	17.3	2.7	82%	2013	42.1	20.6	2.0	66%
KENYA	85.18%	44.4	24.5	1.8	88%	2009	24.9	8.8	2.8	79%	2009	76.9	18.1	4.2	93%	2009	97.5	68.5	1.4	90%	2009	23.7	16.4	1.4	97%	2009	22.7	10.4	2.2	63%
ETHIOPIA	83.24%	49.2	29.7	1.7	92%	2011	35.6	15.1	2.4	87%	2011	97.1	49.6	2.0	100%	2011	137.0	86.0	1.6	82%	2011	20.6	5.5	3.7	69%	2011	74.0	38.5	1.9	69%
COMOROS	81.48%	38.2	21.9	1.7	90%	2012	19.8	9.3	2.1	91%	2012	33.9	5.0	6.8	85%	2012	52.0	40.0	1.3	96%	2012	17.0	4.3	4.0	67%	2012	42.5	18.3	2.3	60%
THE GAMBIA	81.00%	29.5	15.2	1.9	85%	2013	21.8	9.7	2.2	89%	2013	47.4	8.4	5.6	88%	2013	70.0	34.0	2.1	60%	2013	24.8	6.3	3.9	67%	2013	10.0	17.3	0.6	97%
MOZAMBIQUE	77.32%	51.1	24.1	2.1	80%	2011	23.0	6.4	3.6	67%	2011	65.8	9.3	7.1	84%	2011	129.0	91.0	1.4	91%	2011	44.6	22.7	2.0	91%	2011	35.1	12.9	2.7	52%
MALI	76.71%	46.4	21.2	2.2	78%	2013	31.8	15.1	2.1	91%	2013	62.1	5.3	11.7	69%	2013	112.0	61.0	1.8	70%	2013	46.1	23.8	1.9	91%	2013	52.4	22.4	2.3	60%
RWANDA	76.71%	54.0	25.8	2.1	81%	2010	15.5	5.2	3.0	77%	2010	30.1	9.1	3.3	96%	2010	119.0	75.0	1.6	82%	2010	8.9	3.9	2.3	87%	2010	4.4	1.3	3.4	37%
COTE D'IVOIRE	76.31%	38.4	15.5	2.5	71%	2012	20.7	10.0	2.1	92%	2012	63.0	8.2	7.7	82%	2012	123.0	82.0	1.5	87%	2012	53.8	14.6	3.7	70%	2012	4.79	19.3	2.5	57%
BURKINA FASO	75.52%	41.9	18.6	2.3	76%	2010	31.7	15.5	2.0	92%	2010	49.2	4.3	11.4	70%	2010	175.0	97.0	1.8	72%	2010	29.6	11.1	2.7	82%	2010	16.6	7.1	2.3	60%
TANZANIA	75.19%	48.4	26.3	1.8	87%	2010	21.5	9.3	2.3	88%	2010	69.1	11.9	5.8	88%	2010	103.0	84.0	1.2	100%	2010	28.1	12.7	2.2	88%	2010	15.9	3.1	5.1	0%
CONGO, DEM. REP.	69.37%	49.7	22.9	2.2	79%	2014	29.1	8.1	3.6	67%	2014	33.2	2.3	14.4	61%	2014	117.0	76.0	1.5	85%	2014	42.2	15.1	2.8	81%	2014	52.0	17.0	3.1	44%
ZAMBIA	68.56%	47.3	28.4	1.7	92%	2014	20.1	8.7	2.3	88%	2014	51.2	5.3	9.7	76%	2014	100.0	58.0	1.7	76%	2014	44.5	10.3	4.3	62%	2014	20.7	4.9	4.2	19%
GUINEA	66.42%	33.8	15.4	2.2	78%	2012	19.8	4.8	4.1	58%	2012	80.1	8.3	9.7	76%	2012	173.0	68.0	2.5	36%	2012	49.6	16.9	2.9	79%	2012	6.76	3.78	1.8	71%
SÃO TOMÉ AND PRÍNCIPE	66.28%	38.2	17.6	2.2	79%	2009	17.8	6.8	2.6	83%	2009	24.1	8.1	3.0	97%	2009	90.2	27.6	3.3	1%	2009	36.8	8.3	4.4	61%	2009	13.5	9.0	1.5	78%
TOGO	65.83%	33.4	10.6	3.2	53%	2014	20.2	7.2	2.8	80%	2014	88.4	12.4	7.1	84%	2014	120.0	46.0	2.6	33%	2014	21.0	6.2	3.4	74%	2014	16.0	9.1	1.8	72%
NAMIBIA	64.88%	31.3	8.7	3.6	41%	2013	18.9	4.9	3.9	62%	2013	24.3	1.6	15.2	58%	2013	67.0	31.0	2.2	55%	2013	28.0	8.1	3.5	73%	2013	13.1	28.7	0.5	100%
CONGO, REP.	63.59%	34.5	9.3	3.7	38%	2012	17.6	4.8	3.7	66%	2012	42.5	3.6	11.8	69%	2012	89.0	54.0	1.6	80%	2012	51.2	16.5	3.1	77%	2012	43.6	16.2	2.7	52%
BENIN	62.63%	49.5	28.8	1.7	91%	2006	25.1	10.3	2.4	86%	2012	34.3	1.2	28.6	16%	2012	88.0	44.0	2.0	62%	2012	26.7	7.6	3.5	72%	2012	41.3	14.4	2.9	4.8%
GHANA	60.42%	33.2	11.6	2.9	60%	2011	20.0	6.3	3.2	74%	2011	61.4	2.4	25.6	26%	2011	106.0	52.0	2.0	61%	2008	17.9	3.9	4.6	59%	2011	7.0	5.6	1.3	83%
GABON	58.53%	29.9	5.8	5.2	0%	2012	10.4	1.9	5.5	36%	2012	23.5	4.4	5.3	89%	2012	75.0	50.0	1.5	87%	2012	48.8	10.3	4.7	57%	2012	34.1	26.5	1.3	82%
SENEGAL	56.82%	28.8	8.4	3.4	45%	2014	19.2	5.3	3.6	66%	2014	68.2	16.2	4.2	93%	2014	92.0	28.0	3.3	0%	2014	32.7	7.7	4.2	63%	2014	14.4	8.4	1.7	73%
NIGERIA	44.75%	53.8	18.0	3.0	57%	2013	41.9	15.6	2.7	82%	2013	91.9	12.9	7.1	84%	2013	190.0	73.0	2.6	33%	2013	43.3	4.6	9.4	0%	2013	93.0	20.5	4.5	13%
CAMEROON	27.41%	48.6	12.3	4.0	32%	2011	29.8	3.9	7.6	0%	2011	81.2	2.4	33.8	0%	2011	184.0	72.0	2.6	35%	2011	37.6	14.3	2.6	83%	2011	56.1	12.6	4.5	14%

Source: World Bank Health, Nutrition, and Population Database and ONE's own calculations.

- ¹ The under-five child mortality rate for sub-Saharan Africa is 83 per 1000. (8.3% or one-twelfth) - World Bank Development Indicators (21 June 2016).
- ² WHO (2016) 'World Health Statistics 2016'. http://apps.who.int/iris/bitstream/10665/206498/1/9789241565264_eng.pdf
- ³ WHO (2015) 'World Malaria Report 2015'. http://apps.who.int/iris/bitstream/10665/200018/1/9789241565158_eng.pdf
- ⁴ OECD (2016) 'African Economic Outlook 2016: Sustainable Cities and Structural Transformation', p.53f. <http://www.oecd.org/dev/african-economic-outlook-19991029.htm>
- ⁵ International Monetary Fund (accessed April 2016) 'World Economic Outlook Database: General Government Revenues'. <https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>
- ⁶ International Monetary Fund (January 2016) 'World Economic Outlook Update', p.6. <http://www.imf.org/external/pubs/ft/weo/2016/update/01/pdf/0116.pdf>
- ⁷ ONE calculations using OECD DAC database. ODA to all African countries by DAC countries, 2014 prices, gross disbursement.
- ⁸ 2015 figures not available at time of publication.
- ⁹ ONE calculations using OECD DAC database. ODA to all African countries by DAC countries, 2014 prices, gross disbursement.
- ¹⁰ World Bank, World Development Indicators (21 June 2016).
- ¹¹ "Only 8 per cent of measures between 2010 and 2014 were specifically targeted at private sector participation in key sustainable development sectors (infrastructure, health, education, climate-change mitigation)." UNCTAD (2015) 'World Investment Report 2015'. http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf
- ¹² *The Lancet* (2013) 'Investing in health: why, what, and three reflections'. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62330-2/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62330-2/abstract)
- ¹³ No data for 2002–04 are available for South Africa or Zimbabwe.
- ¹⁴ D. McIntyre and F. Meheus (2014) 'Fiscal Space for Domestic Funding of Health and Other Social Services'. Chatham House. https://www.chathamhouse.org/sites/files/chathamhouse/home/chatham/public_html/sites/default/files/20140300DomesticFundingHealthMcIntyreMeheus.pdf
- ¹⁵ ONE calculation based on WHO database.
- ¹⁶ ONE internal calculation using the unit vaccine rate of \$21 per child for vaccinations to protect against tetanus, diphtheria, whooping cough, Hepatitis B and meningitis (pentavalent vaccine); pneumonia (pneumococcal); and diarrhoeal disease (rotavirus); \$100 for an annual course of antiretroviral medicine to treat HIV/AIDS; and \$10 for an insecticide-treated bed net to protect against malaria, which lasts for around three years.
- ¹⁷ Rwandan Ministry of Health (2015) 'Health Sector Policy'. http://www.moh.gov.rw/fileadmin/templates/policies/Health_Sector_Policy_19th_January_2015.pdf
- ¹⁸ FAO (2004) 'Implementation of the Comprehensive Africa Agriculture Development Programme (CAADP) of NEPAD – Progress Review'. <http://www.fao.org/docrep/meeting/007/J1604e.htm>; and African Union (2014) 'Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods'. http://pages.au.int/sites/default/files/Malabo%20Declaration%202014_11%2026-.pdf
- ¹⁹ It should be noted (as discussed in the 2014 DATA Report) that the debate about what types of spending should count towards the 10% target has not yet been resolved. ONE's analysis uses data from ReSAKSS, which employs a similar definition to that of the International Monetary Fund's Classifications of the Function of Government (COFOG). An alternative approach, used by the Food and Agriculture Organization (FAO) in its Monitoring African Food and Agriculture Policies (MAFAP) project, also includes expenditures for broader rural development, such as health, education and sanitation and yields considerably higher results. Governments, development partners and monitoring institutions must work together to resolve this debate and standardise their systems of measurement.
- ²⁰ UNESCO et al. (2015) 'Incheon Declaration and Framework for Action'. <http://www.uis.unesco.org/Education/Documents/incheon-framework-for-action-en.pdf>
- ²¹ World Education Forum (2015) 'Incheon Declaration'. <https://en.unesco.org/world-education-forum-2015/incheon-declaration>
- ²² I. Jourard, C. Andre and C. Nicq (2010) 'Health Care Systems: Efficiency and Institutions'. OECD Economics Department Working Papers No. 769, OECD Publishing, Paris.
- ²³ J. Anyanwu and A. Erhijakpor (2007) 'Health Expenditures on Health Outcomes in Africa'. Economic Research Working Paper No 91, African Development Bank. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/26820442-EN-ERWP-91.PDF>
- ²⁴ G. Jamison, L. Lau and J. Wange (2005) 'Health Contributions to Economic Growth in an Environment of Partially Endogenous Technical Progress'. In G. López-Casanovas, B. Rivera and L. Currais, 'Health and Economic Growth: Findings and Policy Implications', pp.67–91. Cambridge, MA: MIT Press.
- ²⁵ D. Jamison, L. Summers et al. (2013) Supplementary Appendix 3 of 'Global health 2035: a world converging within a generation'. *The Lancet*, 1898-1995, vol. 382.
- ²⁶ S. Ozawa, S. Clark, A. Portnoy, S. Grewal, L. Brenzel and D. Walker (2016) 'Return on Investment from Childhood Immunization in Low- and Middle-Income Countries, 2011–20'. *Health Affairs*, vol. 35 no. 2, 199–207.
- ²⁷ Against diphtheria, pertussis (whooping cough) and tetanus. For this report we use DPT 3 immunisations as a proxy for routine immunisation coverage, a crucial component of SDG 3.8.
- ²⁸ S. Nicolai, C. Hoy, T. Berliner and T. Aedy (2015) Projecting Progress: Reaching the SDGs by 2030. London: Overseas Development Institute.
- ²⁹ This data series was used for this SDG target and indicator as a proxy for overall immunisation coverage due to the fact that it has data disaggregated by wealth.
- ³⁰ This is a somewhat similar approach to the 'distance to frontier' method used by the World Bank to analyse countries on the ease of doing business. See <http://www.doingbusiness.org/data/distance-to-frontier>.
- ³¹ P. Farmer et al. (2013) 'Reduced premature mortality in Rwanda: lessons from success'. *BMJ*, 346, f65.
- ³² N.J. Blanchet, G. Fink and I. Osei-Akoto (2012) 'The Effect of Ghana's National Health Insurance Scheme on Health Care Utilisation'. *Ghana Medical Journal*, 46.2 (2012): 76–84.
- ³³ A. Wagstaff, B. Caryn and L. Busman (2014) 'Progress on Global Health Goals: Are the Poor Being Left Behind?' *World Bank Research Observer*, vol. 29, 137–162.
- ³⁴ Save the Children (2013) 'Universal Health Coverage: A Commitment to Close the Gap'. London: Save the Children. This analysis was based on countries' 2013 Demographic and Health Surveys/Multiple Indicator Cluster Surveys (DHS/MICs).
- ³⁵ Notably, due to the fact that HIV/AIDs data are not included in this analysis because available data are not disaggregated by wealth quintile, the impact of this disease is not taken into consideration and, thus, may skew results.
- ³⁶ A. Wagstaff, B. Caryn and L. Busman (2014) 'Progress on Global Health Goals: Are the Poor Being Left Behind?', op. cit.
- ³⁷ World Bank, World Development Indicators. See also F. Gundan (2014) 'Kenya Joins Africa's Top 10 Economies After Rebasings Of Its GDP'. *Forbes*. <http://www.forbes.com/sites/faraigundandan/2014/10/01/kenya-joins-africas-top-10-economies-after-rebasings-of-its-gross-domestic-product/>
- ³⁸ Government of Kenya. 'Kenya Vision 2030'. <http://www.vision2030.go.ke/index.php/home/aboutus>
- ³⁹ Government of Kenya (2008) 'Kenya Vision 2030 First Medium Term Plan (2008–2012)'. <http://www.sida.se/contentassets/855677b831b74ea0b226ce2db4eb93a3/kenya-medium-term-plan-2008-2012.pdf>
- ⁴⁰ WHO. 'WHO Country Cooperation Strategy Kenya, Medium-Term Support Strategy, 2014–2019'. http://www.afro.who.int/index.php?option=com_docman&task=doc_download&gid=9704&Itemid=2593
- ⁴¹ International Budget Partnerships (2015) 'Open Budget Index'. <http://www.internationalbudget.org/wp-content/uploads/OBS2015-Report-English.pdf>
- ⁴² Budget documents include: Pre-Budget Statement, Executive's Budget Proposal, Enacted Budget, In-Year Reports, Mid-Year Review, Year-End Report, Audit Report and Citizens Budget.
- ⁴³ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁴⁴ U.S. Global Health Programs (2010) 'Mali: Global Health Strategy'. <https://www.ghi.gov/wherewe-work/docs/MaliStrategy.pdf>
- ⁴⁵ République du Mali. 'Programme de Développement Socio-Sanitaire 2014–2018 (PRODESS III)'. <http://www.sante.gov.ml/docs/PRODESS%20III%20Version%20finale.pdf>
- ⁴⁶ World Bank, World Development Indicators (21 June 2016)
- ⁴⁷ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁴⁸ Nigeria's 2016 Appropriation Act total budget (N6,060,677,358,227)
Part C Non-Debt Expenditure – Ministry of Health (N221,412,548,087)
Part D Capital Expenditure – Ministry of Health (N28,650,342,987)
Part D Capital Expenditure – Counterpart Funding including Global Fund/Health (N3,500,000,000).

- ⁴⁹ C. Izugbara (2014) 'Whose child is dying? Household characteristics and under-5 mortality in Nigeria'. *South African Journal of Child Health*, 8(1):16-22. <http://www.scielo.org.za/pdf/sajch/v8n1/05.pdf>
- ⁵⁰ WHO Global Health Observatory Database (21 June 2016). <http://apps.who.int/gho/data/node.main.ChildMort-1?lang=en>
- ⁵¹ Ibid.
- ⁵² Open Data Barometer. <http://opendatabarometer.org/2ndEdition/about/data.html>; *International Budget Partnership (2015) 'Nigeria'*. <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/country-info/?country=ng>
- ⁵³ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁵⁴ OECD (2016). 'African Economic Outlook' <http://www.oecd.org/dev/african-economic-outlook-19991029.htm>
- ⁵⁵ World Bank World Development Indicators. 'Poverty Headcount Ratio \$1.90 (2011 PPP) for 2012' (21 June 2016).
- ⁵⁶ Rwandan Ministry of Health (January 2015) 'Health Sector Policy'. http://www.moh.gov.rw/fileadmin/templates/policies/Health_Sector_Policy_19th_January_2015.pdf
- ⁵⁷ ODI Development Progress (2011) 'Rwanda's Progress in Health: Leadership, performance and insurance'. http://www.developmentprogress.org/sites/default/files/rwanda_report_-_master_0.pdf
- ⁵⁸ Rwandan Ministry of Health (January 2015) 'Health Sector Policy', op. cit.
- ⁵⁹ WHO (2016) 'WHO vaccine-preventable diseases: monitoring system. 2016 global summary'. http://apps.who.int/immunization_monitoring/globalsummary/estimates?c=RWA
- ⁶⁰ Rwandan Ministry of Health (2015) 'National Community Health Policy'. http://www.moh.gov.rw/fileadmin/templates/policies/NATIONAL_COMMUNITY_HEALTH_POLICY.pdf
- ⁶¹ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁶² World Bank (2016) 'Country Overview: Senegal'. <http://www.worldbank.org/en/country/senegal/overview#1>
- ⁶³ WHO (2014) 'Country Cooperation Strategy at a Glance: Senegal'. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_sen_en.pdf?ua=1
- ⁶⁴ News Record (2014) 'Looking to Rwanda as a model for Senegal's universal health care program'. <https://www.newsrecord.co/looking-to-rwanda-as-a-model-for-senegals-universal-health-care-program/>
- ⁶⁵ USAID (2014) 'Universal Health Coverage Measurement in a Lower-Middle-Income Context: A Senegalese Case Study'. <https://www.hfgproject.org/wp-content/uploads/2014/03/UHC-Measurement-in-Senegal-Case-Study.pdf>
- ⁶⁶ République du Sénégal. 'Programme d'Investissement Sectoriel 2011-2015'. <http://www.sante.gouv.sn/images/stories/pdf/pispref.pdf>
- ⁶⁷ World Bank (2013) 'Country Partnership Strategy (FY2013-2017)'. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/01/29/000356161_20130129173312/Rendered/PDF/NonAsciiFileName0.pdf
- ⁶⁸ Senegal Ministry of Health and Social Action. 'Rapport Financier 2009-2012'. <http://www.sante.gouv.sn/document/1449764294.pdf>
- ⁶⁹ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁷⁰ WHO (2014). 'United Republic of Tanzania Country Cooperation Strategy at a Glance'. http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_tza_en.pdf?ua=1
- ⁷¹ For more information on how countries are scored and ranked on budget transparency over time and what is taken into consideration for this index and ranking, please see the International Budget Partnership's Open Budget Index Rankings: <http://www.internationalbudget.org/opening-budgets/open-budget-initiative/open-budget-survey/publications-2/rankings-key-findings/rankings/>
- ⁷² Tunis Declaration on Value for Money, Sustainability and Accountability in the Health Sector (2012). [http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Tunis_declaration_english_july_6_2\).pdf](http://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Tunis_declaration_english_july_6_2).pdf)
- ⁷³ WHO (2014) 'WHO and AUC Joint Meeting for African Ministers of Health'. <http://www.afro.who.int/en/media-centre/events/min-health-meeting-auc-who.html>
- ⁷⁴ Center for Global Development (2015) 'South Africa's Child Support Grant'. <http://millions-saved.cgdev.org/case-studies/south-africas-child-support-grant>
- ⁷⁵ Using the average exchange rate between January and May 2016 to convert to dollars.
- ⁷⁶ South African Social Security Agency (2016) 'Statistical Report 5 of 2016 - 31 May 2016' <http://www.sassa.gov.za/index.php/statistical-reports>
- ⁷⁷ C. Heinrich, J. Hoddinott and M. Samson (2012) 'Reducing Adolescent Risky Behaviors in a High-Risk Context: The Impact of Unconditional Cash Transfers in South Africa'. Center for Global Development.
- ⁷⁸ Center for Global Development (2015) 'Kenya's Social Cash Transfer Program'. <http://millions-saved.cgdev.org/case-studies/kenyas-social-cash-transfer-program>
- ⁷⁹ VillageReach (2013) 'Chipatala cha pa Foni (CCPF)'. <http://www.villagereach.org/impact/ccpf/>
- ⁸⁰ VillageReach (2014) 'Evaluation of the Information and Communications Technology for Maternal Newborn and Child Health Project (Chipatala cha pa Foni)'. <http://www.villagereach.org/wp-content/uploads/2009/08/VR-Exec-Summary-of-CCPF-Eval-Feb-21-FINAL.pdf>
- ⁸¹ Kenya Vision 2030 (Government of Kenya). 'Kenya's Social Protection Single Registry'. <http://mis.socialprotection.go.ke/20304/IntroductionPage.aspx>
- ⁸² Government of Kenya (2012) 'Kenya Social Protection Sector Review', p.89. http://www.unicef.org/evaldatabase/files/Kenya_Social_Protection_Sector_Review.pdf
- ⁸³ Open Contracting Partnership. 'Open Contracting in Africa: The next generation of action'. <http://www.open-contracting.org/wp-content/uploads/2016/05/OCP2016-Africa-brief-web.pdf>
- ⁸⁴ OECD (2013) 'Implementing the OECD Principles for Integrity in Public Procurement: Progress since 2008'. http://www.oecd-ilibrary.org/governance/implementing-the-oecd-principles-for-integrity-in-public-procurement_9789264201385-en; OECD (2015) 'Transparency in public procurement - moving from the abstract'. <http://oecdinsights.org/2015/03/27/transparency-in-public-procurement-moving-away-from-the-abstract/>
- ⁸⁵ Global Health Workforce Alliance (2016). <http://www.who.int/workforcealliance/countries/nga/en/>
- ⁸⁶ PricewaterhouseCoopers (2016) 'Impact of Corruption on Nigeria's Economy'. <http://www.pwc.com/ng/en/assets/pdf/impact-of-corruption-on-nigerias-economy.pdf>
- ⁸⁷ Open Data Barometer, 3rd Edition. <http://opendatabarometer.org/>
- ⁸⁸ Open Government Partnership (2016) 'Full Text of Buhari's speech at the Anti-Corruption Summit in London'. <http://www.opengovpartnership.org/blog/ogp-webmaster/2016/05/11/full-text-buhari%E2%80%99s-speech-anti-corruption-summit-london>
- ⁸⁹ WHO (2014) 'Civil registration: why counting births and deaths is important'. <http://www.who.int/mediacentre/factsheets/fs324/en/>
- ⁹⁰ World Bank/WHO (2014) 'Global Civil Registration and Vital Statistics: Scaling up Investment Plan 2015-2024'. http://www.who.int/healthinfo/civil_registration/WB-WHO_ScalingUp_InvestmentPlan_2015_2024.pdf?ua=1
- ⁹¹ See: <http://www.data4sdgs.org/>
- ⁹² See: <https://www.one.org/international/follow-the-money/>
- ⁹³ World Bank Poverty and Equity Database (21 June 2016)
- ⁹⁴ The ONE Campaign (2015) 'Follow the Money: Oil funds followed, fuels health project'. <https://www.one.org/international/follow-the-money/case-studies/oil-funds-followed-fuels-health-project/>
- ⁹⁵ The ONE Campaign (2015) 'Follow the Money: \$5.3m to clean up lead-poisoning mining village after social media campaign'. <https://www.one.org/international/follow-the-money/case-studies/5-3m-to-clean-up-lead-poisoning-mining-village-after-social-media-campaign/>
- ⁹⁶ This is an accounting framework that aims to facilitate systematic comprehensive, and consistent data collection synthesis, and reporting on national health expenditure and resource flows. NHAs are divided into four dimensions: financing agent, financing source, health function and health provider.
- ⁹⁷ D. McIntyre and F. Meheus (2014) 'Fiscal Space for Domestic Funding of Health and Other Social Service', op. cit.
- ⁹⁸ E. Kaltenthaler, R. Maheswaran and C. Beverly (2004) 'Population-based health indexes: a systematic review'. *Health Policy*, 68 (2), 245-255.
- ⁹⁹ Ibid.