

# Financing Global Health 2016

Development Assistance, Public and Private Health Spending for the Pursuit of Universal Health Coverage





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## ABOUT IHME

The Institute for Health Metrics and Evaluation (IHME) is a population health research center that is part of UW Medicine at the University of Washington. IHME provides rigorous and comparable measurement of health problems and evaluates the strategies used to address them. IHME makes this information freely available so that researchers, policymakers, and other health stakeholders have the necessary evidence to make informed decisions. For more information about IHME and its work, please visit [www.healthdata.org](http://www.healthdata.org).

## CALL FOR COLLABORATORS

In addition to conducting the FGH study, IHME coordinates the Global Burden of Diseases, Injuries, and Risk Factors (GBD) Study, a comprehensive effort to measure epidemiological levels and trends worldwide. (More information on GBD is available at <http://www.healthdata.org/gbd>.) The GBD study relies on a worldwide network of over 2,000 collaborators in over 120 countries. Current collaborator areas of expertise include epidemiology, public health, demography, statistics, and other related fields.

During the coming GBD analyses, IHME plans to expand the scope of GBD to encompass quantification of health resource flows, health system attributes, and the performance of health systems. To that end, IHME is seeking GBD collaborators who are experts in health financing and health systems. GBD collaborators – many of whom have co-authored GBD publications – provide timely feedback related to the interpretation of GBD results, data sources, and methodological approaches pertaining to their areas of expertise. We invite researchers and analysts with expertise in health financing to join the GBD collaborator network. Potential collaborators may apply at <http://www.healthdata.org/gbd/call-for-collaborators>.

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## ACRONYMS

<b>ADB</b>	Asian Development Bank
<b>AfDB</b>	African Development Bank
<b>DAH</b>	Development assistance for health
<b>DALYs</b>	Disability-adjusted life years
<b>DfID</b>	United Kingdom's Department for International Development
<b>GBD</b>	Global Burden of Diseases, Injuries, and Risk Factors Study
<b>GDP</b>	Gross domestic product
<b>GHEs</b>	Government health expenditure as a source
<b>HSS</b>	Health system strengthening
<b>IBRD</b>	International Bank for Reconstruction and Development
<b>IDA</b>	International Development Association
<b>IDB</b>	Inter-American Development Bank
<b>IHME</b>	Institute for Health Metrics and Evaluation
<b>MDGs</b>	Millennium Development Goals
<b>MNCH</b>	Maternal, newborn, and child health
<b>NCDs</b>	Non-communicable diseases
<b>NGOs</b>	Non-governmental organizations
<b>NTDs</b>	Neglected tropical diseases
<b>ODA</b>	Official development assistance
<b>OECD</b>	Organisation for Economic Co-operation and Development



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**OOP** . . . . . Out-of-pocket  
**PAHO** . . . . . Pan American Health Organization  
**PEPFAR** . . . . . United States President’s Emergency Plan for AIDS Relief  
**PMI** . . . . . United States President’s Malaria Initiative  
**PMTCT** . . . . . Prevention of mother-to-child transmission of HIV  
**PPP** . . . . . Prepaid private spending  
**SDGs** . . . . . Sustainable Development Goals  
**SWAps** . . . . . Sector-wide approaches  
**TB** . . . . . Tuberculosis  
**UHC** . . . . . Universal health coverage  
**UI** . . . . . Uncertainty interval  
**UK** . . . . . United Kingdom  
**UN** . . . . . United Nations  
**UNAIDS** . . . . . Joint United Nations Programme on HIV/AIDS  
**UNDP** . . . . . United Nations Development Program  
**UNFPA** . . . . . United Nations Population Fund  
**UNICEF** . . . . . United Nations International Children’s Emergency Fund  
**US** . . . . . United States  
**USAID** . . . . . United States Agency for International Development  
**WHO** . . . . . World Health Organization

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# Executive summary

**F**inancing *Global Health 2016: Development Assistance, Public and Private Health Spending for the Pursuit of Universal Health Coverage* presents a complete analysis of the resources available for health in 184 countries, with a particular focus on development assistance for health (DAH). DAH was estimated to total \$37.6 billion in 2016, up 0.1% from 2015. After a decade of rapid growth from 2000 to 2010 (up 11.4% annually), DAH grew at only 1.8% annually between 2010 and 2016. In low-income countries, where much DAH is targeted, DAH made up 34.6% of total health spending in 2016. In upper-middle- and high-income countries, which generally do not receive DAH, DAH accounted for only 0.5% of total health spending. The other 99.5% of health spending – government, prepaid private, and out-of-pocket spending – is the subject of our further analysis.

The amount of resources available to spend on health, and the degree to which it is paid in advance and pooled across diverse groups, impacts overall access to and quality of care. Many global health advocates and the Sustainable Development Goals (SDGs) endorse the concept of universal health coverage (UHC) – that all people should have reliable, good-quality health care without the risk of financial hardship. While DAH provided to low- and middle-income countries to maintain and improve health can, in some cases, aid in the pursuit of UHC, it is prepaid and pooled resources for health that are at the crux of the pursuit. As such, understanding the public and private resources available for health is crucial for any stakeholder pursuing UHC.

Our data confirm that total health spending and government health spending are positively associated with development, but health spending varies widely across countries and within income groups. From 1995 to 2014, the largest absolute increases in total health spending have been in high-income countries, and the largest health spending growth rates have been in upper-middle- and lower-middle-income groups. Spending in low-income countries grew at a rate nearly as fast as the middle-income groups, but because 1995 spending per capita in those countries was very low, the absolute gains were small. Still, spending growth rates vary dramatically across countries.

A closer look reveals that the sources of funding countries use to finance health also follow a general trend: low-income countries tend to finance most health spending from out-of-pocket and development assistance funds, whereas high-income countries tend to finance health with government spending, which includes social health insurance. In general, middle-income countries transition away from dependence on development assistance as they develop economically, although a country's ability to replace financing with sustainable, prepaid sources for all populations generally relies on their government's capacity to generate and allocate resources for health. Concerns exist that middle-income countries may not have sufficient resources for affordable health care, leading in some cases to continued dependence on out-of-pocket (OOP) financing. OOP financing can deter access to care and lead to medical impoverishment.

Based on past trends and relationships, our estimates for future health spending show gains in total and especially government health spending for all countries from 2016 to 2040, while DAH is expected to increase only marginally. Financing gaps between low- and high-income countries, and even within income groups, are expected to widen in absolute terms. Our research confirms that in some low- and middle-income countries, DAH will remain a vital portion of health spending where gaps in access and mobilization of domestic funds may not meet complex health needs. And while health financing is country-specific and varies dramatically, proactive steps will need to be taken in some countries to mobilize more resources for health going forward. The spending trajectories and financing gaps analyzed in this report will be critical for health stakeholders to consider when moving toward both the ambitious SDG agenda and specific goals for UHC.

## Highlights from this year's report include:

- Contributions from the US and the UK, while down 5.1% and 8.4%, respectively, over 2015, still made up the bulk of DAH funding in 2016 (34.0% and 10.9%). In 2016, the US and UK provided \$12.8 and \$4.1 billion, respectively.
- Germany, Japan, and Norway all increased their contributions to DAH in 2016, 17.4%, 12.3%, and 8.7%, respectively, as did the governments of some other high-income nations. In 2016, Germany, Japan, and Norway provided \$1.5 billion, \$867.6 million, and \$811.6 million, respectively.
- Contributions from the Bill & Melinda Gates Foundation and other private foundations roughly maintained their 2015 levels, as did donations from corporations. In 2016, private foundations tracked for this study provided \$2.3 billion, 78.5% of which was disbursed by the Bill & Melinda Gates Foundation.
- NGOs continued to disburse a large share of DAH funds (30.1%), followed by the US bilateral aid agencies (15.4%) and the Global Fund (9.9%).
- The Global Fund and the World Bank increased their disbursements of DAH between 2015 and 2016 by 8.6% and 32.1%, respectively.
- Across health areas, maternal, newborn, and child health collectively received the largest percentage of DAH funding in 2016 (29.4%). DAH to HIV/AIDS, still a dominant health focus area, declined for the fifth consecutive year to 25.4% in 2016.
- Sub-Saharan Africa received the most DAH of any region (38.8%), followed by South Asia (6.1%).
- Low-income countries spent \$120 per capita in 2014; lower-middle- and upper-middle-income countries spent \$267 and \$914 per capita, respectively, and high-income countries spent \$5,221 per capita.
- In relative terms, health spending in upper-middle- and lower-middle-income countries increased the fastest (4.8% and 6.7%, respectively), although increases in DAH during this period and some additional domestic resources for health spending spurred growth in low-income countries to 12.6%. High-income health spending grew at 20.7% between 1995 and 2014.
- In high-income countries, 64.2% of the \$3.0 trillion increase in total health spending was due to increases in government spending. Conversely, the growth in

low-income countries was driven by increases in OOP, government spending, and DAH, contributing 22.0%, 15.9%, and 42.5% to the spending growth, respectively.

- Per capita spending is projected to grow in high-income countries from \$5,221 to \$9,215 (76.5%), in upper-middle-income countries from \$914 to \$3,903 (327.2%), in lower-middle-income countries from \$267 to \$844 (215.6%), and in low-income countries from \$120 to \$195 (62.5%).
- DAH per capita is expected to grow only 1.7% annually, or \$12, globally, by 2040.

## BOX 1

### Health financing definitions

**Total health spending:** The sum of government health spending, prepaid private health spending, out-of-pocket health spending, and DAH. This represents all direct spending for health maintenance, restoration, or enhancement. It does not include indirect health spending, such as lost wages due to illness or transportation costs; spending on informal care, such as care provided by a family member; spending on traditional healers; and illegal, “black market,” or under-the-table transactions such as bribes.

**Development assistance for health (DAH):** Financial and in-kind resources that are transferred from development agencies (such as UNICEF or the United Kingdom’s Department for International Development) to low- and middle-income countries with the primary purpose of maintaining or improving health. DAH is mutually exclusive from out-of-pocket, prepaid private, and government health spending.

**Government health spending:** Spending for health care that is derived from domestic government sources. Government health spending is mutually exclusive from out-of-pocket, prepaid private, and DAH spending. Government spending includes spending on public health system infrastructure and government-provided social health insurance.

**Out-of-pocket health spending:** Payments made by individuals at or after the time of health care delivery. Out-of-pocket spending is mutually exclusive from government, prepaid private, and DAH spending. This includes spending at the point of care that is not reimbursed, such as health insurance copayments or payments devoted to deductibles.

**Prepaid private health spending:** Health spending sourced from non-public programs that are funded prior to obtaining health care. This includes private health insurance and services provided for free by non-governmental agencies. Prepaid health spending is mutually exclusive from out-of-pocket, government, and DAH spending.

**World Bank income group:** The World Bank classifies countries using gross national income (GNI) per person. (A country’s GNI is similar to its GDP plus any payments or investment income that flows to its residents from abroad.) This report uses the 2017 World Bank income groups, which are high-income (GNI per person greater than \$12,475), upper-middle-income (\$4,036 to \$12,476), lower-middle-income (\$1,026 to \$4,035), and low-income (\$1,025 or less).







# Introduction

**F**inancing *Global Health 2016* is the eighth edition of IHME's annual series on global health spending and health financing. In addition to describing the trends in development assistance for health (DAH), this year's report features an expanded discussion of domestic spending across low-, middle-, and high-income countries to describe the context in which DAH operates, identify health financing gaps, and support the pursuit of universal health coverage. Also new in *Financing Global Health* this year are detailed data for the funding of specific program areas within DAH for malaria and more thorough analysis of DAH for health system strengthening. This adds to the existing detailed tracking of DAH by program area for HIV/AIDS, maternal, newborn, and child health, and non-communicable diseases (NCDs).

The coverage of domestic health spending builds on data and analyses presented in two papers published this year: "Global Burden of Disease Financing Global Health Collaborator Network. Evolution and patterns of global health financing 1995–2014: development assistance for health, and government, prepaid private, and out-of-pocket health spending in 184 countries,"<sup>1</sup> and "Global Burden of Disease Financing Global Health Collaborator Network. Future and potential spending on health 2015–2040 by government, prepaid private, out-of-pocket, and donor financing for 184 countries."<sup>2</sup> The first paper explored the state of global health financing by testing the relationship between economic development and health spending, then examined how these trends impact the sourcing of funds, the types of services purchased, and the disbursement of development assistance for health. The second paper estimated future economic development, all-sector government spending, and health spending disaggregated by source, and compared expected future spending to potential future spending for 184 countries through 2040. Both analyses were published in *The Lancet* in April 2017.

This report consists of three chapters. Chapter 1 introduces the concept of development assistance for health (DAH), tracks disbursement of DAH over the past 27 years, and takes a close look at recent changes in sources and channels of funding. Chapter 2 provides a data-driven year-in-review for the key health issues targeted by DAH: HIV/AIDS; malaria; tuberculosis; maternal, newborn, and child health; non-communicable diseases (NCDs); other infectious diseases; and health system strengthening and sector-wide approaches (HSS/SWAPs). Several health focus areas are further disaggregated by their major program areas; for example, DAH for maternal, newborn, and child health is separated into vaccines, nutrition, family

planning programs, other child health programs, and other maternal health programs. Funding by program area for the period 1990–2016 is broken out for HIV/AIDS; tuberculosis; maternal, newborn, and child health; NCDs; and, new this year, malaria. In addition, the report tracks resources for health system strengthening that are provided as sector-wide approaches, and also tracks spending for specific health focus areas such as HIV/AIDS. Lastly, Chapter 3 looks at changes in domestic health funding in developed and developing countries over two decades. This chapter explores health financing transitions, assesses the various ways in which health is financed differently depending on setting, and presents estimates for future health spending for the period 2015–2040 based on past data and trends from 184 countries.

The work highlighted in this report pulls data from many sources, among them the Creditor Reporting System and Development Assistance Committee databases of the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD-DAC), the International Monetary Fund, the World Health Organization; and government and agency budgets and annual reports. We adjusted these data for known biases, standardized it, removed double-counting, and adjusted all disbursements into real 2015 US dollars and real purchasing-power-adjusted 2015 dollars. We used nonlinear regression methods to model the relationship between health financing, time, and development. For estimates of future spending, we used a series of ensemble models to estimate future GDP, all-sector government spending, DAH, and government, out-of-pocket, and private prepaid health spending through 2040. We used frontier analyses to identify patterns exhibited by the countries that dedicate the most to health and used these frontiers to estimate potential health spending for each country. For more information about these data and methods, please visit the online methods annex at [www.healthdata.org/fgh2016](http://www.healthdata.org/fgh2016). There you may also find links to our two papers from *The Lancet*, which served as the foundation of this report.

## BOX 2

### Putting health financing in context

- 8.4% of the global economy was spent on health in 2014.
- In high-income countries, 11.7% of GDP was spent on health, while in upper-middle-income, lower-middle-income, and low-income countries 5.9%, 4.3%, and 7.3% of GDP was spent on health, respectively.
- On a per capita basis, high-income countries spent \$5,221 on health in 2014. That is over five times as much as upper-middle-income countries (\$914), over 17 times as much as lower-middle-income countries (\$267), and almost 49 times as much as low-income countries (\$120).
- DAH was 0.056% of the economy of the high-income countries that provided it. DAH was 35.7% of the amount spent on health in the low-income countries that received it.





# Development assistance for health

Development assistance for health (DAH) refers to the financial and in-kind resources transferred from development agencies to low- and middle-income countries with the primary purpose of maintaining or improving health. In this chapter, we analyze the role different funding agencies and their partners play in providing and disbursing DAH to promote health and to prevent and treat diseases in low- and middle-income countries. To characterize the ways and means of these various entities, we disaggregate development assistance by sources, channels, and implementing institutions (Figure 1). These three categories are not, however, mutually exclusive. The World Health Organization (WHO), for example, may serve as a channel, gathering funds for an Ebola outbreak, and then as an implementing institution, providing aid and services directly to individuals.

## OVERVIEW OF DEVELOPMENT ASSISTANCE FOR HEALTH

In 2016, total DAH amounted to \$37.6 billion. This represented a 0.1% change from 2015 and a 1.8% annual increase since 2010. The lion's share of the resources were provided by national treasuries: prominent among them were the US at \$12.8 billion (34.0%) and the UK at \$4.1 billion (10.9%) of total DAH in 2016. Private philanthropy provided \$2.2 billion (5.8%), and the Bill & Melinda Gates Foundation contributed \$2.9 billion (7.8%) in 2016. Significant shares of DAH were disbursed by multilateral development agencies such as the World Bank and WHO (disbursing 5.1% and 5.8%, respectively), and public-private partnerships such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) and Gavi, the Vaccine Alliance (disbursing 9.9% and 4.9%, respectively) in 2016.

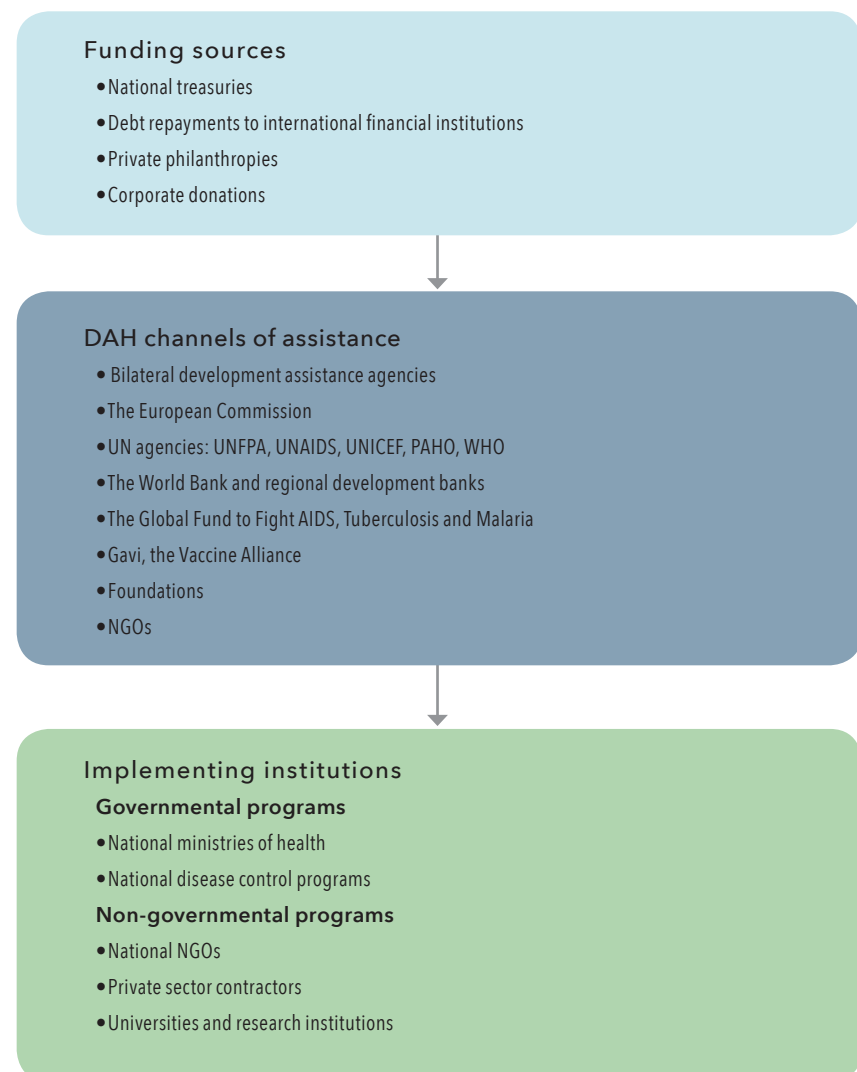
In 2016, countries receiving DAH generally had a gross domestic product per capita of less than \$20,869. That same year there were 132 eligible countries, encompassing 84.3% of the world's population. Across regions, sub-Saharan African countries were the recipients of 38.8% of 2014 DAH funds, while 6.1% flowed to South Asia.

Across the major health focus areas targeted by DAH, 25.4% of DAH focused on HIV/AIDS, while maternal and child health projects received 19.1% and 10.3% of funding, respectively, in 2016. This slight shift in health focus represents a change from the past decade. Since 2000, funding for HIV/AIDS has risen 13.4% annually on average, but more precisely it rose 23.3% from 2000 to 2010, reaching a high of 29.8% of total DAH in 2011. It has since decreased 1.9% annually from 2011 to 25.4% of total DAH in 2016. Funding for maternal, newborn, and child health, collectively, has risen 9.1% annually from 2006 to

2016. Maternal, newborn, and child health collectively captured 29.4% of DAH in 2016, a greater percentage than the other health focus areas, including HIV/AIDS.

In the past 27 years, DAH has shown three “phases:” a moderate annualized growth rate of 4.9% from 1990 to 2000, an unprecedented 11.4% annualized growth rate during the first decade of the millennium, and a flat 1.8% annualized growth rate since 2010. DAH for 2016 is in keeping with the trend we have observed since 2010. And yet, while DAH has remained flat since 2010, total health spending has continued to rise. In the push toward universal health coverage, DAH can be a catalyst for investment in underperforming health systems; build infrastructure within which domestic health programs can function; fund rapid scaling of vaccine programs and other time-sensitive initiatives; and invest in global public goods. But DAH alone is unlikely to sustain countries indefinitely, especially in an era of flat-lined funding.

**FIGURE 1**  
Sources, channels, implementing institutions



## BOX 3

### Development assistance for health terms defined

**Development assistance for health** refers to the financial and in-kind contributions provided by global health channels to improve health in developing countries. These contributions include grants as well as concessionary loans, provided with no interest or at a rate sufficiently lower than the current market rate. Because development assistance for health includes only funds with the primary intent to maintain or improve health, funding for humanitarian assistance, water and sanitation, and other allied sectors that do not primarily focus on health are not included in these estimates.

**Sources** are defined as the origins of funding, which are generally government treasuries, the endowments of philanthropic entities, or other private pools, including direct contributions from private parties.

**Channels** serve as the intermediaries in the flow of funds. Channels are composed of bilateral aid agencies, multilateral organizations, non-governmental organizations (NGOs), United Nations (UN) agencies, public-private partnerships, and private foundations. These organizations may direct funds to health focus areas or priority disease areas, provide platforms for action, or finance implementing institutions.

**Implementing institutions** are the actors working to promote health and prevent and treat diseases on the ground in low- and middle-income countries. Implementing institutions vary from governmental bodies, such as national disease programs and networks of public health facilities run by ministries of health, to non-governmental bodies consisting of NGOs, and international organizations.

**Health focus areas** identify the primary target of DAH. DAH projects may target a single health focus area or multiple health focus areas, but each dollar of DAH is assigned to a single health focus area. Health focus areas include HIV/AIDS; malaria; tuberculosis; maternal, newborn, and child health; non-communicable diseases; other infectious diseases; and health system strengthening (HSS) and sector-wide approaches (SWAPs). In addition, “other” and “unallocable” capture the resources that do not fall within one of these other categories or cannot be traced to a health focus area. “Other DAH” is DAH targeting issues not included in the other categories, while unallocable DAH is that for which there are insufficient data to estimate the health focus area.

**Program areas** are sub-categories within health focus areas that describe more granularly what DAH targets. HIV/AIDS, malaria, maternal, newborn, and child health, and non-communicable diseases are split into program areas. For example, program areas for HIV/AIDS include treatment or prevention of mother-to-child transmission.

## SOURCES OF DEVELOPMENT ASSISTANCE FOR HEALTH

The complete, 27-year trend in DAH, broken down by the sources most prominent in global health, is captured in Figure 2. At \$37.6 billion, 2016 marks the third year of relatively little growth in DAH funding, supporting predictions that external funding is unlikely to continue to grow at the rate seen earlier in the millennium. This “new normal” level of DAH held steady in 2016 due to increased support from some governments. Germany increased its funding by 17.4%, Japan by 12.3%, and Norway by 8.7%, offsetting declines from the US (down 5.1%) and other private monies (down 3.0%). But to put these trends in perspective, the UK, down slightly year-over-year in 2016, has increased its support annually, on average, for the past 27 years, whereas Japan has been hovering around the same disbursement in absolute terms since the mid-1990s.

In 2002, 12 high-income country governments committed to the United Nations’ Monterrey Consensus, an agreement that proposed the target of allocating 0.7% of GDP to official development assistance (ODA). Figure 3 depicts the amount of DAH provided by each of 10 high-income countries serving as major public sources of development assistance. The size of the bubbles represents the total amount of DAH distributed by each country. The amount of DAH as a share of each country’s GDP is captured in the position of the bubble on the vertical axis. Although DAH as a percentage of GDP has been growing over time, variation remains in countries’ commitments to global health.

### UNITED STATES

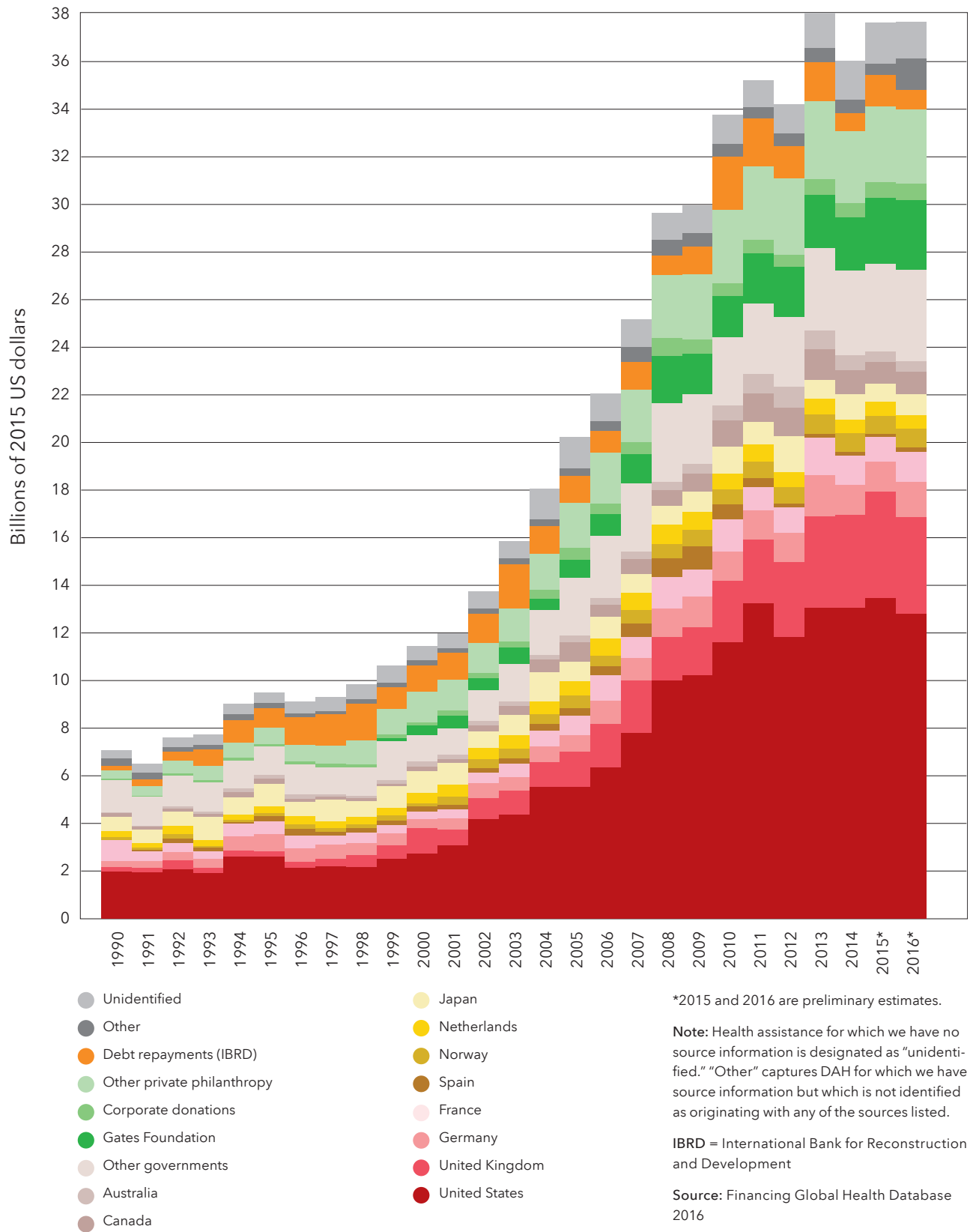
Of the \$536.1 billion of development assistance for health provided to low- and middle-income countries around the world since 1990, the United States government has provided \$171.0 billion, or 31.9%. US funding increased on an annual basis from 1990 to 2010 by an average of 9.3%, with expansive growth during the period 2000–2010. Since 2010 US support has increased slightly, on average 1.6% annually, although it remains the largest single source. In 2016, the US contributed \$12.8 billion or 34.0% of total global DAH. This contribution represents 0.069% of the US economy, down from 0.074% in 2015. The US Global Health Budget Fiscal Year 2017 budget request was for funding in line with FY2016<sup>3</sup> which, if approved, would result in relatively flat growth.

Across channels, the US provided 44.7% of its funding through its bilateral aid agencies, including the United States Agency for International Development (USAID), the US President’s Malaria Initiative (PMI), and the US President’s Emergency Plan for AIDS Relief (PEPFAR). DAH disbursed through US bilateral agencies decreased by 3.7% to \$5.8 billion in 2016.

UN agencies received \$654.9 million or 5.1% of US DAH in 2016, an increase of 5.5% from the prior year. Gavi and the Global Fund were the recipients of \$242.1 million and \$906.0 million, respectively, down 0.09%



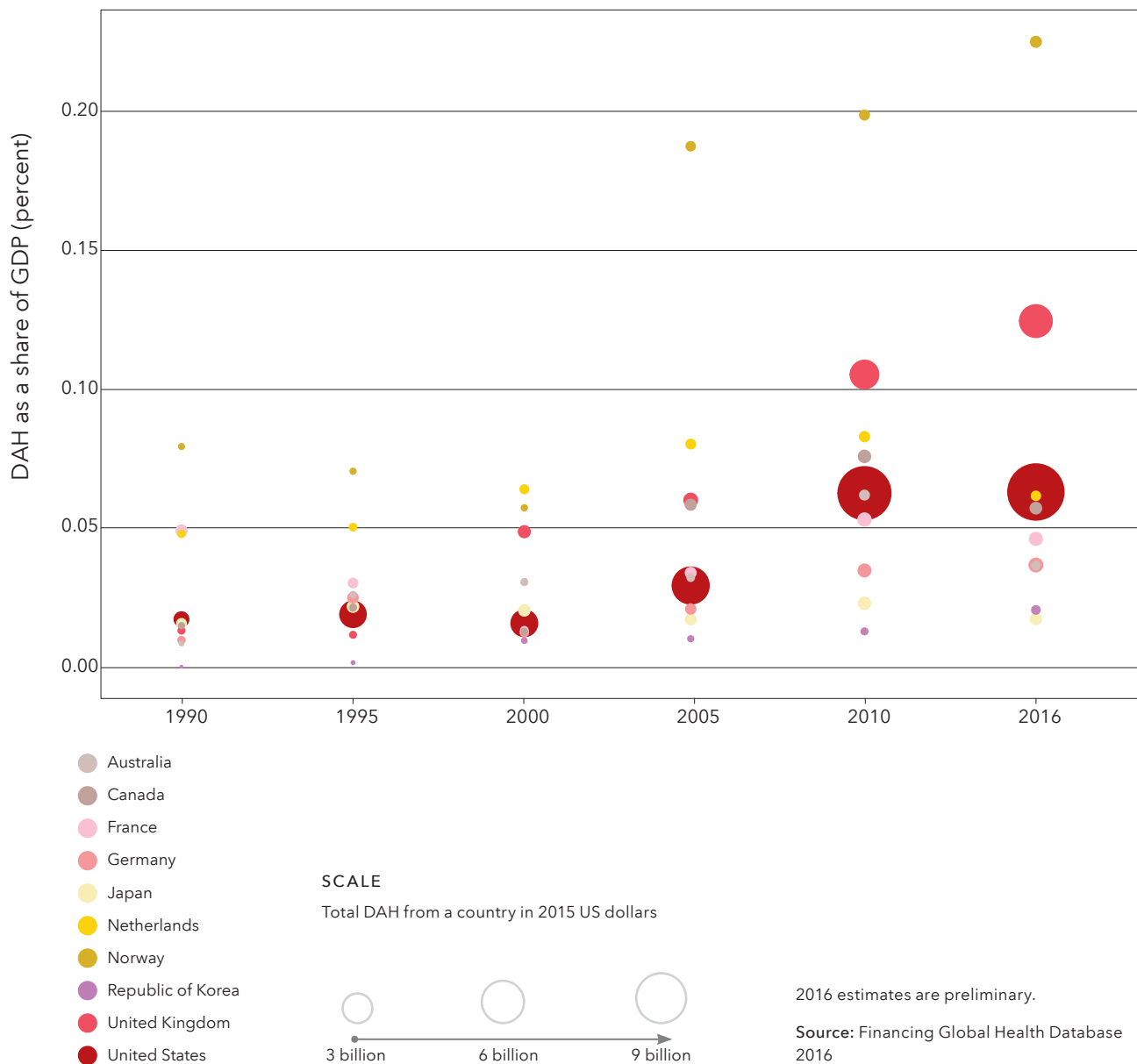
**FIGURE 2**  
DAH by source of funding, 1990-2016



and 24.8% from 2015. US NGOs received \$4.4 billion from the US, 34.2% of total US DAH in 2016. International NGOs, which are NGOs generally headquartered in high-income countries other than the US, received \$792.0 million in US DAH.

The direction of US funds to health focus areas has shifted over time, with an emphasis on maternal health from 1990 to 2000 giving way to a strong focus on HIV/AIDS by 2010. In 2016, US DAH for HIV/AIDS was \$6.7 billion and accounted for 52.6% of the total US DAH budget. Maternal health received \$1.3 billion in 2016, down 4.4% over the previous year; and newborn and child health received \$1.4 billion, up 2.3%. Tuberculosis and

**FIGURE 3**  
Total DAH relative to DAH measured as a share of a source's GDP, 1990-2016



malaria received \$483.9 million and \$1.1 billion, respectively, 7.4% and 9.8% down from 2015. Regionally, most funds from the US flowed to sub-Saharan Africa. In 2014, the most recent year for which regional DAH estimates are available, this amounted to \$7.3 billion, or 56.1% of total US DAH. The transition to a new presidential administration means marked uncertainty for US DAH in the years to come.

#### **UNITED KINGDOM**

DAH from the UK, which has risen at a steady annual average of 12.0% since 1990, decreased 8.4% in the last year, from \$4.5 billion in 2015 to \$4.1 billion in 2016, although much of this decrease is due to the exchange rates between the US dollar and the UK pound. An alternative method to measure UK DAH is as a share of the national economy or GDP. In 2016, UK DAH was an estimated 0.125% of total UK GDP. The bulk of these funds were disbursed by bilateral agencies, of which the Department for International Development (DfID) is the most prominent. The UK bilateral agencies overall decreased DAH disbursement 1.5% to \$1.6 billion in 2016. The UK disbursed \$532.2 million or 13.0% of its DAH to UN agencies in 2016, and \$576.8 million or 14.1% to Gavi. The Global Fund received \$425.0 million or 10.4% of total UK funding.

The UK focused \$411.1 million, or 10.1% of its DAH, in 2016 on HIV/AIDS, with maternal and child health commanding \$1.1 billion or 27.1%, and \$405.8 million or 9.9%, respectively. In September 2016, the UK pledged 1.1 billion pounds (\$1.37 billion) to the Global Fund over the next three years; up to 50 million pounds (US \$62.3 million) to the Medicines for Malaria Venture to develop and deliver new antimalarial drugs; and up to 25 million pounds (US \$31.1 million) for the Innovative Vector Control Consortium (IVCC) to develop new insecticides.<sup>4</sup>

Regionally, the UK contributed 43.6% of its DAH, or \$1.7 billion, to sub-Saharan Africa in 2014. South Asia received \$421.3 million or 10.8%. Southeast Asia, East Asia, and Oceania received \$159.5 million or 4.1% of UK DAH in 2014.

#### **GERMANY**

In just over a decade, German DAH has tripled in absolute value, and the current administration solidified the country's dedication to this trend last year by approving the largest development aid budget in Germany's history.<sup>5</sup> Germany provided \$1.5 billion in DAH in 2016, an increase of 17.4% over 2015. DAH from Germany in 2016 represented 0.037% of GDP, up from 0.032% in 2015.

Germany disbursed \$77.9 million in DAH to Gavi and \$322.9 million to the Global Fund, representing 5.3% and 21.9% of total German DAH for 2016, respectively. UN agencies received \$108.7 million or 7.4%, while NGOs and foundations received \$245.4 million. The European Commission received \$48.9 million. Germany disbursed 44.2% or \$652.0 million of its 2016 DAH

through its own bilateral aid agencies. The German Federal Ministry for Economic Cooperation and Development has noted three strategic areas of focus for its DAH funding going forward: health system strengthening, HIV/AIDS and other infectious diseases, and sexual reproductive health and rights.<sup>6</sup>

Across regions, sub-Saharan Africa (44.1%), followed by Southeast Asia, East Asia, and Oceania (11.4%), and South Asia (10.7%) received the bulk of Germany's DAH in 2014. Across health focus areas, 20.8% of German DAH was distributed to newborn and child health (\$311.5 million); 17.5% to HIV/AIDS (\$258.4 million); and 12.0% to maternal health (\$177.3 million).

#### **FRANCE**

DAH from France remained steady from 2015 to 2016 at \$1.3 billion. In 2015 this represented 0.047% of France's GDP; in 2016 DAH represented 0.048% of GDP. France has stated a clear aim to work toward SDG 3, promoting universal health coverage, defending human rights, and advancing health equity.

In 2016, France was the fourth-largest government donor of DAH after the US, the UK, and Germany. The Global Fund received \$470.7 million from France, or 37.2% of France's DAH. Gavi received 0.6% of France's 2016 DAH, which amounted to \$7.6 million.

Sub-Saharan African countries constitute France's main priority for official development assistance and received at least 85% of the State's financial efforts for development in 2014.<sup>7</sup> Across health focus areas France marks nutrition, communicable diseases, and maternal, newborn, and child health as priorities. In monetary terms, 19.6% of France's DAH was allocated to HIV/AIDS (\$247.5 million), 12.1% to malaria (\$152.9 million), 8.6% to tuberculosis (\$110.6 million), and 6.2% to maternal health (\$77.8 million).

#### **CANADA**

In 2016, DAH from Canada increased over 2015 totals by 7.88%, from \$900.0 million in 2015 to \$970.1 million in 2016. The 2016 disbursement represented 0.06% of Canada's GDP. Of this funding, the majority was channeled through Canada's bilateral agencies (\$295.9 million) and NGOs (\$273.7 million). Gavi received \$40.2 million, or 4.1% of Canada's DAH, and the Global Fund received \$230.5 million or 23.8%. UN agencies received \$120.9 million or 12.5% of Canadian DAH.

Across health focus areas, Canada prioritized maternal health with \$107.8 million, representing 11.1% of its total DAH budget. Funding for newborn and child health amounted to \$332.8 million or 34.3% of Canadian DAH, and HIV/AIDS received \$141.8 million or 14.6% DAH from Canada in 2016.

Across regions, Canada supported global health activities in sub-Saharan Africa with \$585.5 million or 58.3% of its DAH in 2014. Funds to South Asia

totaled \$121.5 million or 12.1% of Canadian DAH. Southeast Asia, East Asia, and Oceania received \$35.8 million (3.6%), and Latin American and the Caribbean received \$36.7 million (3.7%).

#### **JAPAN**

Japan contributed \$867.6 million or 0.018% of its GDP to DAH in 2016 as compared to \$772.4 million or 0.016% of GDP in 2015. 2016 funds represented an increase of 12.3% over the prior year. The bulk of Japan's DAH in 2016, 29.7%, went to the Global Fund. NGOs received \$114.8 million, representing 13.2% of Japan's DAH. UN agencies, WHO, and Gavi received \$139.4 million, \$75.5 million, and \$19.4 million of DAH from Japan in 2016, respectively.

Across regions, Japan focused 34.8% or \$365.8 million of its DAH on sub-Saharan Africa in 2014. East Asia and the Pacific received 12.5% or \$131.4 million, and South Asia received 8.1% or \$84.7 million. Across health focus areas, 16.2% or \$140.6 million of Japan's DAH was disbursed to HIV/AIDS; 20.3% or \$175.8 million to maternal, newborn, and child health; 10.0% or \$87.0 million to malaria; 7.1% or \$61.7 million to tuberculosis; 7.8% or \$68.0 million to HSS/SWAPS; and 4.8% or \$41.4 million to infectious diseases in 2016.

#### **AUSTRALIA**

DAH from Australia decreased for the fourth year in a row, reaching a level not seen from this country since 2005. At \$420.0 million, DAH in 2016 represented 0.038% of Australia's GDP. Australia channeled \$89.5 million, or 21.3% of its 2016 DAH, to the Global Fund; \$75.5 million or 18% to NGOs; \$48.6 million or 11.6% to WHO; \$79.8 million or 19.0% to UN agencies; and \$17.8 million or 4.2% to Gavi. Another \$154.9 million or 36.9% was channeled through Australian bilateral aid agencies.

East Asia and the Pacific have been the geographical focus of Australia's assistance and received 40.1% of its 2014 DAH, while sub-Saharan Africa has been an increasing focus, up 15.9% from 2013. Australia allocated \$92.5 million to HIV/AIDS in 2016, a 3.6% decrease over 2013. Maternal, newborn, and child health received \$130.7 million or 31.2% of total Australian DAH.

#### **OTHER COUNTRIES**

DAH from other high-income countries continued the fluctuating trend of recent years. The countries that increased their disbursements of DAH included Spain (\$24.3 million more than in 2016 than in 2015 or a 17.1% increase), Norway (\$64.9 million or 8.7%), and Greece (\$1.2 million or 1.5%).

#### BOX 4

### The Sustainable Development Goals

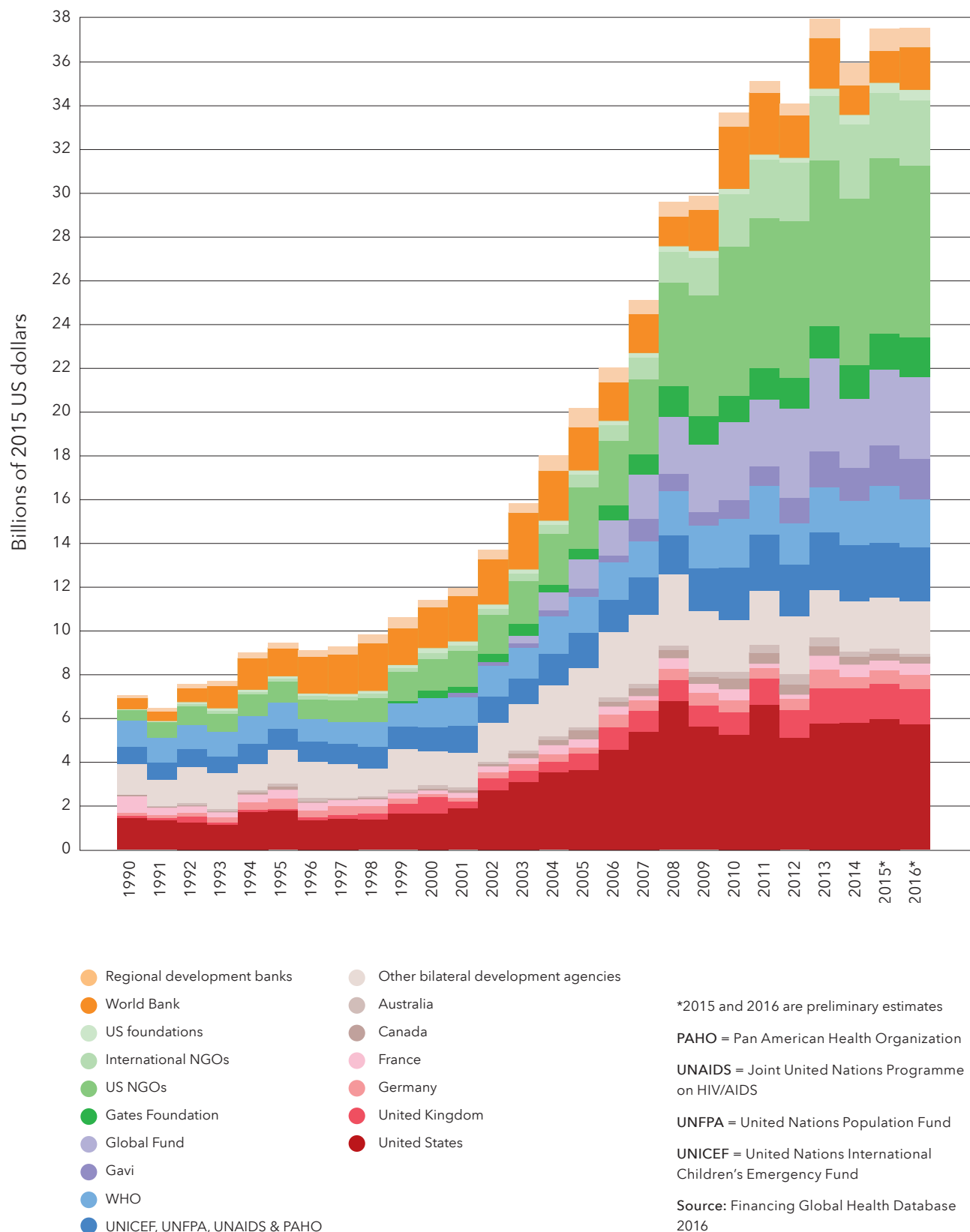
The Sustainable Development Goals (SDGs) were adopted by world leaders at the UN Summit in September 2015 and went into effect on January 1, 2016. Building on the Millennium Development Goals (MDGs) of 2000–2015, the scope of the SDGs is broader than that of the MDGs. According to the UN, the SDGs attempt to address the core causes of poverty and cover the three dimensions of sustainable development: economic growth, social inclusion, and environmental protection. They call for action on the part of all countries and focus more heavily on building capacity for implementation, including mobilizing financial and technological resources, data, and institutions.

SDG 3 addresses “Good Health and Well-Being.” Achieving universal health coverage (“including financial risk protection, access to quality essential health care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all”) is one of the SDG 3 targets for 2030.<sup>8</sup> Others include reducing the maternal mortality ratio to less than 70 per 100,000 live births by 2030; ending preventable deaths of newborns and children under 5 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-5 mortality to at least as low as 25 per 1,000 live births; ending the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases; and ensuring universal access to sexual and reproductive health care services. IHME tracks health data for 33 health-related indicators aligning with the SDGs. These data may be viewed at [www.vizhub.healthdata.org/sdg](http://www.vizhub.healthdata.org/sdg).

## CHANNELS OF DEVELOPMENT ASSISTANCE FOR HEALTH

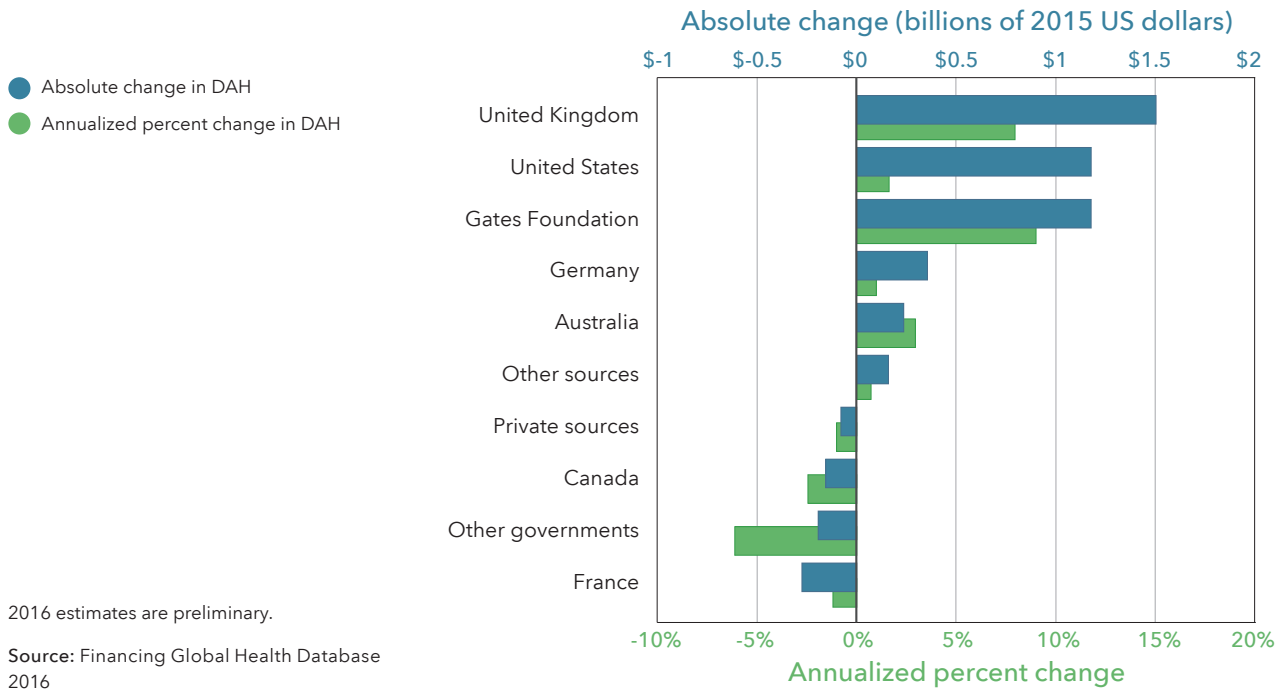
Figure 4 illustrates the distribution of funding across the types of organizations most active in global health for the period 1990–2016. Most notable is the shift away from development banks, where support shrank from 8.9% in 1990 to 7.5% in 2016. Bilateral agency support has remained relatively stable, channeling 28.8% of DAH in 2016, down from 55.2% in 1990. The public-private partnerships of Gavi and the Global Fund, both of which were founded early in the last decade, accounted for 14.8% of total DAH in 2016. NGOs and private foundations have made the most significant gains, channeling 30.1% in 2016 compared with just 7.6% of DAH in 1990, an increase of 2,005.0% over the 27-year period. This growing role of large-scale giving from private, non-government institutions is noteworthy and may continue to rise in coming years.<sup>9</sup> Among the larger private foundations that name public health as a major initiative, Bloomberg Philanthropies distributed a total of \$600.1 million in 2016,<sup>10</sup> some of which went to maternal health and NCDs; and the Parker Foundation, established in June 2015 with \$600 million from tech entrepreneurs Sean and Alexandra Parker, is pursuing “large-scale systemic change in three focus areas,” one of which is global public health.<sup>11</sup>

**FIGURE 4**  
DAH by channel of assistance, 1990-2016



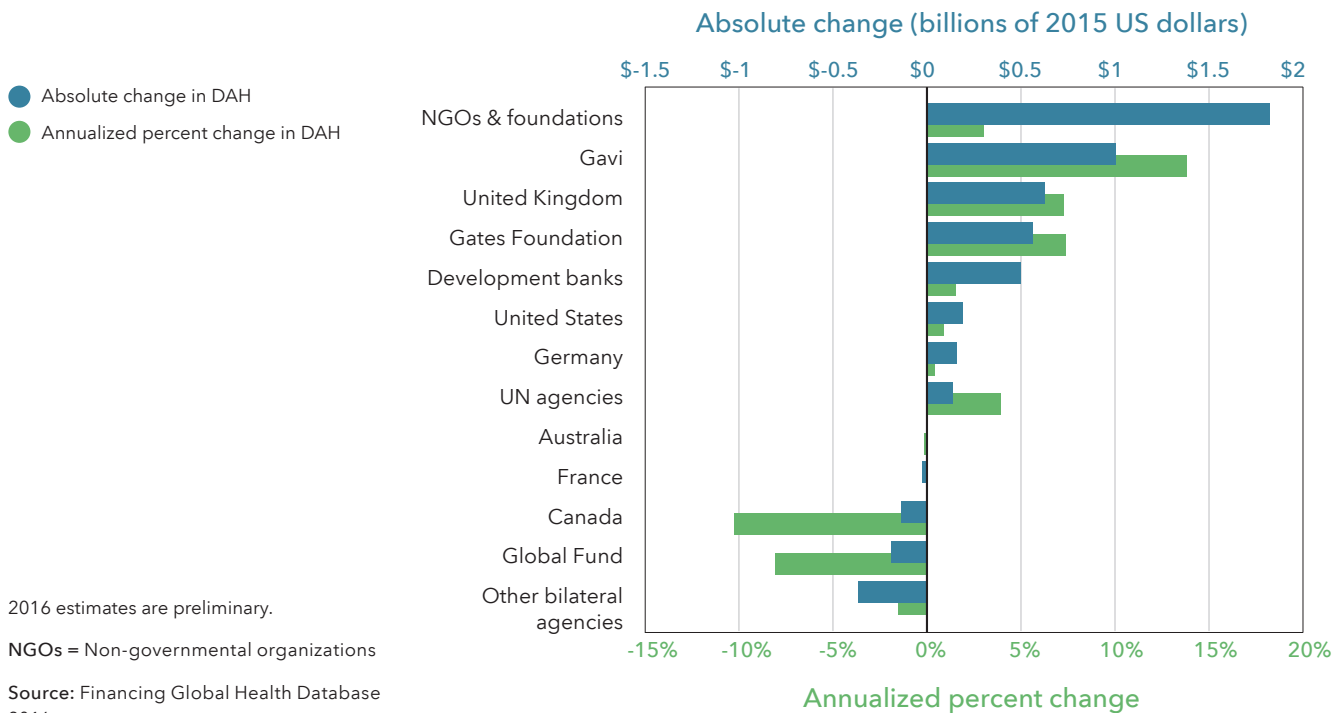
**FIGURE 5**

Change in DAH by source, 2010-2016



**FIGURE 6**

Change in DAH by channel, 2010-2016





### **GAVI, THE VACCINE ALLIANCE**

Gavi's mission for 2016 to 2020 is to see developing countries immunize 300 million children and help as many as 20 countries transition out of Gavi's financial support.<sup>12,13</sup> As such, 88.7% of Gavi's funds in 2016 were disbursed to child health and 11.3% went to HSS/SWAPs.

A pledging conference for Gavi hosted in January 2015 secured funding from major donors over a multi-year cycle. Among them, Norway committed \$850 million to Gavi for the period 2016–2020.<sup>14</sup> With this and other renewed commitments, Gavi's funding was up 0.1% in 2016, reaching \$1.9 billion. The UK provided \$576.8 million to Gavi in 2016, the Bill & Melinda Gates Foundation provided \$400.6 million, the US provided \$242.1 million, and Germany provided \$77.9 million. In January 2017, Google became a substantive source of funding for Gavi. The company provided \$2 million, which will be matched by the Gates Foundation's funding to the Gavi Matching Fund, to scale up high-tech innovations for vaccine delivery.<sup>15</sup>

### **THE GLOBAL FUND TO FIGHT AIDS, TUBERCULOSIS AND MALARIA**

The Global Fund mobilizes and invests nearly \$4 billion a year to support programs accelerating the end of AIDS, tuberculosis, and malaria as epidemics. In 2016, the Global Fund disbursed \$3.7 billion, up from \$3.4 billion in 2015. The most prominent donors to the Global Fund in 2016 were the US (\$906.0 million or 24.3%), the UK (\$425.0 million or 11.4%), Germany (\$322.9 million or 8.7%), and France (\$470.7 million or 12.6%). Across health focus areas, the Global Fund disbursed 40.4% of its funding for HIV/AIDS, 29.7% for malaria, 22.4% for tuberculosis, and 1.9% for HSS/SWAPs in 2016.

The Global Fund recently adopted a new funding allocation methodology to drive more funding to higher-burden, lower-income countries. High levels of HIV among key populations, the threat of multidrug-resistant tuberculosis (MDR-TB), and malaria elimination countries will also receive priority. The Global Fund's Fifth Replenishment conference in mid-2016 solicited multi-year commitments from major donors to establish funding for 2017–2019. Luxembourg, the third-largest donor to the Global Fund on a per capita basis, was the first to make a contribution (of 8 million euros, or \$8.6 million) to this new cycle in late 2016. Commitments thus far total over \$12.9 billion for the next three years, nearly \$1 billion more than the previous pledging session in 2013.<sup>16</sup>

### **DEVELOPMENT BANKS**

The World Bank is composed of two institutions that provide development assistance: the International Development Association (IDA) and the International Bank for Reconstruction and Development (IBRD).

IDA serves the world's poorest countries with concessional loans and grants as well as debt relief. IDA focuses on ending poverty and, in the next five years, is putting special emphasis on fragility and conflict, gender, climate, jobs and economic transformation, and governance and institutions. Within these categories, health issues such as vaccines for children and basic health services are included.<sup>17</sup> In its next funding cycle IDA will

adopt a new funding model, leveraging its capital base by raising funds on the capital market. These funds will add to IDA's donor contributions and the repayments on its loans, though donor contributions will remain at the core of IDA's financing.<sup>18</sup> In 2016, IDA disbursements were up 18.1% to \$1.1 billion.

IBRD focuses its assistance on reducing poverty and promoting economic growth and prosperity in middle-income countries. IBRD's health-related initiatives in 2016 included ending preventable maternal and child mortality, promoting childhood nutrition, halting the spread of preventable communicable diseases and NCDs, building strong health care systems, and achieving universal health care coverage.<sup>19</sup> Funding from IBRD in 2016 was up 55.9% to \$837.6 million.

In addition to IDA and IBRD, *Financing Global Health* tracks DAH from three regional development banks – the African Development Bank (AfDB), the Asian Development Bank (ADB), and the Inter-American Development Bank (IDB). These development banks provide critical support to the specific geographic regions where they operate. Together, these banks provided \$7.9 billion for global health in 2016. IDB funding decreased 14.0% to \$689.4 million and ADB decreased 6.7% to \$99.6 million. AfDB was up 3.0% to \$99.4 million.

#### **THE BILL & MELINDA GATES FOUNDATION**

The Bill & Melinda Gates Foundation, which launched in 1999 with a disbursement of \$100 million, contributed \$2.9 billion to development assistance for health in 2016. Of this, 62.4% or \$1.8 billion flowed through the foundation as a channel, and 10.5% or \$306.0 million went to UN agencies. The Global Fund received \$253.0 million or 8.7% of the Gates Foundation's funding for 2016, and Gavi received \$400.6 million or 13.7%. NGOs received \$137.0 million or 4.7% of 2016 disbursements.

Newborn and child health remained the focus of Gates Foundation funding in 2016, receiving 36.2% of the year's disbursements, or \$1.1 billion. Another 6.1% or \$178.9 million went to maternal health; 7.4% or \$216.4 million went to tuberculosis, 6.1% or \$178.1 million to malaria, 10.1% or \$295.2 million to HIV/AIDS, and 7.6% or \$222.7 million to HSS/SWAPS.

In its 2017 annual letter, the Gates Foundation cites significant achievements in family planning and social change, ending malnutrition, and reducing the newborn and under-5 mortality rate. In one of many initiatives going forward, the Gates Foundation, with the Family Planning 2020 global partnership, aims to provide 120 million more women with access to contraceptives by 2020. The initiative is focused on South Asia, where contraceptives are used by one-third of women, and Africa, where contraceptives are used by fewer than one in five women.

#### **NON-GOVERNMENTAL ORGANIZATIONS, FOUNDATIONS, AND OTHER PRIVATE ENTITIES**

NGOs provided \$11.3 billion of DAH to low- and middle-income countries in 2016, a decrease of 1.1% over 2015. NGO funding amounted to 30.1% of total DAH

disbursed in 2016, a substantial gain from the 7.6% of total DAH funding NGOs accounted for in 1990. As a channel, NGOs collectively disbursed more funds than any other channel by a wide margin.

The most prominent US global health NGOs in 2016 included Population Services International, Catholic Relief Services, and Management Sciences for Health. HIV/AIDS receives a significant amount of funding from NGOs, collectively. In 2016, this amounted to \$3.4 billion or 30.4% of NGO funding. Maternal, newborn, and child health received \$1.7 billion or 21.3%.

DAH from private foundations decreased 1.6% in 2016. Contributing 1.3% of total DAH, foundations often focus on nontraditional health focus areas such as NCDs. In late 2016, Bloomberg Philanthropies cemented its commitment to global health concerns, donating \$25 million to the Global Polio Eradication Initiative (GPEI), a partnership of WHO, UNICEF, the US Centers for Disease Control and Prevention, Rotary International, and the Gates Foundation.<sup>20</sup> This follows Bloomberg Philanthropies' 2012 commitment of \$50 million to Family Planning 2020, a global initiative addressing maternal reproductive health in Africa.<sup>21</sup>

#### **UNITED NATIONS AGENCIES**

Funding to The World Health Organization (WHO) decreased 16.8% in 2016 to \$2.2 billion. Of the \$2.2 billion disbursed by WHO in 2016, funds went primarily to other infectious diseases and HSS/SWAPs (\$682.3 million and \$609.3 million, respectively). Funds flowed primarily to other infectious diseases and HSS/SWAPs (\$682.3 million and \$609.3 million, respectively). Current initiatives for WHO include fighting cholera in South Sudan, global testing guidelines for viral hepatitis, combatting diabetes and obesity in South Africa, and enhancing the health and well-being of migrant workers in Sri Lanka.

Funding from UN agencies, collectively, was down 8.6% from \$5.1 billion to \$4.7 billion in 2016. UNICEF – the United Nations Children's Fund – provides long-term humanitarian and development assistance to children and mothers. It is a key recipient of funds from the Bill & Melinda Gates Foundation and others working toward maternal, newborn, and child health as a priority. Funding to UNICEF was \$1.2 billion in 2016, up 8.9% over 2015.

United Nations Population Fund (UNFPA) is the lead UN agency focused on women's reproductive health, family planning, and newborn and child health. Funding to UNFPA was \$678.0 million in 2016, down 15.8% over 2015, and came primarily from governments and other sources (\$26.5 million and \$20.1 million, respectively). UNFPA disbursed a total of \$678.0 million in 2016.

UNAIDS, co-sponsored by 10 UN agencies to stop and reverse the spread of HIV/AIDS, disbursed \$284.2 million in 2016, down 0.49% over 2015.

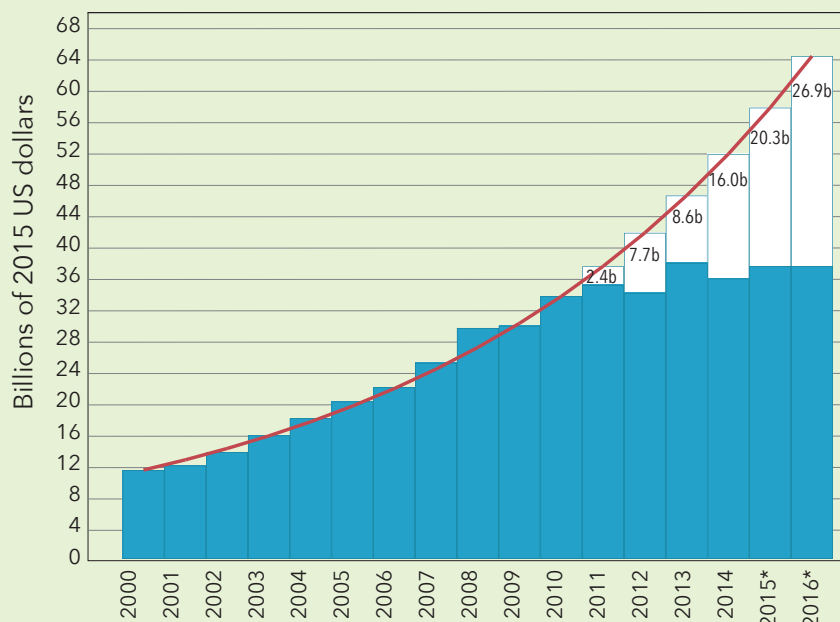
Finally, The Pan American Health Organization (PAHO) was up 11.8% in 2016 at \$280.6 million. Funding came primarily from other governments and other sources (\$171.8 million and \$4.8 million, respectively). Funds were disbursed primarily to maternal and child health and HSS/SWAPs (\$57.1 million and \$39.8 million, respectively).

**BOX 5**

**The costs of stagnation**

Figure 7 illustrates an alternate scenario to the flat-line trend in DAH since 2010. The red line represents the DAH total that would have been observed had the growth rate of 2000–2010 continued through 2016. If this trajectory had been realized, an additional \$82 billion of DAH would have been disbursed for health in low- and middle-income countries from 2010 to 2016.

**FIGURE 7**  
Total DAH, 2000–2016, observed versus potential



\*2015 and 2016 are preliminary estimates.

**Note:** Continued growth scenario for DAH is modeled from 2011 to 2016, in billions of 2015 US dollars, as based on the average annual percent increase from 2000 to 2010. The difference between DAH disbursed and DAH with continued growth is captured by the white boxes and the funding levels reported therein.

Source: Financing Global Health Database 2016

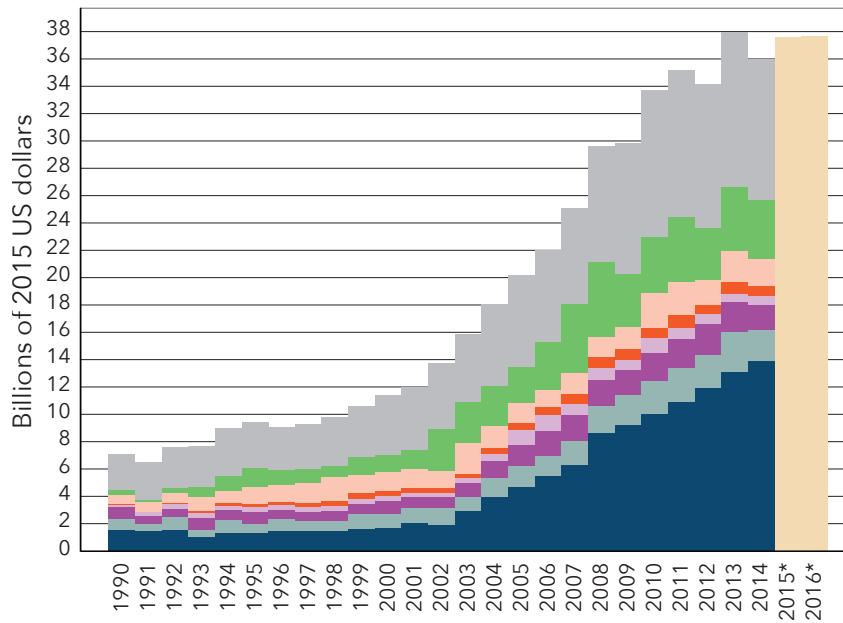
**RECIPIENTS OF DEVELOPMENT ASSISTANCE FOR HEALTH**

In 2016, 118 low- and middle-income countries were recipients of development assistance for health. Figure 8 presents DAH disbursements from 1990 to 2014 (the most recent year for which regional estimates are available) disaggregated by recipient region. “Global initiatives” captures DAH that does not flow to a specific region but contributes to health in developing countries on a more global scale. Since 2003, sub-Saharan Africa has commanded an increasingly large percentage of global DAH; in 2014, 38.8% of total DAH, or \$14.0 billion, went to this region. The second-largest allocation, 12.0% or \$4.3 billion, went to global initiatives.

Figure 9 depicts the flows of cumulative DAH, 2000–2014, from source to channel to recipient region, and further illustrates the predominant players: the US, private philanthropy, the UK, and the Gates Foundation on

**FIGURE 8**

DAH by recipient region, 1990-2014



- Unallocable†
- Global initiatives
- Latin America and Caribbean†
- Central Europe, Eastern Europe, and Central Asia
- North Africa and Middle East
- Southeast Asia, East Asia, and Oceania†
- South Asia
- Sub-Saharan Africa
- Preliminary estimates

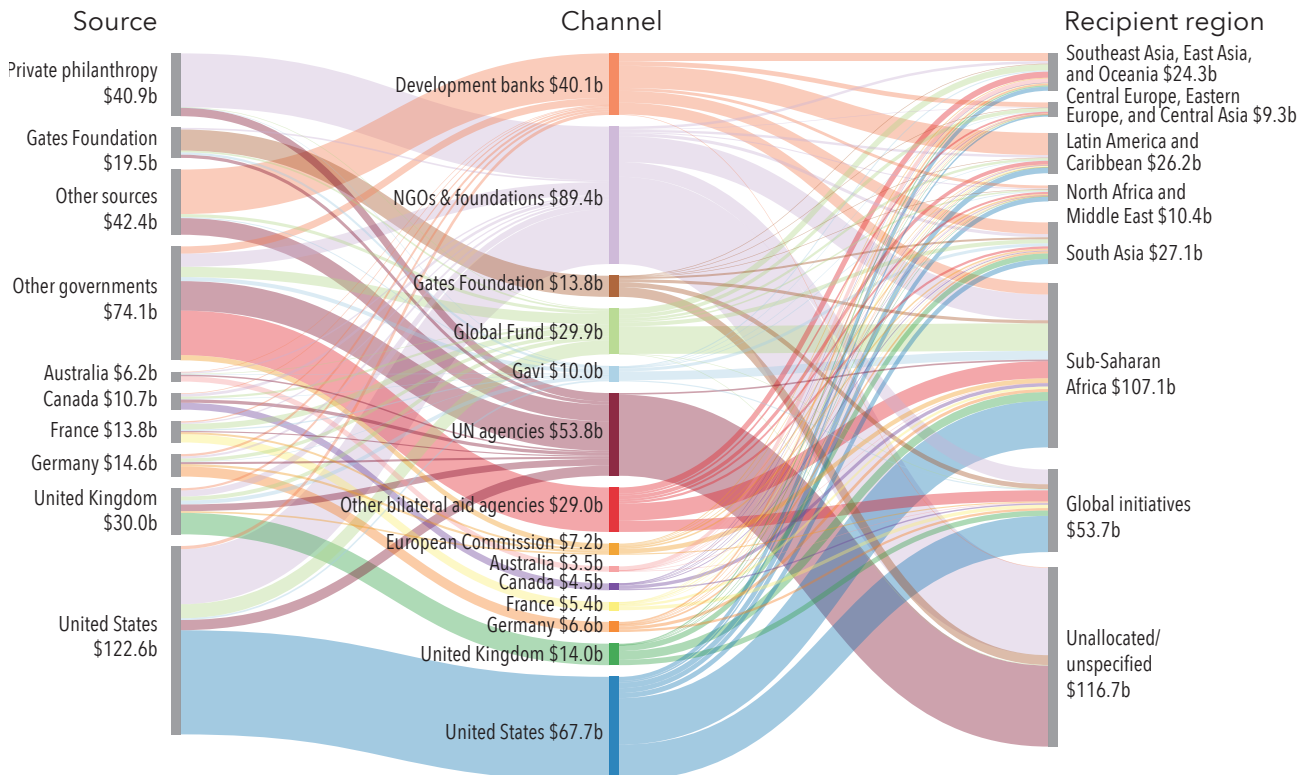
\*2015 and 2016 are preliminary estimates.

†Health assistance for which no recipient country or regional information is available is designated as "Unallocable." Due to data limitations, DAH estimates are not available by focus region for 2015 and 2016. Argentina, Chile, and Uruguay were included in the Latin America and Caribbean region. South Korea was included in Southeast Asia, East Asia, and Oceania. These countries are generally included in the "high-income" GBD classification, but have been included in these geographic regions because they were considered low- or middle-income countries by the World Bank at least at one point between 1990 and 2016.

Source: Financing Global Health Database 2016

**FIGURE 9**

Flows of DAH from source to channel to recipient region, 2000-2014



Source: Financing Global Health Database 2016

the source side; and sub-Saharan Africa followed by global initiatives on the recipient side. Among the conduits, the US, NGOs and foundations, the UN, and development banks channel most of the funds.

#### **SUB-SAHARAN AFRICA**

For more than a decade, sub-Saharan Africa has received more DAH than anywhere else in the world. In 2014, this amounted to \$14.0 billion or 38.8% of total DAH. The US provided \$7.3 billion or 52.4% of this funding, and the Gates Foundation provided \$429.9 million or 3.1%. Since 2007, approximately one-half of funds to sub-Saharan Africa have been earmarked for HIV/AIDS. In 2014, this amounted to \$5.7 billion. Maternal health received \$1.2 billion or 8.4% of funds to sub-Saharan Africa, and newborn and child health efforts received \$1.6 billion or 11.4% of the region's funds. In this region, Nigeria, Tanzania, Kenya, and Ethiopia received the most DAH.

#### **SOUTH ASIA**

Afghanistan, Bangladesh, Bhutan, India, Nepal, and Pakistan make up the South Asia region. Of these, India and Pakistan receive the bulk of DAH. In 2014, a total of \$2.2 billion flowed to this region, comprising 6.1% of total DAH and representing the largest share of regional funds after sub-Saharan Africa. The US and the UK were major sources of DAH for South Asia, contributing \$665.3 million and \$421.3 million, respectively, in 2014. The bulk of DAH to South Asia, 34.3% (\$752.7 million), is directed to newborn and child health; maternal health and HSS/SWAPs comprise 22.7% (\$498.1 million) and 16.6% (\$365.1 million), respectively.

#### **SOUTHEAST ASIA, EAST ASIA, AND OCEANIA**

This region consists of China, small-island developing states, and the members of the Association of Southeast Asian Nations. In 2014, DAH for this region amounted to \$1.8 billion, down 13.1% from 2013. The bulk of funding came from the US (\$521.0 million), Australia (\$247.4 million), and other bilateral aid agencies (\$784.7 million), as well as substantial contributions from the Global Fund (\$386.3 million) and NGOs (\$227.5 million). Funding was directed most prominently to HIV/AIDS (\$359.9 million) and tuberculosis (\$166.0 million).

#### **NORTH AFRICA AND THE MIDDLE EAST**

Newborn and child health has been the increasing focus of DAH to North Africa and the Middle East, up 32.0% since 2010. Total DAH in 2014 amounted to \$658.5 million, up 3.1% from 2013. Of this, 33.7% (\$222.0 million) was directed to newborn and child health. The US, Germany, and the UK were major sources of funding for the region in 2014, contributing \$140.4 million, \$82.9 million, and \$58.8 million, respectively.

## **LATIN AMERICA AND THE CARIBBEAN**

DAH for Latin America and the Caribbean fell 10.1% from 2013 to 2014 to a total of \$2.0 billion. The US and France were major sources of DAH for the region, contributing \$409.9 million and \$391.4 million, respectively. France's contribution was nearly triple what it allocated to the region in 2013, while the US decreased its funding by 24.4% year-over-year. Regional development banks were the most substantial funding source for the region, providing \$716.6 million or 36.1% of 2014 DAH.

Overall, DAH to Latin America and the Caribbean increased from 2000 to 2014 by 3.8% annually. Across health focus areas for the period 2000–2014, HIV/AIDS commanded the largest shift in funding attention, up \$252.0 million, followed by malaria, NCDs, and tuberculosis (\$23.1 million, \$19.2 million, and \$18.1 million, respectively). NCDs, despite receiving a small share of Latin America and the Caribbean's DAH, remain the largest source of burden for this region. In 2014, the bulk of DAH to Latin America and the Caribbean was directed to HSS/SWaps.

## **CENTRAL EUROPE, EASTERN EUROPE, AND CENTRAL ASIA**

Although DAH to this region increased 6.0% annually on average for the period 2000–2014, it has fluctuated significantly year to year. In 2014, DAH to the region was down 21.8% over 2013 to \$707.2 million. As sources, the US, Germany, and Japan contributed \$175.8 million, \$54.3 million, and \$49.3 million, respectively. The Global Fund and other bilateral aid agencies disbursed \$194.2 million and \$203.8 million of DAH to this region, accounting for 27.5% and 28.8%, respectively, of the region's total DAH. Across health focus areas, funding was allocated to HSS/SWaps (29.2%), HIV/AIDS (23.5%), and tuberculosis (15.6%).

Eastern Europe and Central Asia are home to the largest and fastest-growing HIV epidemic and the highest levels of multidrug-resistant tuberculosis, and the region pays some of the highest prices for antiretroviral therapy in the world while at the same time providing some of the lowest coverage of people on treatment. For these reasons, this region is a key area of focus for the Global Fund.

## **GLOBAL INITIATIVES**

Funding directed to global health activities that are not confined to a specific region are collected in the "global initiatives" category. Examples of these activities include international conferences or mobilizing the international community around a given topic area. From 2000 to 2014, DAH for global initiatives grew 8.9% annually and amounted to \$4.3 billion in 2014. The US was the main source of funding for these initiatives in 2014, contributing \$2.4 billion. Other major contributors included the UK and Norway, providing \$887.0 million and \$107.3 million, respectively.







# Development assistance for health focus areas

This chapter provides an in-depth analysis of development assistance for health (DAH) to the following major health focus issues: HIV/AIDS; tuberculosis; malaria; maternal, newborn, and child health; non-communicable diseases (NCDs); other infectious diseases; and health system strengthening and sector-wide approaches (HSS/SWAPs). Funding, activities, and major developments for each area are discussed. In addition, funding for HIV/AIDS, maternal, newborn, and child health, NCDs and, new as of this year, malaria, is broken out by program to track effective interventions and best practices.

## OVERVIEW OF HEALTH FOCUS AREAS

Figure 10 depicts DAH by health focus area for the period 1990–2016, with the most notable focus area increases occurring in maternal, newborn, and child health (up 0.8% over 2015), tuberculosis (up 13.3%), and HSS/SWAPs (up 5.8%). Of the total \$37.6 billion in DAH for 2016, 29.4% went to maternal, newborn, and child health; 25.4% to HIV/AIDS; 6.6% to malaria; 4.0% to tuberculosis; 1.7% to non-communicable diseases; 3.9% to other infectious diseases; and 9.6% to HSS/SWAPs.

The overall uptick in DAH during the period 2000–2015 corresponded with the launch of the Millennium Development Goals, which catalyzed and aligned many sources of funding to target DAH at four areas – HIV/AIDS, malaria, tuberculosis, and maternal, newborn, and child health. At the same time, the genesis of the Gates Foundation, the Global Fund, and Gavi, and concerted activity in the global AIDS advocacy movement, spurred global health efforts along in these critical areas. The galvanizing effort has corresponded with exceptional advances: maternal mortality has fallen by almost 50% since 1990; new HIV infections fell 38% from 2001 to 2013, and among children, new infections declined 58%; the global malaria mortality rate fell by 58% between 2000 and 2015; the tuberculosis mortality rate fell by 45% between 1990 and 2013.<sup>8</sup>

But there is still much work to be done. Every year, roughly 6.3 million children die before their fifth birthday, and 79 out of every 100 of these deaths occur in sub-Saharan Africa or South Asia. A mother in a developing region is 20 times more likely to die in childbirth than her

counterpart in a high-income country. HIV remains the leading cause of death for women of reproductive age worldwide, and at the end of 2015 there were still an estimated 30 million people living with the disease. In September 2015, the SDGs proposed new “sustaining” numbers for these four areas over the next 15 years (noted in Box 4). Assuming DAH continues to grow at a tepid rate, there will be a need to improve efficiency in order to make health gains and to augment domestic government spending and mobilize prepaid health resources as discussed in detail in Chapter 3.

**FIGURE 10**  
DAH by health focus area, 1990-2016

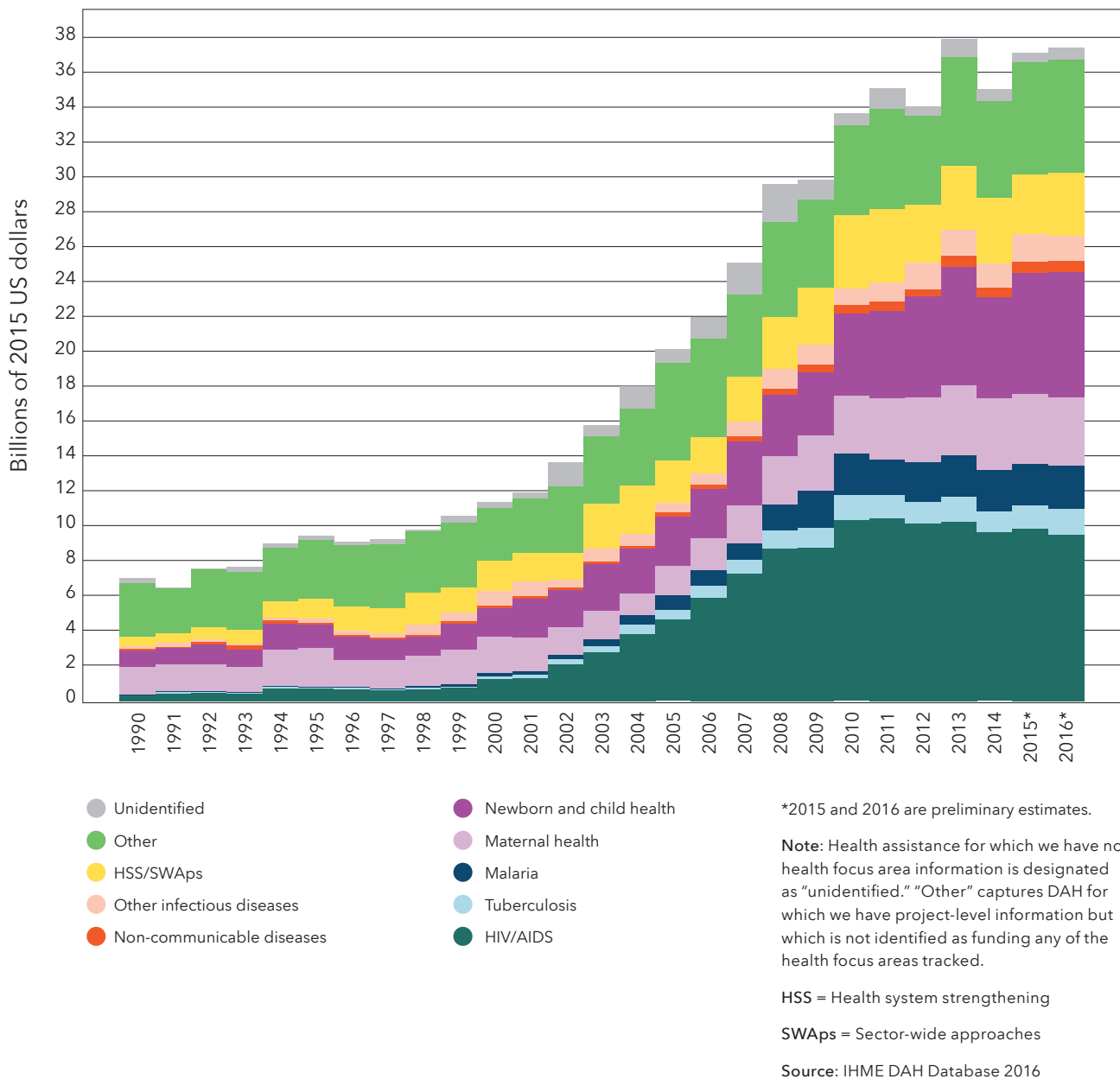


Figure 11 displays DAH for 2000–2016 by health focus area. HIV/AIDS, maternal, newborn, and child health, malaria, and NCDs are detailed further by program area. Differentiated program areas highlight the particular activities DAH funds support for each of these issues. Figure 12 presents the change in DAH by health focus area for the period 2010–2016. During this time, on a percentage basis, other infectious diseases and maternal, newborn, and child health have seen the greatest funding increases, at 6.7% and 5.5%, respectively, followed by NCDs (5.2%) and

Note: 2015 and 2016 are preliminary estimates. Health assistance for which we have no health focus area information is designated as “unidentified.” “Other” captures DAH for which we have project-level information but which is not identified as funding any of the health focus areas tracked.

HSS/SWApS = Health system strengthening/sector-wide approaches

MNCH = Maternal, newborn, and child health

PMTCT = Prevention of mother-to-child transmission

Source: Financing Global Health Database 2016

**FIGURE 11**  
DAH by health focus areas and program areas, 2000–2016

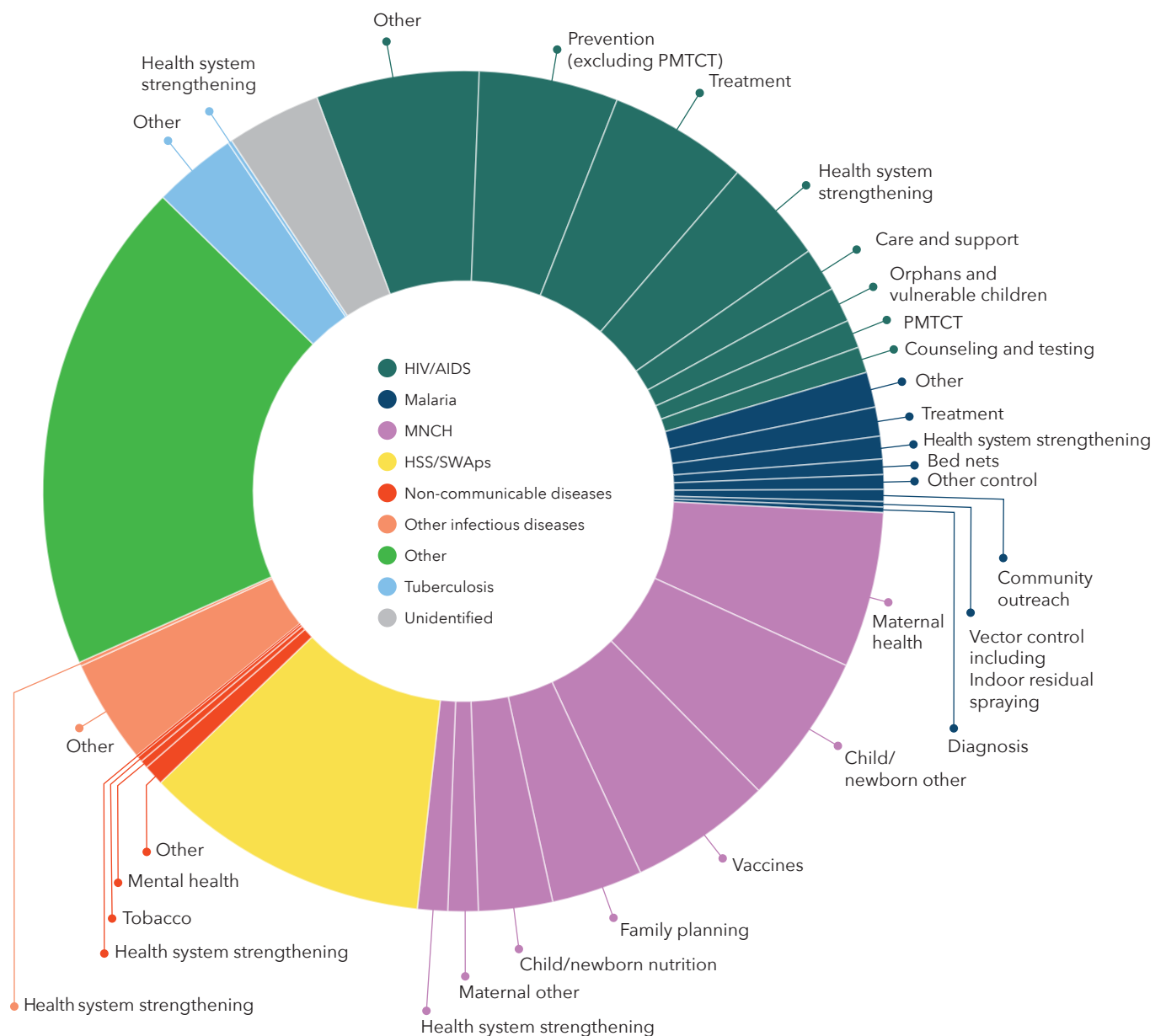
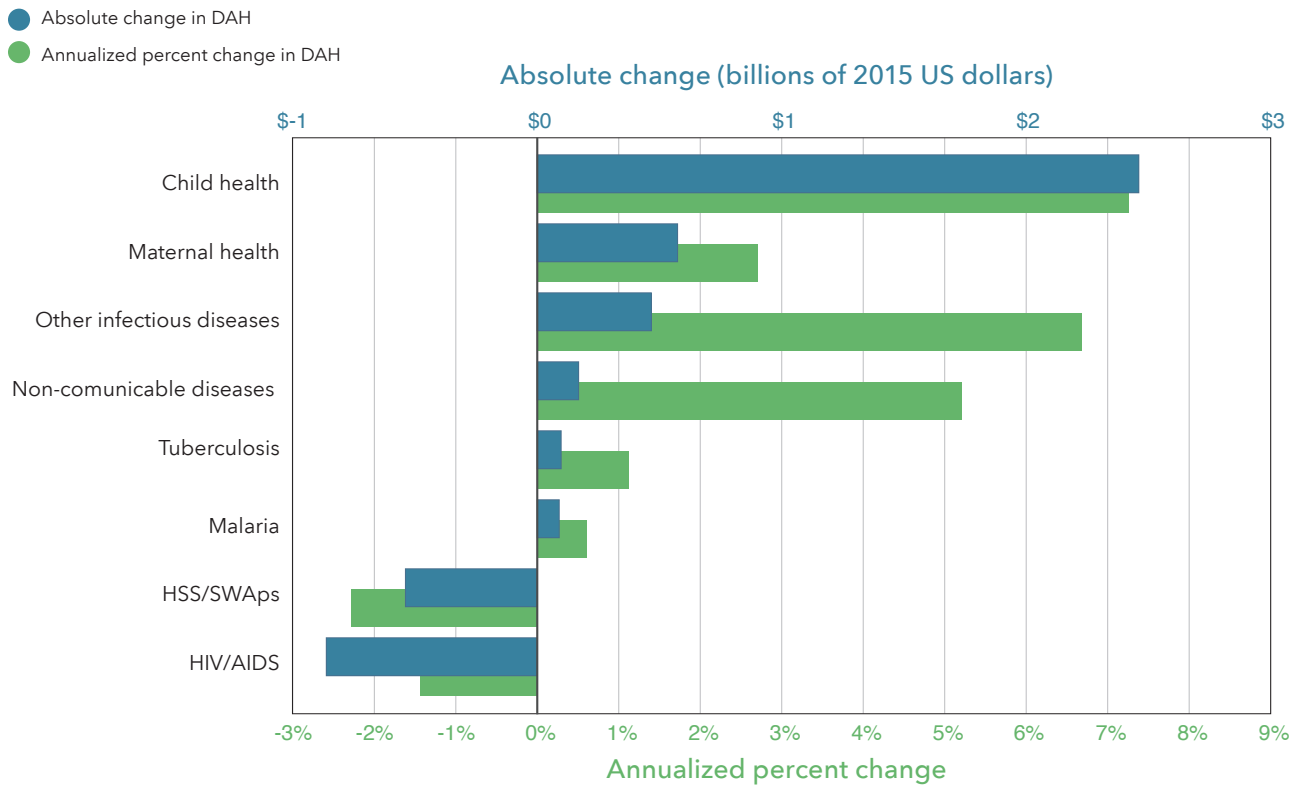


FIGURE 12

Absolute and relative change in DAH by health focus area, 2010–2016



Note: Cumulative DAH from 2000 to 2016 in billions of US 2015 dollars. 2015 and 2016 are preliminary estimates.

HSS/SWApS = Health system strengthening sector-wide approaches

Source: Financing Global Health Database 2016

tuberculosis (1.2%). It is important to note that although DAH for NCDs rose rapidly during this period, it is the health focus area with the smallest amount of funding, by far, compared with other areas; in 2016 it still only represented 1.7% of total DAH. DAH allocation for HSS/SWApS declined 2.3% during this time, and HIV/AIDS funding declined 1.4%.

Figure 13 illustrates the rate of change by health focus area since 1990. HIV/AIDS, tuberculosis, and malaria saw great gains – 6.6% to 13.2% – from 1990 to 1999; more than 20% gains for the period 2000–2009; and less than 5% gains from 2010 to 2016. Each of these health areas followed the general trend of total development assistance for health, except for HIV/AIDS, which saw a decrease in funding from 2010 to 2016. NCDs realized only a small increase, of 0.6%, during the 1990–1999 period; the period from 2000 to 2009 saw a gain of 11.9% for this area, and from 2010 to 2016 DAH has been up 5.2%. Similarly, maternal, newborn, and child health saw modest increases (3.7%) from 1990 to 1999, a surge from 2000 to 2009 (6.9%), and a decent gain (5.5%) for 2010–2016 that exceeded its 1990–1999 period. Other infectious diseases and HSS/SWApS did not follow the pattern of any other health areas for the periods 1990–1999 and 2000–2009. In both of these cases, the period from 1990 to 1999 saw the greatest gains (18.2% and 11.4%), followed by a sharp decline from 2000 to 2009. In 2010–2016, DAH for other infectious diseases increased 7.8%, up 2.5% over the prior period. HSS/SWApS, however, declined 2.3% from 2010 to 2016.

FIGURE 13

Annualized rate of change in DAH for health by health focus area, 1990-2016

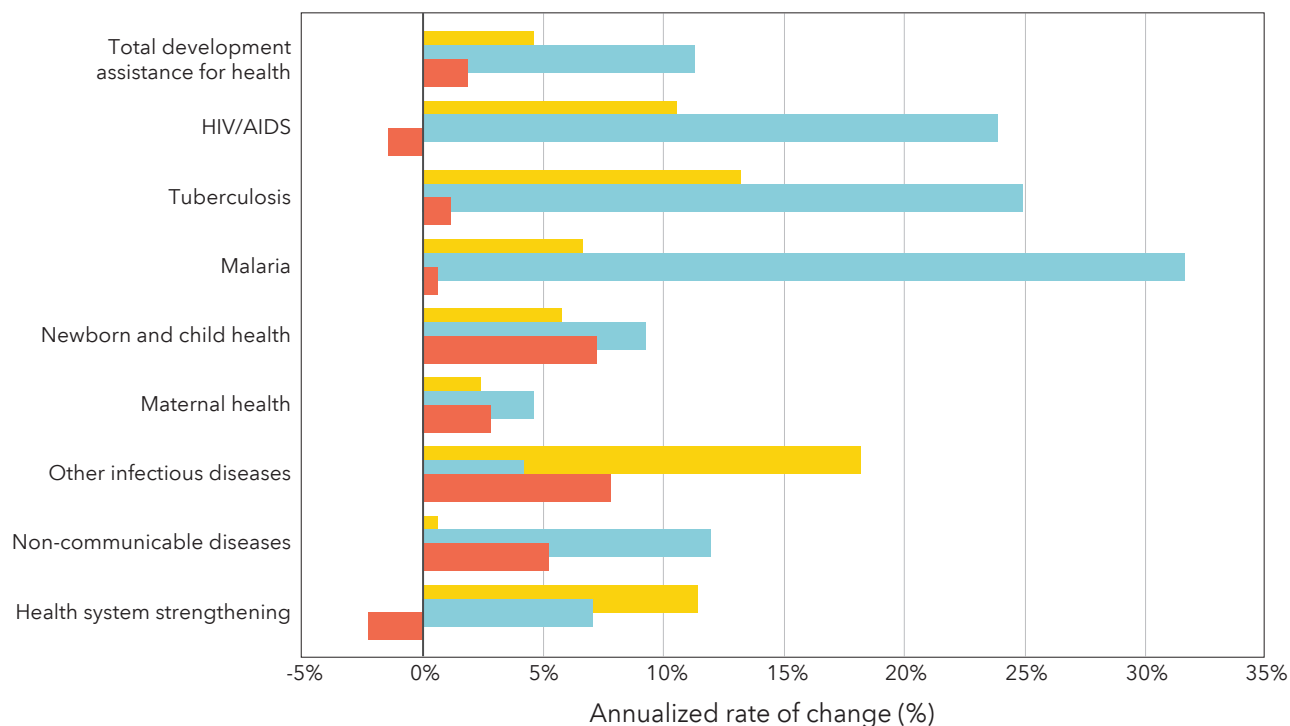


Figure 14 captures the flow of funds from the originating sources through various channels to the respective health focus area from 2000 to 2016. At \$148.8 billion, the US was the single largest source of funding during this period, with the UK (\$38.6 billion) and the Gates Foundation (\$25.2 billion) the next single largest sources and channels. NGOs and UN agencies were major intermediary channels, directing funds to all eight health focus areas as well as others. HIV/AIDS received the most funding of any single focus area (26.1% or \$117.4 billion), largely from the US, NGOs, and foundations. But maternal, newborn, and child health combined received comparable amounts (25.9% or \$116.7 billion), largely from UN agencies, NGOs, Gavi, and the US.

- 1990-1999
- 2000-2009
- 2010-2016

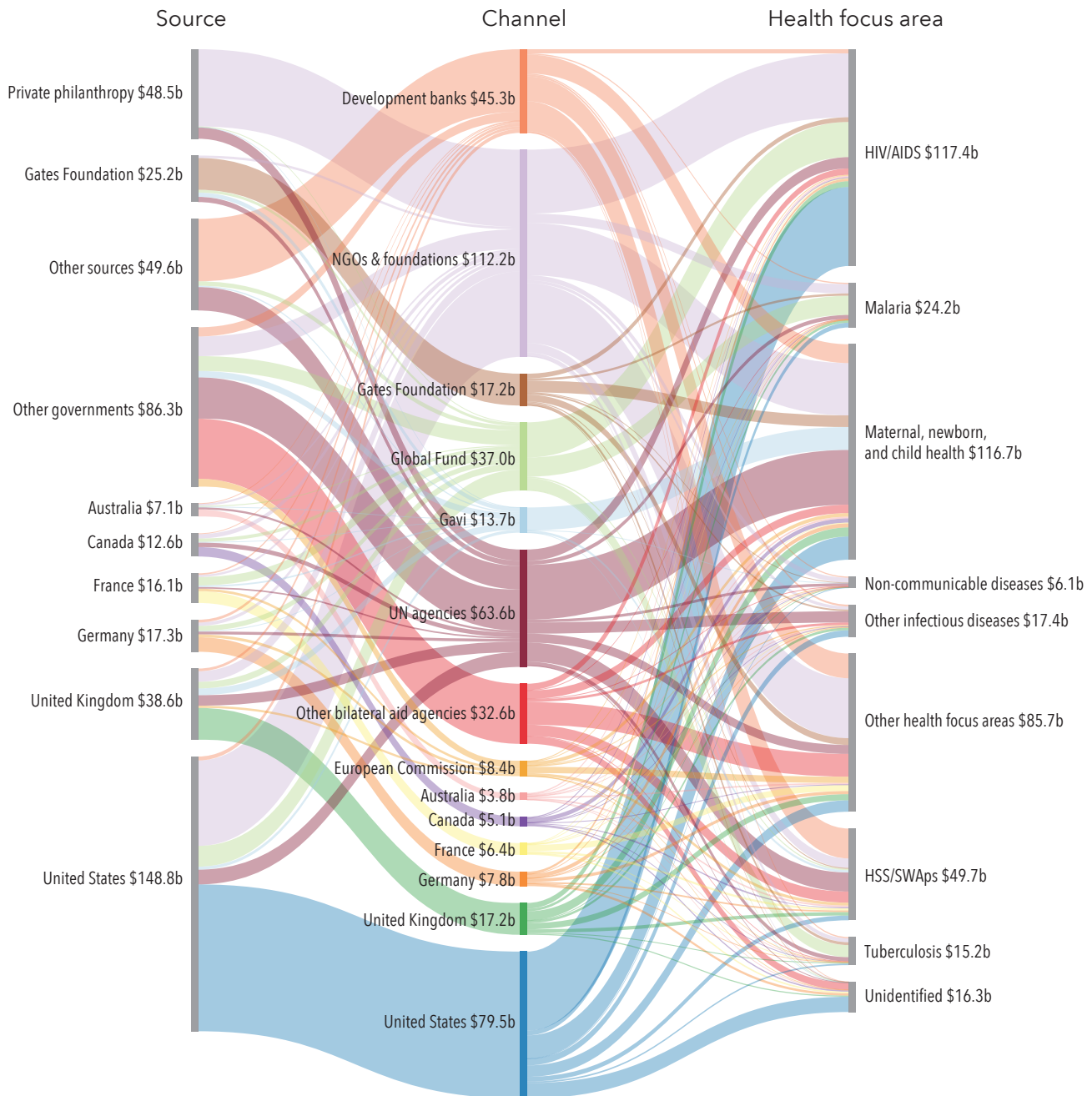
HSS = Health system strengthening  
 SWAps = Sector-wide approaches  
 2016 estimates are preliminary.

Source: Financing Global Health Database 2016

Figure 15 shows the distribution of funding across health focus areas for the period 1990–2016. In 1990, the health focus areas tracked by IHME with the largest share of funding were maternal, newborn, and child health (35.4%). By 2004, at 21.3%, HIV/AIDS was the largest single focus area for DAH and has remained so; but funding for HIV/AIDS peaked in 2010 at 30.9% and has been on the decline since then. Funding for maternal, newborn, and child health, meanwhile, has made a comeback. Together, these two closely related health focus areas represent 29.4% of DAH for 2016. Malaria and tuberculosis, while representing smaller percentages of the whole, have followed the same trend as HIV/AIDS.

**FIGURE 14**

Flows of DAH from source to channel to health focus area, 2000-2016

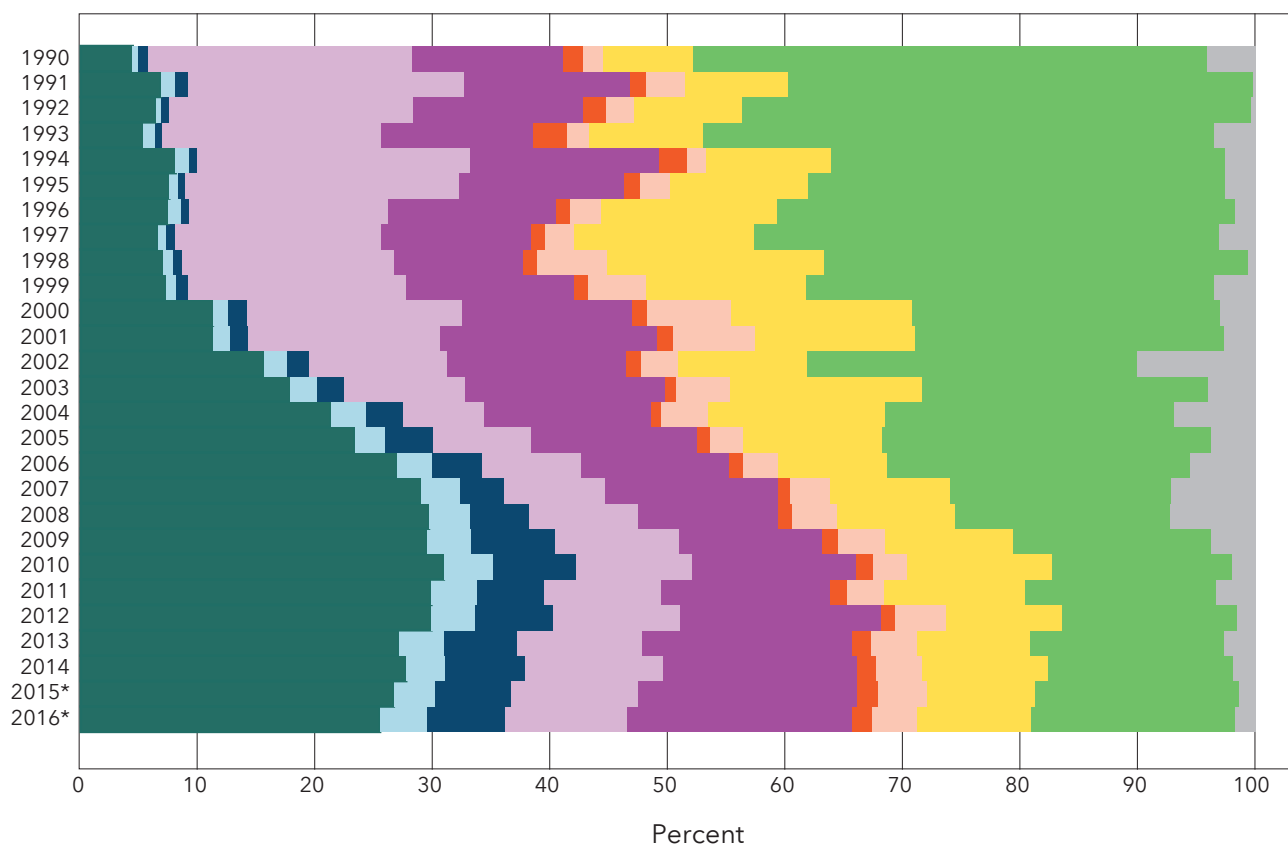


**Note:** Cumulative DAH from 2000 to 2016 in billions of US 2015 dollars. 2015 and 2016 are preliminary estimates. Health assistance for which we have no health focus area information is designated as "unidentified." "Other" captures DAH for which we have project-level information but which is not identified as funding any of the health focus areas tracked

Source: Financing Global Health Database 2016.

FIGURE 15

Share of DAH allocated by health focus area, 1990-2016



## HEALTH FOCUS AREAS

### HIV/AIDS

Of the \$37.6 billion in DAH disbursed in 2016, roughly one-quarter of it, or \$9.5 billion, went to HIV/AIDS. Of this, 70.4% (\$6.7 billion) was contributed by the US and 3.1% (\$295.2 million) by the Gates Foundation.

From 2000 to 2010, HIV/AIDS saw a very rapid rise in development assistance for health on an annual percentage basis (23.3%), and garnered the most funding on an absolute basis, of any health focus area. Programs scaled up and new clinics opened. But for the period 2010–2016, funding for HIV/AIDS decreased an average of 1.4% annually. While great progress has been made in slowing the spread of the disease through counseling, testing, and prevention, HIV/AIDS is a chronic disease and DAH is still vital to the care and treatment of the 35 million people living with it – 2.1 million of them adolescents – and the 13.6 million people accessing antiretroviral therapy.<sup>8</sup>

Figure 16 illustrates the 27-year trend in HIV/AIDS DAH disaggregated by channels of assistance. Of 2016 DAH disbursed for HIV/AIDS, the US aid agencies provided 37.7% or \$3.6 billion; NGOs provided 34.4% or \$3.4 billion; and the Global Fund provided 15.8% or \$1.5 billion. PEPFAR disbursed the vast majority of funds from the US. Launched in 2003 by President George

- HIV/AIDS
- Tuberculosis
- Malaria
- Maternal health
- Newborn and child health
- Non-communicable diseases
- Other infectious diseases
- HSS/SWAPs
- Other
- Unidentified

\*2016 estimates are preliminary.

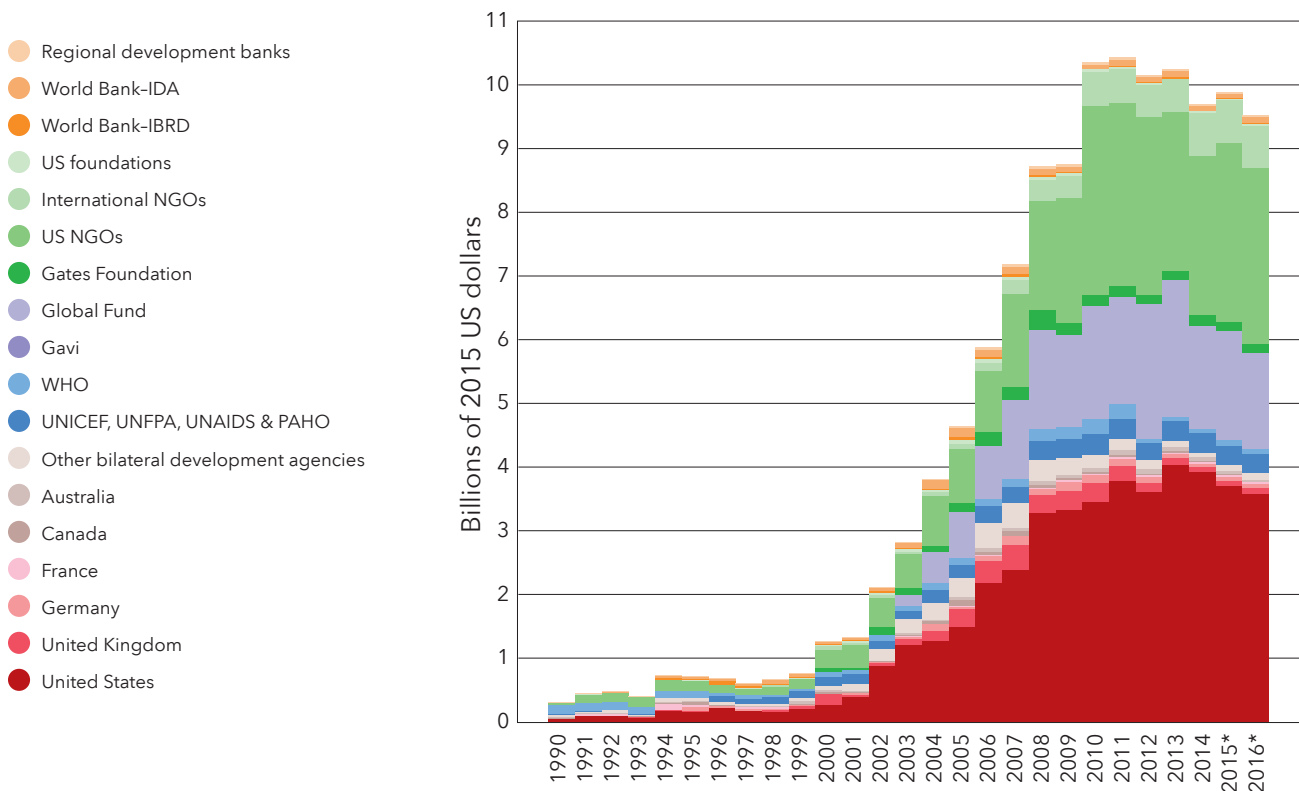
Note: “Other” captures DAH for which we have project-level information but which is not identified as funding any of the health focus areas tracked. Health assistance for which we have no health focus area information is designated as “unidentified.”

HSS/SWAPs = Health system strengthening and sector-wide approaches

Source: Financing Global Health Database 2016

**FIGURE 16**

DAH for HIV/AIDS by channel of assistance, 1990–2016



\*2015 and 2016 are preliminary estimates.

PAHO = Pan American Health Organization

UNAIDS = Joint United Nations Programme on HIV/AIDS

UNFPA = United Nations Population Fund

UNICEF = United Nations International Children's Emergency Fund

Source: Financing Global Health Database 2016

W. Bush with strong bipartisan support from the US Congress, and substantially strengthened by President Barack Obama, PEPFAR has committed more than \$70 billion to bilateral HIV/AIDS programs; the Global Fund to Fight AIDS, Tuberculosis and Malaria; and bilateral tuberculosis programs. In 2016, US bilateral agencies disbursed \$3.6 billion, down 3.4% from \$3.7 billion in 2015. The US fiscal year 2017 budget request stayed essentially flat for HIV/AIDS funding from all disbursing agencies – PEPFAR, UNAIDS, the Centers for Disease Control and Prevention (CDC), the Department of Defense, and the National Institutes of Health (NIH).<sup>3</sup>

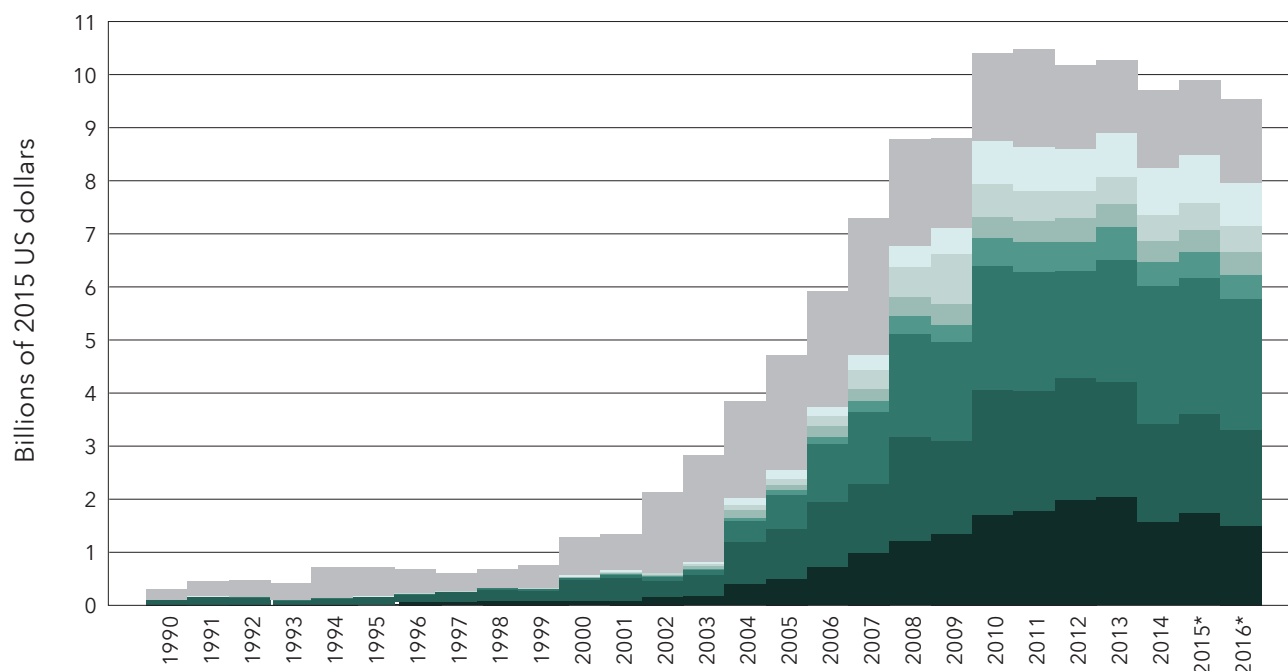
Figure 17 disaggregates DAH for HIV/AIDS by program area for the period 1990–2016. Since 2000, the most marked growth has been for treatment, which includes antiretroviral therapy (ART) (7,392.9%); prevention, excluding prevention of mother-to-child transmission (PMTCT) (365.0%); and health system strengthening (1,484.6%). The three most prominent areas of action in 2016 were the same as in 2015: treatment received 25.8% of funds; prevention received 19.0%; and HSS received 15.7%.

Figure 18 illustrates the flow of HIV/AIDS DAH from source to channel to program area for the period 2000–2016. During this time, the US provided \$12.9 billion or 59.4% of HIV/AIDS DAH to non-PMTCT prevention and \$19.1 billion or 86.8% to treatment. Health system strengthening received 15.1% of US HIV/AIDS DAH, a total of \$10.8 billion from 2000 to 2016. Over the same period, care and support programs received \$6.2 billion (8.6%), programs for



FIGURE 17

DAH for HIV/AIDS by program area, 1990-2016



- Other
- Care and treatment
- Orphans and vulnerable children
- Counseling and testing
- Prevention of mother-to-child transmission
- Treatment
- Prevention
- Health system strengthening

\*2015 and 2016 are preliminary estimates.

Note: "Other" captures DAH for which we have project-level information, but which is not identified as funding any of the health focus areas tracked.

Source: Financing Global Health Database 2016

orphans and vulnerable children were provided with \$5.3 billion (7.4%), and PMTCT activities were given \$3.8 billion (5.3%) of US HIV/AIDS DAH.

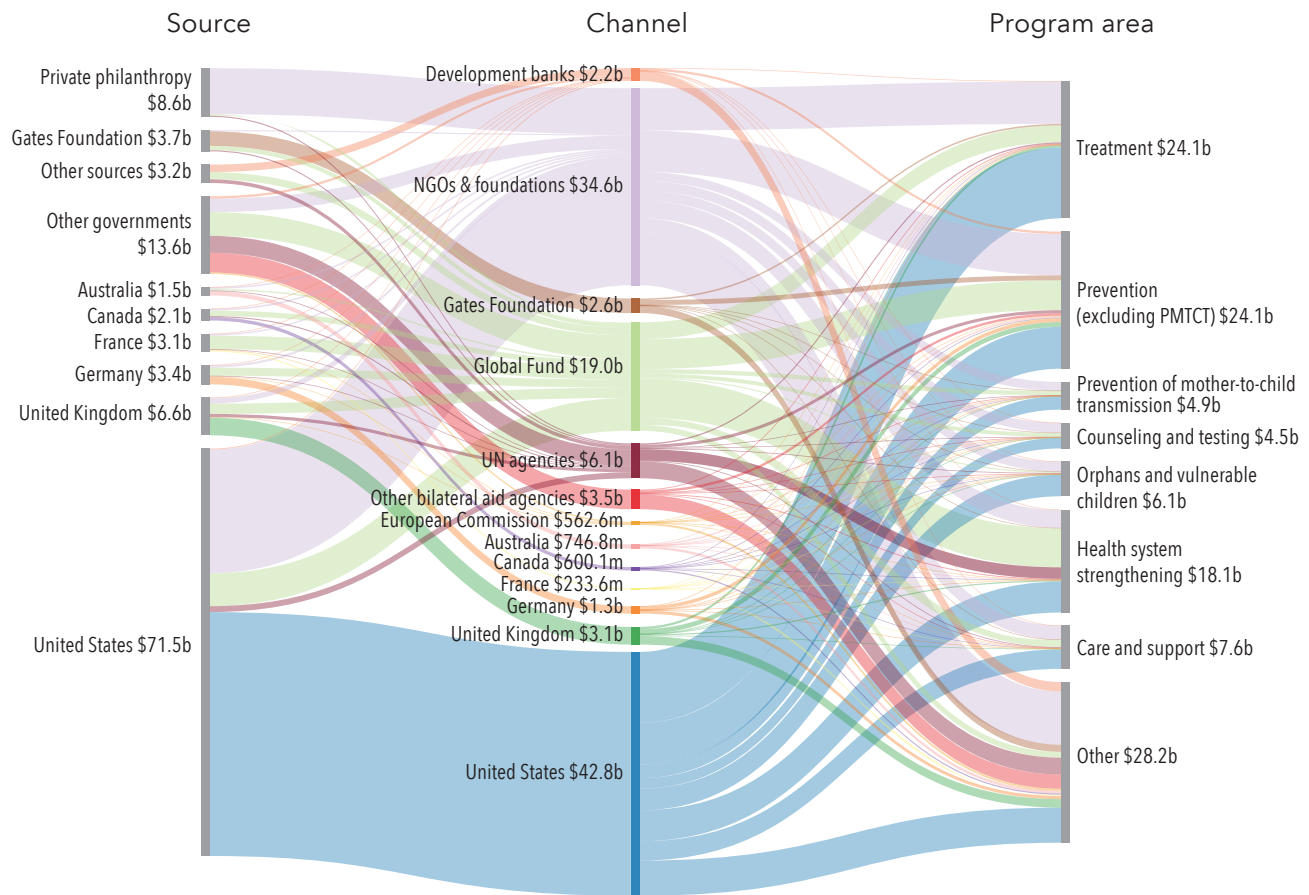
Since its establishment in 2002, the Global Fund has disbursed \$19.0 billion to support HIV/AIDS programs in low- and middle-income countries. It is the next largest single channel of HIV/AIDS funding after the US. From 2002 to 2016, Global Fund DAH for HIV/AIDS amounted to \$19.0 billion, constituting 16.6% of total HIV/AIDS funding. The US provided 35.4% of the Global Fund's HIV/AIDS funding from 2002 to 2016, or \$6.7 billion. Other major contributors included the UK (\$1.8 billion), Germany, (\$1.4 billion), and the Gates Foundation (\$760.9 million).

Across program areas, the Global Fund supported prevention with \$5.2 billion from 2002 to 2016. This constituted 27.5% of all Global Fund HIV/AIDS funding. Over the same period, \$6.9 billion or 36.0% of all Global Fund HIV/AIDS financing flowed to health system strengthening efforts. Treatment received \$3.0 billion or 15.6% of Global Fund support for HIV/AIDS. Care and support and counseling and testing were funded with \$1.3 billion (6.9%) and \$682.3 million (3.6%), respectively, from 2002 to 2016.

The Joint United Nations Programme on HIV/AIDS (UNAIDS) was established in 1995 and has grown at an average annual rate of 6.3%, or \$199.9 million in absolute terms. In 2016, the agency disbursed \$284.2 million. From 2000 to 2016 UNAIDS funneled \$2.0 billion to health system strengthening, \$136.8 million to care and support, and \$51.3 million to counseling and testing. PMTCT and treatment were given \$58.9 million and \$242.0 million, respectively, over the same period.

**FIGURE 18**

Flows of HIV/AIDS DAH from source to channel to program area, 2000-2016



Note: Cumulative HIV/AIDS DAH from 2000 to 2016 in billions of 2015 US dollars. 2015 and 2016 are preliminary estimates.

Source: Financing Global Health Database 2016

From 2000 to 2016, 3.2% of HIV/AIDS funding (\$3.7 billion) was provided by the Gates Foundation. Of this, 68.7% (\$2.6 billion) was channeled through the foundation itself; 5.7% (\$210.9 million) supported NGOs; and 20.4% (\$760.9 million) went to the Global Fund. Across program areas, Gates Foundation funding focused predominantly on prevention with 30.2% or \$1.1 billion flowing to non-PMTCT prevention programs from 2000 to 2016. Over the same period, \$60.4 million went to care and support and \$96.9 million supported counseling and testing.

Finally, NGOs and private foundations provided \$34.6 billion in development assistance for HIV/AIDS, or 29.5% of total HIV/AIDS funding from 2000 to 2016. These funds were sourced primarily from the US government, which provided 62.8% or \$21.7 billion over this period. Private philanthropic efforts made up 23.4% or \$8.1 billion of HIV/AIDS funding to NGOs and foundations. Prevention and treatment were, again, key areas of focus for NGO and foundation DAH during this period. Prevention programs received \$7.3 billion or 21.0% of NGO and foundation funding; treatment was supported with \$7.5 billion, and \$1.6 billion flowed to PMTCT.

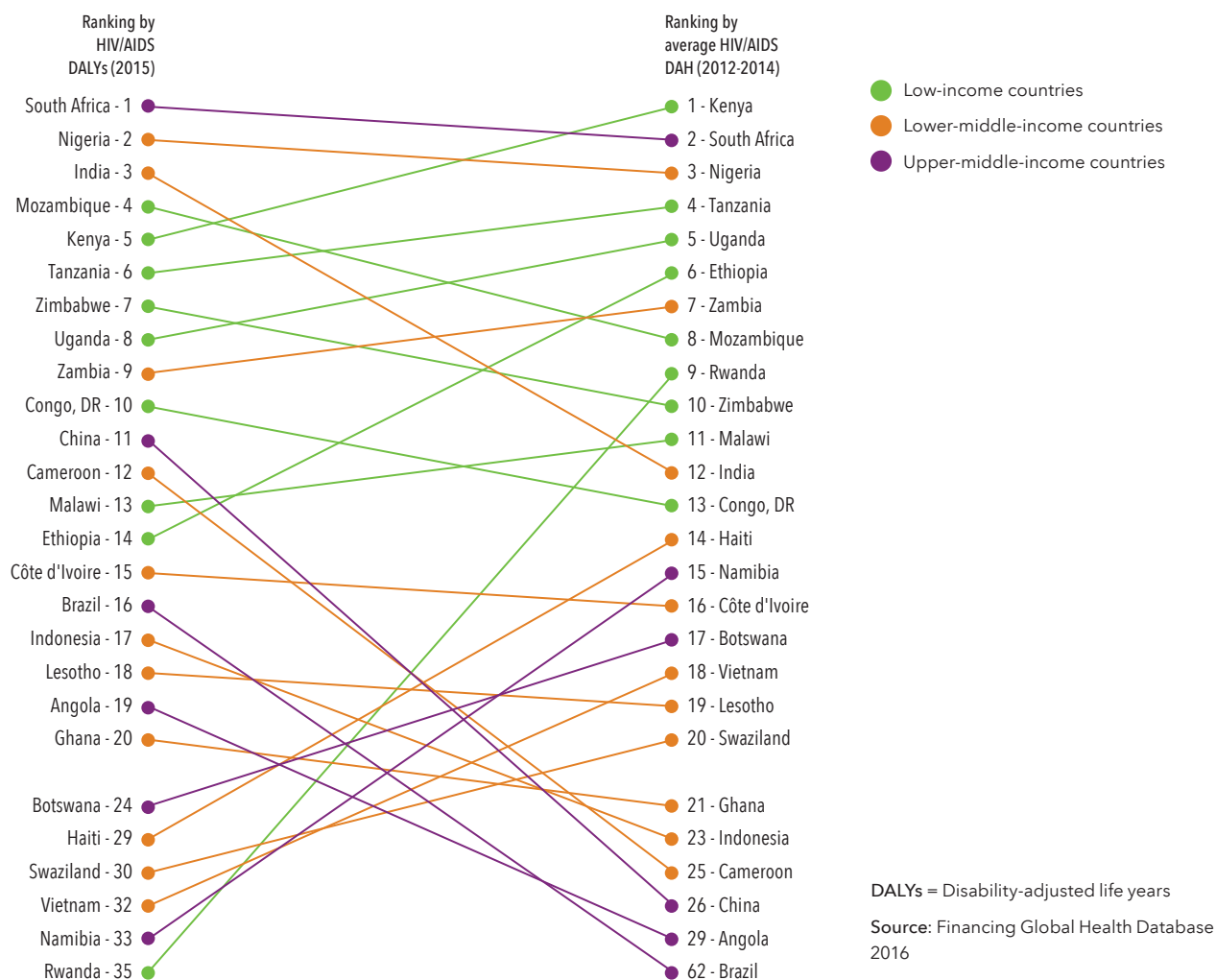
Across regions, roughly half of all HIV/AIDS funding has been directed to sub-Saharan Africa. In 2014, the last year for which data are available,

58.8% (\$5.7 billion) of DAH for HIV/AIDS went to sub-Saharan Africa; and in 2015, 75.1% of HIV/AIDS DALYs were counted in this region. In 2014, East Asia and the Pacific received \$359.9 million, 3.7% of HIV/AIDS DAH; Latin America and the Caribbean received \$297.7 million, or 3.1%; South Asia received \$183.2 million, or 1.9%; and Europe and Central Asia received \$166.4 million, or 1.7%. Another \$1.3 billion (13.5%) of DAH for HIV/AIDS was unallocable to a specific region.

Figure 19 captures the top 20 countries by 2015 HIV/AIDS burden of disease versus average 2012–2014 DAH allocated. Of the top 20 country recipients of HIV/AIDS DAH, 17 are located in sub-Saharan Africa. The tops of both lists align strongly – the countries with the highest DALYs are receiving the most HIV-related DAH. At the bottom of the lists, however, countries in the middle- and upper-middle-income brackets with high DALYs are receiving fewer DAH funds. Countries with fewer DALYs but lower levels of income per capita are ranked higher in terms of DAH received. These patterns highlight some of the challenges captured in the concept of the “missing middle,” wherein countries classified as middle-income phase out of DAH eligibility, or donors pull funding out of rising middle-income countries, before domestic government funding is available to replace the assistance.

FIGURE 19

Top 20 countries by 2015 HIV/AIDS burden of disease versus average 2012–2014 DAH



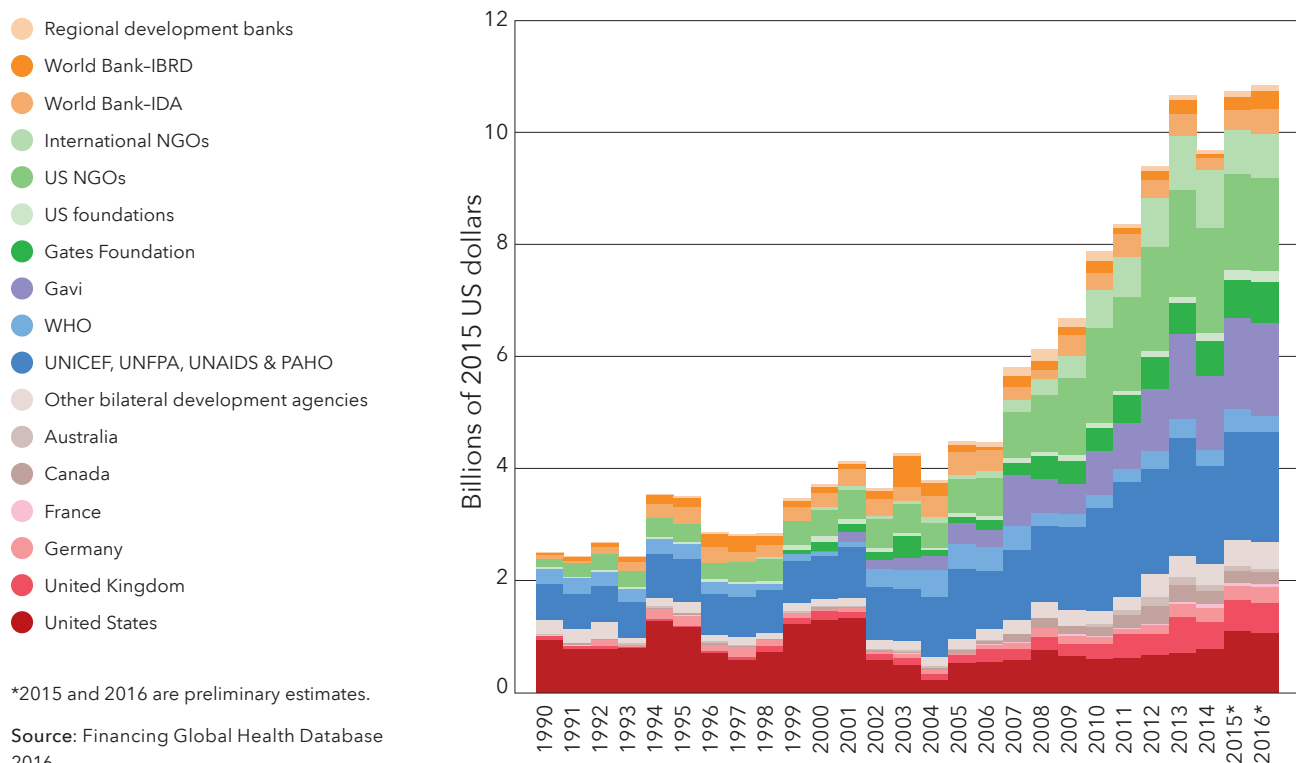
## MATERNAL, NEWBORN, AND CHILD HEALTH

IHME's Global Burden of Disease mortality estimates for 2015 report that 50% fewer children die each day than in 1990, and maternal mortality has fallen by almost 29% in the same time. Still, more than 6 million children die before their fifth birthday each year. Children born into poverty are almost twice as likely to die before the age of 5 as those from wealthier families. And an increasing proportion of children who die before the age of 5 are in sub-Saharan Africa and South Asia; four out of every five deaths of children under age 5 occur in these regions.<sup>8</sup>

The SDGs call for reducing the global maternal mortality ratio to less than 70 per 100,000 live births; ensuring universal access to sexual and reproductive health care services, including for family planning, information, and education; and the integration of reproductive health into national strategies and programs. They also call for ending preventable deaths of newborns and children under 5 years of age, aiming for all countries to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births by 2030. To achieve these goals, maternal health will need to be addressed adjacent to child and newborn health, as one influences the other; as such, these focus areas will be aggregated in this report.

As shown in Figure 20, funding for maternal, newborn, and child health hit an all-time funding high in 2016, totaling \$11.1 billion, up 0.8% from 2015, and representing 29.4% of total DAH across health focus areas. The US was the largest single source of funds to this area in 2016 with \$2.7 billion, representing 24.0% of total MNCH development assistance, a 1.1% decrease over 2015. UN agencies collectively were the largest channel of DAH for MNCH in 2016, led by UNICEF and UNFPA, which disbursed 11.2% and 6.1% of all funding to this

**FIGURE 20**  
DAH for maternal, newborn, and child health by channel of assistance, 1990–2016



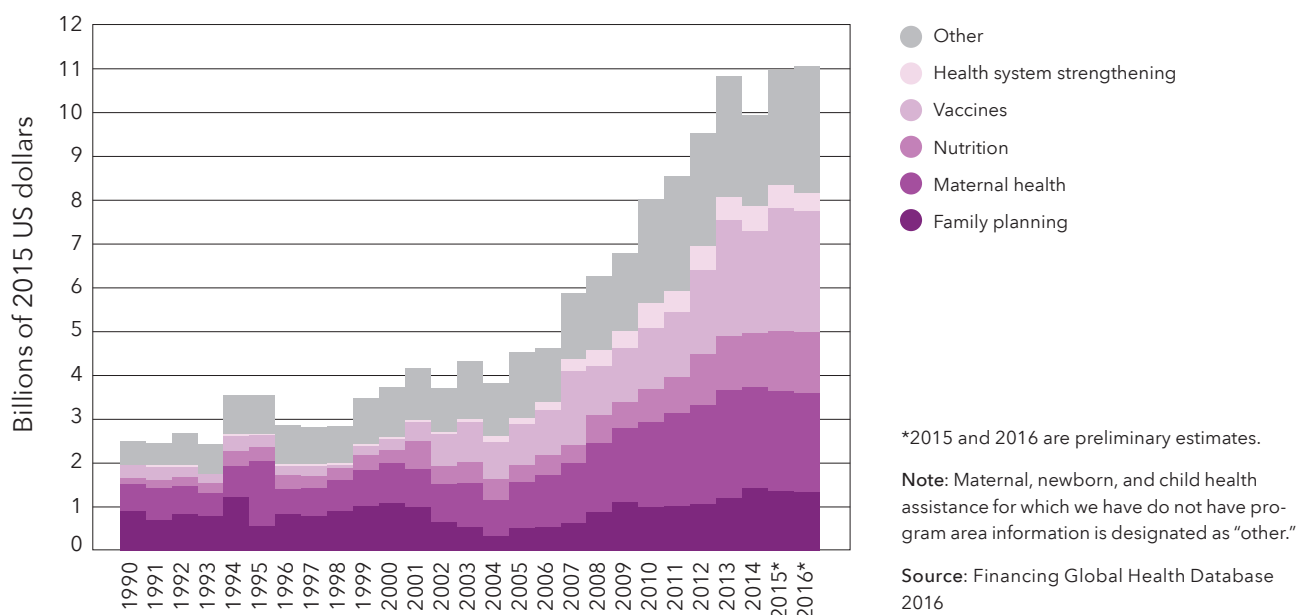
focus area, respectively, followed by WHO and PAHO. Together, the agencies disbursed \$349.0 million for MNCH in 2016, a decrease of 1.7% from 2015. Gavi, US and international NGOs, the Gates Foundation, the UK, the World Bank, WHO, and Germany all showed strong support for MNCH in 2016, making the flow of funds to this health area relatively stable. Regional development banks contributed \$104.6 million to this focus area, or 0.9% of total MNCH development assistance in 2016.

MNCH funding for the period 1990–2016 increased 5.9% annually, on average, with sustained funding provided by the US (\$41.2 billion for the period), the UK (\$13.9 billion), and the Gates Foundation (\$9.6 billion). Since 2000, the Gates Foundation has provided a cumulative \$9.6 billion for MNCH. The bulk of this, \$6.0 billion or 62.9%, focused on vaccines and was disbursed by the foundation itself (36.5%) and Gavi (22.0%). The UK provided a cumulative \$12.8 billion to MNCH from 2000 to 2016. Much of this, \$3.3 billion or 25.9%, was disbursed through Gavi. In 2016, the UK provided \$1.5 billion to MNCH, a 2.7% decrease over 2015. Of this, 31.9% was disbursed through Gavi, while UK bilateral aid agencies disbursed \$538.7 million in 2016, down 0.016% from the prior year.

For the period 2000–2016, the UN agencies disbursed 25.4% of funding to MNCH, or \$29.7 billion. Regional development banks disbursed \$1.6 billion for the period, or 1.3% of all funding for MNCH activities. Of this, \$109.6 million and \$175.2 million was invested in vaccination and nutrition efforts, respectively. Finally, NGOs and foundations made up 24.3% of the funding in this health focus area for the period 2000–2016. The US provided 41.7% of this money and private philanthropy provided 31.1%. In 2016, funding through these entities amounted to \$2.6 billion, down 1.1% from 2015.

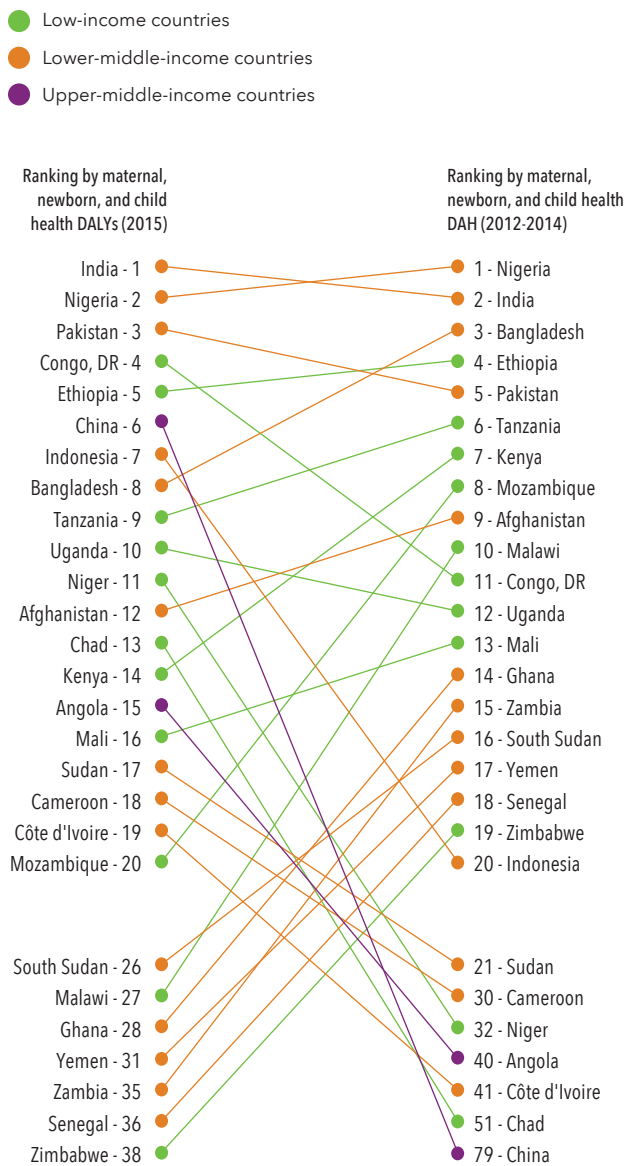
Figure 21 illustrates MNCH DAH broken out by health focus program area. Vaccines and maternal health programs commanded the most funding, \$2.8 billion (25.1%) and \$2.3 billion (20.5%), respectively. Funding for these areas increased 1,032.3% and 150.1% for the period 2000–2016. DAH for nutrition has grown at a slower pace, rising 9.7% annually, on average, from 2000 to 2016; in 2016, funding to this program area

**FIGURE 21**  
DAH for maternal, newborn, and child health by program area, 1990–2016



**FIGURE 22**

Top 20 countries by 2015 maternal, newborn, and child health burden of disease versus average 2012–2014 DAH



Source: Financing Global Health Database 2016

amounted to \$1.4 billion, or 12.5% of MNCH funding. In 2016, \$1.3 billion was invested in family planning activities, down 2.2% from 2015, and represented 12.1% of total DAH to this health area.

Gavi leads the world in supporting and administering vaccine programs for children. In 2015, 65 million children were immunized through Gavi, and five countries – Bhutan, Honduras, Mongolia, Sri Lanka, and Ukraine – transitioned smoothly out of Gavi assistance, meaning they no longer qualify for Gavi’s support and their health systems are independently continuing effective childhood vaccination programs.<sup>22</sup> Still, as of the beginning of 2017, nearly one in five children are still not fully immunized with basic vaccines, and questions about vaccine support for countries entering the epidemiological and health financing transitions remain.

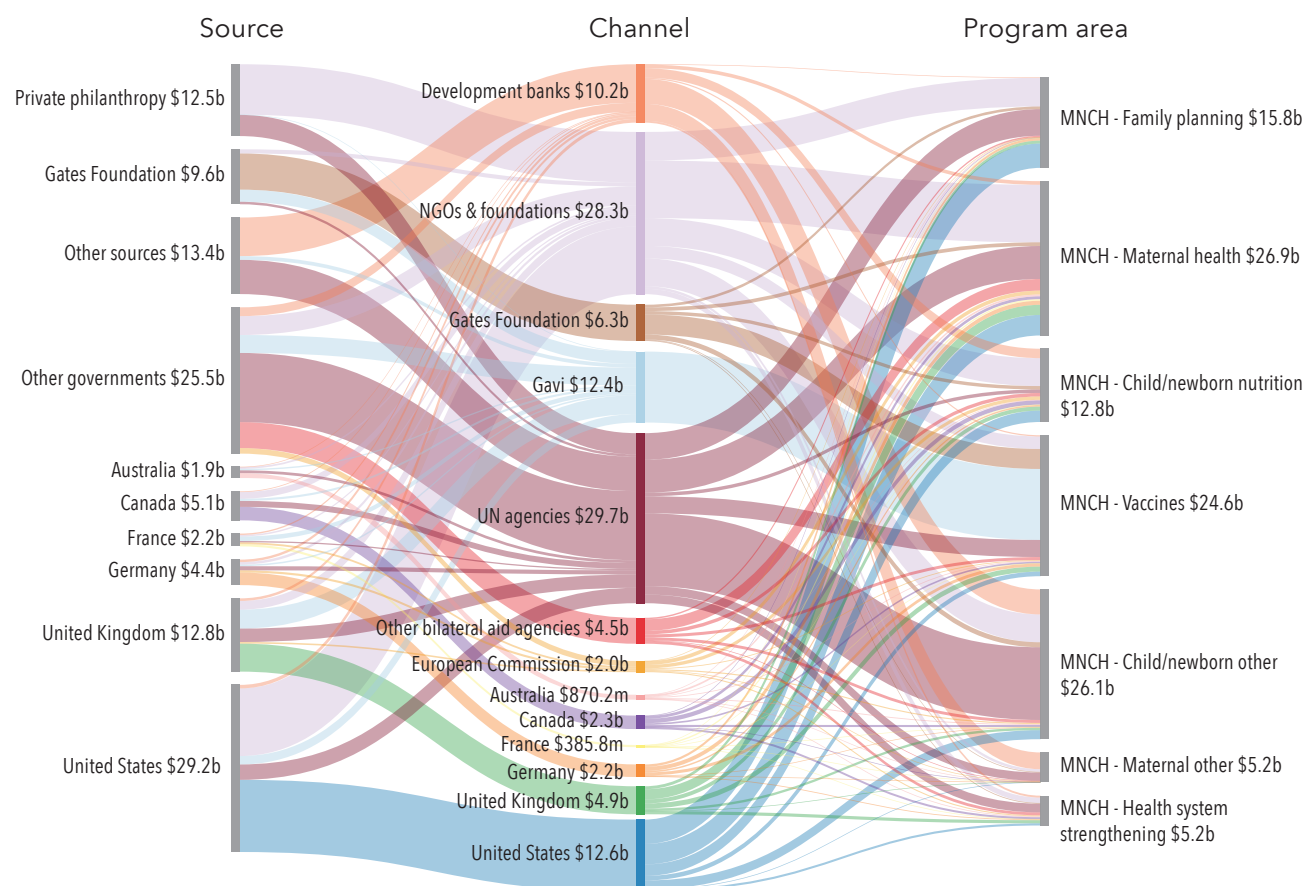
Figure 22 depicts the countries with the highest MNCH DALYs and DAH between 2012 and 2014. Fertility and maternal health are major drivers of child health DALYs, as are vaccination rates and child nutrition, and there is strong alignment between the countries with the top five child health DALYs and DAH. There are many countries, however, at the threshold of phasing out for vaccine support, including China, India, Nigeria, and Pakistan. While these countries have growing economies, health infrastructure systems remain in positions of dire need in some of these countries.

Figure 23 visualizes the flow of funds from source to channel to program area in maternal, newborn, and child health from 2000 to 2016. The US was the largest source of funding during this period, contributing \$29.2 billion or 25.0% of total MNCH DAH. US funding was channeled mainly through its bilateral aid agencies; the remaining US funds for maternal health were disbursed to NGOs and foundations (\$11.8 billion or 40.4%) and UN agencies (\$2.7 billion or 9.2%). US funds were split 24.6% to family planning activities and 27.8% to other maternal health activities.

Among channels, NGOs and foundations disbursed the most for maternal health from 2000 to 2016, splitting 10.7% and 21.6% of funding between family planning and other maternal health activities, respectively. The US provided 46.4% of all NGO and foundation funding for the period, totaling \$7.2 billion. Private philanthropy provided 9.7% of maternal health DAH, or a cumulative \$4.5 billion from 2000 to 2016.

**FIGURE 23**

Flows of maternal, newborn, and child health DAH from source to channel to program area, 2000-2016



Source: Financing Global Health Database 2016

**MALARIA**

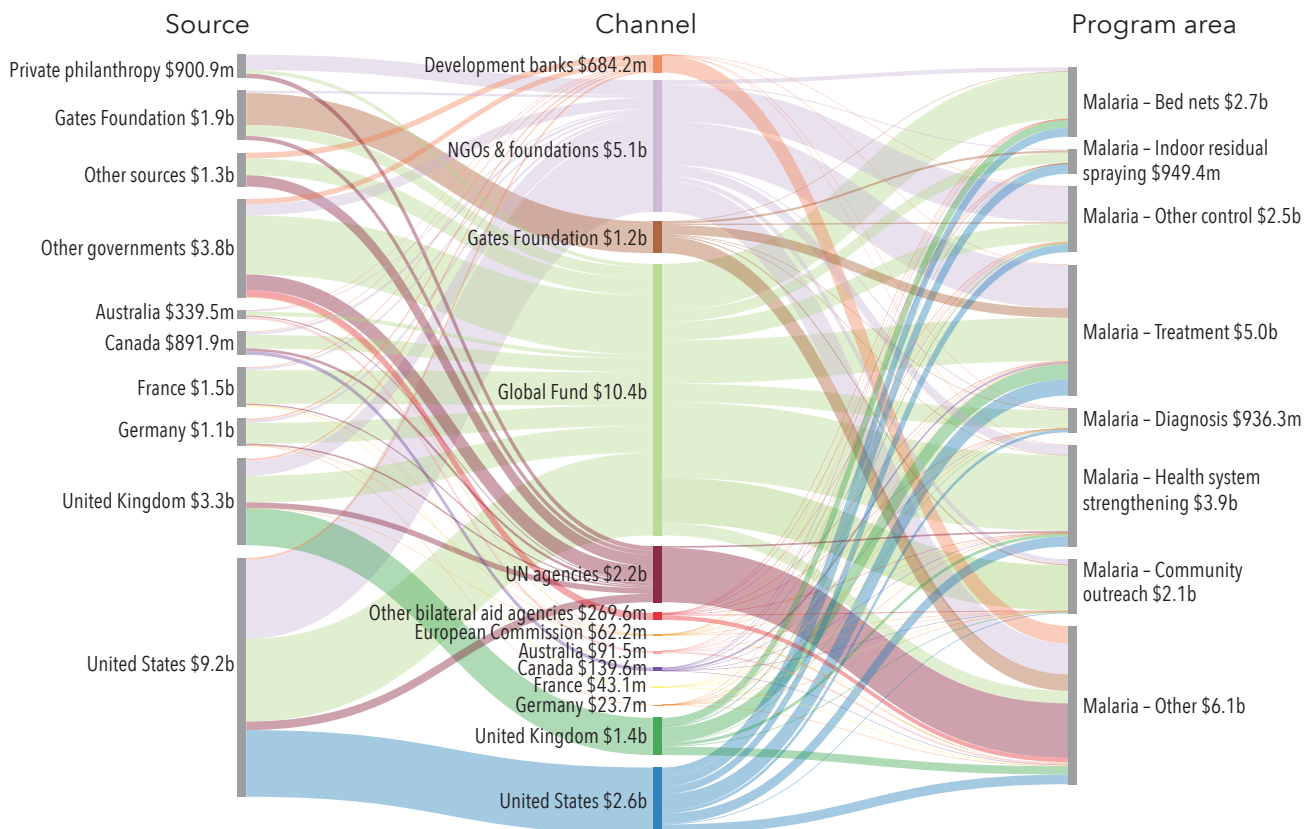
There are two types of malaria, and two types of malaria countries. *Plasmodium falciparum* causes the endemic form of the disease, concentrated in sub-Saharan Africa. *Plasmodium vivax* is present in many parts of Asia and Central and South America. Some countries – the us, Chile, most of North Africa, and parts of Latin America – have eliminated malaria, having no or low transmission. Other countries have the burden of endemic malaria; of these, some are actively trying to become eliminating countries. South Africa, China, Mexico, and Argentina are working toward malaria elimination, and they are close to achieving this goal. For some countries pursuing elimination, including China, Bolivia, and Iran, the cost per DALY can be prohibitively high. Eliminating the last few cases of malaria can be the most expensive, as drugs to combat antimicrobial-resistant strains of the disease and containing outbreaks in highly mobile and remote populations require far more expensive measures than broader treatments (bed nets, spray) in high-DALY countries. In the last year, however, one country was able to achieve this goal: WHO declared Sri Lanka malaria-free in late 2016.<sup>23</sup>

Figure 24 illustrates flows of malaria DAH from source to channel to program area for 2000–2016. Many players maintained commitments to funding malaria during this period, including France (6.1%), Germany (4.6%), Canada (3.4%), and Australia (1.4%), with the vast majority of these funds (44.3%) channeled through the Global Fund. Funds were disbursed to treatment (20.8%), health system strengthening (16.2%), community outreach (8.6%), bed nets (11.0%), diagnosis (3.9%), vector control including indoor residual spray (3.9%), and other control (10.5%). Figure 25 tracks these same program areas over the entire 27-year data period. The greatest growth during this time, as illustrated, has been in treatment totaling \$544 million in 2016, and more recently in health system strengthening totaling \$474 million. Community outreach, bed nets, and other controls have grown by \$222 million, \$253 million, and \$287 million in 2016, respectively.

SDG 3 calls, simply, for an end to the malaria epidemic by 2030. Among other actors, in September 2016 the United Kingdom responded by pledging 1.1 billion pounds (\$1.37 billion) to the Global Fund to Fight AIDS, Tuberculosis and Malaria over the next three years, up to 50 million pounds (\$62.3 million) to the Medicines for Malaria Venture to develop and deliver new antimalarial drugs, and up to 25 million pounds (\$31.1 million) for the

FIGURE 24

Flows of malaria DAH from source to channel to program area, 2000–2016



Source: Financing Global Health Database 2016



Innovative Vector Control Consortium (IVCC) to develop new insecticides. The IVCC is set to deliver new active ingredients to the market by 2022. The Global Fund notes that the fight against malaria has reached a pivotal moment, where the number of malaria cases has never been so low but the resistant strains are growing. If contained quickly, malaria elimination is possible. As such, the Global Fund has pledged to invest more than \$242 million in five countries through the Regional Artemisinin Initiative over the next three years, with the objective of containing and eliminating resistant strains before they spread.<sup>24</sup>

Figure 26 illustrates DAH for malaria by channel of assistance from 1990 to 2016. Similar to other MDGs, funding for malaria grew rapidly from 2000 to 2010. It has held relatively steady since then, growing 0.6% annually, on average, for the 2010 to 2016 period for a cumulative total of \$16.3 billion. In 2016, DAH for malaria amounted to \$2.5 billion, up 4.4% from 2015. Relative to the other health focus areas tracked in this report, malaria has seen the greatest gains in DAH funding since 1990, followed closely only by tuberculosis and HIV/AIDS.

From 2000 to 2016, the US has provided \$9.2 billion of DAH for malaria and has channeled those funds through its own bilateral agencies (27.9%),

**FIGURE 25**  
DAH for malaria by program area, 1990-2016

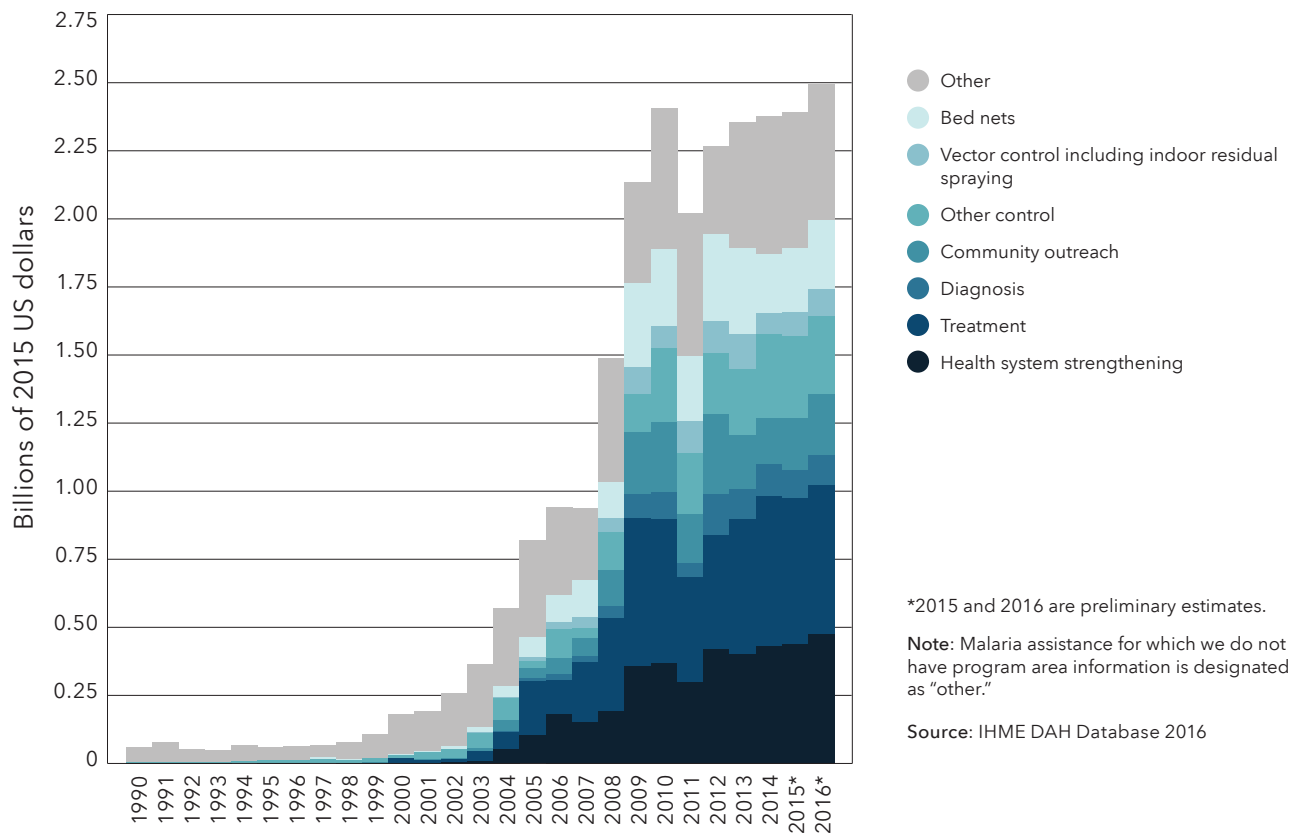
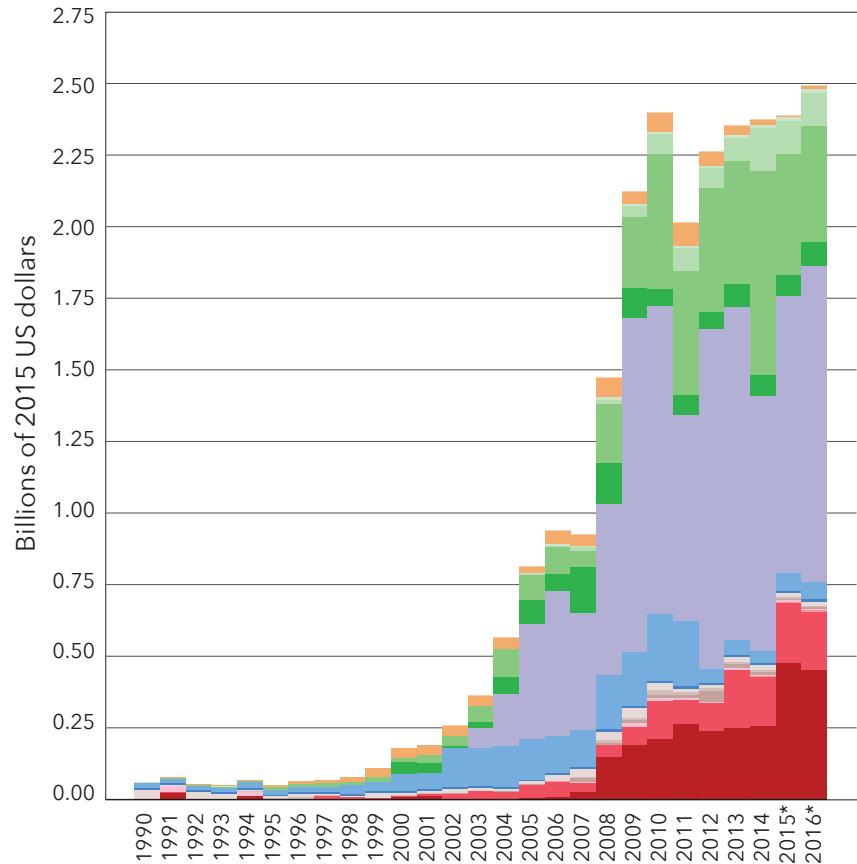


FIGURE 26

DAH for malaria by channel of assistance, 1990-2016

- Regional development banks
- World Bank - IDA
- US foundations
- International NGOs
- US NGOs
- Gates Foundation
- Global Fund
- WHO
- UNICEF, UNFPA, UNAIDS & PAHO
- Other bilateral development agencies
- Australia
- Canada
- France
- Germany
- United Kingdom
- United States

\*2015 and 2016 are preliminary estimates  
 IDA = International Development Association  
 IBRD = International Bank for Reconstruction and Development  
 NGOs = Non-governmental organizations  
 Source: Financing Global Health Database 2016



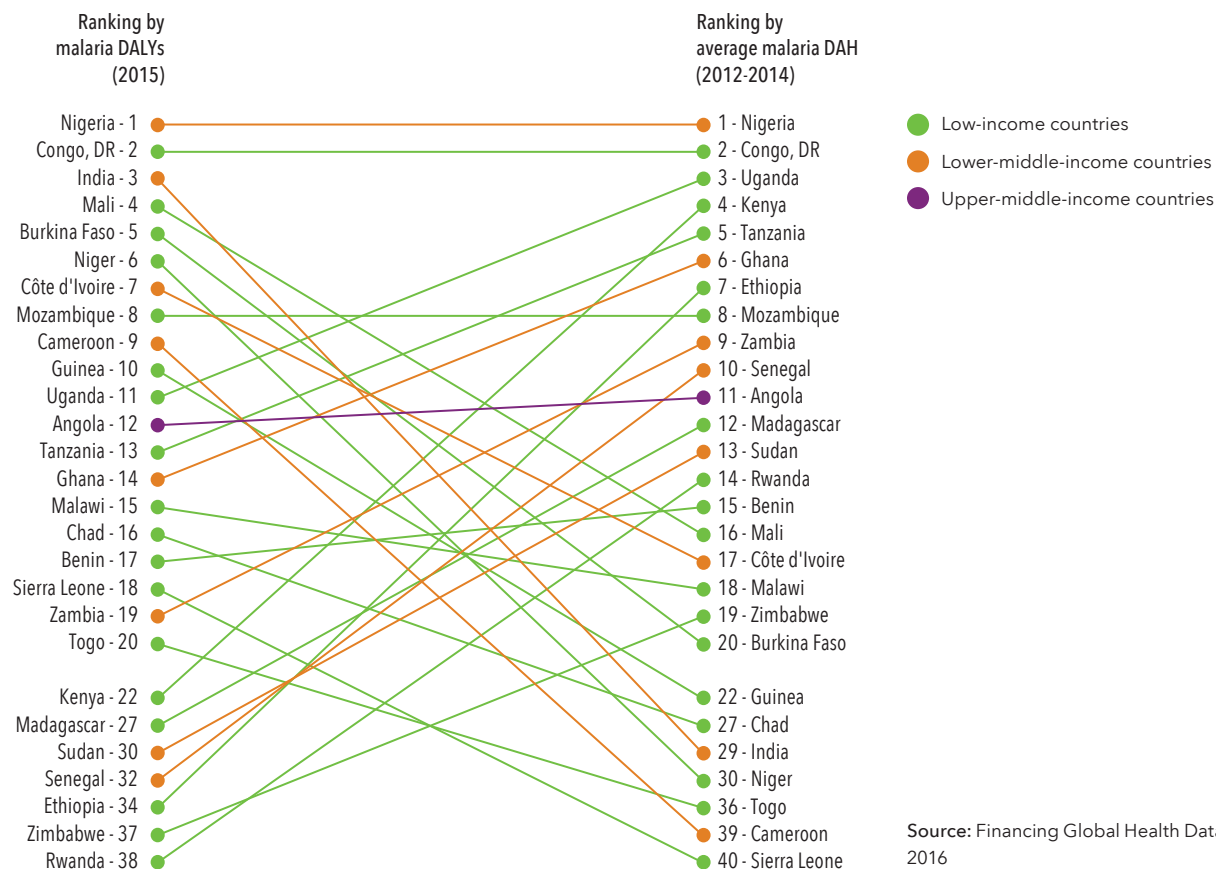
the Global Fund (34.6%), NGOs and foundations (30.4%), and to a lesser extent through UN agencies (15.6%) and development banks (0.8%). The US’s 2016 contribution of \$269.0 million to the Global Fund accounted for nearly a quarter of the organization’s yearly malaria funding. The UK was the next largest source of DAH for malaria, contributing \$126.2 million to the Global Fund and \$204.5 million through its own bilateral agencies.

The Gates Foundation contributed \$178.1 million in DAH for malaria in 2016, channeling 45.1% of this through the foundation itself and 42.2% to the Global Fund. The rest of the Gates Foundation funds for malaria were channeled through UN agencies (10.3%) and NGOs and other foundations (18.0%). After the Global Fund, the Gates Foundation has been the second-largest channel of funding for malaria from 2000 to 2016.

Across regions, sub-Saharan Africa received \$11 billion or 56.8% of all malaria DAH from 2000 to 2014. Southeast Asia, East Asia, and Oceania received \$1.4 billion or 7.5% of total DAH for malaria from 2000 to 2014. Figure 27 charts the top 20 countries by 2015 malaria burden of disease versus average 2012–2014 DAH allocated, illustrating the relationship of poverty to malaria incidence, but also the fact that countries with relatively few malaria cases are often the countries where the most DAH is needed. The last few cases of malaria in a given country are often isolated in remote areas, making them costly to identify and treat.

FIGURE 27

Top 20 countries by 2015 malaria burden of disease versus average 2012–2014 DAH



**TUBERCULOSIS**

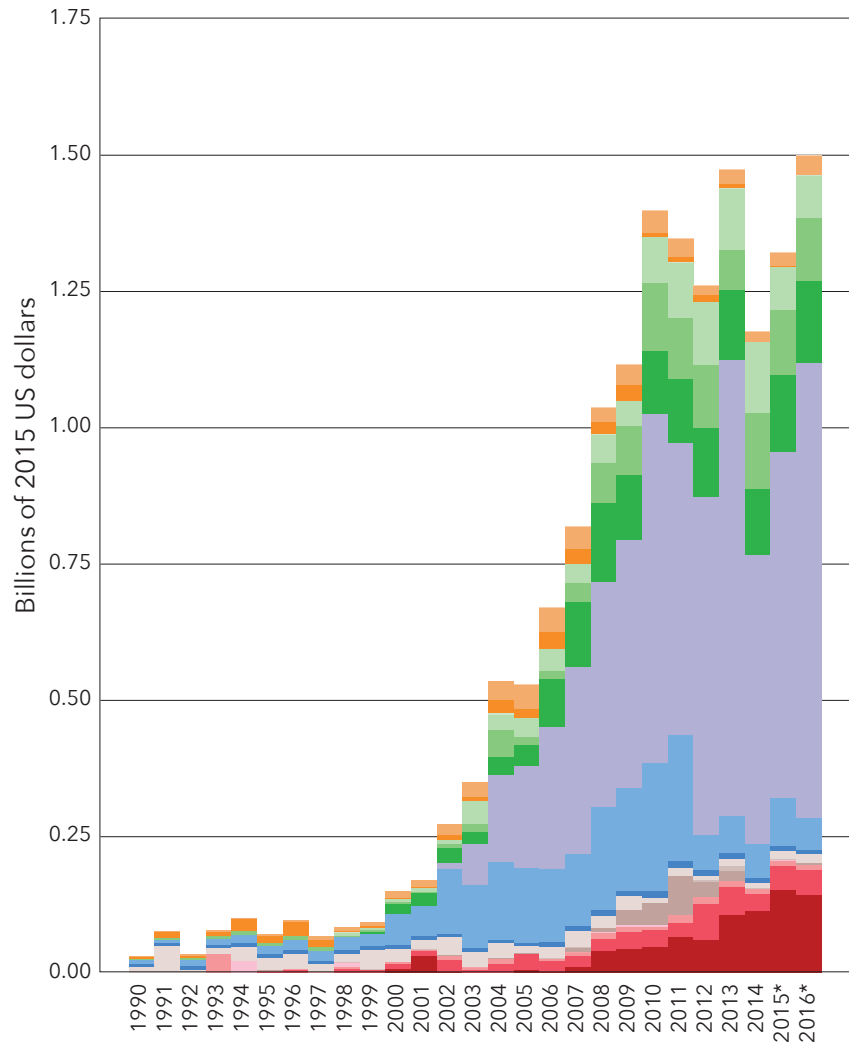
As with DAH in other areas, tuberculosis saw a rapid rise in funding from 2000 to 2010, outpaced only by DAH for malaria. Between 1990 and 2013 the tuberculosis mortality rate fell by 45% and the prevalence rate by 41%. Likewise, tuberculosis-related deaths in people living with HIV have fallen by 36% since 2004. Several initiatives were launched in 2014 with a target to eliminate tuberculosis by 2030, but elimination has been complicated by the increase of microbial resistance and the high costs of antimicrobial-resistant (AMR) drugs.

Figure 28 depicts DAH for tuberculosis by channel of assistance from 1990 to 2016. DAH for tuberculosis totaled \$1.5 billion in 2016, accounting for 4.0% of total DAH. This represented an increase of 13.3% from 2015. Since 2010, the majority of funding for tuberculosis has been channeled through the Global Fund. In 2016, 55.5% of all tuberculosis funding passed through the Global Fund, sourced primarily from the US (\$202.8 million or 24.3%), Germany (\$72.3 million or 8.7%), and Australia (\$20.0 million or 2.4%). The US contributed a total of \$483.9 million to tuberculosis in 2016; after the Global Fund, the US channeled \$144.5 million through its own agencies and another \$127.0 million through NGOs and foundations.

**FIGURE 28**

DAH for tuberculosis by channel of assistance, 1990-2016

- Regional development banks
- World Bank - IDA
- World Bank - IBRD
- US Foundations
- International NGOs
- US NGOs
- Gates Foundation
- Global Fund
- WHO
- UNICEF, UNFPA, UNAIDS & PAHO
- Other bilateral development agencies
- Australia
- Canada
- France
- Germany
- United Kingdom
- United States



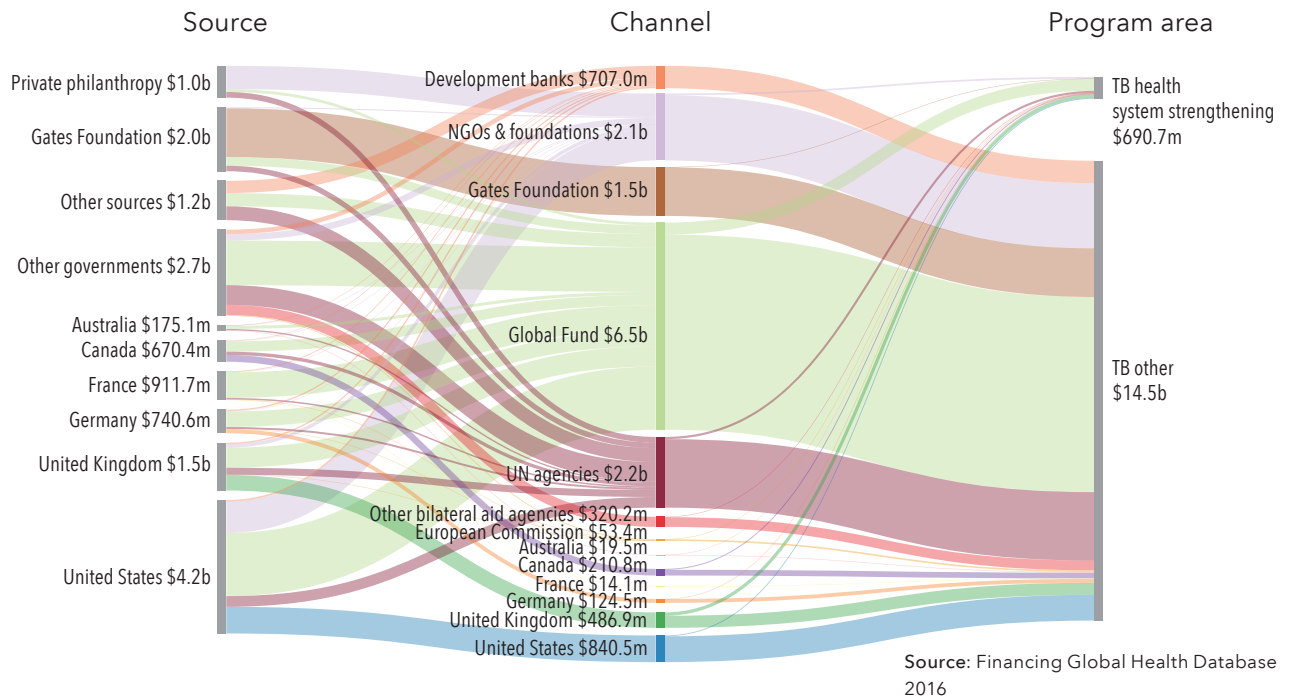
\*2015 and 2016 are preliminary estimates.  
 IDA = International Development Association  
 IBRD = International Bank for Reconstruction and Development  
 NGOs = Non-governmental organizations  
 Source: Financing Global Health Database 2016

The Gates Foundation contributed \$216.4 to DAH for tuberculosis in 2016, channeling the majority (\$151.7 million or 70.1%) through its foundation, 26.2% (\$56.6 million) to the Global Fund, and 3.7% (\$8.0 million) to UN agencies. UN agencies channeled \$67.3 million of tuberculosis DAH in 2016, all of which went to support policymaking, technical advances, and other activities supporting all regions. Finally, private philanthropic efforts provided NGOs, UN agencies, and the Global Fund with \$46.5 million, \$5.2 million, and \$13.2 million, respectively, for this health focus area in 2016. Like the UN agencies, NGOs and foundations channeled the bulk of their funds to research, development, and policymaking across borders.

Figure 29 illustrates the flows of tuberculosis DAH from source to channel to program area from 2000 to 2016. The bulk of these funds went to sub-Saharan Africa (21.1% or \$2.6 billion) and Southeast Asia, East Asia, and Oceania (14.5% or \$1.8 billion). Figure 30 charts the top 20 countries with the highest tuberculosis DALYs and DAH. Alignment in the top 10 countries is fairly strong.

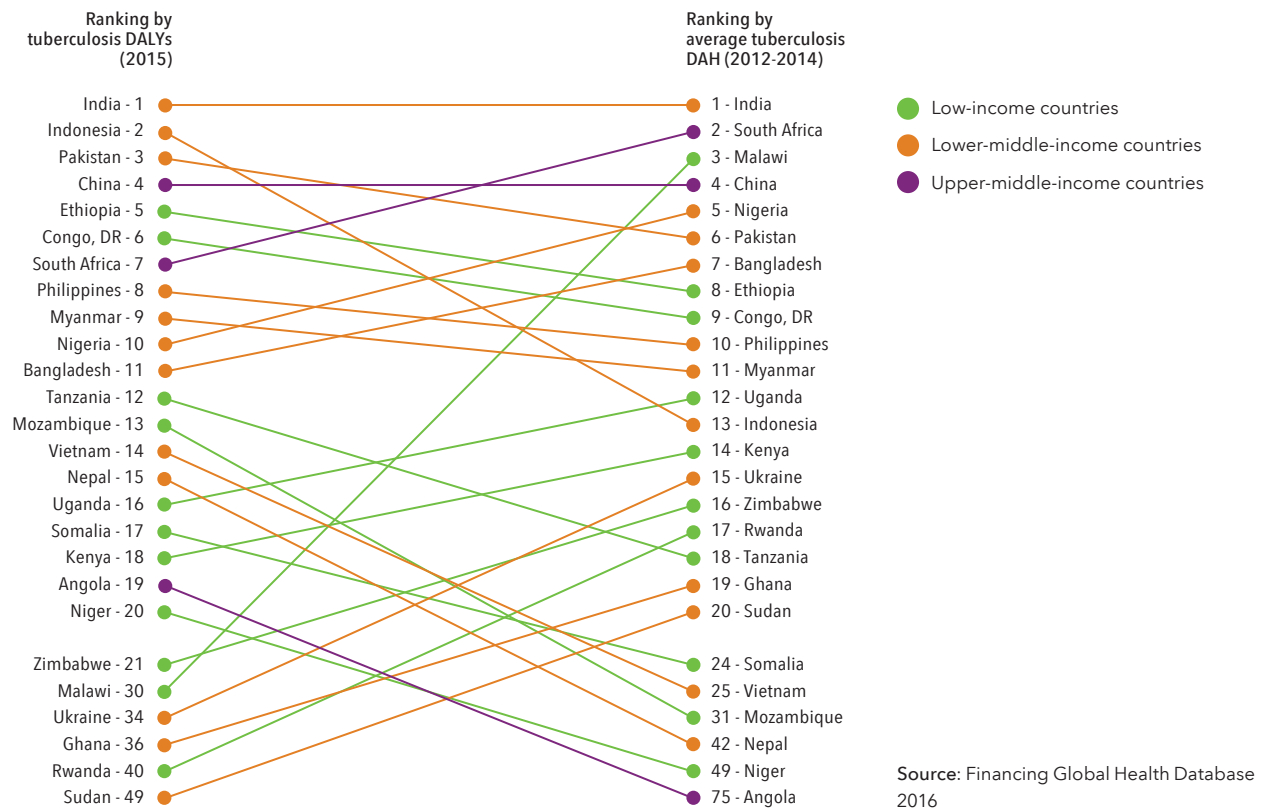
**FIGURE 29**

Flows of tuberculosis DAH from source to channel to program area, 2000–2016



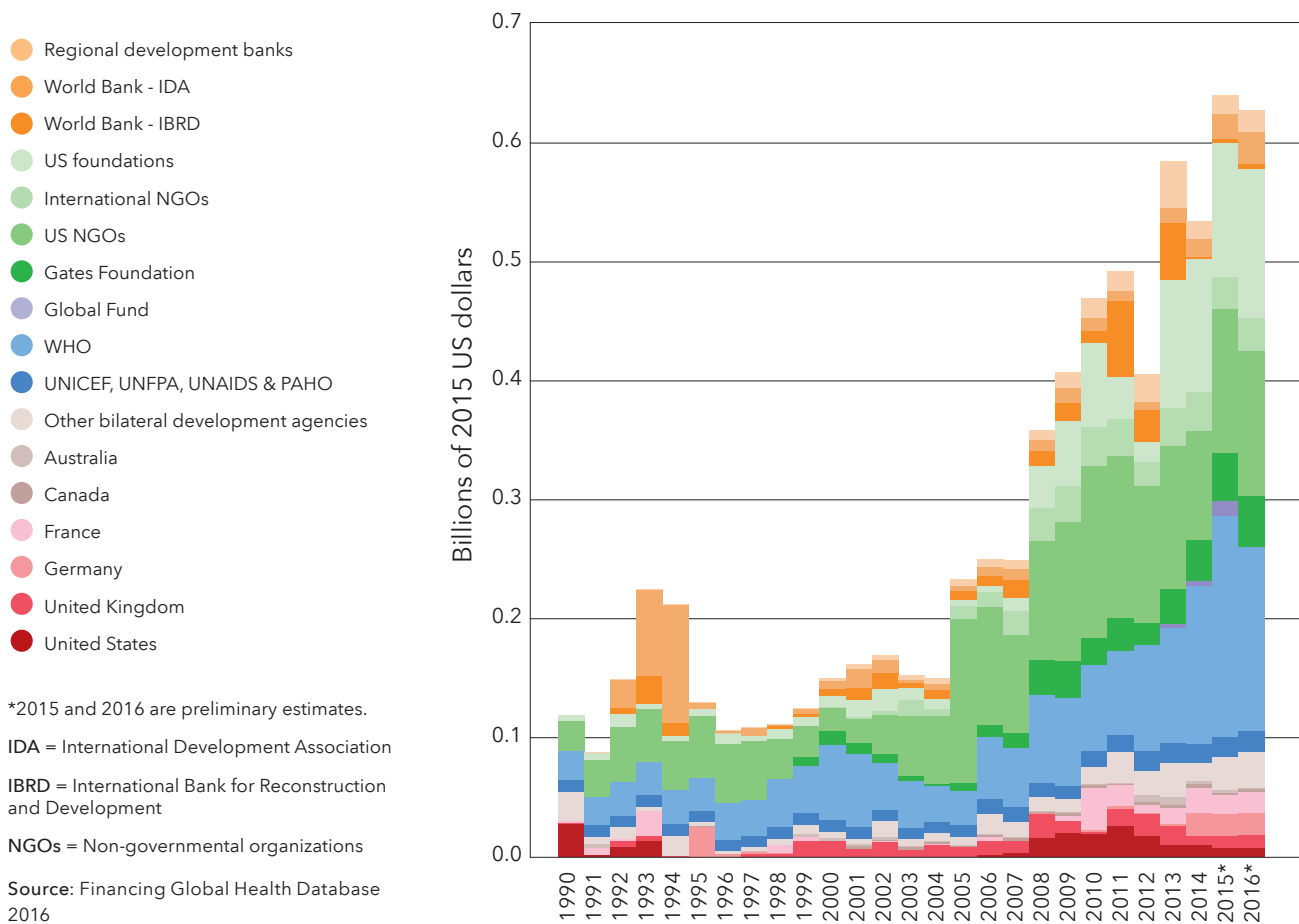
**FIGURE 30**

Top 20 countries by 2015 tuberculosis burden of disease versus average 2012–2014 DAH



**FIGURE 31**

DAH for non-communicable diseases by channel of assistance, 1990–2016



**NON-COMMUNICABLE DISEASES**

Figure 31 illustrates DAH for NCDs by channel of assistance for the period 1990–2016. Compared to the other health focus areas highlighted here, NCDs received relatively little attention until recently. Funding has increased for NCDs 9.5% annually, on average, since 2000, though funding dropped slightly in 2016 to \$643.8 million. Overall, this focus area receives less than any other: in 2016 funding for NCDs accounted for only 1.7% of total DAH. In 2016, the main channels of assistance for NCD funding were NGOs and WHO.

Figure 32 disaggregates the program areas within NCDs: anti-tobacco, mental health, and health system strengthening. Support for mental health programs has increased 4.9% annually from 2000 to 2016. In 2016, anti-tobacco programs received \$103.5 million (16%) of NCDs DAH while mental health received \$129.6 million (20.1%). Other program areas were supported with \$410.7 million in 2016.

Figure 33 illustrates the flows of NCDs DAH from source to channel to program area for 2000–2016. Private philanthropy provided the bulk of funds in this area, channeled through NGOs and foundations and, to a lesser extent, UN agencies. In 2016, private philanthropy contributed \$245.0

FIGURE 32

DAH for non-communicable diseases by program area, 1990-2016

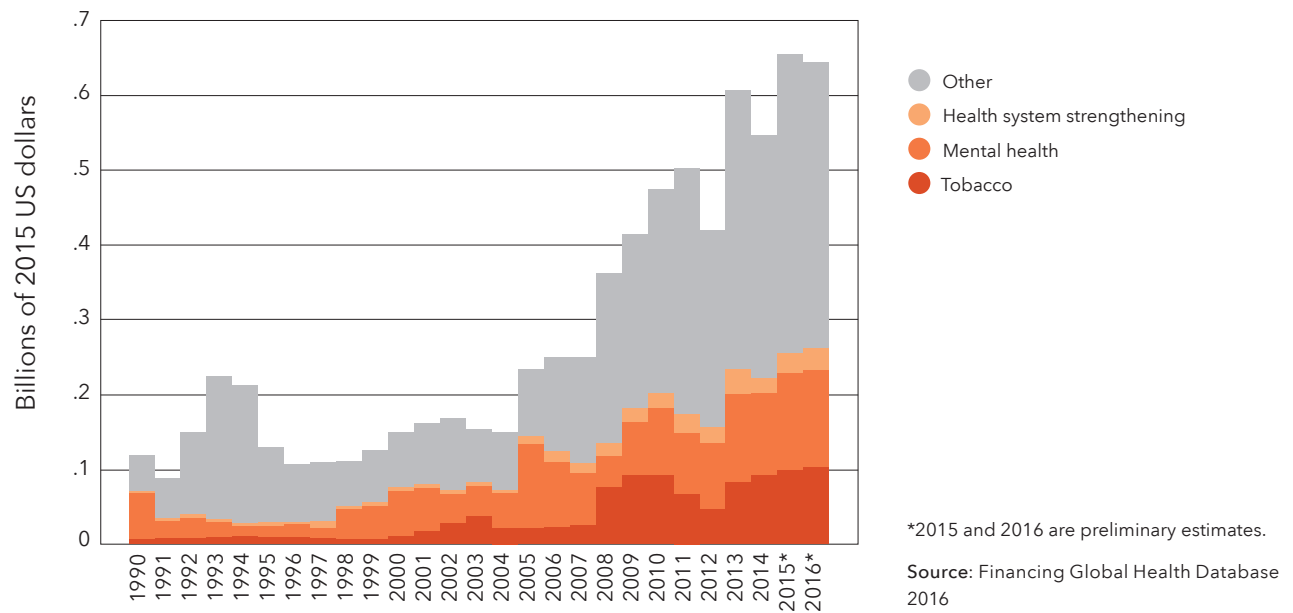
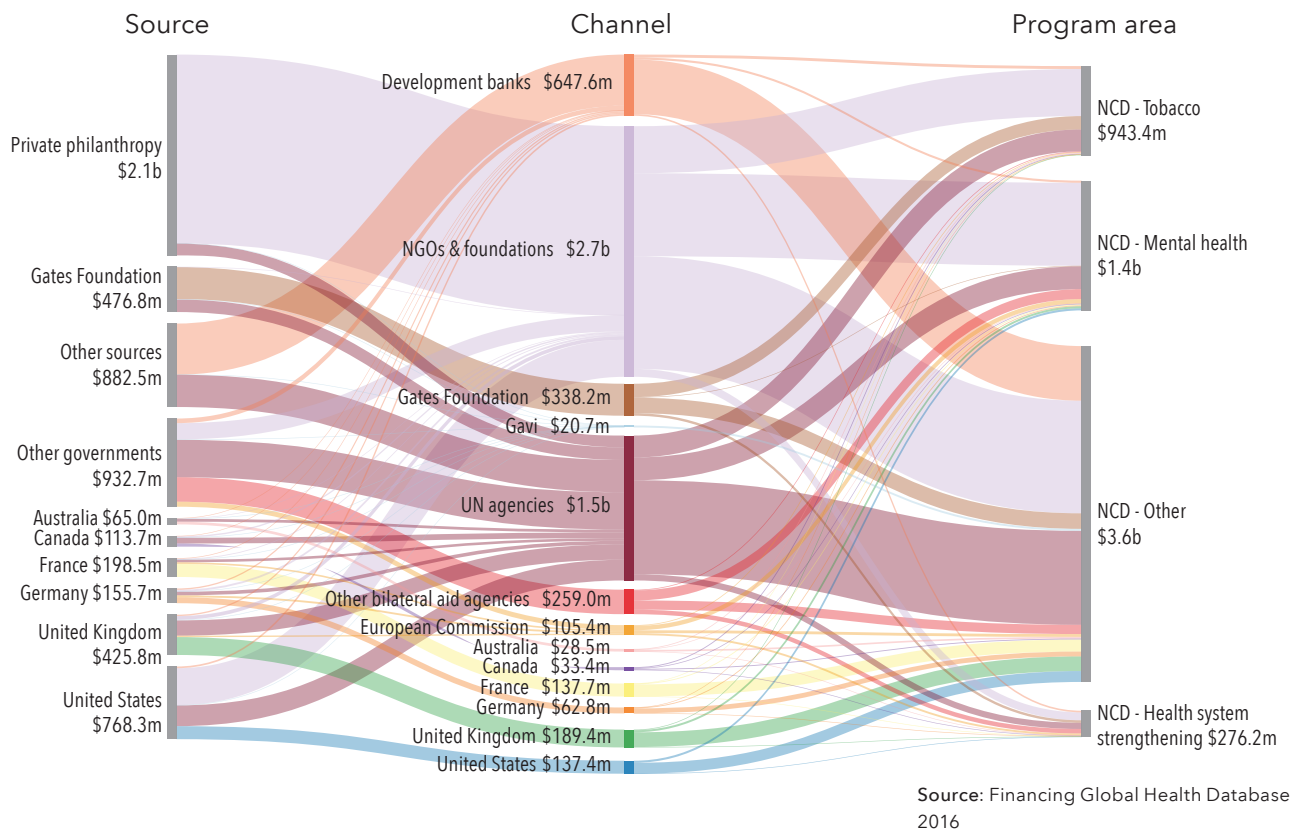


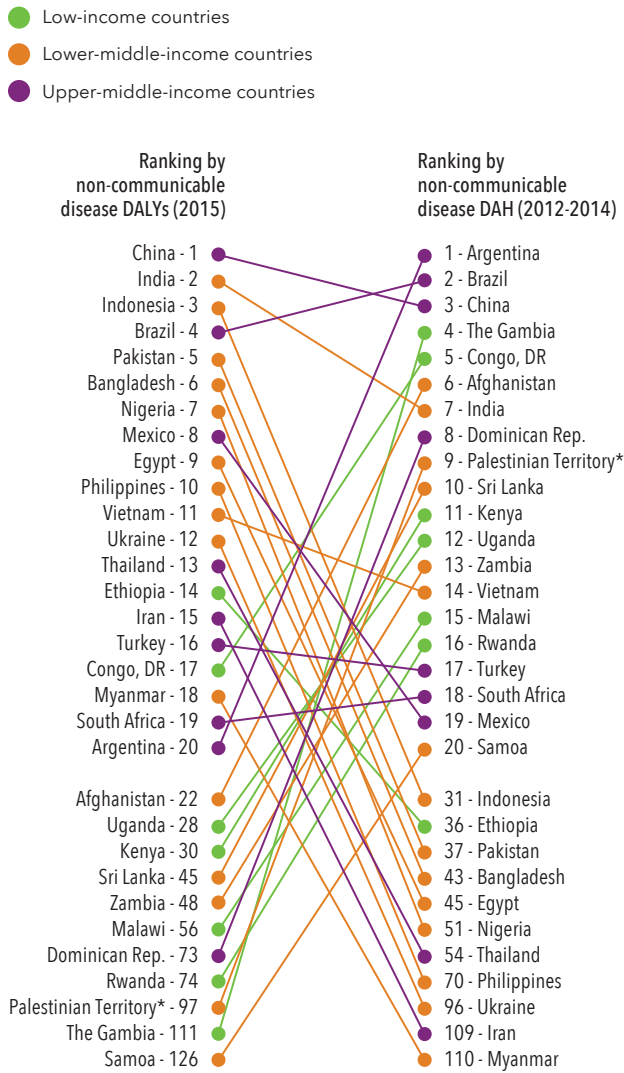
FIGURE 33

Flows of non-communicable disease DAH from source to channel to program area, 2000-2016



**FIGURE 34**

**Top 20 countries by 2015 non-communicable disease burden of disease versus average 2012–2014 DAH**



\*Occupied

Source: Financing Global Health Database 2016

million to this health focus area and NGOs and foundations disbursed \$274.5 million. UN agencies, led by WHO and PAHO, channeled \$172.9 million, with contributions from the US (\$23.3 million), the UK (\$24.8 million), the Gates Foundation (\$21.1 million), and private philanthropy (\$13.6 million), among others.

The Gates Foundation channeled an additional \$43.0 million through its foundation for a total contribution of \$64.2 million to NCDs DAH in 2016. The US was the single largest bilateral source of funding, providing \$53.7 million across channels in 2016.

Finally, Figure 34 captures the top 20 countries by 2015 NCD burden versus average DAH allocated for 2012–2014. There is little alignment in this area; only a very few countries with high NCD DALYs are among the top 20 recipients of NCD DAH.

Some global health experts advocate for increased attention and funding for NCDs, arguing that NCDs are on the rise and that they are straining the health budgets of countries all over the world. Despite being historically more prevalent in high-income countries, NCDs like cardiovascular and lung disease, obesity, and diabetes are affecting more and more low- and middle-income countries as diet and lifestyle habits have changed. The argument against increased funds for NCDs revolves around there not being a risk of contagion; these are diseases that, even while at or approaching epidemic levels, are not transmissible and therefore do not pose a risk of spreading between nations. Whether and how much NCDs are a global health funding concern will continue to be debated.<sup>25</sup>

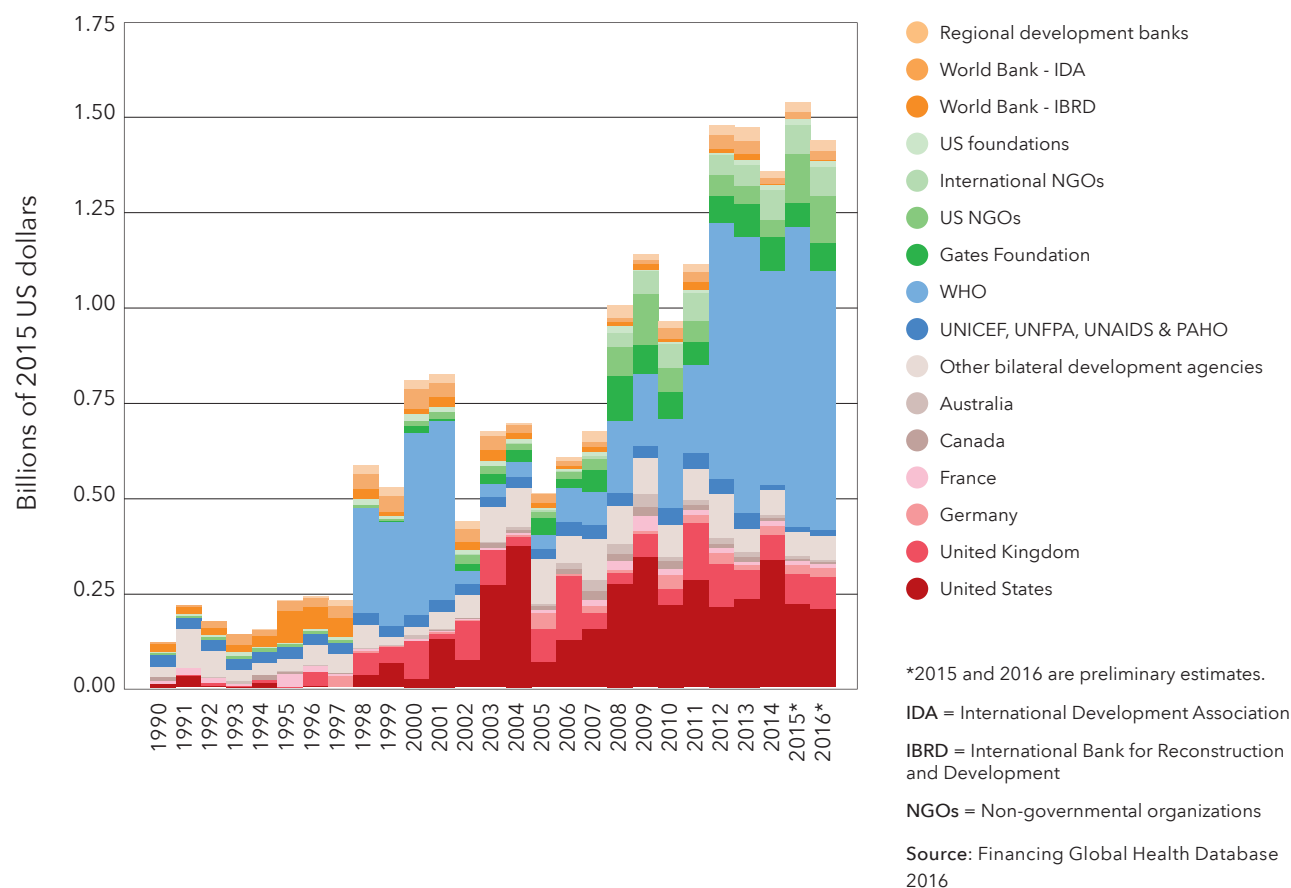
**OTHER INFECTIOUS DISEASES**

This health focus area encompasses infectious diseases outside the three main communicable disease areas of HIV/AIDS, tuberculosis, and malaria. Neglected tropical diseases (NTDs), Ebola, polio, and many other such infectious diseases fall into this category. In sum, these diseases made up 33.2% of DALYs in low- and middle-income countries in 2016 and received 3.9% of total DAH. Compared to other health focus areas, other infectious diseases had an average annual gain of 18.2% in funding from 1990 to 1999; but in 2000–2009, when almost all other areas saw a rapid rise in funding far exceeding the prior period, other infectious diseases dropped back to a modest 4.2% annual increase. Attention to this area has resurfaced during 2010–2016,



FIGURE 35

DAH for other infectious diseases by channel of assistance, 1990–2016



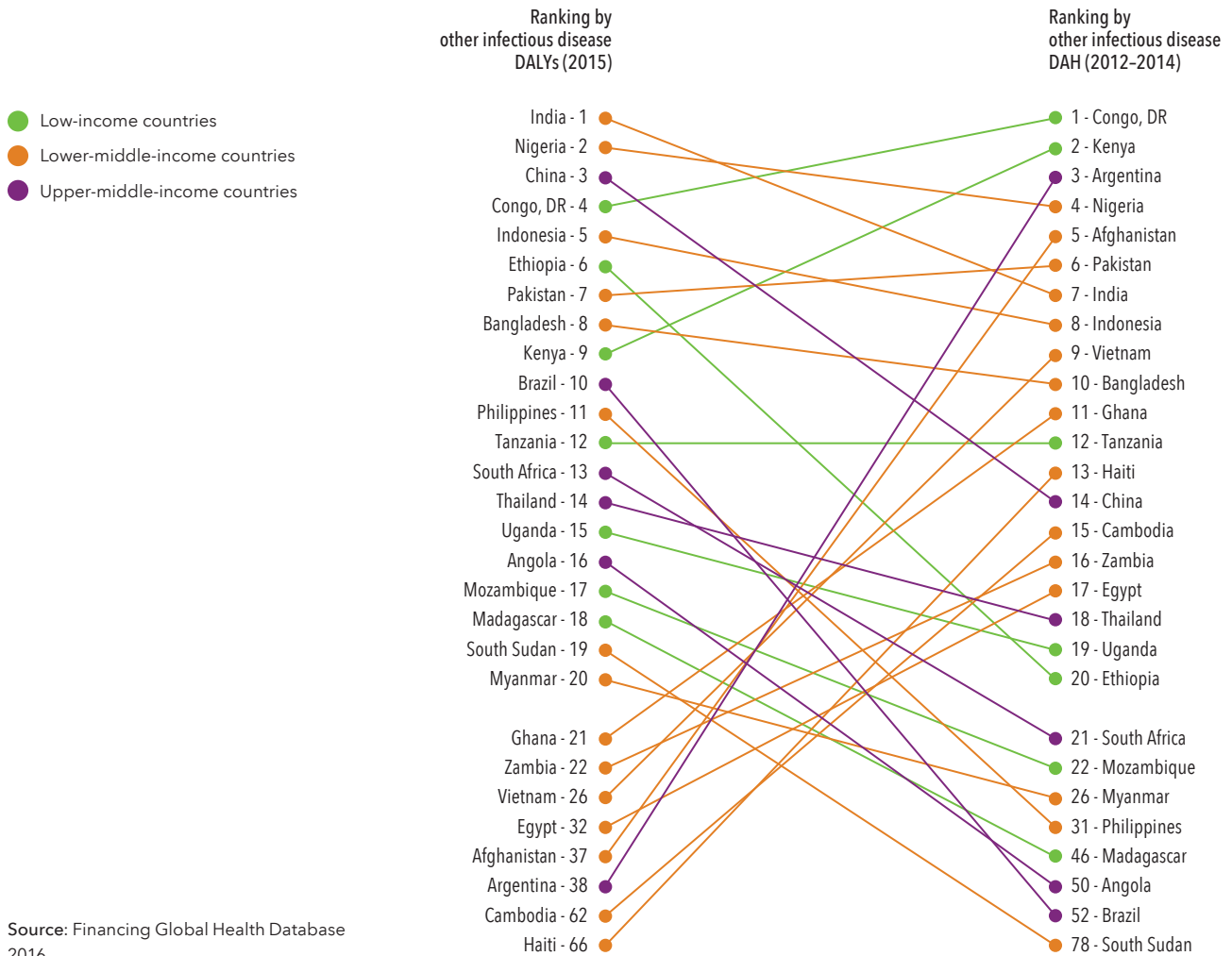
perhaps related to recent outbreaks of Ebola and Zika. With a funding gain of 6.7% annually, other infectious diseases are topped only by maternal, newborn, and child health for this period.

Figure 35 captures the trend of DAH for this focus area from 1990 to 2016. The \$877.9 million raised for Ebola in 2014 accounted for nearly half of the infectious disease DAH for that year. In 2016, \$1.5 billion was channeled to other infectious diseases. The US was the largest contributor in 2016 with \$454.8 million or 31.4% of DAH for this area, channeled primarily through its bilateral aid agencies (\$207.8 million or 45.7%). This contribution was down 6.3% from 2015. The UK was the second-largest supporter with a contribution of \$214.0 million in 2016, down 24.0% compared to 2015.

The Gates Foundation has provided a cumulative \$1.5 billion to this focus area since 2000 with 14.3% annual increases, on average. As a channel, WHO disbursed \$5.6 billion, or 32.0% of other infectious disease DAH from 2000 to 2016. In 2016, the Gates Foundation contributed \$167.3 million, which it channeled through the foundation itself (44.4%), and WHO (55.6%). Private philanthropy has accounted for a more significant portion of other infectious disease DAH in recent years. Private philanthropy contributions have grown on average 13.5% annually over the last decade and in 2016 amounted to \$81.6 million or 5.6% of total DAH in this area.

FIGURE 36

Top 20 countries by 2015 other infectious disease burden of disease versus average 2012–2014 DAH



Comparing the countries with the highest DALYs due to other infectious diseases with those receiving the most DAH for this focus area, as seen in Figure 36, other infectious diseases do not discriminate across geography or economic status.

**HEALTH SYSTEM STRENGTHENING AND SECTOR-WIDE APPROACHES (HSS/SWAPS)**

The Ebola outbreak in 2014 underscored the danger a weak health system poses for a public health emergency. Since then, organizations such as the World Bank, WHO, and some bilateral agencies have highlighted the need for strong domestic health systems as countries transition out of DAH eligibility. The capacity to carry on public health services and programs such as vaccinations, disease surveillance, and primary health care, among many other basic health needs, is critical to robust health systems and healthy societies.

DAH for health system strengthening falls into two categories. The first is sector-wide support that goes into a pooled fund for the health sector. These funds are not earmarked and go toward broad national health sector goals such as improving monitoring and evaluation of a health issue, or better coordination across the various stakeholders in the sector. The second category involves health system strengthening support that is targeted toward specific health focus areas such as HIV/AIDS or maternal, newborn, and child health. This year, for the first time, we disaggregate DAH into the two categories. This new disaggregation is important because it provides information on the share of development assistance spent on broad, system-wide health sector development and the share focused on health system strengthening for specific health priority areas. Due to how health system strengthening DAH is reported in the other health focus area figures in this report, simply adding these funds across figures may lead to double counting.

Figure 37 illustrates DAH for health system strengthening. It includes DAH targeting health system strengthening for specific health priorities as well as those dedicated to strengthening the health system as a whole. From 2000 to 2016, as programs associated with HIV/AIDS and other communicable diseases such as malaria and childhood disease gained prominence, HSS for those specific health focus areas also increased. In 2016, DAH for SWAps totaled \$3.6 billion and comprised 58.7% of HSS funding. HSS for HIV/AIDS totaled \$1.5, or 24.3% of HSS DAH. MNCH and malaria accounted for 6.5% and 7.8%, respectively, in 2016.

FIGURE 37

DAH for health system strengthening by health focus area, 1990-2016

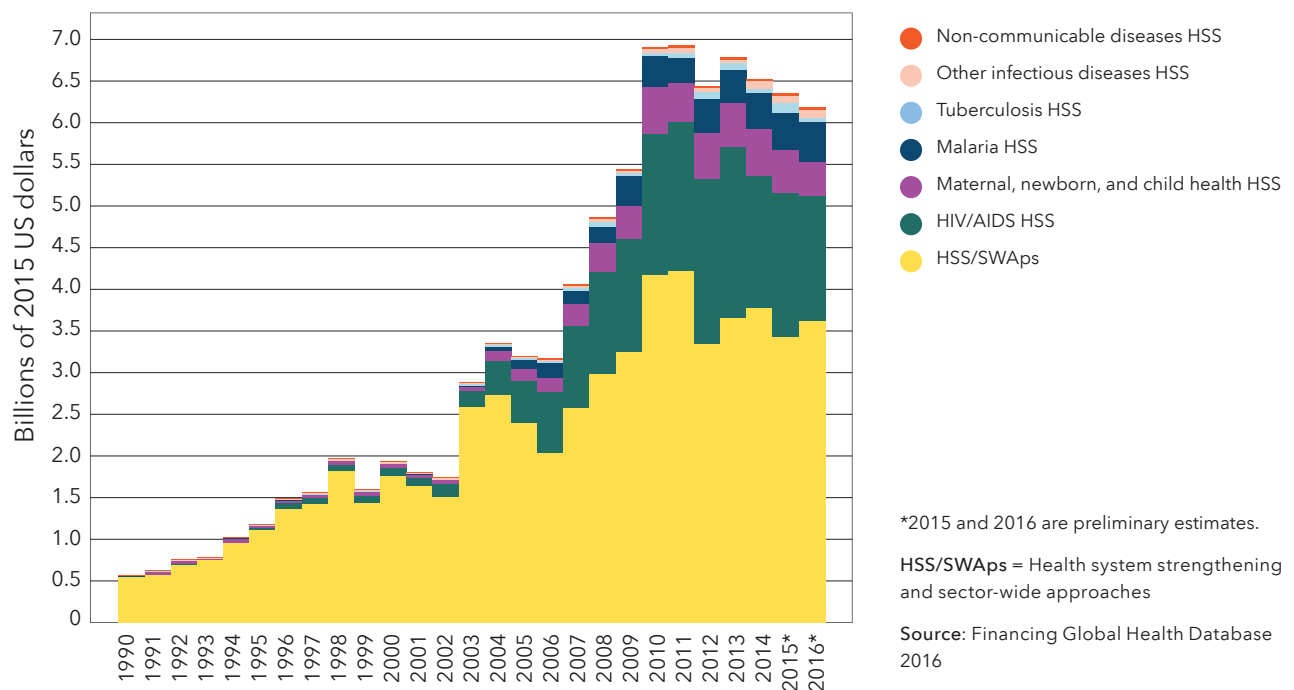


FIGURE 38

DAH for health sector support and sector-wide approaches by channel of assistance, 1990–2016

- Regional development banks
- World Bank - IDA
- World Bank - IBRD
- US foundations
- International NGOs
- US NGOs
- Gates Foundation
- Gavi
- Global Fund
- WHO
- UNICEF, UNFPA, UNAIDS & PAHO
- Other bilateral development agencies
- Australia
- Canada
- France
- Germany
- United Kingdom
- United States

\*2015 and 2016 are preliminary estimates.  
 IDA = International Development Association  
 IBRD = International Bank for Reconstruction and Development  
 NGOs = Non-governmental organizations

Source: Financing Global Health Database 2016

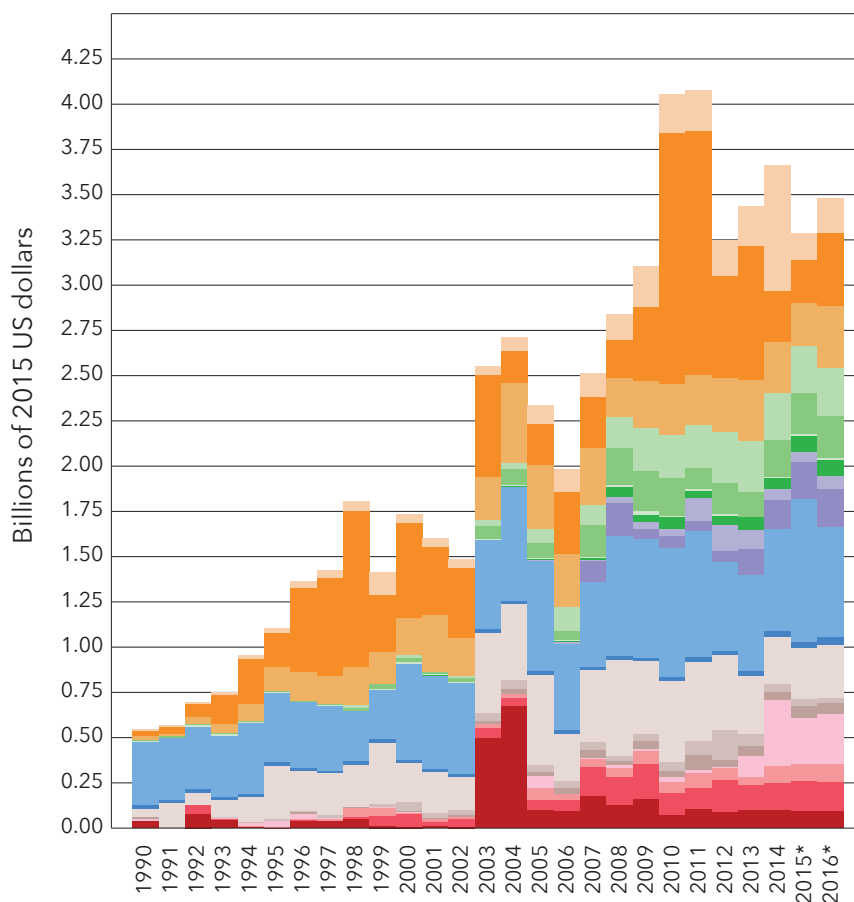
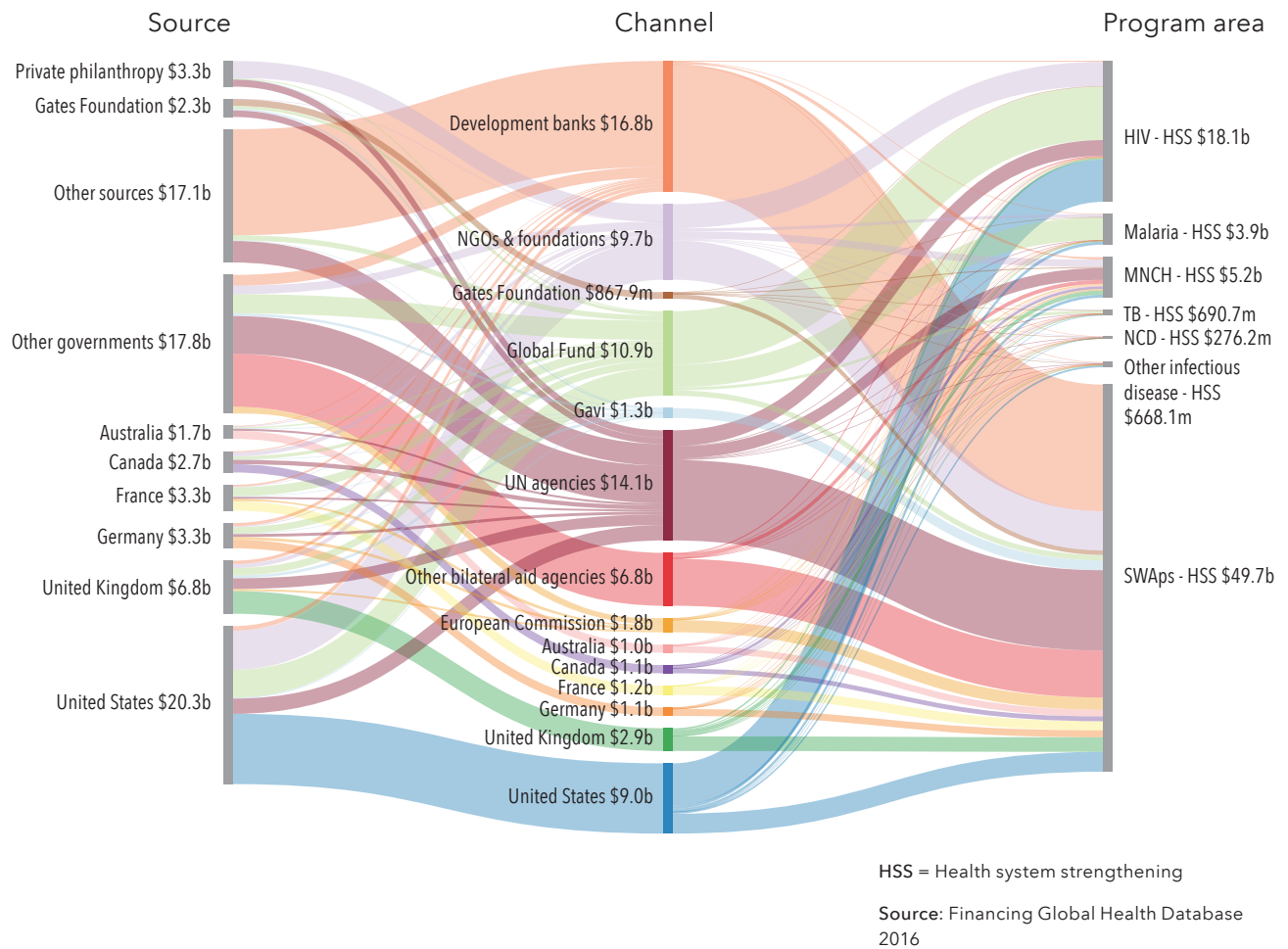


Figure 38 illustrates DAH for health system strengthening and sector-wide approaches by channel of assistance for 1990–2016. DAH for this health focus area has grown 7.6% annually, on average, gaining traction since 2000 but declining with substantial fluctuation since 2010. HSS/SWAPS DAH was \$3.6 billion in 2016, up 5.8% over 2015. As a percentage of total 2016 DAH, HSS/SWAPS accounted for 9.6%. Compared with other health focus areas, gains for HSS/SWAPS have not followed the predominant funding pattern at all. Average annual funding gains were greatest for this area during the 1990–1999 period (11.4%), dropping to 7.1% during 2000–2009 while all other areas saw an increase, and decreasing 2.3% from 2010 to 2016, only one of two health focus areas to do so for this period.

Development banks have increased their disbursements to HSS/SWAPS substantially since 1990, up 11.5% annually, on average. In 2016, these entities channeled \$939.5 million in funding to HSS/SWAPS and accounted for 25.9% of total DAH. The World Bank provided \$749.0 million in 2016, an increase of 57.3% over 2015. WHO contributed \$609.3 million in 2016, down 22.5% from the prior year. Gavi has stepped up its contribution to HSS/SWAPS in recent

FIGURE 39

Flows of HSS/SWApS DAH from source to channel to program area, 2000–2016



years, channeling \$209.1 million in 2016 or 5.8% of total HSS/SWApS DAH.

Figure 39 illustrates the flows of HSS/SWApS DAH from source to channel to program area for 2000 to 2016. Prominent sources of funds for HSS/SWApS included the US (\$1.7 billion or 28.2%), the UK (\$665.3 million or 10.8%), France (\$442.0 million or 7.15%), and the Bill & Melinda Gates Foundation (\$320.7 million or 5.2%). The Gates Foundation channeled 40.0% of its DAH for HSS/SWApS through the foundation.





# Health financing context: Evolution and future estimates of national health spending

This chapter focuses on global health financing trends and country-specific deviations from those trends. For our analysis, we looked at national health spending in 184 countries over a 20-year period, 1995–2014. We found the basic relationship between economic development and health financing to be straightforward: as countries become wealthier they spend more on health. In general, wealthier countries have better access to care and higher use of care; experience greater availability of sophisticated treatments, which cost more; and in general pay higher prices. But variation in health spending abounds across countries and even within income groups. In addition, there is great variation in how this spending is financed and distributed. Tracking changes in health spending across time and benchmarking against peers can assist global health stakeholders in identifying health financing gaps and supporting the pursuit of universal health coverage.

As countries develop and strengthen their health systems, access to preventive care, such as vaccines and family planning, coupled with other health benefits associated with development, such as nutrition, education, and technology, result in lower disease burdens. People live longer, with particular gains most apparent in reductions in childhood mortality, deaths from infectious diseases, and maternal mortality. With these gains, the health burden shifts to revolve more exclusively around non-communicable diseases such as diabetes, cardiovascular disease, and neurological disorders such as Alzheimer's disease. These are the hallmarks of aging populations in 21<sup>st</sup>-century, high-income countries. This shift is known as the epidemiological transition. Depending on the country, the epidemiological transition may bring changes to a country's financial outlook for health. And with lifestyle and diet changes occurring in many parts of the world, epidemics such as diabetes and obesity, once limited to high-income countries, are quickly spreading to middle- and low-income countries as well.

By assessing health financing trends and deviations, funders, researchers, and policymakers may look for best practices in countries and health systems that are highly efficient with their spending. Determining policies and health interventions that provide high health returns for relatively low monetary inputs, and replicating those practices, could help drive health care costs down in high-income countries and provide high-quality medical care to

low- and middle-income countries. As seen in the data, different mixes of government, prepaid private, out-of-pocket, and DAH funding work in different proportions depending on the setting and are, in many cases, determined by many factors outside the health sector.

While this chapter examines national averages, it is important to note that national averages provide limited information about how spending is distributed within each country. Research shows that wealth, race, education, and geography impact how much individuals spend on health. While this research focuses on national-level spending, ongoing research is needed to more precisely understand the variations in health spending within countries.

## OVERVIEW OF TOTAL HEALTH SPENDING

Table 1 shows that health spending per capita across all countries in 2014 was \$1,279. But per capita spending varied dramatically from country to country, from \$33 in Somalia to \$9,237 in the us. Even within World Bank income groups, spending variations were wide. In 2014, health spending across low-income countries was \$120 per capita, ranging from \$33 in Somalia to \$347 in Uganda. Spending per capita across lower-middle-income countries was \$267, ranging from \$92 in Bangladesh to \$791 in Tunisia; and spending per capita in upper-middle-income countries was \$914, ranging from \$228 in Angola to \$1,980 in the Maldives. In high-income countries, health spending per capita was \$5,221 and ranged from \$853 in the Seychelles to \$9,237 in the us. These spending ranges were also present between GBD super-regions.

Looking at the sources of health financing in 2014, Table 1 illustrates that, globally, governments provided 59.2% of health spending, while 17.4% of total health financing was prepaid private, 22.8% was OOP, and 0.6% was DAH. In low-income countries, health spending was predominately financed by DAH and OOP, constituting 35.7% and 29.1% of total health spending, respectively. However, the share of health financing sourced from OOP is largest in lower-middle-income countries, at 58%, where DAH makes up a smaller share of total health spending than in low-income countries. These trends provide evidence that in some cases lower-middle-income countries do not have health financing systems or government capacity to replace the reduction in DAH that tends to occur as countries develop. In contrast, governments in upper-middle- and high-income countries finance the bulk of health care and related activities, at 57.2% and 63.4%, respectively. Across all income groups, prepaid private health spending remained, on average, relatively constant, near 17.4%. However, as with per capita spending, the composition of sources financing health systems varied widely within income groups and across geographic regions.



TABLE 1

## Health spending by source, 2014

	Total health spending per capita – 2015 purchasing power parity dollars	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995–2014 (%)
Global	1,279 (33–9,237)	8.3 (1.9–39.3)	59.2 (0.0–95.5)	17.4 (0.0–64.8)	22.8 (2.4–76.6)	0.6 (0.0–92.3)	3.3 (-3.0–19.7)
<b>World Bank income group</b>							
High-income	5,221 (853–9,237)	11.7 (2.2–16.6)	63.4 (42.4–93.9)	22.7 (0.0–38.8)	13.9 (2.4–55.7)	0.0 (0.0–0.1)	3.0 (-1.1–7.6)
Upper-middle-income	914 (228–1,980)	5.9 (2.3–17.2)	57.2 (19.4–95.5)	8.7 (0.0–44.2)	33.8 (4.4–74.2)	0.3 (0.0–23.2)	5.9 (-3.0–17.0)
Lower-middle-income	267 (92–791)	4.3 (1.9–16.1)	35.9 (0.0–87.2)	3.1 (0.0–10.2)	58.0 (2.8–76.6)	3.0 (0.2–92.3)	5.0 (-1.4–9.4)
Lower-income	120 (33–347)	7.3 (3.6–39.3)	18.0 (0.0–48.5)	17.2 (0.0–64.8)	29.1 (7.8–54.1)	35.7 (12.9–92.2)	4.6 (-3.0–19.7)
<b>GBD super-region</b>							
High-income	5,460 (1,322–9,237)	12.3 (2.6–16.6)	62.8 (42.4–93.9)	23.4 (0.0–38.8)	13.8 (5.3–55.7)	0.0 (0.0–0.0)	2.9 (-6–7.6)
Central Europe, Eastern Europe, and Central Asia	1,364 (200–2,845)	6.7 (2.3–10.3)	58.5 (19.4–84.8)	2.8 (0.0–18.9)	38.5 (11.2–74.2)	0.3 (0.0–13.7)	4.9 (1.4–9.6)
Latin America and Caribbean	1,082 (154–1,996)	7.3 (4.3–11.1)	51.6 (0.0–95.5)	16.1 (0.0–29.6)	31.7 (4.4–64.3)	0.7 (0.0–40.8)	3.3 (-1.8–8.5)
North Africa and Middle East	870 (159–2,663)	5.2 (2.2–9.7)	60.1 (14.3–91.8)	4.3 (0.0–14.9)	34.9 (5.9–76.6)	0.7 (0.0–30.9)	4.9 (-1.4–9.0)
Southeast Asia, East Asia, and Oceania	588 (105–1,980)	4.8 (1.9–17.2)	58.6 (0.0–93.6)	5.2 (0.0–10.2)	35.7 (2.4–65.4)	0.5 (0.0–92.3)	8.9 (-3.0–11.0)
Sub-Saharan Africa	218 (33–1,411)	5.9 (3.0–39.3)	33.5 (0.0–80.7)	20.8 (0.0–64.8)	29.2 (5.1–70.1)	16.6 (0.1–92.2)	3.2 (-3.0–19.7)
South Asia	223 (92–279)	4.2 (2.7–5.8)	31.0 (22.7–70.7)	2.6 (0.0–6.1)	64.7 (25.1–65.6)	1.7 (0.7–17.8)	5.8 (2.0–6.4)

Note: Range of values included in parentheses.

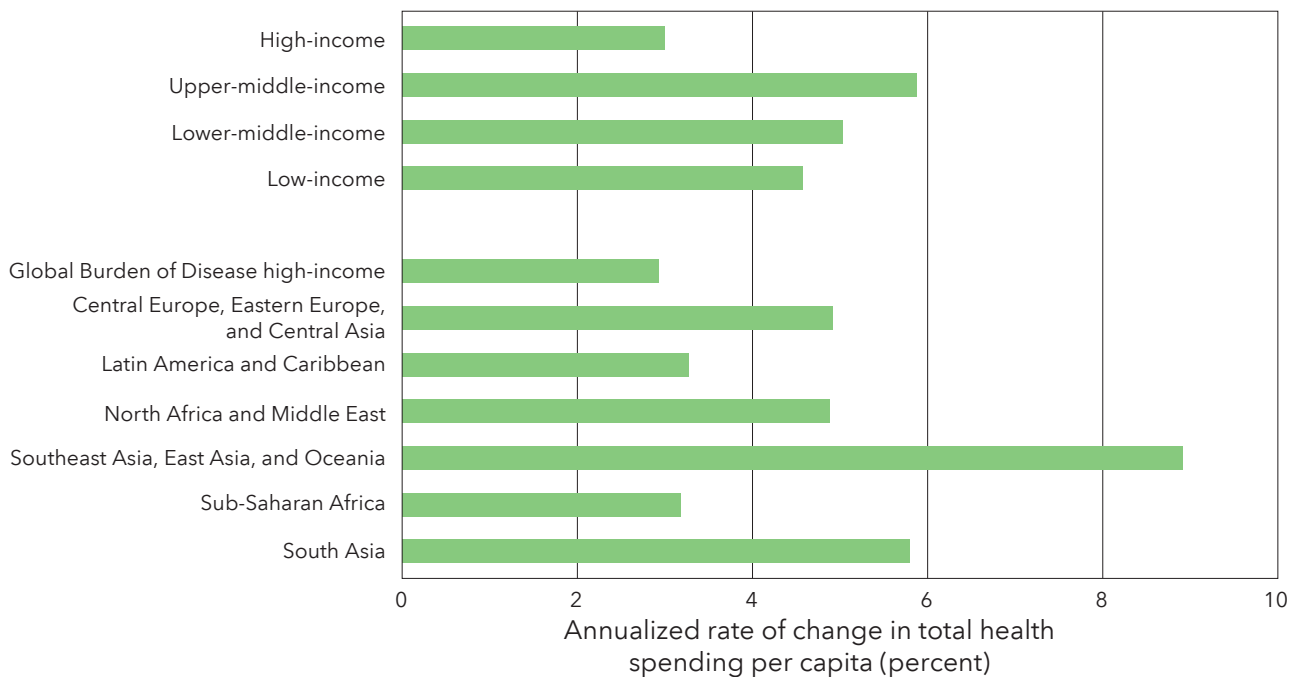
**HEALTH SPENDING TRENDS ACROSS TIME AND ECONOMIC DEVELOPMENT**

Figure 40 highlights how total health spending per capita changed between 1995 and 2014. Upper-middle- and lower-middle-income country groups have increased per capita health spending the fastest, with annualized growth rates of 5.9% and 5.0%, respectively. Over the course of 20 years this has led to a near tripling of health spending in upper-middle-income countries, from \$309 to \$914 per capita. Spending growth in low-income countries was slower, at 4.6% per year, while annualized growth was slowest in high-income countries, at 3.0%. Despite this, the largest per capita health spending increases were in high-income countries, which added \$2,245 per capita in spending between 1995 and 2014. Upper- and lower-income countries added \$605 and \$162 per capita, respectively. Low-income countries, which spent little in 1995, increased health spending by \$69 per capita between 1995 and 2014, reaching \$120. For high- and middle-income countries, the growth in spending was driven by increases in government spending. Conversely, the growth in low-income countries was driven by increases in DAH.

Figure 41 depicts health spending per capita from 1995 to 2014 by World Bank income group, GBD super-region, and source of spending. Although similar to Figure 40, this figure also distinctly highlights the source of the increase in per capita health spending from 1990 through 2014.

**FIGURE 40**

Changes in total health spending per capita, 1995–2014



Source: Financing Global Health Database 2016

**FIGURE 41**

**Increases in total health spending per capita by source, 1995-2014**

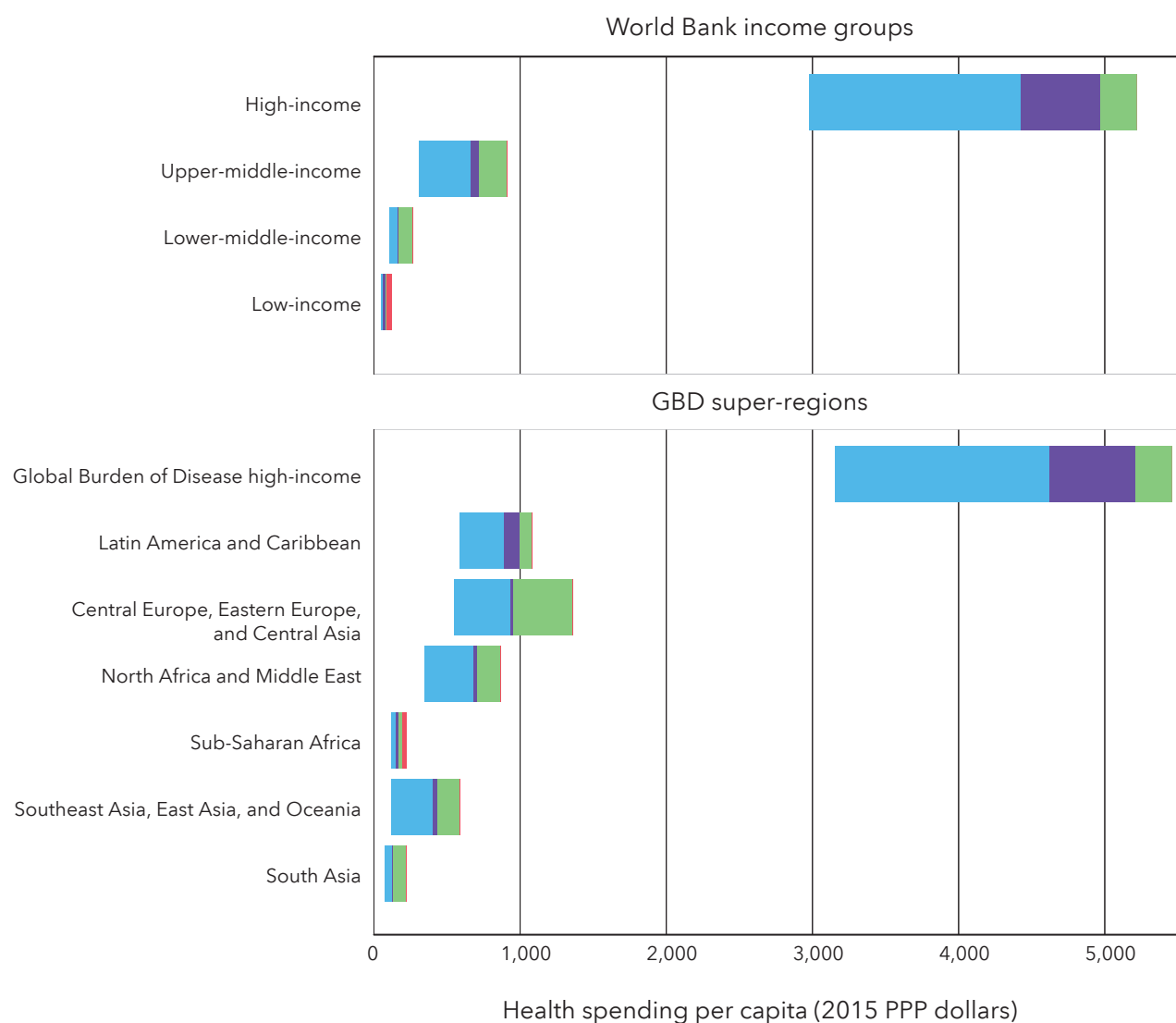


Figure 42 and Figure 43 confirm the relationship between total health spending and economic development. On average, total health spending rises with economic development and the share of OOP financing decreases. As shown in Figure 42, growth in per capita GDP was associated with exponential growth in total health spending per capita across countries.

Figure 44 illustrates how the source relied on to fund total health spending evolves with economic development. On average, the proportion of total health spending from governments rises as GDP per capita increases. At the 80<sup>th</sup> wealth percentile (GDP per capita of \$18,146), trend analysis estimates that 66.9% of health spending is financed by the government and just 30.2% is sourced from OOP. At the 20<sup>th</sup> wealth percentile (GDP per capita of \$1,445), trend analysis estimates that OOP financing accounts for 42.8% of total spending, while DAH accounts for 35.7%. With development, we see

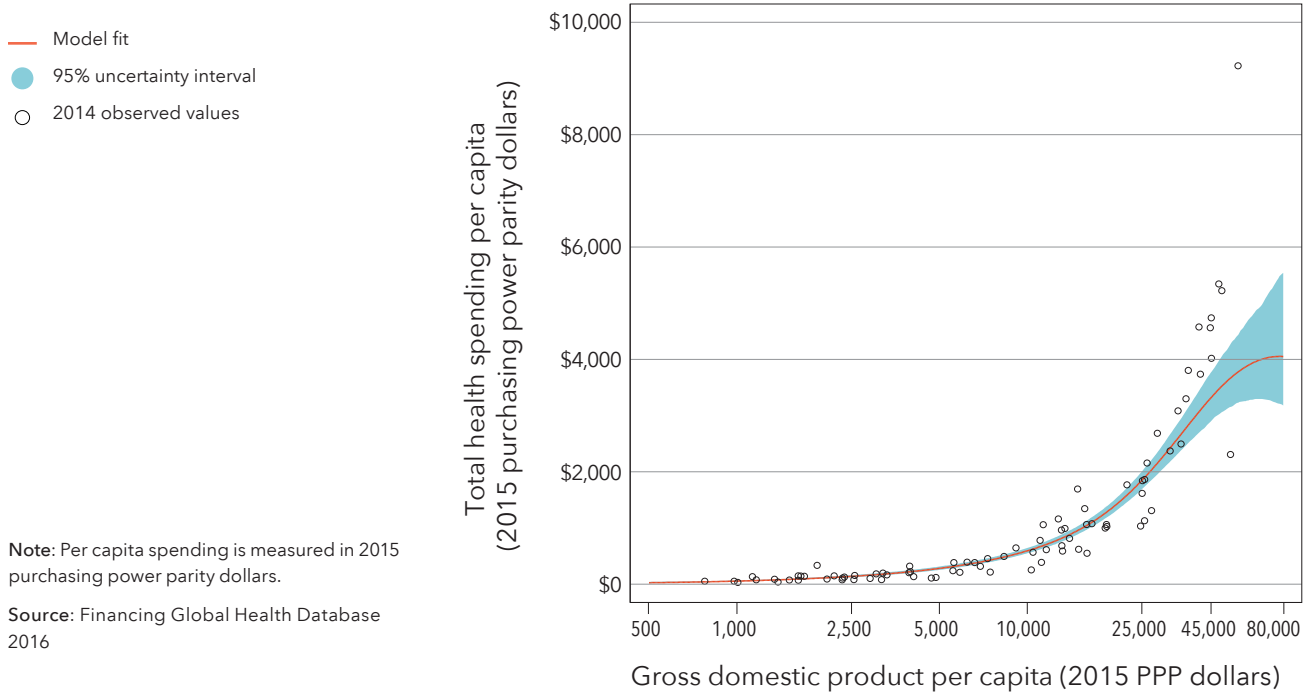
- Government health spending
- Prepaid private spending
- Out-of-pocket spending
- Development assistance for health

**Note:** Per capita spending is measured in 2015 purchasing power parity dollars. The bar shows the increase in health spending between 1995 and 2014, and highlights the source of the spending growth.

**Source:** Financing Global Health Database 2016

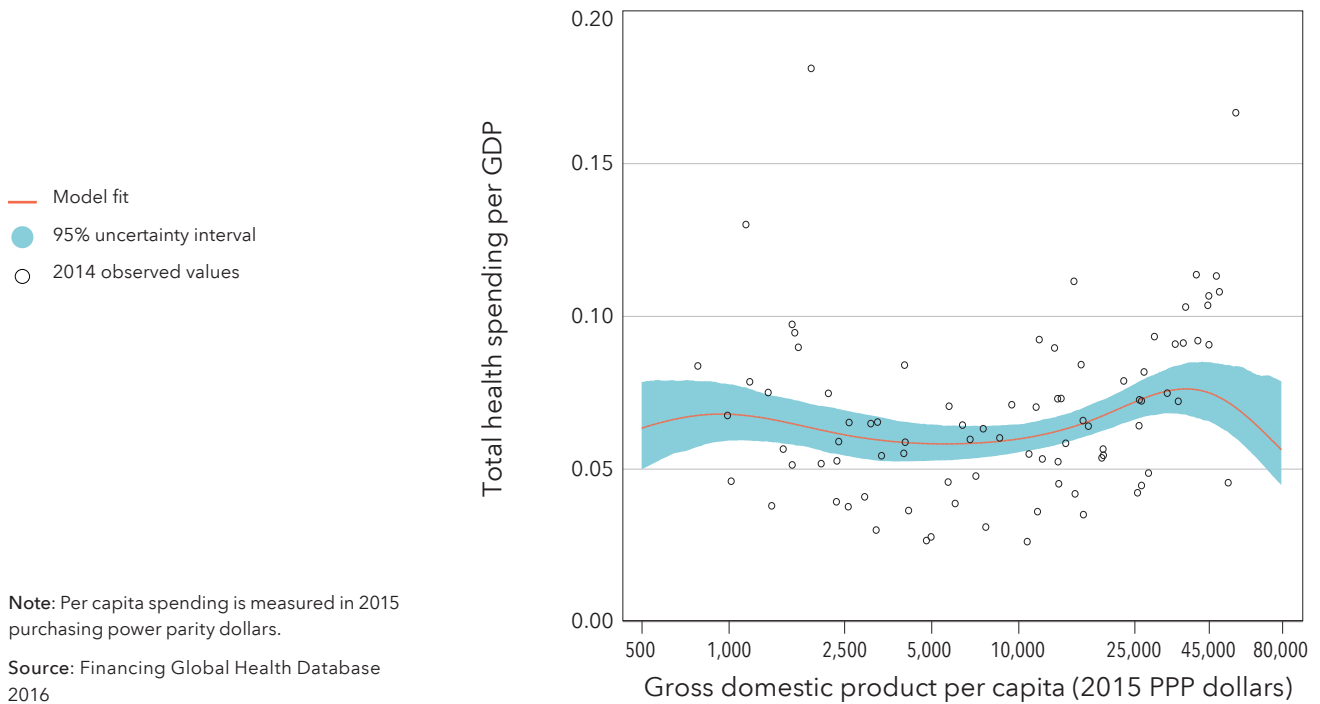
**FIGURE 42**

Total health spending per person by GDP per capita, 2014



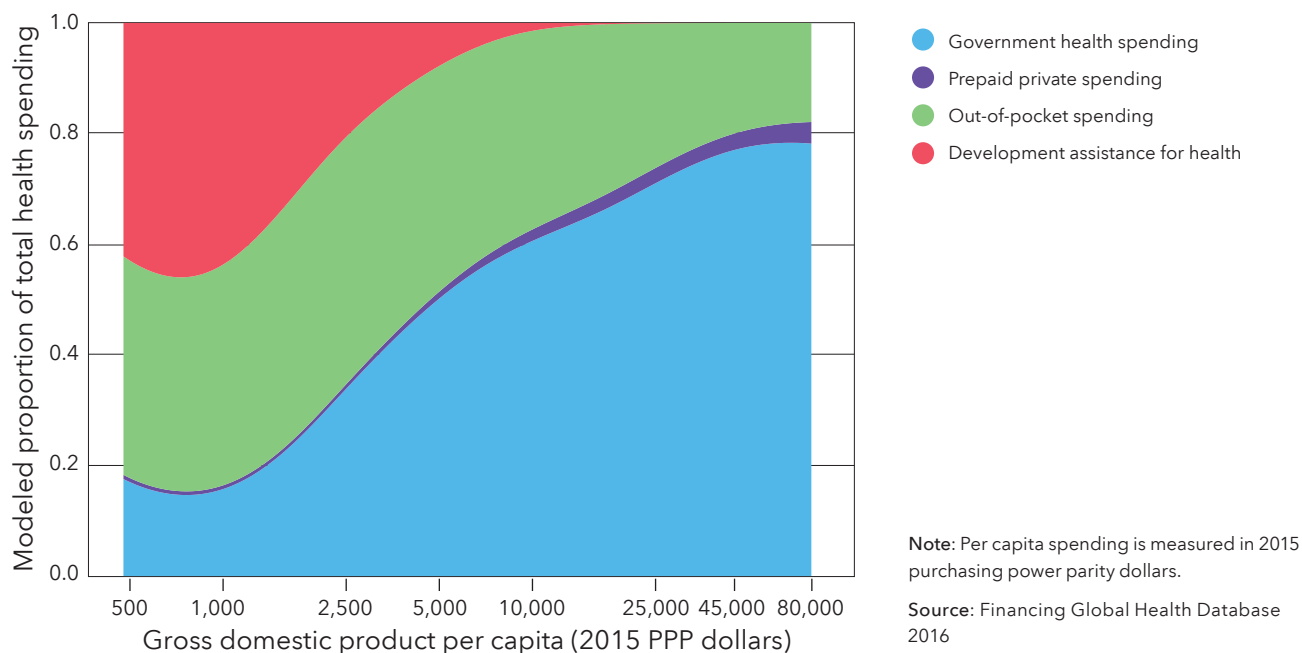
**FIGURE 43**

Total health spending as a share of GDP per capita, 2014



**FIGURE 44**

Total health spending composition by source by GDP per capita, 2014



that countries spend more money on health. Health financing moves away from DAH and OOP to government spending and private prepaid spending, and the availability of health services rises, in general, as governments bolster their health systems infrastructures. This process is referred to as the “health financing transition.”

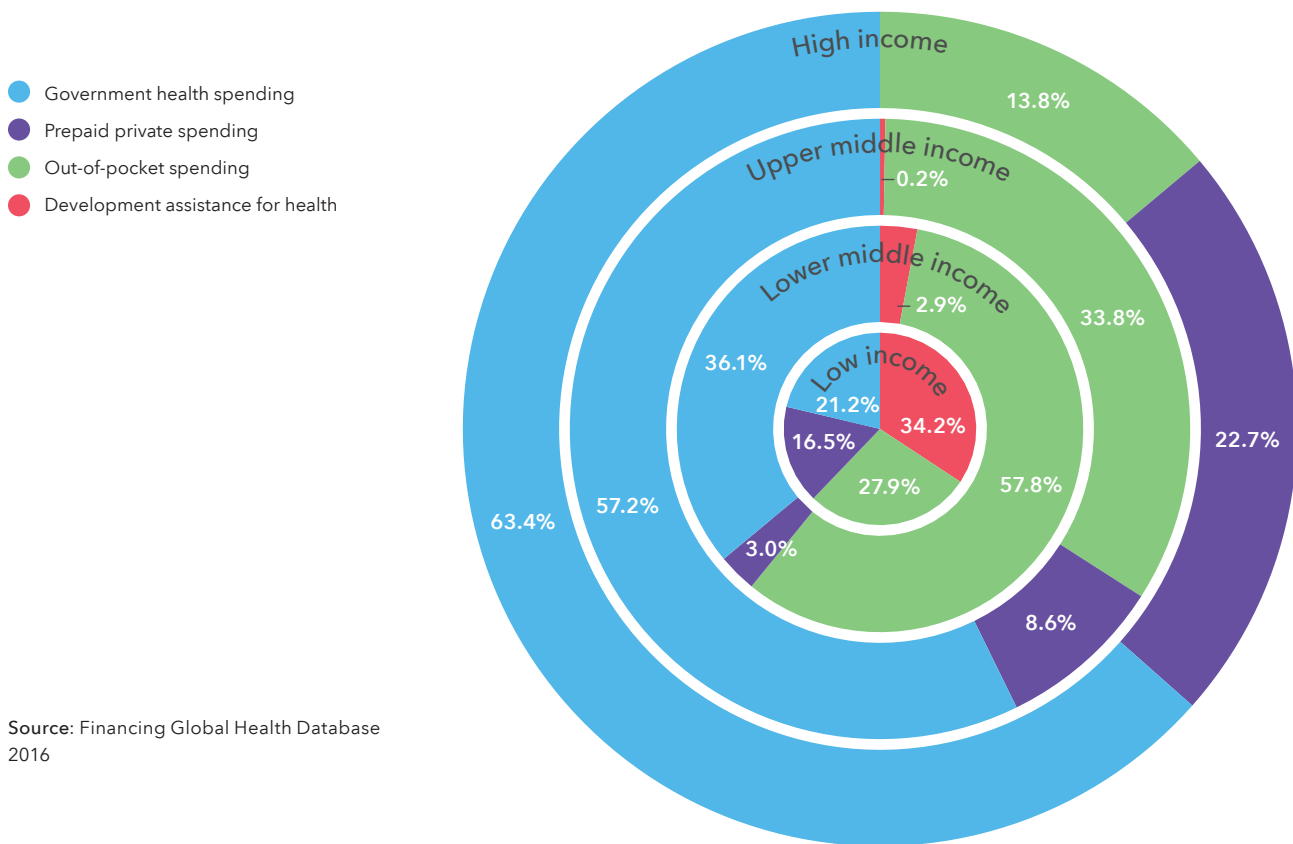
As seen, the proportion of DAH that constitutes total health spending decreases as countries become richer. Figure 45 highlights distinctly how the share of DAH declines and the share of government health spending increases as countries become more economically developed.

**DEVIATION FROM THE HEALTH FINANCING TRENDS**

As Figure 42 shows, total health spending increases exponentially with GDP per capita, but there is variation in health spending across countries relative to a modeled average. Some countries spent up to 575.9% more in 2014 than the modeled average, based on GDP per capita, while other countries spent as little as 33.0% of the expected amount. Different health financing sources drove the deviations in health care spending. Some countries deviated substantially from average trends, financing much smaller or much larger shares of health spending with government funds than the expected amount. Countries such as Kiribati and the Solomon Islands financed their health systems with considerably more government financing than expected based on their levels of economic development alone, while countries such as Azerbaijan and Singapore relied more than expected on OOP financing. Countries such as the Federated States of Micronesia and Liberia used DAH

**FIGURE 45**

Health spending by source and World Bank income group, 2014



Source: Financing Global Health Database 2016

to fund more of their health system than would have otherwise been expected based on their level of economic development.

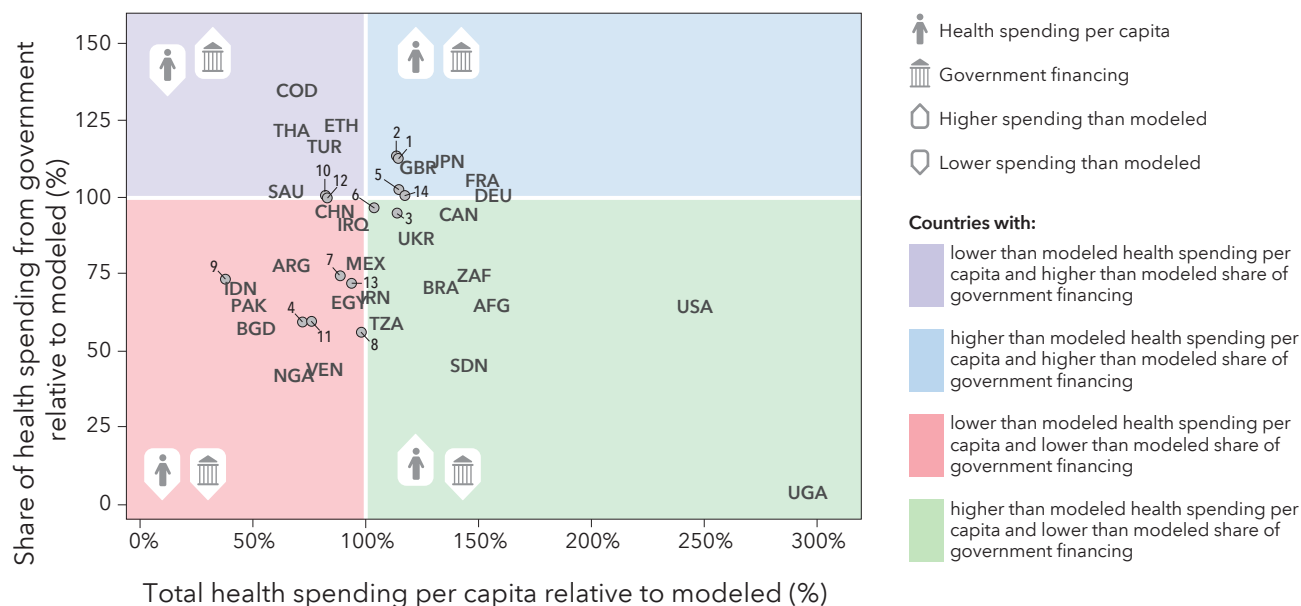
Figure 46 illustrates total health spending and government health spending, both measured relative to the modeled amount. Some countries, such as Japan and Colombia, had greater-than-modeled health spending per capita and a greater-than-modeled share of financing from government. Some countries, such as the US and Uganda, had greater-than-modeled health spending per capita, but a lesser-than-modeled share of financing from government. Conversely, other countries, such as Thailand and Turkey, had less health spending per capita than expected, but a higher-than-expected share of financing from government, and still others, such as Nigeria and Bangladesh, had less health spending per capita than expected and a lower-than-expected share of financing from government.

**HEALTH SPENDING BY TYPE OF GOODS AND SERVICES**

Figure 47 highlights that the types of health care services purchased were relatively constant across different levels of economic development. At the median GDP per capita (\$8,346), 29.0% of total spending in 2014 was on inpatient curative and rehabilitative care; 30.6% was on day and outpatient curative and rehabilitative care; and 23.5% was on medical goods, which

FIGURE 46

Share of health spending from government and total health spending per capita, relative to expected value, 2014



Note: Graph includes countries with a population over 30 million.

Source: Financing Global Health Database 2016

- AFG Afghanistan
- ARG Argentina
- BGD Bangladesh
- BRA Brazil
- CAN Canada
- CHN China
- COD Democratic Republic of the Congo
- 1 COL Colombia
- DEU Germany
- 2 DZA Algeria
- EGY Egypt
- 3 ESP Spain
- ETH Ethiopia
- FRA France
- GBR United Kingdom
- IDN Indonesia
- 4 IND India
- IRN Iran
- IRQ Iraq
- 5 ITA Italy
- JPN Japan
- 6 KEN Kenya
- 7 KOR South Korea
- 8 MAR Morocco
- MEX Mexico
- 9 MMR Myanmar
- NGA Nigeria
- PAK Pakistan
- 10 PER Peru
- 11 PHL Philippines
- 12 POL Poland
- 13 RUS Russia
- SAU Saudi Arabia
- SDN Sudan
- THA Thailand
- TUR Turkey
- TZA Tanzania
- UGA Uganda
- UKR Ukraine
- USA United States
- VEN Venezuela
- 14 VNM Vietnam
- ZAF South Africa

include pharmaceuticals (Panel A). These values drop marginally at the highest values of GDP per capita, where long-term care is more prominent.

Panel B illustrates that government spending by type of good and service is similar to total spending. However, government spending at the lowest levels of GDP per capita is much more focused on building and financing the health system, immunization, and early disease detection; and government spending at the highest levels of GDP per capita focuses a much greater proportion on long-term care than countries in the middle and low levels of GDP per capita.

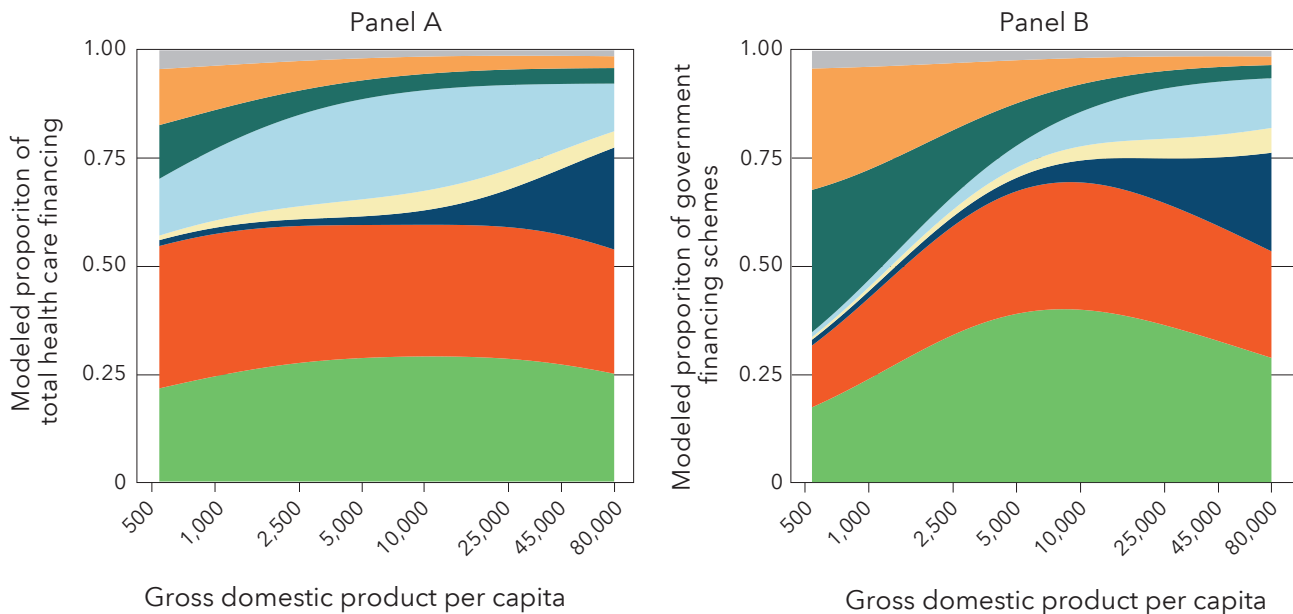
**THE HEALTH FINANCING TRANSITION AND THE ROLE OF DAH**

As shown by the study, but contrary to what would appear to be necessary, the countries with the lowest levels of GDP do not rely on DAH as much as other countries with slightly more economic development (Figure 44). This may be because development partners find it difficult to support extremely poor countries as health system effectiveness, political stability, financial management capacity, infrastructure, or human resources for health all constrain the potential for impact. The role DAH can play for the world’s neediest populations, and how DAH can effectively assist countries transitioning from the lowest levels of economic development are important issues and worthy of further study.

Also at the nexus of the health financing transition and DAH disbursements is the transition away from reliance on DAH for health system financing, as DAH disbursements tend to taper with economic development.

**FIGURE 47**

Total health spending and government health spending composition by type of care by GDP per capita, 2014



- Inpatient care, curative and rehabilitative
- Day and outpatient care, curative and rehabilitative
- Long-term care
- Ancillary services
- Medical goods
- Immunization & early disease detection
- Governance, health system, and financing administration
- Other

Source: Financing Global Health Database 2016

Because of this, middle-income countries receive less DAH but in some cases have not been able to sufficiently raise government resources to replace the lost external financing. This can lead to reductions in health spending or increases in the share of spending that is financed OOP. With over 70% of the world’s poor living in middle-income countries and the poor most at risk of being adversely impacted by a reliance on OOP, the transition from DAH support is an important topic and deserving of further study.

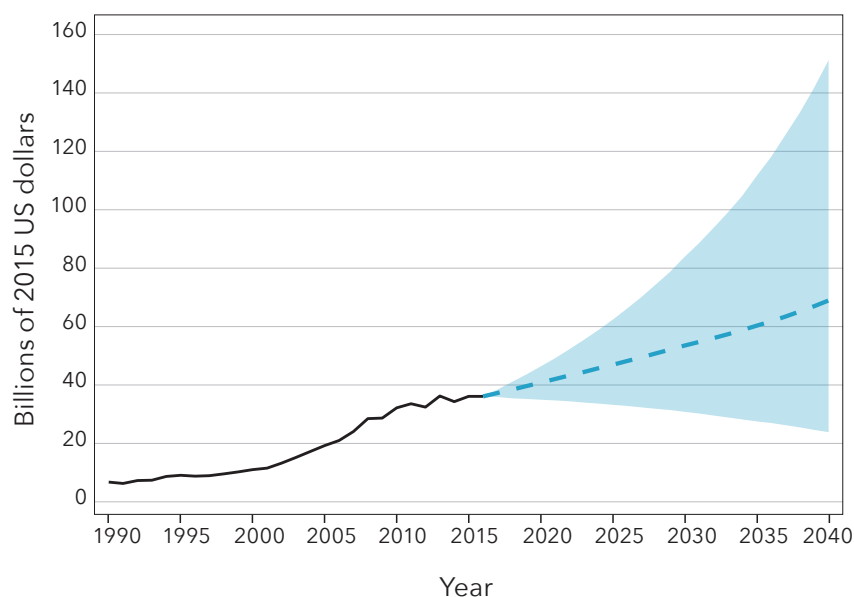
## LOOKING AHEAD: GLOBAL HEALTH FINANCING 2016-2040

The tepid growth in DAH since 2010 suggests that external funding will not continue to grow at the rate seen earlier in the millennium. Figure 48 illustrates our future projection for DAH through 2040, with the dotted line representing the expected growth trajectory based on the growth rate from 1990 to 2015 and expected economic development in high-income countries that provide the majority of DAH. The shaded blue area represents the plausible range of expected change, from -\$12.2 billion to as high as \$114.8 billion. The expected growth trajectory intensifies the need to augment domestic spending on health in some of the poorest countries, and addressing these health financing challenges requires forward-looking policy and planning.

A handful of countries have undertaken fiscal space analyses to explore avenues for generating more resources for the health sector, but very few studies have empirically examined how much governments could potentially spend given expected future income levels. In this study, we estimated expected health spending through 2040, and empirically



**FIGURE 48**  
**Estimating DAH, 2017–2040**



**Note:** DAH projected for each major source through 2040. An ensemble modeling approach was utilized, incorporating more than 381 models, each based on a distinct set of underlying drivers.

**Source:** Financing Global Health Database 2016

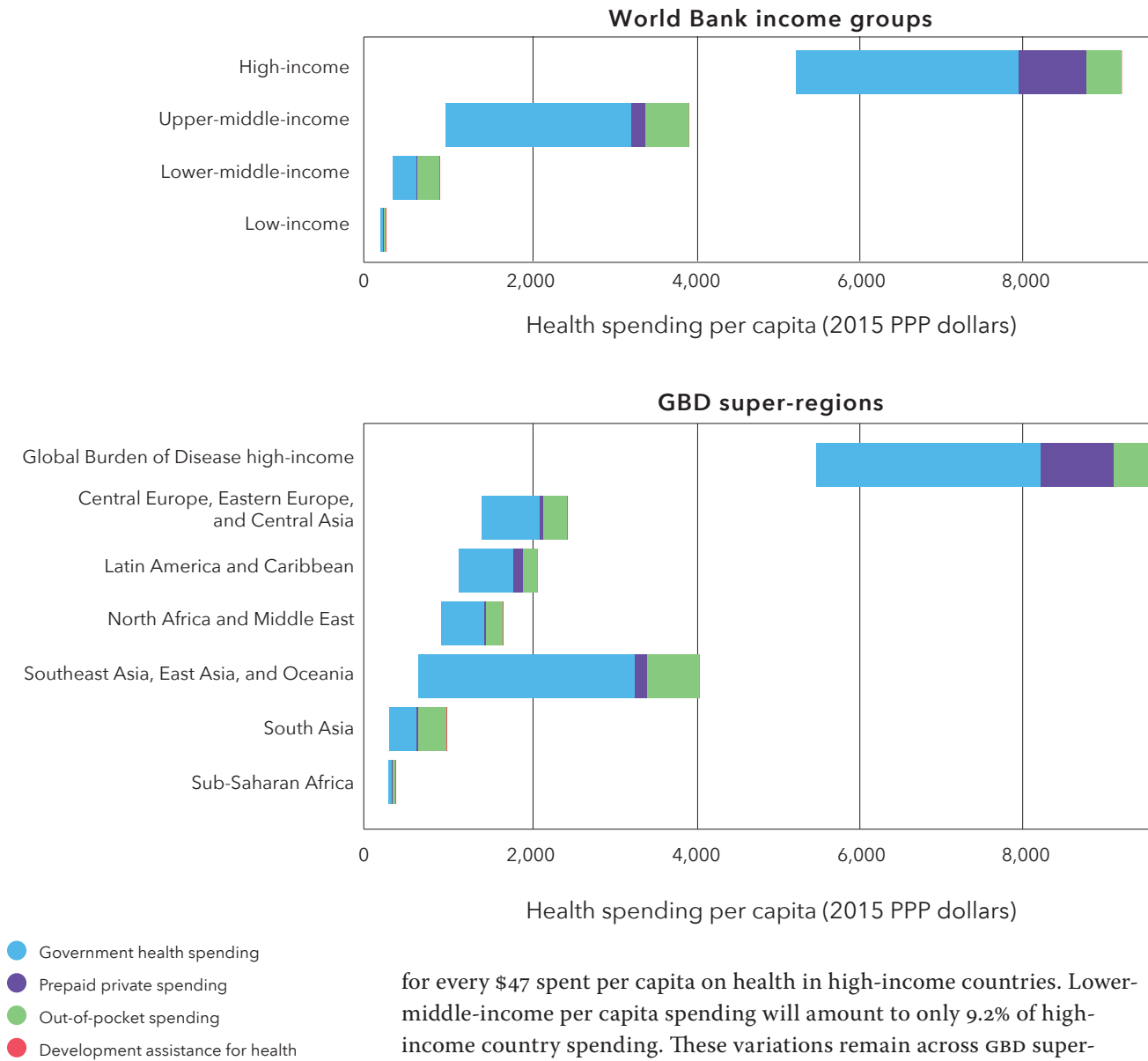
assessed how current health financing trends could be shifted. To produce these estimates, we also estimated expected GDP per capita and all-sector government spending through 2040. We used these data to examine alternative scenarios in health financing to highlight how fiscal policy changes – in government spending generation and the allocation of government resources – could impact future national and government health spending. We identified patterns exhibited by the countries that dedicate the most to health, and used these frontiers to estimate potential health spending for each country.

**ESTIMATES FOR 2040**

*Financing Global Health 2016* estimates show global health spending growing at an annual rate of 3.8% from \$9.2 trillion in 2014 to \$24.2 trillion in 2040. While gains in total health spending and especially government health spending are expected for all countries, expected spending continues to vary substantially by income group and by country. Figure 49 illustrates the health spending variation between low- and high-income countries from 2014 to 2040, grouped by World Bank income group and GBD super-region and disaggregated by source of spending. The groups that already spend the most on health are expected to increase health spending the most, widening the absolute gap between low- and high-income countries. Per capita spending in high-income countries is projected to grow from \$5,221 to \$9,215 (2.2% annually), in upper-middle-income countries from \$914 to \$3,903 (5.8%), in lower-middle-income countries from \$267 to \$844 (4.6%), and in lower-income countries from \$120 to \$195 (2.2%). In 2040, low-income countries will spend an estimated \$1 per capita, on average,

**FIGURE 49**

Total health spending forecast by source, 2014-2040



Source: Financing Global Health Database 2016

for every \$47 spent per capita on health in high-income countries. Lower-middle-income per capita spending will amount to only 9.2% of high-income country spending. These variations remain across GBD super-regions as well.

The share of health spending financed by governments is expected to increase as well. This is true at the global level for all World Bank 2017 income groups and for all Global Burden of Disease (GBD) super-regions. This growth will be most pronounced in upper-middle-income countries where the share of government spending is expected to increase from 57.2% in 2014 to 71.2% in 2040, in line with rising GDPs. Globally, the share of health spending that is financed through OOP payments is expected to decrease from 22.8% in 2014 to 21.4% in 2040. Reductions in the share of health spending that is OOP are expected in 136 of the 184 countries included in this study. Meanwhile, DAH per capita is expected to grow only 50.4%, or \$4, globally, by 2040.

## POTENTIAL HEALTH SPENDING, 2040

To explore alternative policy scenarios capable of generating more health spending in low- and middle-income countries, we estimated different levels of potential health spending in 2040 based on expected 2040 GDP and expected 2040 all-sector government spending for low- and middle-income countries. To generate these alternative policy scenarios, we estimated health spending frontiers. These frontiers represent spending patterns of the countries that are spending the most on health. We mapped each country relative to the frontier based on its 2040 GDP per capita. The data revealed a strong relationship between spending and GDP per capita, although the gaps between the frontier and individual countries suggest that many countries might be able to divert more resources toward health.

If each low- and middle-income country raised health spending to its potential amount, the analysis suggests that low-income countries as a whole could spend 64.3% more on health. Lower-middle- and upper-middle-income countries, overall, could spend 80.7% and 19.9% more if all countries spent as much as their best-performing peers. Across regions, countries in sub-Saharan Africa could expand health spending the most, with a 82.8% increase, followed by South Asia (71.7%) and North Africa and the Middle East (35.7%).

We also estimated potential gains in government health spending. To explore specific policy alternatives, we estimated two frontiers. The first frontier measures the greatest amount of all-sector government spending associated with each level of economic development, while the second frontier measures the greatest amount of health spending associated with each level of all-sector government spending. These alternative scenarios assess the potential gains associated with improving tax policy or tax collection in order to generate more all-sector government spending and potential gains associated with prioritizing health within the government budget.

Table 2 illustrates that while country estimates are distinct, raising government spending, on average, would increase government health spending per capita by \$64 in low-income countries, whereas reprioritization of health would augment government health spending per capita by \$104. Government spending increases would translate into \$526 and \$831 in per capita increases in lower-middle- and upper-middle-income countries, respectively. In contrast, reprioritizing health spending in lower-middle- and upper-middle-income countries would augment government health spending per capita by \$531 and \$3,183, respectively. In sum, in low-income and lower-middle-income countries, increasing all-sector government spending and prioritizing the health sector among other government sectors would lead to roughly similar gains in health spending, on average, although the specific policy that is most productive in generating more government health spending is country-specific.

TABLE 2

Potential total and government health spending for low-income and middle-income countries in 2040

	Total health spending per capita in 2040 (purchasing power parity dollars)		Government health spending per capita in 2040 (purchasing power parity dollars)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
<b>Income level</b>						
Upper-middle income	3,903 (2,770-5,741)	4,638 (3,130-6,180)	2,812 (1,755-4,635)	3,643 (2,055-7,195)	5,955 (4,483-7,746)	7,406 (5,043-10,275)
Lower-middle income	844 (739-1,004)	1,525 (1,108-1,942)	387 (289-545)	826 (440-1,328)	913 (779-1,061)	1,837 (1,131-2,539)
Lower-income	195 (157-258)	321 (255-394)	57 (45-76)	121 (69-198)	161 (132-194)	285 (183-385)
<b>Region</b>						
Central Europe, Eastern Europe, and Central Asia	2,417 (2,252-2,637)	2,511 (2,121-2,999)	1,511 (1,377-1,671)	1,798 (1,301-2,389)	2,370 (1,874-2,866)	3,399 (2,464-4,373)
Latin America and Caribbean	2,047 (1,720-2,494)	2,297 (1,964-2,699)	1,226 (915-1,661)	1,661 (1,220-2,224)	2,298 (1,760-2,894)	2,933 (2,170-3,695)
North Africa and Middle East	1,630 (1,431-1,975)	1,837 (1,470-2,153)	1,045 (856-1,387)	1,261 (839-1,821)	1,753 (1,495-2,075)	2,512 (1,864-3,192)
South Asia	935 (773-1,203)	1,599 (973-2,244)	413 (260-673)	812 (317-1,693)	1,021 (829-1,248)	1,916 (1,048-2,985)
Southeast Asia, East Asia, and Oceania	4,035 (2,640-6,314)	5,080 (3,064-7,000)	2,997 (1,711-5,223)	3,980 (2,023-8,524)	6,382 (4,542-8,659)	8,255 (5,310-11,921)
Sub-Saharan Africa	307 (269-365)	557 (435-656)	119 (102-142)	272 (151-444)	271 (222-335)	556 (356-737)

Note: Range of values included in parentheses.



# Conclusion

Total health spending continued its upward trajectory in 2016, in concert with continued economic growth, especially in middle-income countries. Concurrently, DAH remained flat for the fourth consecutive year. The launch of the Sustainable Development Goals, as well as increased commitments to DAH from some high-income governments, helped to maintain this important means of health system financing.

Access to care and health outcomes are shaped by the amount of resources available, how health care is financed, and the types of services and interventions procured, in addition to the efficiency of the health system. Limited resources for health, and a reliance on out-of-pocket payments for health financing, curb access to health services and increase the likelihood that illness translates into impoverishment. In general, the health financing transition shows that as countries develop, more resources are spent per capita on health and less of total health spending is out-of-pocket. However, tremendous variation exists in health financing systems and health spending levels across countries, and even within income groups.

Economic development plays an important and complex role in health spending. We have seen that it can lead to more all-sector government spending and also to more government health spending, and when it is well-managed it can allow for more equitable access to health care. Our estimates show future total health spending unequivocally rising with a rising global GDP, but we also see the gaps, in absolute terms, growing between low- and high-income countries, and within income groups.

Our analysis illustrates that while many lower-middle-income countries could increase government spending, the best strategy for doing so depends on the country context. In some countries, generating more government spending through improved tax collection or policy would lead to the most sizable increase in government spending on health. In other countries, reprioritization of government spending toward the health sector will be the key approach to increasing government health spending. Despite expected and potential increases in spending, it remains likely that in some countries this spending will be insufficient to meet complex health needs, suggesting an important role for DAH in years to come.

With the world's population predicted to reach 8.9 billion by 2050, and 49% of that population living in what is currently considered a low- or lower-middle-income country, a global perspective on providing resources for health for the poorest is imperative. While domestic policy changes could and should lead to increased government health spending and help bridge financing gaps, for the poorest countries, external support may remain vital. Decision-makers and global health advocates will be pressed to look beyond their own borders, analyze best practices, identify health financing gaps, mobilize funds, and use funds efficiently to achieve the SDGs and push toward the universal health coverage goal. To this end, measuring and assessing global health financing trends, both retrospectively and prospectively, is of the utmost importance.





# References

1. Global Burden of Disease Financing Global Health Collaborator Network. Evolution and patterns of global health financing 1995–2014: development assistance for health, and government, prepaid private, and out-of-pocket health spending in 184 countries. *The Lancet*. April 2017.
2. Global Burden of Disease Financing Global Health Collaborator Network. Future and potential spending on health 2015–2040 by government, prepaid private, out-of-pocket, and donor financing for 184 countries. *The Lancet*. April 2017.
3. Wexler A, Kates J. The U.S. Global Health Budget: Analysis of the Fiscal Year 2017 Budget Request. The Henry J. Kaiser Family Foundation. 2016; published online March 22. <http://kff.org/global-health-policy/issue-brief/the-u-s-global-health-budget-analysis-of-the-fiscal-year-2017-budget-request/> (accessed March 29, 2017).
4. UK steps up investments in global fight to end malaria - GOV.UK. <https://www.gov.uk/government/news/uk-steps-up-investments-in-global-fight-to-end-malaria> (accessed March 29, 2017).
5. Munir K, Freund M. (2016), *German Development Cooperation's Contribution to Global Health*, German Institute for Development Evaluation (DEval), Bonn. [https://www.deval.org/files/content/Dateien/Evaluierung/Berichte/2016\\_DEval\\_GDC%20Health%20Portfolio%20Analysis.pdf](https://www.deval.org/files/content/Dateien/Evaluierung/Berichte/2016_DEval_GDC%20Health%20Portfolio%20Analysis.pdf)
6. Munir K, Worm I. Health systems strengthening in German development cooperation: making the case for a comprehensive strategy. *Globalization and Health* 2016; 12: 81.
7. French bilateral aid. France Diplomatie : Ministry of Foreign Affairs and International Development. <http://www.diplomatie.gouv.fr/en/french-foreign-policy/development- assistance/ french-assistance-institutional/ french-assistance-delivery/article/ french-bilateral-aid> (accessed March 30, 2017).
8. Nino FS. Sustainable Development Goals. United Nations Sustainable Development. <http://www.un.org/sustainabledevelopment/health/> (accessed March 29, 2017).
9. Explosion: The Latest Evidence That Silicon Valley Giving Is Going Totally Nuts. Inside Philanthropy. <https://www.insidephilanthropy.com/home/2017/2/15/explosion-the-latest-evidence-that-silicon-valley-giving-is-going-totally-nuts> (accessed March 29, 2017).
10. Mike Bloomberg. Bloomberg Philanthropies. <https://www.bloomberg.org/about/mike-bloomberg/> (accessed March 29, 2017).
11. The Parker Foundation. Parker.org. <http://parker.org> (accessed March 29, 2017).
12. Gavi's strategy, phase IV (2016-20). <http://www.gavi.org/about/strategy/phase-iv-2016-20/> (accessed March 30, 2017).
13. Google & Gavi partner to scale up high-tech innovations for vaccine delivery. <http://www.gavi.org/library/news/press-releases/2017/google-and-gavi-partner-to-scale-up-high-tech-innovations-for-vaccine-delivery/> (accessed March 31, 2017).
14. Norway strengthens commitment to immunisation in developing countries. <http://www.gavi.org/library/news/press-releases/2016/norway-strengthens-commitment-to-immunisation-in-developing-countries/> (accessed March 29, 2017).
15. <http://www.gavi.org/library/news/press-releases/2017/google-and-gavi-partner-to-scale-up-high-tech-innovations-for-vaccine-delivery/>
16. Luxembourg Secures Commitment to Global Fight against AIDS, TB and Malaria. <https://www.theglobalfund.org/en/news/2016-11-15-luxembourg-secures-commitment-to-global-fight-against-aids-tb-and-malaria/> (accessed March 29, 2017).
17. African Countries Step Up Contributions to the Global Fund. <https://www.theglobalfund.org/en/news/2016-09-16-african-countries-step-up-contributions-to-the-global-fund/> (accessed March 29, 2017).
18. The World Bank's Fund for the Poorest. International Development Association. <http://ida.worldbank.org/sites/default/files/images/fund-for-the-poorest.pdf> (accessed March 29, 2017).
19. IDA 101: World Bank's Fund for the Poorest Takes on Issues for the Global Good. <http://www.worldbank.org/en/news/vid-eo/2016/12/08/podcast-ida-101> (accessed March 30, 2017).
20. Bloomberg Philanthropies to Donate Additional \$25 Million to End Polio. Bloomberg Philanthropies. <https://www.bloomberg.org/press/releases/bloomberg-philanthropies-donate-additional-25-million-end-polio/> (accessed March 28, 2017).
21. Bloomberg Philanthropies Announces New Collaboration on Groundbreaking Global Family Planning Initiative. Bloomberg Philanthropies. <https://www.bloomberg.org/press/releases/bloomberg-philanthropies-announces-new-collaboration-on-groundbreaking-global-family-planning-initiative/> (accessed March 28, 2017).
22. Transition process. Gavi, the Vaccine Alliance. <http://www.gavi.org/support/sustainability/transition-process/> (accessed March 28, 2017).
23. World Health Organization, WHO certifies Sri Lanka malaria-free. SEARO. <http://www.searo.who.int/mediacentre/releases/2016/1631/en/> (accessed March 30, 2017).
24. Failing Drugs and Super Bugs: The Race to Eliminate Malaria. <https://www.theglobalfund.org/en/blog/2017-02-08-failing-drugs-and-super-bugs-the-race-to-eliminate-malaria/> (accessed March 29, 2017).
25. Posted by Jeff Meer on September 6 2011 at 1:00pm, Blog V. Could NCD Advocacy Hurt Global Health Funding? [http://dialogue4health.ning.com/profiles/blogs/will-funding-for-global-ncd-prevention-and-treatment-be-additive?xg\\_source=activity](http://dialogue4health.ning.com/profiles/blogs/will-funding-for-global-ncd-prevention-and-treatment-be-additive?xg_source=activity) (accessed March 29, 2017).







# Methods

The estimates found in *Financing Global Health 2016* were produced through data collation, processing, and analysis conducted throughout 2016. A range of accounting methods and statistical models are used to harness budgetary, expenditure, and other data from numerous sources. This section briefly outlines the process deployed to generate DAH and GHES estimates. For a more in-depth description of the data and methodology, please refer to our online Methods Annex, available at <http://www.healthdata.org/policy-report/financing-global-health-2016-development-assistance-public-and-private-health-spending>.

Throughout 2016, IHME compiled and collated data from the sources and channels discussed in this report. Our objective was to track all disbursements that aimed to improve health in low- and middle-income countries from 1990 to 2016. Government documents, annual reports, audited financial statements, and data from public and private organizations were used to generate DAH estimates. For several channels, correspondence with organizational representatives augmented publically available data.

Because accounting processes can be lengthy, some organizations were not able to report on disbursements for the previous two years. To estimate flows for organizations without up-to-date spending information, we relied on budgets, revenues, commitments, appropriations, and macroeconomic data. These were used to model the most recent years. This ensured that we were able to estimate preliminary DAH by source, channel, and health focus area for 2015 and 2016.

Removing double-counting is another core component of the process. Global health organizations frequently transfer funds among themselves. Since these funding flows are reported by both the entity from which funds originate and the recipient organization, double-counting is common in the data.

Disentangling the funds that flow to each of the health focus and program areas assessed in *Financing Global Health 2016* also required substantial processing and analysis. Project-level sector and theme codes and keyword searches of project titles and descriptions were used to classify funding. All DAH from the Joint United Nations Programme on HIV/AIDS (UNAIDS) was considered funding for HIV/AIDS. Funding from the United Nations Children's Fund (UNICEF) was classified as DAH for newborn and child health. For projects that span two or more health focus areas, funding was divided according to weights based on the number of keywords associated with each health focus area.

Government health expenditure as source (GHES) through 2014 was also estimated for *Financing Global Health 2016*. GHES relies on data from the World Health Organization (WHO), which regularly publishes estimates of health expenditure in the Government Health Observatory database. These spending figures capture government spending on health sourced from both domestic and international pools. IHME subtracted estimates of DAH channeled to governments to produce government health expenditure as source, and DAH channeled to non-governments from prepaid private insurance for all low- and middle-income countries. Finally, we ran multiple imputations on the incomplete data set to produce a complete, rectangular data set with the health expenditure variables.

## HEALTH SPENDING AND ECONOMIC DEVELOPMENT TRENDS

To model total health spending and the share that each of its source components – GHES, out-of-pocket (OOP), prepaid private (PPP), and DAH – contribute to the total, we used separate multivariate penalized spline regressions to allow for flexible and nonlinear model fits. Total health spending was natural log transformed, while its components were modeled as a share of total health spending and then center log-ratio transformed. Each of these five spline regressions used the natural log of gross domestic product (GDP) per capita and time as the independent variables. The underlying data, 184 countries and 20 years of data, was bootstrapped 1,000 times. All regressions were completed independently on each of the 1,000 bootstrapped samples. This approach provided 1,000 regressions for each of the five outcome variables. Predictions were then made for each respective outcome variable for all values of GDP per capita observed in the data, holding the year constant at 2014. This provided 1,000 predictions of each outcome variable at every value of GDP per capita. For each of our five outcomes, the mean of its respective 1,000 estimated values was taken as our modeled value at every observed value of GDP per capita, while the 97.5 and 2.5 percentiles of these modeled values were taken as the uncertainty intervals.

## FORECASTING HEALTH SPENDING 2015-2040

We used a time-varying ensemble forecasting methodology in order to predict health expenditure variables. Using out-of-sample predictive validity based on five years, we picked the best country and time specific sub-models in the first five years (2015-2019), while the sixth year and onwards used the same set of sub-models for each country. The sub-models were all based on linear mixed effect models, while the ensemble was constructed by cycling over the inclusion of covariates and model specifications, for example, the orders of autoregressive terms. The final set of forecasts across all of the variables we predicted included a total of 2,833 sub-models.

We predicted total health spending by using a components-based forecasting architecture. Given that the total was made up of four components (GHES, OOP, PPP and DAH), we forecasted each of the four components first, starting with DAH received and disbursed, which fed into the forecasting sub-models of GHES, OOP and PPP. Finally, we added up the four forecasted components to get total health spending from 2015 through 2040.

## POTENTIAL HEALTH SPENDING

Frontier analysis is an econometric method for determining the efficiency with which a country (or other unit) produces an output. By benchmarking the country's performance against the observed performance of others, the frontier describes the maximum potential output that one could achieve. In this report, we used frontier analysis in two ways: 1) to describe the potential total health spending a country could achieve given their level of GDP per capita, and 2) to describe the potential government health spending a country could achieve under different policy scenarios. The policy scenarios include increasing general government expenditure, prioritizing health at the current level of general government expenditure, and doing both. All variables were log-transformed for the frontier analysis. After testing alternative methods, we used a stochastic frontier assuming a half-normal distribution for the inefficiency term.



## Tabulated data

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TABLE B1

## DAH by channel of assistance, 1990-2016

Channel	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>BILATERAL AID AGENCIES</b>												
Australia	14.12	16.62	84.11	75.88	111.16	118.22	145.40	60.44	63.02	105.14	179.47	115.68
Austria	38.87	11.42	9.53	33.18	26.93	19.50	13.63	64.66	25.59	129.45	41.81	10.52
Belgium	121.60	86.38	107.53	114.18	87.40	81.38	92.62	91.17	92.55	95.64	92.60	97.85
Canada	49.11	39.49	42.45	50.37	86.00	139.18	67.93	35.52	51.01	32.27	70.26	109.41
Denmark	47.33	110.69	165.57	121.90	56.00	49.92	127.80	126.46	73.35	112.93	22.59	30.46
Finland	71.63	45.81	35.09	23.37	21.77	12.45	18.86	12.84	16.07	19.62	17.04	26.85
France	782.73	346.37	295.60	246.69	363.24	428.18	352.33	290.96	338.51	247.58	173.10	231.76
Germany	115.07	128.36	191.83	213.80	343.87	453.01	333.09	403.82	313.93	261.62	146.62	190.90
Greece	-	-	-	-	-	7.89	7.75	10.40	11.75	5.27	6.00	8.07
Ireland	3.10	3.30	4.33	-	8.61	27.18	26.69	-	25.58	23.25	32.64	41.62
Italy	201.85	231.96	170.26	123.36	55.33	63.76	90.50	34.41	21.11	57.84	69.57	35.44
Japan	386.64	377.01	374.06	667.87	503.52	552.41	371.83	542.74	330.01	518.06	467.80	426.61
Luxembourg	-	-	7.69	7.70	-	15.18	14.90	26.24	30.14	22.29	26.88	35.70
Netherlands	130.42	67.38	226.80	109.23	114.86	169.87	212.20	116.02	155.44	158.72	143.22	191.33
Norway	34.68	29.84	107.81	11.59	49.81	92.44	48.63	47.49	56.89	125.10	46.31	191.79
New Zealand	-	4.23	3.26	2.55	3.42	3.28	0.05	0.00	7.06	8.05	5.93	6.07
Portugal	-	-	3.45	0.13	7.32	11.15	13.61	16.74	11.73	13.90	9.21	11.47
South Korea	-	2.10	4.01	5.73	1.60	7.88	1.92	54.49	37.76	149.46	84.75	65.82
Spain	8.52	34.39	146.98	115.37	55.48	171.46	271.18	131.48	152.21	141.83	159.84	134.27
Sweden	267.33	153.09	184.09	208.09	111.69	147.40	133.66	122.39	70.19	92.86	101.15	105.65
Switzerland	66.51	44.29	27.36	21.07	40.74	19.03	27.72	56.78	32.06	48.30	38.53	33.18
United Kingdom	103.13	104.56	263.03	120.71	109.98	70.84	128.78	172.24	284.80	429.60	721.01	277.15
United States	1,461.93	1,360.54	1,251.62	1,149.73	1,725.85	1,808.43	1,322.09	1,410.64	1,389.32	1,664.67	1,686.70	1,919.31
European Commission (EC) <sup>1</sup>	8.34	18.04	83.40	73.82	22.50	118.82	153.43	71.90	118.35	156.15	158.73	152.09
<b>UNITED NATIONS</b>												
Joint United Nations Programme on HIV/AIDS (UNAIDS)	-	-	-	-	-	-	84.30	82.89	93.50	92.09	142.83	139.64
United Nations Population Fund (UNFPA)	388.99	376.46	324.79	317.24	459.55	450.16	429.16	421.94	445.03	438.32	412.66	403.47
United Nations Children's Fund (UNICEF)	241.77	233.98	301.77	294.76	314.09	307.67	277.26	272.59	287.96	283.62	347.38	498.07
World Health Organization (WHO)	1,183.32	1,145.20	1,127.39	1,101.19	1,238.32	1,213.02	1,019.45	1,002.29	1,106.38	1,089.71	1,351.19	1,321.08
Pan American Health Organization (PAHO)	177.26	171.55	176.55	172.44	180.76	177.07	167.57	164.75	190.33	187.46	188.95	184.73
<b>PUBLIC-PRIVATE PARTNERSHIPS</b>												
Gavi, the Vaccine Alliance	-	-	-	-	-	-	-	-	-	-	3.48	177.22
Global Fund to Fight AIDS, Tuberculosis and Malaria	-	-	-	-	-	-	-	-	-	-	-	-
<b>NGOs &amp; FOUNDATIONS</b>												
Bill & Melinda Gates Foundation	-	-	-	-	-	-	-	-	-	103.58	336.18	275.81
Other foundations <sup>2</sup>	61.44	65.98	99.20	121.56	108.42	106.47	114.36	110.88	126.11	139.73	224.08	194.29
Non-governmental organizations (NGOs)	476.43	687.22	943.34	973.90	1,124.46	1,110.23	1,057.59	1,172.13	1,316.00	1,509.45	1,724.61	1,890.62

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*
120.56	139.04	147.60	150.19	193.99	201.63	197.89	223.00	296.84	386.29	466.30	383.69	269.47	213.34	154.89
15.69	21.77	30.68	28.99	18.39	29.97	53.08	38.79	61.41	82.00	116.03	54.12	39.33	75.10	75.61
100.10	121.92	105.17	83.79	109.49	138.41	211.35	201.55	181.40	184.75	127.58	134.26	145.14	121.28	123.85
85.71	201.41	237.29	382.70	215.88	345.32	364.95	300.04	490.88	481.42	454.56	429.83	329.51	313.13	295.92
38.57	69.98	86.81	101.39	132.26	135.64	103.14	143.34	143.64	117.36	131.23	77.05	100.86	188.77	208.64
25.55	34.39	12.82	27.55	48.73	26.37	22.58	19.33	15.20	10.38	11.43	8.83	24.77	17.56	14.02
279.40	272.16	422.40	377.23	360.76	212.73	483.06	426.48	524.93	218.10	187.99	636.99	579.86	473.76	520.29
279.73	320.97	337.92	286.25	586.35	461.34	526.35	574.28	517.32	454.20	536.34	860.16	518.88	591.25	652.00
5.23	29.54	30.92	42.54	41.43	43.25	14.41	25.46	7.56	3.17	2.54	0.43	0.52	28.57	33.35
99.00	128.10	137.20	142.93	203.19	181.08	105.90	79.03	74.66	76.22	71.66	84.45	75.04	85.97	90.16
98.67	85.51	67.38	124.56	124.62	136.17	163.87	139.03	100.92	103.53	39.90	46.30	41.68	79.84	93.70
436.28	438.66	734.22	355.20	394.49	412.13	356.66	292.85	408.48	419.22	627.74	262.97	417.69	308.39	305.92
37.13	35.29	37.33	35.68	43.56	49.19	31.70	29.95	45.03	33.22	30.14	40.74	32.80	28.74	31.04
247.72	297.61	254.41	280.96	328.13	285.05	284.84	221.52	187.96	220.48	263.30	119.11	144.92	133.91	101.76
151.21	171.18	145.63	269.34	184.31	214.97	196.93	207.99	134.81	115.54	176.63	151.54	128.95	113.88	123.64
5.18	11.42	11.89	20.51	18.39	16.56	18.89	17.98	27.55	22.65	27.14	20.71	9.95	13.83	13.63
11.49	11.49	13.71	13.50	13.57	12.73	10.25	8.21	11.00	15.43	14.60	15.77	19.61	13.63	12.68
58.55	36.68	74.98	117.97	50.05	132.19	307.68	173.80	160.69	168.52	213.94	337.91	292.88	308.66	312.65
132.10	148.27	160.52	194.97	170.66	276.33	266.99	358.12	143.54	106.08	27.78	33.56	55.34	46.85	49.67
97.76	132.53	155.26	258.21	321.74	288.87	230.82	158.62	116.97	93.93	198.11	132.08	101.07	116.13	112.45
47.26	54.95	56.73	61.16	34.28	43.17	49.92	44.07	42.29	55.26	56.58	105.58	105.40	102.65	100.31
552.09	508.41	510.75	758.68	1,046.20	974.07	958.23	961.27	1,054.72	1,219.60	1,256.10	1,617.81	1,575.29	1,636.95	1,612.44
2,717.45	3,108.37	3,523.71	3,646.92	4,560.83	5,384.38	6,804.72	5,640.12	5,284.26	6,664.01	5,157.84	5,807.42	5,838.76	6,007.70	5,787.04
167.98	272.11	224.41	545.23	743.11	733.31	814.33	627.56	519.14	644.04	512.33	561.29	563.74	581.56	581.43
121.87	119.49	194.05	188.00	255.03	248.42	289.22	287.04	317.99	311.56	275.35	300.87	290.62	285.61	284.21
448.66	439.89	523.49	507.18	574.73	648.84	776.20	878.13	893.22	876.01	838.24	903.54	857.43	805.41	678.04
469.78	464.42	541.10	727.49	435.28	589.86	548.76	576.18	921.12	1,147.76	1,003.73	1,187.61	1,135.88	1,133.97	1,234.56
1,406.15	1,378.65	1,731.19	1,677.23	1,714.63	1,670.19	1,994.56	1,979.52	2,238.03	2,196.36	1,894.69	2,046.90	2,055.06	2,636.51	2,194.65
175.66	172.26	176.24	170.88	221.95	214.14	201.00	199.48	244.94	238.03	235.11	234.12	253.16	250.98	280.59
151.39	231.11	254.77	361.73	293.43	1,031.67	808.53	591.60	857.03	885.67	1,173.93	1,650.71	1,477.78	1,854.71	1,856.41
17.63	319.54	826.89	1,327.94	1,603.39	1,991.97	2,595.35	3,099.23	3,536.56	3,077.01	4,054.42	4,258.88	3,150.96	3,429.30	3,723.65
354.61	579.03	348.56	495.05	711.02	918.24	1,392.42	1,303.57	1,198.30	1,415.11	1,420.74	1,469.98	1,534.86	1,669.36	1,819.60
198.59	198.34	175.45	185.82	206.77	213.46	256.59	317.41	268.72	237.99	239.91	323.03	442.82	458.50	499.73
2,066.99	2,279.73	2,759.76	3,398.56	3,644.88	4,442.15	6,150.62	7,236.59	9,233.20	9,539.58	9,820.60	10,536.20	11,019.37	10,995.06	10,822.69

TABLE B1

## DAH by channel of assistance, 1990-2016, continued

Channel	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>WORLD BANK</b>												
International Bank for Reconstruction and Development (IBRD)	188.22	250.67	319.48	634.92	777.34	650.93	1,010.25	1,169.70	1,417.90	801.99	929.23	922.17
International Development Association (IDA)	303.72	187.67	321.65	383.82	637.72	622.06	675.77	624.15	747.08	852.14	913.98	1,142.35
<b>REGIONAL DEVELOPMENT BANKS</b>												
African Development Bank (AfDB)	71.24	68.94	67.40	65.84	102.56	79.23	80.93	101.05	67.86	66.84	48.85	45.86
Asian Development Bank (ADB)	27.95	41.31	56.25	60.83	65.73	54.68	58.55	85.36	119.13	234.18	77.97	118.41
Inter-American Development Bank (IDB)	35.38	53.91	62.16	86.49	96.75	106.21	141.27	175.75	196.86	186.01	202.03	203.79
<b>TOTAL</b>	<b>7,068.62</b>	<b>6,498.76</b>	<b>7,589.85</b>	<b>7,709.31</b>	<b>9,012.79</b>	<b>9,466.61</b>	<b>9,093.07</b>	<b>9,283.31</b>	<b>9,822.55</b>	<b>10,604.72</b>	<b>11,405.18</b>	<b>11,966.54</b>

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*
866.09	1,561.63	776.61	648.58	666.07	820.04	646.42	858.29	1,899.61	1,737.02	1,030.59	1,229.24	564.74	537.45	837.63
1,194.51	1,017.23	1,488.18	1,333.36	1,087.82	960.00	698.32	1,015.28	914.33	1,081.45	907.35	1,063.89	768.75	917.69	1,084.20
88.20	46.02	98.26	162.14	99.13	96.36	116.87	84.68	112.42	107.56	112.51	72.39	94.25	96.45	99.36
117.96	112.66	145.13	379.45	402.87	376.81	372.92	375.21	374.84	279.02	255.96	235.88	205.28	106.79	99.65
221.04	265.53	473.58	320.01	158.24	172.10	184.31	174.00	139.95	138.44	163.37	559.00	716.59	801.50	689.36
13,709.55	15,837.30	18,032.99	20,189.85	22,019.64	25,129.08	29,610.64	29,888.59	33,701.42	35,163.96	34,134.30	37,994.84	35,979.05	37,580.75	37,611.43

\*2015 and 2016 are preliminary estimates.

**Notes:** All figures are in millions of US dollars. Development assistance for health (DAH) includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries. This table disaggregates DAH by the institutional channel through which DAH flowed to low- and middle-income countries. Dashes indicate inapplicable.

Source: Financing Global Health Database 2016

1 Includes funds from the European Development Fund and the European Commission budget.

2 Only includes organizations incorporated in the United States.

TABLE B2

## DAH by source of funding, 1990-2016

Funding source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>NATIONAL TREASURIES</b>												
Australia	43.75	36.62	108.56	102.64	164.51	154.15	197.09	100.75	91.55	158.56	221.23	156.75
Austria	46.13	17.72	18.67	44.60	45.95	34.50	23.18	82.80	36.70	144.91	58.22	25.78
Belgium	143.05	107.23	131.99	133.98	111.72	124.70	135.31	117.12	122.07	127.89	140.50	150.84
Canada	139.58	119.75	118.69	127.11	193.03	219.62	144.42	125.18	123.98	123.36	161.22	184.14
Denmark	114.42	175.01	238.18	192.59	149.72	136.38	249.86	236.60	153.53	183.01	99.50	108.38
Finland	132.52	105.34	61.62	49.02	52.31	40.48	55.22	44.86	46.37	51.32	51.72	64.06
France	853.49	418.67	388.49	339.74	521.25	562.45	528.55	391.13	451.25	363.57	295.44	379.15
Germany	251.18	251.05	347.15	370.16	603.32	721.83	564.84	576.96	507.60	474.77	406.75	476.29
Greece	1.72	1.67	1.62	1.58	2.31	10.50	15.71	14.94	16.88	10.17	11.78	14.61
Ireland	4.46	4.71	6.83	2.22	13.15	33.15	34.97	5.48	32.65	30.74	44.77	56.83
Italy	267.21	305.03	256.39	205.73	157.87	172.93	237.08	90.68	120.44	167.08	157.81	184.23
Japan	608.82	575.62	600.81	942.39	747.84	942.73	583.11	910.59	644.13	901.89	914.00	913.41
Luxembourg	1.48	1.45	10.61	10.45	4.34	20.37	21.54	32.71	35.51	27.11	38.59	49.09
Netherlands	233.38	163.20	351.58	256.77	198.81	277.34	359.53	284.42	329.90	314.43	453.55	500.71
New Zealand	1.83	6.06	5.24	4.60	60.59	57.86	2.92	2.82	11.02	12.53	9.69	10.32
Norway	133.54	124.05	192.77	91.48	105.51	141.74	159.33	146.87	136.83	209.10	145.62	330.36
Portugal	1.03	1.25	5.72	2.31	10.75	14.60	17.66	21.44	16.68	18.50	16.59	17.14
South Korea	1.14	3.29	6.22	7.99	8.04	14.44	12.59	64.40	54.76	169.92	103.48	85.91
Spain	18.75	46.33	168.12	133.75	79.15	204.97	307.95	155.91	192.20	186.87	204.96	196.49
Sweden	403.85	284.05	321.82	348.71	225.02	255.02	238.99	216.15	152.16	178.53	188.08	187.99
Switzerland	103.43	80.94	62.73	61.94	104.84	71.03	74.86	106.74	55.86	142.12	69.39	64.95
United Kingdom	214.86	207.18	382.03	220.13	238.30	208.94	264.79	330.01	472.61	566.85	1,051.78	645.10
United States	1,970.14	1,955.58	2,072.30	1,913.15	2,615.26	2,603.80	2,126.13	2,196.68	2,192.64	2,532.59	2,739.78	3,091.34
Other	126.86	125.38	162.99	159.20	215.08	210.68	114.91	112.97	350.21	353.60	110.48	100.21
<b>PRIVATE PHILANTHROPY</b>												
Bill & Melinda Gates Foundation	-	-	-	-	-	-	-	-	-	115.87	401.71	529.33
Corporate donations	47.27	54.74	69.74	85.20	112.13	105.58	119.15	130.74	145.16	152.04	139.00	202.16
Other	344.54	388.67	563.27	615.84	658.77	670.36	704.26	764.19	989.06	1,066.41	1,298.47	1,287.75
Debt repayments	205.78	270.94	347.47	679.80	933.47	810.07	1,164.76	1,310.32	1,556.68	939.72	1,109.88	1,152.47
Other <sup>1</sup>	312.78	302.70	194.13	189.62	238.83	233.95	140.81	138.44	168.45	165.91	191.73	193.97
<b>UNALLOCABLE</b>	341.62	364.54	394.11	416.62	440.94	412.44	493.56	571.39	615.66	715.35	569.44	606.76
<b>TOTAL</b>	7,068.63	6,498.76	7,589.85	7,709.31	9,012.79	9,466.61	9,093.06	9,283.31	9,822.55	10,604.72	11,405.18	11,966.54



2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*
159.16	178.96	205.72	274.87	274.06	297.53	341.60	395.35	613.68	799.96	886.68	787.51	616.78	443.33	419.67
34.69	43.56	57.89	71.00	60.35	75.39	97.81	87.78	111.74	138.13	168.58	107.38	78.88	117.76	116.43
160.80	174.22	226.07	193.65	236.53	250.16	375.49	381.04	367.14	383.16	302.16	321.78	340.65	260.34	243.13
252.65	376.29	505.60	824.08	485.76	646.13	667.11	759.98	1,126.33	1,200.86	1,199.40	1,297.79	1,004.62	899.98	970.15
121.18	153.61	192.94	221.63	246.92	264.48	251.10	310.77	359.24	335.81	325.60	283.45	517.35	536.24	491.74
69.28	76.68	69.99	88.32	117.09	107.06	117.83	115.92	167.61	140.66	127.71	198.21	171.93	102.17	37.95
464.01	575.16	669.39	806.17	1,067.36	880.20	1,303.83	1,126.94	1,344.49	975.49	1,064.47	1,581.92	1,227.38	1,032.68	1,264.66
600.82	594.05	667.21	692.08	997.91	964.97	1,196.73	1,318.64	1,239.84	1,227.95	1,224.30	1,727.39	1,265.67	1,257.51	1,476.06
12.85	39.59	40.78	59.49	64.99	65.79	40.44	47.59	22.01	16.29	12.65	10.48	52.32	79.78	80.98
129.28	164.28	181.96	201.92	296.88	315.22	254.38	194.69	173.59	153.51	137.55	170.40	209.54	198.17	193.82
234.03	295.28	233.27	500.68	455.19	498.91	564.24	335.28	314.82	322.31	272.52	331.60	280.78	282.42	265.33
695.84	841.28	1,233.00	813.47	933.29	765.81	772.25	872.87	1,103.09	952.24	1,491.75	784.46	1,050.28	772.39	867.64
55.96	54.27	64.54	60.33	78.38	88.50	90.62	88.54	100.83	83.28	71.79	96.11	81.61	64.86	53.33
502.51	585.58	543.40	599.60	702.97	731.33	821.80	745.56	673.87	717.77	636.35	643.11	583.96	587.49	541.43
12.55	18.86	22.67	32.40	30.69	29.04	32.07	33.52	52.04	47.14	48.17	49.90	43.15	34.94	27.65
352.35	378.90	421.74	539.88	442.66	593.65	608.77	675.06	626.99	675.24	702.00	821.87	767.36	746.70	811.58
21.06	22.02	24.16	28.55	29.35	30.92	26.57	29.40	31.98	35.23	29.08	32.42	34.15	27.53	20.94
88.61	55.38	121.30	140.33	86.98	184.89	379.53	259.14	216.11	227.80	310.21	453.84	418.61	433.18	414.42
193.15	222.64	261.54	313.64	380.92	540.75	779.62	980.71	623.12	385.47	150.86	168.48	159.04	141.85	166.12
196.21	240.99	414.03	558.86	610.57	637.12	661.53	564.96	564.21	615.05	672.15	732.22	609.92	557.03	382.60
84.24	158.76	95.18	101.96	126.30	93.43	118.98	201.38	140.20	199.43	152.27	273.69	318.15	234.14	193.23
881.73	973.95	1,020.60	1,475.82	1,819.33	2,175.41	1,853.09	1,986.79	2,579.87	2,681.65	3,156.62	3,808.71	3,896.25	4,460.04	4,085.61
4,189.31	4,382.41	5,540.55	5,538.96	6,335.70	7,802.74	9,975.63	10,220.01	11,592.14	13,223.50	11,810.69	13,061.40	13,047.83	13,454.14	12,771.57
85.49	88.81	136.16	154.53	182.47	231.79	302.31	283.77	235.80	272.37	268.52	389.51	419.96	751.39	1,331.91
489.29	662.94	465.83	782.90	923.27	1,222.27	1,963.17	1,666.07	1,737.02	2,107.53	2,131.18	2,235.37	2,229.30	2,749.20	2,916.22
224.06	277.71	388.57	483.22	426.76	483.59	753.96	624.50	531.39	570.51	512.78	657.08	579.95	687.21	690.56
1,255.95	1,387.10	1,522.42	1,889.63	2,121.18	2,215.29	2,649.17	2,727.11	3,095.29	3,062.69	3,186.69	3,277.80	3,030.62	3,145.62	3,095.62
1,215.50	1,845.32	1,139.47	1,111.13	908.02	1,165.84	815.23	1,176.08	2,229.22	2,013.29	1,359.71	1,642.84	756.64	1,336.14	837.63
213.48	247.44	304.99	309.59	439.81	627.47	672.72	540.47	520.08	482.83	523.11	574.01	557.17	485.22	1,321.81
713.49	721.24	1,262.02	1,321.16	1,137.95	1,143.41	1,123.06	1,138.68	1,207.70	1,116.80	1,198.75	1,474.13	1,629.20	1,701.31	1,521.67
13,709.55	15,837.29	18,032.99	20,189.85	22,019.64	25,129.08	29,610.64	29,888.59	33,701.42	35,163.96	34,134.30	37,994.84	35,979.05	37,580.74	37,611.43

\*2015 and 2016 are preliminary estimates.

1 Includes private contributions through foundations and NGOs

**Notes:** All figures are in millions of 2015 US dollars. Development assistance for health (DAH) includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries. This table disaggregates DAH by primary funding source. Dashes indicate inapplicable.

Source: Financing Global Health Database 2016

**TABLE B3****DAH by focus region, 1990-2014**

Recipient region	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sub-Saharan Africa	1,543.12	1,494.18	1,581.55	1,040.63	1,388.46	1,321.53	1,487.46	1,459.50	1,451.89	1,619.33	1,737.40
North Africa and Middle East	151.00	282.57	363.93	349.71	317.79	412.63	407.34	346.26	394.64	368.53	376.42
South Asia	863.95	523.92	922.31	525.74	962.94	719.12	907.02	789.89	790.62	1,069.95	999.76
Southeast Asia, East Asia, and Oceania	883.54	569.65	587.87	878.46	662.03	809.32	598.90	663.91	697.10	799.19	983.90
Central Europe, Eastern Europe, and Central Asia	12.67	2.43	62.50	178.07	226.99	183.35	186.40	295.08	324.20	395.80	312.56
Latin America and Caribbean	666.50	762.81	789.52	972.65	840.45	1,218.50	1,302.36	1,459.82	1,818.93	1,375.20	1,365.71
GLOBAL <sup>1</sup>	356.88	124.92	296.71	792.12	1,158.29	1,452.65	1,065.18	1,048.32	814.64	1,253.62	1,299.97
UNALLOCABLE BY REGION	2,590.96	2,738.27	2,985.46	2,971.92	3,455.85	3,349.51	3,138.40	3,220.53	3,530.53	3,723.09	4,329.47
TOTAL	7,068.62	6,498.76	7,589.85	7,709.31	9,012.80	9,466.61	9,093.07	9,283.31	9,822.55	10,604.72	11,405.18

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
2,078.55	1,942.46	2,964.90	3,975.24	4,704.08	5,513.68	6,314.85	8,681.73	9,252.33	10,048.79	10,919.54	11,926.77	13,137.41	13,973.58
316.89	348.28	424.33	474.73	1,077.84	1,149.82	793.21	888.12	711.74	1,088.61	767.23	676.47	640.20	659.39
1,100.73	1,216.19	978.42	1,400.40	1,539.81	1,496.26	1,781.34	1,944.60	2,169.29	2,437.98	2,491.56	2,449.98	2,948.45	2,199.52
798.05	781.19	1,026.50	1,259.54	1,517.61	1,792.43	1,914.44	1,937.61	1,903.30	2,058.26	2,158.59	2,301.78	2,136.77	1,853.21
341.21	326.64	314.82	434.74	572.15	632.16	749.19	766.42	830.35	720.44	943.61	698.98	904.91	707.24
1,395.29	1,241.23	2,266.93	1,655.60	1,439.67	1,266.97	1,537.44	1,500.44	1,623.96	2,548.79	2,396.48	1,826.41	2,210.89	1,988.82
1,382.35	3,068.39	2,951.15	2,873.11	2,665.61	3,444.78	5,074.75	5,473.05	3,882.79	4,073.90	4,747.17	3,767.47	4,723.48	4,312.70
4,553.46	4,785.18	4,910.24	5,959.64	6,673.09	6,723.55	6,963.86	8,418.68	9,514.82	10,724.64	10,739.78	10,486.44	11,292.74	10,284.58
11,966.54	13,709.55	15,837.30	18,032.99	20,189.85	22,019.64	25,129.08	29,610.64	29,888.59	33,701.42	35,163.96	34,134.30	37,994.84	35,979.05

**Notes:** All figures are in millions of 2015 US dollars. Development assistance for health (DAH) includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries. This table disaggregates DAH by World Bank regional groups intended to benefit from the assistance. For preliminary estimates of DAH for 2015 and 2016, refer to Table B1.

**Source:** Financing Global Health Database 2016

1 Global denotes contributions made toward health research or the creation of public goods for multiple regions or projects that donors categorized as benefiting the world on the whole.

TABLE B4

## DAH by target country, 1990-2014

Recipient country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Afghanistan	73.30	48.20	19.92	14.61	2.25	4.26	5.65	10.88	4.87	8.36	8.87
Albania	0.00	0.00	19.85	0.01	5.55	16.42	13.29	3.59	11.85	24.02	24.34
Algeria	0.09	0.07	6.40	4.24	0.03	0.06	0.09	0.54	1.45	2.09	1.36
Angola	16.25	26.55	27.41	14.20	12.65	50.59	100.06	48.71	26.94	33.51	36.30
Antigua and Barbuda	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.02	1.16	1.75	1.21
Argentina	15.84	27.00	108.06	21.19	27.12	196.18	280.03	293.99	298.21	138.00	81.98
Armenia	0.03	0.11	0.05	0.48	28.90	0.75	4.26	1.82	6.06	8.96	16.67
Azerbaijan	0.02	0.04	0.02	0.01	12.07	0.05	0.48	0.20	0.72	15.08	19.56
Bahrain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.03	0.02
Bangladesh	145.03	205.72	461.43	129.88	215.06	119.98	102.35	141.55	279.72	292.79	261.82
Barbados	3.39	3.42	1.37	0.13	0.13	0.18	0.12	0.12	0.12	0.12	-
Belarus	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.05	0.06	0.03	0.09
Belize	7.10	4.80	4.55	8.77	0.17	0.49	0.52	0.84	0.55	0.98	2.43
Benin	15.14	11.79	43.00	16.39	42.22	15.06	21.43	15.36	37.27	22.82	29.77
Bhutan	17.83	0.86	0.01	0.01	1.23	0.81	0.23	10.91	7.90	0.86	3.66
Bolivia	55.84	44.58	77.36	67.70	60.39	47.66	59.56	56.50	78.15	65.79	100.72
Bosnia and Herzegovina	0.00	0.00	0.03	1.55	10.97	0.20	20.18	5.00	30.78	81.52	19.60
Botswana	20.44	7.05	9.67	5.39	6.69	23.52	1.45	2.17	2.80	1.24	2.12
Brazil	58.79	96.11	60.70	51.17	190.84	163.00	201.66	218.84	125.20	234.09	169.55
Bulgaria	0.00	0.00	0.00	0.02	0.00	0.05	0.02	1.63	22.16	2.17	13.03
Burkina Faso	30.23	27.07	28.77	27.91	89.34	38.04	15.84	38.80	41.19	29.53	31.12
Burundi	9.13	9.07	22.86	48.61	14.44	13.91	6.58	7.21	7.24	8.78	11.05
Cambodia	0.52	3.07	30.39	26.61	91.78	148.95	84.67	71.51	44.77	39.94	48.93
Cameroon	17.97	69.67	32.58	33.36	24.43	3.36	59.88	23.82	27.55	18.30	13.94
Cape Verde	0.00	0.00	0.00	0.98	1.68	0.33	0.00	4.09	1.83	3.07	1.28
Central African Republic	9.88	9.36	9.24	6.63	5.46	13.05	1.23	6.38	25.38	15.17	5.79
Chad	28.84	5.04	19.28	21.77	8.04	38.30	14.81	27.61	25.76	35.98	25.86
Chile	39.42	153.12	37.32	86.77	35.00	31.88	31.54	57.40	5.22	3.06	3.75
China	55.08	52.70	79.30	100.73	89.17	155.64	157.00	146.10	165.88	144.64	196.73
Colombia	20.89	19.07	10.13	64.37	13.88	16.44	68.72	58.55	34.05	64.15	23.44
Comoros	0.55	1.58	0.22	0.07	2.38	10.43	3.45	6.27	8.39	1.78	2.01
Congo	20.36	0.95	0.99	4.90	11.43	12.78	0.67	5.07	6.69	1.88	1.21
Congo, DR	49.64	44.68	12.34	5.03	28.62	20.55	45.58	31.14	33.95	31.27	41.04
Costa Rica	2.45	0.44	3.98	9.53	6.78	9.03	10.04	13.24	16.53	21.17	29.53
Croatia	0.00	0.00	0.00	0.00	7.68	20.98	23.98	17.90	9.06	0.94	4.21
Cuba	0.33	0.43	1.59	1.35	0.13	1.37	1.21	2.70	1.68	6.68	4.67
Czech Republic	0.00	0.00	0.07	0.12	0.00	0.00	0.00	0.00	0.05	0.07	0.00
Côte d'Ivoire	43.85	54.75	87.40	29.16	130.73	112.19	71.63	41.16	46.51	43.64	16.27
Djibouti	9.78	8.63	17.66	0.99	1.01	8.23	2.56	14.44	16.33	5.78	4.84
Dominica	0.01	0.01	0.30	4.90	0.01	0.01	0.01	1.10	0.83	0.02	0.02

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	15.44	24.98	47.18	123.91	158.17	168.99	211.28	240.00	410.35	456.97	568.98	465.22	533.53	489.98
	25.07	20.39	27.32	26.21	33.21	35.18	18.78	28.61	22.12	18.79	36.55	14.82	4.04	14.51
	2.21	1.57	0.51	3.24	2.57	3.91	4.25	5.89	2.54	2.47	5.50	2.85	6.69	5.73
	45.86	40.87	45.45	57.72	140.32	64.73	83.33	114.48	99.09	94.77	81.22	125.05	134.98	110.65
	0.12	0.01	0.31	0.27	0.03	0.01	0.01	0.01	0.12	0.08	0.09	0.00	0.01	0.01
	228.02	88.53	808.26	234.06	88.44	78.45	326.36	179.12	170.29	181.14	322.62	274.52	319.54	3.15
	9.72	15.93	6.69	10.09	19.75	30.24	33.82	26.26	47.10	33.03	34.49	37.58	30.44	18.94
	3.73	6.58	4.01	3.58	11.66	16.57	14.00	17.49	25.32	30.26	47.09	26.19	32.06	20.83
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	225.95	168.55	174.70	189.44	237.52	292.84	214.01	310.78	309.57	343.40	343.69	460.17	612.86	510.21
	0.11	-	4.72	6.75	2.32	-	-	-	-	-	-	-	-	-
	0.33	0.37	0.65	2.09	10.88	6.79	9.41	16.65	16.71	20.09	16.48	16.97	14.84	13.02
	2.61	2.16	2.09	2.20	2.27	2.52	2.13	1.90	2.23	3.92	1.93	3.21	14.57	2.66
	27.77	25.70	42.97	62.02	66.51	64.41	62.77	82.23	107.43	122.39	124.78	93.26	108.81	130.90
	2.76	3.05	6.02	4.81	9.07	8.73	6.85	4.76	3.41	2.75	2.85	4.31	2.05	2.89
	83.07	66.00	103.69	99.80	71.48	91.94	83.17	83.83	68.49	75.51	83.30	64.94	72.75	50.13
	15.42	16.83	21.64	10.94	16.69	16.34	18.09	74.70	33.16	59.08	39.14	34.09	26.66	34.62
	2.50	16.28	30.48	44.34	29.29	54.70	60.95	352.35	338.35	123.89	134.67	105.17	121.70	94.85
	272.94	192.20	457.22	131.87	162.44	136.11	114.41	138.96	197.28	351.83	207.45	189.01	295.58	193.89
	10.80	14.29	8.73	29.69	39.77	12.20	80.45	27.40	139.07	16.02	13.57	6.01	4.85	7.19
	45.68	39.28	69.58	83.33	94.52	98.30	99.19	133.34	133.51	178.68	97.94	158.20	145.26	146.24
	10.46	14.64	21.08	32.06	44.59	52.76	48.03	69.28	80.76	107.66	117.83	104.96	118.96	125.32
	63.81	48.66	86.37	101.98	136.23	148.43	164.55	168.01	194.03	230.88	209.21	183.25	182.08	196.26
	23.28	16.32	34.31	57.73	60.09	77.57	77.38	80.42	86.07	66.00	153.46	115.66	154.80	125.07
	8.81	2.82	9.41	11.06	14.67	14.22	12.81	13.69	5.96	12.61	22.69	14.57	21.95	16.86
	7.80	12.01	9.06	14.26	18.13	22.26	11.10	33.44	14.50	22.80	25.09	25.63	30.36	45.54
	21.07	26.89	39.58	40.39	47.55	36.06	25.98	35.88	31.89	60.38	50.97	42.65	97.50	69.70
	4.67	2.96	10.64	30.96	17.96	6.75	8.14	5.22	3.73	5.36	2.27	0.30	0.51	0.58
	112.86	159.05	172.90	285.65	244.83	327.99	424.81	332.37	414.86	338.42	311.96	404.46	195.14	134.97
	84.72	151.70	184.07	443.20	257.89	133.64	136.28	67.16	213.41	313.16	257.93	92.35	432.44	824.10
	2.08	4.66	6.67	4.84	3.00	2.16	2.35	2.12	4.19	9.66	7.76	8.84	10.28	6.44
	1.47	3.17	2.75	9.48	8.45	10.75	9.91	18.68	12.79	33.37	31.87	37.26	28.29	11.95
	49.74	54.81	88.13	102.58	177.81	189.88	178.46	410.77	430.27	457.62	507.53	636.33	620.50	666.01
	11.87	13.58	13.94	8.91	3.97	7.48	7.20	11.03	8.49	5.08	1.95	1.42	1.12	1.18
	5.98	7.30	10.87	5.03	17.62	25.48	0.70	-	-	-	-	-	-	-
	5.49	6.74	16.75	16.40	10.57	11.46	18.34	12.88	22.36	21.97	18.03	15.55	15.92	9.23
	0.00	0.02	0.00	0.09	0.00	-	-	-	-	-	-	-	-	-
	20.89	51.32	45.58	59.76	59.18	87.74	81.34	172.26	129.77	217.55	142.57	160.00	194.01	257.87
	1.23	3.19	3.00	9.17	16.48	17.59	19.75	16.26	14.76	8.05	9.82	17.99	12.32	10.75
	0.03	0.02	0.29	0.20	0.25	0.23	0.16	0.20	0.24	0.28	0.55	0.16	0.23	0.01

TABLE B4

## DAH by target country, 1990-2014, continued

Recipient country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Dominican Republic	21.79	6.81	17.21	18.00	9.79	9.66	48.87	22.31	54.07	69.26	38.96
Ecuador	35.51	16.73	29.48	20.25	65.14	20.69	25.20	25.90	49.36	28.10	28.61
Egypt	64.30	162.42	153.84	158.63	164.43	142.29	138.79	90.13	138.27	96.37	107.23
El Salvador	48.15	83.24	81.57	61.65	24.24	46.71	53.94	28.89	38.30	33.93	30.12
Equatorial Guinea	0.20	0.28	0.67	1.55	6.79	1.00	6.98	1.62	1.63	2.77	5.25
Eritrea	1.17	0.87	0.88	0.21	12.54	12.43	16.93	6.44	16.93	22.91	31.69
Estonia	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.12	0.58	2.01	0.16
Ethiopia	91.35	42.31	61.45	22.50	56.62	72.72	95.15	71.90	64.06	111.45	102.09
Fiji	0.44	35.36	24.04	11.03	0.47	0.73	0.06	0.64	11.37	14.87	10.20
Gabon	2.03	0.33	4.10	18.85	0.49	0.20	3.05	7.34	10.54	2.52	2.77
Gambia	2.53	3.74	15.35	21.31	5.89	2.90	2.52	2.79	4.30	6.63	7.16
Georgia	0.05	0.13	0.05	0.05	16.26	0.61	3.26	4.26	8.88	20.78	19.73
Ghana	20.84	152.77	38.27	85.71	30.44	24.76	30.15	95.50	36.01	69.87	63.50
Grenada	12.47	0.01	0.01	0.02	0.01	0.01	0.01	0.48	0.38	0.02	0.03
Guatemala	28.79	15.88	32.01	55.14	18.52	26.19	27.84	146.79	38.27	73.36	40.76
Guinea	7.42	38.69	18.41	18.99	23.70	50.56	20.67	41.70	34.68	23.18	28.90
Guinea-Bissau	8.65	11.76	6.88	8.89	4.79	29.66	5.04	6.67	7.66	1.08	5.27
Guyana	7.42	4.51	4.27	5.87	5.55	5.34	5.16	6.42	4.64	4.29	1.48
Haiti	61.39	72.26	42.57	68.67	50.70	160.16	34.42	37.03	80.99	60.94	48.67
Honduras	55.40	42.17	70.11	34.42	27.72	24.54	53.62	59.39	31.25	73.00	50.98
Hungary	0.00	0.00	0.00	6.51	2.46	1.91	14.67	14.06	7.13	3.55	3.35
India	399.74	139.46	371.89	269.66	493.95	447.09	636.69	442.46	360.57	513.73	618.72
Indonesia	444.15	125.44	106.53	258.46	169.01	227.54	117.53	146.74	156.97	178.25	294.47
Iran	2.67	2.76	0.19	0.04	0.05	4.62	41.23	39.34	23.41	12.34	7.93
Iraq	4.95	3.66	4.28	1.62	1.41	6.50	3.94	4.64	1.11	3.37	2.38
Jamaica	28.64	32.26	33.61	25.29	25.71	38.04	26.51	22.79	23.85	20.57	22.51
Jordan	10.93	14.30	2.52	14.43	30.01	26.00	13.18	21.50	31.77	60.70	51.74
Kazakhstan	0.03	0.10	0.04	0.04	9.66	6.46	8.76	7.89	14.85	24.04	23.61
Kenya	243.12	81.73	134.12	41.86	60.90	95.29	132.36	83.08	121.21	102.15	128.63
Kiribati	13.37	0.11	4.46	0.14	0.29	0.56	0.29	0.34	0.03	0.09	0.11
Kyrgyzstan	0.05	0.13	0.05	0.19	3.09	16.86	14.30	13.15	23.13	8.29	20.33
Laos	0.45	0.89	3.42	1.79	4.21	11.62	7.57	7.91	9.36	14.38	31.17
Latvia	0.00	0.00	0.00	10.54	9.35	0.79	0.01	0.00	0.32	0.72	1.93
Lebanon	2.90	8.23	2.35	0.71	1.50	25.06	2.36	5.17	7.50	11.90	9.05
Lesotho	5.92	8.04	7.42	2.03	9.26	11.16	11.24	6.14	2.40	0.92	4.53
Liberia	1.99	2.71	1.96	2.84	1.45	0.47	1.38	4.37	6.69	8.15	12.46
Libya	0.14	0.06	0.05	0.05	0.03	0.03	0.11	0.26	0.10	0.06	0.12
Lithuania	0.00	0.00	0.00	16.96	1.68	4.64	0.07	0.00	0.00	0.01	1.16
Macedonia, FYR	0.00	0.00	0.00	0.00	0.00	11.19	8.15	6.34	9.70	22.61	9.44
Madagascar	12.69	42.38	38.77	22.89	49.53	37.42	40.95	33.57	54.94	30.31	31.10

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
37.25	34.06	39.39	59.12	78.56	52.45	56.73	54.67	112.51	107.53	49.09	79.39	78.55	120.24
29.03	15.27	35.25	35.92	39.57	49.22	62.11	60.43	46.47	41.95	43.67	22.80	26.61	41.43
98.53	79.82	64.39	97.28	120.39	176.23	121.17	169.25	64.64	74.88	67.40	38.40	18.42	30.67
49.05	31.00	26.39	33.63	42.19	36.39	36.25	37.43	40.52	78.67	39.86	36.31	47.24	25.50
4.47	2.84	4.04	5.15	10.21	13.94	0.39	0.67	0.32	0.23	0.24	0.25	0.29	0.32
17.16	28.02	46.23	44.91	42.19	20.79	26.59	31.61	22.23	56.42	24.22	37.53	36.65	40.72
0.00	0.00	1.45	2.39	3.21	-	-	-	-	-	-	-	-	-
120.44	135.32	234.87	223.01	298.52	486.19	662.87	686.62	683.41	887.26	1038.27	937.65	1233.99	1001.27
5.35	6.87	17.24	9.81	5.85	8.83	10.75	8.53	8.97	15.39	16.00	8.19	9.76	9.36
3.14	3.08	4.50	8.71	8.04	13.61	9.57	7.82	12.32	5.74	7.50	6.51	9.81	9.97
7.37	8.68	10.91	20.69	26.75	13.73	17.04	17.18	20.19	33.21	37.57	40.06	50.43	37.07
20.90	22.78	12.97	16.53	36.69	44.60	46.62	31.43	48.36	44.25	53.91	53.62	28.31	30.45
106.92	105.80	160.64	246.10	241.64	220.98	219.05	263.31	270.79	276.30	298.93	383.79	351.92	266.37
0.03	0.03	0.40	0.36	0.19	0.31	0.65	0.37	0.37	0.06	0.03	0.09	0.17	0.11
59.78	41.57	59.81	40.62	44.59	54.02	65.39	100.06	79.51	85.78	112.46	75.19	138.24	84.16
41.71	27.42	27.04	32.86	30.71	38.72	28.58	38.14	31.63	47.20	36.86	61.48	44.42	193.07
9.69	9.50	10.17	13.31	14.50	13.99	19.08	15.94	17.80	39.13	18.47	25.24	45.53	21.12
3.07	3.57	15.12	31.37	25.67	36.11	34.70	44.34	32.73	34.23	22.97	20.14	13.97	12.10
48.07	34.93	71.30	68.32	76.09	142.16	158.24	178.73	138.79	237.33	309.91	283.29	299.03	283.34
39.48	31.16	49.40	74.31	82.71	55.97	62.88	68.03	66.50	69.34	80.48	98.94	90.12	72.19
0.07	0.30	0.29	0.24	0.07	0.17	-	-	-	-	-	1.62	0.26	-
642.00	758.77	555.74	785.49	818.25	611.92	838.57	858.41	957.50	1011.99	1114.51	901.93	1043.39	649.25
224.40	170.11	216.00	248.48	256.95	358.58	388.06	504.88	346.05	302.43	328.97	449.23	413.20	268.52
14.49	4.18	0.81	6.54	75.09	13.93	9.41	16.55	18.21	11.02	13.89	21.44	10.76	12.67
3.62	1.94	30.15	88.97	535.10	429.96	262.00	96.98	98.33	104.06	37.01	27.13	36.38	45.58
55.30	10.18	13.20	16.22	16.70	21.37	20.73	20.74	18.30	44.10	29.53	17.54	23.11	16.92
46.48	51.64	53.63	45.00	22.75	18.32	13.59	33.94	40.82	50.30	58.03	108.39	98.50	93.19
25.09	11.98	22.25	16.67	12.80	20.35	13.40	24.67	26.84	44.48	41.91	44.78	29.37	27.16
149.46	142.20	211.30	281.97	296.94	461.27	457.37	604.08	700.93	844.07	952.87	1079.16	1235.21	1137.31
0.34	0.24	0.36	7.43	3.37	3.89	5.88	10.00	6.29	7.23	6.81	7.19	5.07	2.78
11.46	19.43	35.06	25.71	39.43	40.75	49.89	57.10	46.30	48.49	61.17	48.56	49.19	55.96
21.96	20.10	43.39	33.26	48.25	43.84	53.06	55.64	53.73	62.02	70.68	65.17	81.69	68.79
2.61	4.81	0.91	2.01	0.00	0.00	0.00	0.00	-	42.90	48.92	-	-	-
9.98	12.48	18.20	11.14	3.72	4.74	14.15	11.10	8.29	11.01	7.58	7.58	6.89	32.42
6.95	7.20	14.12	17.40	17.70	20.00	30.95	54.80	44.70	91.06	129.24	119.74	159.11	66.59
7.08	6.05	9.09	16.95	20.14	22.67	24.18	58.99	93.58	102.94	109.44	126.89	111.08	218.01
0.10	0.18	0.12	0.16	0.47	1.06	2.15	38.74	23.29	1.11	13.62	2.26	4.58	0.51
0.71	5.09	5.17	8.40	2.47	2.23	0.00	0.00	0.00	0.00	0.00	-	-	-
17.99	4.68	6.83	9.87	18.03	9.48	24.77	11.69	4.38	13.78	9.35	2.58	6.57	2.29
40.63	35.21	66.23	90.99	103.71	72.42	93.73	97.99	79.65	156.63	98.90	100.14	140.72	125.52

TABLE B4

## DAH by target country, 1990-2014, continued

Recipient country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Malawi	106.59	34.73	65.06	42.54	58.35	52.75	65.18	77.14	59.12	112.34	103.62
Malaysia	46.03	72.50	26.43	150.81	26.23	31.55	49.91	37.86	18.29	20.30	16.45
Maldives	0.01	0.02	18.56	8.22	0.00	0.01	0.00	1.25	0.01	0.30	0.42
Mali	37.96	48.96	54.31	32.88	49.59	41.89	31.54	39.01	13.70	33.77	37.12
Malta	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	-	0.00	-
Marshall Islands	0.96	0.25	0.24	1.74	1.69	1.29	1.24	1.33	1.25	6.00	2.62
Mauritania	75.71	0.83	20.68	6.89	38.48	3.18	20.40	11.06	11.98	9.58	12.53
Mauritius	0.05	0.02	0.03	0.01	2.92	0.07	2.74	0.57	0.35	0.21	0.28
Mexico	50.82	35.68	24.71	115.79	60.11	147.74	138.34	168.89	593.97	118.20	426.05
Micronesia, Federated States of	0.72	0.29	14.29	0.79	0.81	0.16	0.00	0.24	0.09	11.37	0.64
Moldova	0.00	0.00	0.01	0.01	0.01	0.07	0.06	1.31	2.79	19.55	21.87
Mongolia	12.29	1.69	11.50	14.26	4.58	6.32	5.27	4.05	12.45	15.14	9.11
Montenegro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.01	0.04
Morocco	33.68	41.33	58.26	82.66	56.23	46.51	61.12	30.42	55.66	43.78	70.00
Mozambique	148.77	192.82	151.38	34.11	133.81	86.95	121.75	102.21	94.57	111.02	134.02
Myanmar	3.16	0.13	0.05	0.29	0.42	0.30	0.55	1.63	2.72	7.17	9.98
Namibia	9.43	12.73	8.15	26.46	7.26	12.14	8.44	15.61	9.75	9.11	10.14
Nepal	53.65	73.12	24.35	46.00	23.62	18.04	19.32	44.10	53.92	51.39	43.59
Nicaragua	35.14	31.78	64.35	41.74	56.67	42.03	71.20	63.13	56.94	126.20	64.57
Niger	19.73	39.63	64.36	25.17	31.50	25.78	25.66	22.67	26.87	14.87	22.26
Nigeria	64.06	58.97	44.50	93.86	43.28	26.29	28.26	32.34	48.77	77.08	201.45
North Korea	0.01	0.01	0.02	0.06	0.08	0.01	0.00	0.05	0.82	0.75	0.11
Occupied Palestinian Territory	3.72	1.72	1.86	0.45	19.84	14.63	37.70	54.89	40.72	40.79	50.34
Oman	0.76	2.06	3.13	3.91	0.64	0.00	0.00	0.00	0.04	0.03	0.02
Pakistan	174.40	56.57	44.73	65.58	226.83	128.94	142.77	139.99	83.64	202.83	63.09
Panama	0.46	14.15	10.54	2.65	9.23	8.99	31.93	22.11	16.08	15.77	13.66
Papua New Guinea	61.21	69.07	55.72	15.65	25.39	8.65	57.80	28.98	52.76	96.91	106.23
Paraguay	0.90	0.63	0.89	4.86	0.41	0.45	0.53	5.36	26.95	34.86	24.70
Peru	49.43	30.03	35.40	97.49	101.39	137.34	78.88	76.19	105.90	93.62	114.77
Philippines	135.99	125.28	92.96	125.42	81.27	160.51	64.56	72.75	101.71	113.82	96.52
Poland	0.00	0.00	0.18	4.40	9.95	10.57	22.73	37.95	0.91	3.08	1.92
Romania	0.00	0.00	28.53	20.50	13.81	46.98	28.49	14.02	41.03	25.34	0.34
Russia	0.00	0.00	0.48	101.03	61.73	0.81	0.28	148.03	96.03	58.87	49.72
Rwanda	29.24	40.79	35.76	13.65	11.80	20.81	20.86	37.66	36.91	33.02	36.21
Samoa	0.08	0.05	0.05	14.37	2.19	0.56	0.31	0.18	0.29	0.60	4.41
Sao Tome and Principe	8.40	0.81	0.70	2.46	12.72	3.31	3.18	1.87	2.09	9.09	6.44
Saudi Arabia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.29	0.05
Senegal	34.80	42.92	50.69	45.32	44.97	40.49	30.72	52.23	64.29	60.66	48.97
Serbia	0.00	0.00	0.01	0.01	0.01	0.03	0.03	0.39	2.11	20.43	23.83
Seychelles	0.05	0.01	2.18	0.01	0.29	2.98	0.05	1.37	1.69	0.65	0.12



2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
88.05	79.82	105.44	139.15	151.22	214.05	282.80	334.91	304.53	267.06	402.34	476.33	494.74	452.29
11.31	2.44	4.00	1.95	2.15	1.32	1.28	1.52	0.87	0.52	2.10	3.53	3.33	4.32
0.18	0.17	0.17	0.23	0.62	0.20	1.91	0.77	1.52	0.92	0.64	1.26	0.27	0.05
61.18	27.85	67.96	68.18	98.99	103.46	113.13	150.74	149.35	218.90	217.45	203.09	227.62	221.64
0.00	-	-	-	-	-	-	-	-	-	-	-	-	-
1.16	0.86	3.63	14.12	20.11	10.12	10.54	11.50	13.39	1.28	2.51	12.74	1.22	8.90
11.66	11.40	13.98	15.99	7.36	10.15	17.76	16.96	16.56	13.57	13.64	10.87	19.50	19.02
0.23	0.04	0.26	0.29	0.30	0.77	1.10	0.11	1.00	2.63	1.92	2.60	2.07	2.18
140.59	228.43	43.03	41.09	100.25	141.16	109.53	112.60	49.85	611.93	575.27	321.96	109.41	79.32
0.34	0.27	6.04	24.57	26.61	23.77	23.86	24.60	33.54	2.68	4.46	31.98	2.34	39.41
11.99	7.58	9.84	18.90	27.28	15.02	21.31	23.67	49.70	56.56	43.83	44.02	37.73	53.76
21.05	5.54	10.27	14.64	22.99	21.26	31.09	30.34	31.65	40.17	38.34	39.36	47.50	31.52
0.05	0.09	0.20	3.12	2.63	9.44	8.84	11.15	3.15	3.51	4.79	3.71	2.84	1.86
31.46	34.82	52.94	29.98	61.99	95.81	61.87	60.00	94.16	124.32	105.63	82.01	62.41	63.60
139.83	172.27	196.34	255.98	257.32	289.14	395.27	529.24	486.39	548.52	595.20	607.25	685.39	864.54
6.94	17.58	34.66	34.51	54.10	26.62	52.29	55.77	61.24	102.41	70.53	166.55	217.18	271.32
13.53	15.10	22.58	40.16	44.87	92.07	112.57	111.73	171.82	176.31	131.33	163.82	133.14	120.16
63.10	53.44	79.82	69.18	79.66	87.98	85.91	128.56	110.00	162.65	138.86	141.31	178.29	200.92
55.76	60.93	73.20	80.66	89.00	90.35	96.24	103.02	98.67	76.99	74.81	76.89	86.71	77.06
28.89	30.56	49.65	48.51	48.49	83.02	69.94	109.51	84.84	67.47	86.62	51.74	91.42	122.92
121.36	117.40	182.43	309.81	390.09	530.18	536.40	825.15	1092.91	916.87	988.14	1135.90	1457.97	1206.69
0.43	1.80	1.72	2.85	5.83	3.33	2.91	3.46	8.21	28.43	18.78	19.69	16.61	27.61
37.57	36.68	76.02	78.78	70.56	63.52	77.89	80.96	56.81	77.28	91.54	68.33	52.90	57.70
0.01	0.01	0.06	0.06	0.02	0.00	-	-	-	-	-	-	-	-
151.48	207.40	114.96	227.56	237.14	325.81	424.73	402.08	378.46	455.71	321.49	474.03	573.03	354.33
15.80	18.53	9.87	10.47	9.63	8.31	7.67	8.07	37.83	11.17	12.78	20.86	32.89	25.14
51.41	65.21	64.58	71.82	77.11	81.61	75.88	94.66	114.83	131.11	197.27	174.02	164.44	137.15
15.72	11.48	13.75	12.89	12.43	12.68	19.07	26.93	26.17	33.97	20.05	22.45	15.64	12.83
91.17	105.01	115.83	132.50	113.31	81.92	82.04	155.94	147.17	124.83	64.16	79.50	77.86	37.84
109.03	58.73	101.07	116.59	293.48	302.41	224.03	110.63	121.29	226.58	239.59	215.24	221.14	224.18
23.45	16.71	0.29	0.40	0.61	0.34	0.61	0.12	-	-	-	-	-	-
17.30	22.25	11.60	31.37	13.71	8.66	34.39	31.07	14.35	9.53	168.37	13.67	370.52	155.03
54.87	33.72	10.57	21.73	47.58	114.36	145.72	147.25	76.52	40.86	16.05	-	-	-
43.60	49.22	60.22	114.25	132.21	178.67	201.03	316.01	328.36	390.34	435.55	398.29	343.26	395.84
1.96	0.52	3.90	4.67	4.81	6.79	4.71	4.59	4.17	10.58	4.00	13.64	13.99	3.14
6.80	5.42	4.75	5.86	5.66	5.70	4.52	7.61	5.03	5.62	10.13	5.88	10.43	9.40
0.08	0.16	0.32	-	-	-	-	-	-	-	-	-	-	-
77.64	57.25	117.86	141.29	137.61	162.26	93.59	125.11	149.75	137.34	162.60	194.87	181.53	210.90
21.26	33.85	52.40	37.77	33.03	35.30	21.88	24.26	33.06	18.04	56.65	39.37	14.19	6.79
0.30	0.46	1.48	1.47	1.38	0.26	0.14	0.17	0.22	0.63	0.08	0.19	0.36	0.04

TABLE B4

## DAH by target country, 1990-2014, continued

Recipient country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Sierra Leone	2.91	4.53	10.44	3.53	4.88	3.82	7.11	2.18	7.75	6.73	25.38
Slovakia	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Slovenia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-
Solomon Islands	3.55	0.39	5.62	1.64	3.25	1.33	1.89	2.00	1.19	2.53	6.38
Somalia	16.59	15.17	4.72	7.24	7.28	4.15	5.07	3.95	4.44	5.25	4.63
South Africa	9.86	13.14	12.27	6.12	31.27	18.68	11.26	16.44	42.24	48.52	55.83
South Korea	62.97	0.00	9.82	55.61	33.71	-	-	-	0.01	0.07	0.04
South Sudan	1.99	3.25	1.13	0.25	0.94	0.20	0.65	0.88	0.56	1.03	1.78
Sri Lanka	18.28	56.49	29.58	25.15	11.81	15.23	13.45	27.75	42.13	17.13	16.46
St. Lucia	5.42	3.56	0.08	0.19	4.26	0.04	4.90	1.49	1.00	0.18	0.10
St. Vincent and the Grenadines	0.00	0.00	0.00	0.06	0.13	0.42	0.63	0.08	0.10	0.07	0.04
Sudan	14.87	7.90	22.64	5.16	6.31	19.17	15.44	9.82	15.91	14.47	13.19
Suriname	18.65	18.27	31.26	4.69	6.00	22.25	8.71	4.23	21.03	13.04	6.50
Swaziland	5.45	7.06	3.07	0.55	10.45	2.96	1.82	2.32	6.13	2.54	3.19
Syria	0.40	0.82	0.40	26.53	0.07	0.01	0.01	5.96	3.34	0.24	0.39
Tajikistan	0.04	0.09	0.04	0.03	10.89	2.03	2.17	3.06	3.32	3.96	5.00
Tanzania	105.63	87.08	125.52	58.00	66.28	61.72	123.28	139.89	125.69	230.27	114.34
Thailand	2.79	1.19	28.83	24.02	4.41	2.59	14.27	10.51	7.59	29.61	48.90
Timor-Leste	0.06	0.09	0.17	0.23	0.31	0.34	0.01	0.35	0.06	0.52	1.17
Togo	4.39	16.04	28.41	1.03	8.84	3.40	30.82	5.61	13.77	3.01	6.25
Tonga	0.13	0.11	0.11	0.29	0.85	0.67	0.23	2.27	0.03	0.58	0.47
Trinidad and Tobago	0.01	0.99	1.18	1.48	1.11	1.12	8.11	15.49	15.06	14.67	14.02
Tunisia	2.31	0.16	9.55	6.50	15.36	12.47	15.82	11.27	17.43	24.59	9.80
Turkey	0.20	1.76	72.37	9.56	13.51	93.07	47.76	46.48	37.88	30.03	31.47
Turkmenistan	0.01	0.02	0.01	0.01	2.82	3.53	1.92	1.58	8.29	4.40	2.97
Uganda	92.50	138.61	103.40	59.29	57.15	78.66	103.82	107.00	97.11	110.00	127.39
Ukraine	0.00	0.00	0.01	0.00	0.06	0.02	0.07	0.13	0.27	0.52	1.29
Uruguay	0.35	1.06	1.73	93.06	22.74	0.74	1.92	1.44	2.92	2.32	0.39
Uzbekistan	0.15	0.12	0.04	0.04	3.09	29.09	13.23	8.18	11.27	28.02	18.10
Vanuatu	0.38	1.44	0.15	0.37	16.25	0.35	0.07	1.04	6.17	2.17	1.95
Venezuela	1.06	2.16	1.78	4.27	11.76	54.50	28.21	48.00	91.19	52.08	17.96
Vietnam	32.69	16.55	56.97	52.76	98.20	40.09	27.47	102.39	69.92	91.81	89.46
Yemen	9.07	35.33	26.10	35.21	8.39	22.20	29.79	25.83	19.49	27.43	21.34
Zambia	47.74	16.97	51.67	74.12	62.65	71.13	65.20	65.44	42.12	46.57	79.87
Zimbabwe	0.08	0.05	0.05	14.37	2.19	0.56	0.31	0.18	0.29	0.60	4.41

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
17.27	14.56	21.00	26.97	38.63	38.56	42.73	55.87	51.39	68.24	75.78	73.66	58.01	179.84
0.00	0.11	0.00	19.72	21.43	2.17	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.24	8.59	13.23	17.31	14.67	13.63	16.22	22.96	25.34	33.75	47.65	24.49	41.77	12.81
5.77	6.60	6.28	18.26	20.66	27.10	27.75	29.71	25.33	43.27	37.78	88.73	50.40	60.91
84.03	82.23	141.75	188.12	245.48	285.87	434.80	657.10	841.34	885.20	987.79	896.19	933.86	877.61
-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.69	0.83	1.19	1.34	1.52	2.13	2.29	3.45	2.22	2.59	83.38	191.99	177.31	180.51
14.44	20.33	29.17	15.65	24.68	46.87	33.01	41.22	45.70	64.18	45.32	34.74	40.57	51.15
0.17	0.27	0.55	0.48	0.64	0.89	0.59	1.36	1.75	1.73	16.99	13.20	5.42	3.83
0.05	0.02	0.15	0.14	0.15	0.49	0.43	0.45	0.70	0.76	0.24	0.62	0.86	2.26
14.33	25.45	22.39	44.54	78.42	95.46	89.14	147.79	184.13	212.06	183.39	178.57	169.83	125.82
8.71	10.36	11.46	12.33	13.96	5.57	9.41	10.44	21.85	17.27	16.45	4.68	6.08	3.66
2.82	3.95	12.72	6.75	30.85	19.28	27.18	28.80	46.28	80.74	100.13	62.61	74.09	67.75
0.17	20.56	2.96	6.77	17.44	4.93	7.94	18.17	33.07	18.99	2.97	4.47	5.46	9.42
4.71	8.18	13.73	25.78	23.08	28.48	33.84	44.07	57.65	53.48	46.30	63.77	54.36	60.18
212.25	157.93	178.05	291.87	358.77	460.63	522.20	768.36	711.52	937.53	941.68	959.11	1122.50	1140.01
22.70	24.70	39.90	61.40	47.36	100.61	78.77	80.40	62.00	75.32	112.02	51.92	88.85	102.32
3.13	17.37	3.47	9.44	11.09	19.60	21.98	29.04	24.18	31.05	28.90	32.43	18.51	22.78
4.16	3.50	15.00	17.56	21.65	18.11	27.69	34.09	38.58	33.49	50.03	22.21	54.06	39.77
1.30	1.39	2.63	4.53	17.17	6.12	5.98	3.12	4.17	7.19	21.19	10.82	4.97	3.60
13.72	13.51	13.19	19.17	14.00	-	-	-	-	-	-	-	-	-
18.53	21.87	23.96	9.42	5.50	35.09	9.06	40.83	6.57	11.99	5.50	6.58	6.35	5.79
12.62	34.04	33.91	30.05	31.82	152.50	58.24	100.64	34.47	323.00	121.12	26.89	30.63	26.07
2.30	2.56	2.73	2.18	2.60	2.44	2.54	2.88	2.88	3.20	7.81	3.43	6.86	5.07
192.37	97.98	245.52	342.20	371.30	396.01	461.90	478.58	563.27	571.87	605.17	806.38	747.38	800.86
3.25	4.04	6.61	26.98	70.80	83.53	84.14	80.39	86.60	66.07	94.87	112.75	97.28	102.61
14.41	49.02	62.06	1.28	40.33	0.95	3.71	1.96	1.55	7.13	23.85	0.16	0.26	0.31
30.51	36.70	30.98	52.71	41.97	46.02	51.95	51.18	58.51	46.42	54.00	81.75	42.28	63.72
3.67	2.93	4.47	5.59	5.52	4.17	4.27	7.01	10.99	8.75	12.03	12.31	23.69	14.80
20.53	14.77	9.16	9.35	12.85	2.83	2.59	2.72	4.01	4.42	2.03	1.65	1.23	0.54
112.77	127.29	158.62	174.89	201.42	240.46	295.06	352.42	320.21	355.49	393.63	357.50	374.78	281.00
26.71	22.89	43.96	22.81	52.01	54.38	62.35	67.29	46.39	66.12	54.06	100.17	128.57	149.29
96.24	108.63	188.36	245.36	307.16	249.03	358.54	511.94	439.77	373.95	541.02	547.47	720.06	561.47
58.94	52.01	61.95	65.92	134.44	139.46	188.99	134.78	251.24	229.20	183.98	434.50	296.40	348.43

**Notes:** Development assistance for health (DAH) is in millions of 2015 US dollars. DAH includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries. This table disaggregates financial DAH transfers by the country receiving funds or intended to benefit from research or technical assistance activities. This table reflects financial DAH only from channels of assistance providing project-level detail, specifically bilateral development agencies, the World Bank (IDA and IBRD), ADB, AfDB, IDB, the Global Fund, Gavi, and the Gates Foundation. Dashes indicate years in which a country was classified as high-income by the World Bank.

**Source:** Financing Global Health Database 2016

**TABLE B5****DAH by health focus area, 1990-2016**

Health focus area	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
HIV/AIDS	311.39	442.40	484.17	408.20	726.34	712.27	679.03	609.81	689.59	768.04	1,280.75	1,346.17
Maternal health	1,587.73	1,523.18	1,574.31	1,423.29	2,088.19	2,192.30	1,542.72	1,625.77	1,768.19	1,968.37	2,094.50	1,950.27
Newborn and child health	914.26	921.19	1,100.77	1,010.45	1,450.09	1,347.45	1,308.83	1,193.48	1,082.54	1,513.85	1,646.24	2,210.48
Malaria	60.10	77.10	53.44	48.89	68.24	59.34	65.39	66.94	78.59	107.30	179.40	192.27
Health system strengthening	543.28	569.26	697.86	752.08	954.40	1,115.13	1,365.81	1,422.48	1,816.93	1,437.50	1,760.32	1,637.84
Tuberculosis	30.35	76.55	34.35	77.88	101.63	70.13	97.28	67.68	83.22	92.75	151.60	169.50
Other infectious diseases	118.06	215.65	174.70	139.48	152.59	234.52	241.46	228.90	586.15	531.10	810.26	832.39
Non-communicable diseases	118.74	87.92	149.09	225.02	211.99	129.64	106.65	108.76	111.54	125.45	150.02	162.34
OTHER	3,094.52	2,573.16	3,293.94	3,350.35	3,028.41	3,362.27	3,528.46	3,668.31	3,547.01	3,685.77	2,986.93	3,143.81
UNALLOCABLE	290.20	12.34	27.22	273.67	230.92	243.55	157.44	291.19	58.79	374.59	345.16	321.47
<b>TOTAL</b>	<b>7,068.62</b>	<b>6,498.76</b>	<b>7,589.85</b>	<b>7,709.31</b>	<b>9,012.80</b>	<b>9,466.61</b>	<b>9,093.07</b>	<b>9,283.31</b>	<b>9,822.55</b>	<b>10,604.72</b>	<b>11,405.18</b>	<b>11,966.54</b>

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*	2016*
2,136.31	2,829.54	3,840.99	4,703.50	5,926.76	7,291.73	8,773.37	8,811.33	10,400.86	10,478.00	10,175.54	10,264.28	9,707.86	9,899.45	9,541.03
1,608.91	1,635.84	1,246.24	1,684.39	1,836.87	2,151.80	2,718.30	3,141.19	3,284.86	3,471.23	3,686.35	4,021.86	4,102.76	4,008.68	3,883.02
2,086.96	2,685.83	2,562.42	2,854.59	2,789.92	3,721.55	3,543.14	3,654.92	4,731.47	5,066.59	5,833.45	6,799.77	5,816.06	6,964.14	7,181.41
258.90	366.15	568.76	818.87	938.72	937.19	1,488.78	2,133.40	2,404.82	2,021.31	2,264.94	2,355.42	2,376.61	2,390.66	2,494.83
1,506.32	2,590.76	2,727.75	2,396.21	2,037.22	2,570.89	2,986.13	3,254.13	4,164.00	4,220.88	3,341.92	3,656.43	3,779.27	3,426.25	3,624.83
272.69	350.74	536.66	531.50	672.21	825.59	1,045.10	1,123.80	1,402.55	1,357.18	1,264.47	1,479.11	1,178.89	1,325.74	1,502.36
438.51	724.60	719.77	555.03	664.46	863.74	1,128.69	1,172.29	983.18	1,127.94	1,491.76	1,482.00	1,370.31	1,552.09	1,450.48
169.16	152.75	149.50	233.32	250.02	249.86	361.83	414.03	474.57	502.93	419.72	606.45	546.96	655.40	643.80
3,846.76	3,862.01	4,429.70	5,639.88	5,671.33	4,704.78	5,419.19	5,056.84	5,175.56	5,740.86	5,112.83	6,324.74	5,557.80	6,473.30	6,532.33
1,385.03	639.08	1,251.21	772.57	1,232.14	1,811.95	2,146.12	1,126.65	679.55	1,177.05	543.32	1,004.80	1,542.52	885.02	757.33
13,709.55	15,837.30	18,032.99	20,189.85	22,019.64	25,129.08	29,610.64	29,888.59	33,701.42	35,163.96	34,134.30	37,994.84	35,979.05	37,580.74	37,611.43

\*2015 and 2016 are preliminary estimates.

**Notes:** All figures are in millions of 2015 US dollars. Development assistance for health (DAH) includes both financial and in-kind contributions for activities aimed at improving health in low- and middle-income countries. This table disaggregates financial DAH earmarked for HIV/AIDS; maternal, newborn, and child health; malaria; health system strengthening; tuberculosis; other infectious diseases; and non-communicable diseases. We were able to allocate flows from the following channels of assistance by their health focus areas: bilateral development agencies, the World Bank (IDA and IBRD), ADB, AfDB, IDB, the Global Fund, Gavi, WHO, UNICEF, UNAIDS, UNFPA, the Gates Foundation, and NGOs. Contributions from remaining channels are shown as unallocable by disease. For preliminary estimates of DAH for 2015 and 2016, refer to Table B1.

Source: Financing Global Health Database 2016

TABLE B6

## Health spending by source, 2014

Recipient country	Total health spending per capita (2015 purchasing power parity dollars)	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995 - 2014 (%)
Afghanistan	159.0	9.7	15.0	-	54.1	30.9	5.5
Albania	642.0	5.9	48.3	-	49.8	1.9	4.2
Algeria	1,004.0	7.2	72.7	0.7	26.5	-	6.0
Andorra	5,723.0	8.1	78.0	6.0	15.9	-	2.5
Angola	228.0	3.0	70.0	-	26.6	3.4	1.5
Antigua and Barbuda	1,213.0	5.5	68.3	8.0	23.7	-	3.0
Argentina	1,322.0	4.8	55.8	13.2	30.9	-	(0.6)
Armenia	395.0	4.5	40.6	3.0	52.8	3.6	4.9
Australia	4,032.0	9.0	70.4	9.9	19.7	-	3.3
Austria	5,471.0	11.2	78.0	5.8	16.2	-	2.6
Azerbaijan	1,030.0	5.9	20.9	4.3	74.2	0.6	9.6
Bahrain	2,258.0	4.8	65.3	10.6	24.1	-	2.2
Bangladesh	92.0	2.9	22.7	-	65.6	11.7	3.2
Barbados	1,116.0	7.5	63.5	6.6	29.9	-	2.0
Belarus	1,093.0	5.6	66.9	0.1	32.6	0.4	4.0
Belgium	4,751.0	10.6	77.9	4.3	17.8	-	3.3
Belize	503.0	5.8	64.7	9.5	23.0	2.9	2.8
Benin	105.0	5.1	35.0	-	35.5	29.6	2.0
Bhutan	279.0	3.6	70.7	-	25.1	4.2	4.0
Bolivia	404.0	6.3	70.2	3.4	23.1	3.3	5.2
Bosnia and Herzegovina	992.0	9.5	70.0	-	28.0	2.0	8.8
Botswana	903.0	5.5	49.9	35.0	5.1	10.0	5.1
Brazil	1,357.0	8.3	45.9	28.5	25.5	0.1	3.3
Brunei	1,811.0	2.6	93.9	0.1	6.0	-	(0.4)
Bulgaria	1,490.0	8.4	54.7	0.9	44.3	0.2	6.3
Burkina Faso	83.0	5.0	35.8	-	38.6	25.6	2.8
Burundi	65.0	8.3	23.7	-	19.1	57.2	3.2
Cambodia	209.0	6.4	14.2	-	65.4	20.4	4.1
Cameroon	116.0	4.0	17.0	3.5	68.5	10.9	1.3
Canada	4,576.0	10.3	72.1	14.1	13.8	-	2.4
Cape Verde	318.0	4.8	58.4	0.1	22.2	19.2	4.1
Central African Republic	35.0	5.7	9.0	-	34.2	56.7	(1.3)
Chad	89.0	3.8	48.5	1.3	37.2	12.9	0.6
Chile	1,780.0	7.8	49.5	19.0	31.5	-	4.1
China	697.0	5.1	60.3	5.0	34.6	-	10.4
Colombia	975.0	7.2	71.9	9.5	15.3	3.2	2.7
Comoros	111.0	7.1	22.1	20.1	42.8	14.9	(1.2)
Costa Rica	1,418.0	9.3	73.1	1.8	25.0	-	4.6
Cote d'Ivoire	179.0	5.3	22.1	8.2	54.6	15.1	0.2
Croatia	1,734.0	7.8	81.9	6.9	11.2	-	3.5
Cuba	1,706.0	11.1	95.5	-	4.4	0.2	8.5

Recipient country	Total health spending per capita (2015 purchasing power parity dollars)	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995 - 2014 (%)
Cyprus	2,019.0	7.2	46.0	4.4	49.6	-	3.0
Czech Republic	2,384.0	7.4	84.8	0.8	14.4	-	2.8
DR Congo	46.0	4.5	21.3	-	37.4	41.3	2.9
Denmark	5,075.0	10.8	84.8	1.9	13.4	-	2.8
Djibouti	357.0	10.9	58.3	-	34.6	7.1	5.3
Dominica	599.0	5.5	68.7	3.0	28.3	-	1.1
Dominican Republic	601.0	4.4	63.4	11.4	21.0	4.2	3.0
Ecuador	1,071.0	9.2	48.8	2.2	48.5	0.5	8.0
Egypt	581.0	5.4	39.9	1.5	58.3	0.2	5.5
El Salvador	567.0	6.8	64.7	4.9	28.8	1.6	3.3
Equatorial Guinea	1,411.0	3.7	79.2	-	20.7	0.1	17.0
Eritrea	59.0	5.1	23.4	-	35.2	41.4	(1.1)
Estonia	1,830.0	6.4	79.0	0.3	20.8	-	5.1
Ethiopia	85.0	5.5	26.9	-	28.4	44.7	7.6
Federated States of Micronesia	490.0	16.1	-	-	7.7	92.3	2.9
Fiji	399.0	4.5	63.8	7.5	23.0	5.7	3.3
Finland	3,935.0	9.3	78.0	3.1	18.9	-	3.1
France	4,589.0	11.3	79.9	13.6	6.5	-	2.0
Gabon	612.0	3.4	67.4	8.8	22.0	1.8	-
Georgia	700.0	7.3	19.4	18.9	59.1	2.6	9.3
Germany	5,356.0	11.2	77.3	9.4	13.3	-	2.6
Ghana	146.0	3.5	52.8	3.1	27.1	17.0	4.3
Greece	2,170.0	8.1	61.7	3.4	34.9	-	0.9
Grenada	737.0	6.1	46.6	2.0	51.2	0.2	2.0
Guatemala	466.0	6.2	36.9	8.2	52.1	2.8	3.9
Guinea	101.0	7.4	20.4	-	34.5	45.1	3.5
Guinea-Bissau	77.0	5.3	6.0	-	52.1	41.9	(3.0)
Guyana	438.0	5.4	53.5	2.9	36.5	7.1	3.2
Haiti	154.0	8.9	-	29.6	29.6	40.8	(1.8)
Honduras	420.0	8.8	47.2	5.0	43.3	4.6	4.4
Hungary	1,855.0	7.2	68.1	4.4	27.5	-	2.5
Iceland	3,959.0	8.7	82.3	-	17.7	-	2.3
India	253.0	4.5	31.3	2.4	65.6	0.7	6.4
Indonesia	265.0	2.5	42.7	2.7	53.5	1.1	5.2
Iran	1,073.0	6.5	43.8	5.3	50.8	-	6.2
Iraq	828.0	5.7	58.2	3.0	38.4	0.5	7.5
Ireland	4,006.0	7.6	67.6	14.3	18.1	-	4.6
Israel	2,722.0	7.7	61.5	11.2	27.3	-	1.9
Italy	3,311.0	9.0	77.4	0.9	21.7	-	1.8
Jamaica	477.0	5.4	50.5	19.4	27.8	2.3	1.7
Japan	3,816.0	10.2	83.6	2.4	13.9	-	3.0

TABLE B6

## Health spending by source, 2014, continued

Recipient country	Total health spending per capita (2015 purchasing power parity dollars)	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995 - 2014 (%)
Jordan	839.0	7.4	66.8	8.0	21.1	4.1	2.7
Kazakhstan	1,143.0	4.3	54.4	-	45.3	0.3	5.8
Kenya	197.0	6.4	37.8	3.8	23.4	35.0	3.4
Kiribati	168.0	9.6	79.3	-	2.8	17.9	0.3
Kuwait	2,075.0	3.0	85.9	1.3	12.7	-	(1.1)
Kyrgyzstan	236.0	6.9	47.7	1.3	37.3	13.7	3.1
Laos	113.0	2.0	28.3	0.4	36.6	34.7	1.8
Latvia	1,427.0	5.9	63.2	1.7	35.1	-	5.5
Lebanon	1,060.0	6.4	47.6	14.9	36.4	1.1	(1.2)
Lesotho	319.0	11.6	63.4	0.3	15.0	21.3	6.1
Liberia	345.0	39.3	-	-	7.8	92.2	19.7
Libya	751.0	5.0	73.5	-	26.5	-	-
Lithuania	1,830.0	6.5	67.9	0.8	31.3	-	7.2
Luxembourg	7,105.0	6.9	83.9	5.5	10.6	-	3.2
Macedonia	887.0	6.5	63.1	-	36.6	0.3	1.4
Madagascar	52.0	3.7	29.5	-	34.3	36.2	(0.4)
Malawi	148.0	12.9	33.5	14.0	9.3	43.1	5.5
Malaysia	1,047.0	4.1	56.0	8.1	35.8	-	5.1
Maldives	1,980.0	13.5	79.4	2.0	18.5	-	11.0
Mali	162.0	7.4	22.0	10.9	43.6	23.5	4.0
Malta	3,058.0	9.7	69.2	2.0	28.9	-	5.5
Marshall Islands	599.0	17.2	62.9	2.1	11.8	23.2	(3.0)
Mauritania	153.0	3.7	44.5	1.4	44.7	9.3	0.7
Mauritius	880.0	4.6	50.8	0.7	48.0	0.4	4.8
Mexico	1,088.0	6.3	51.7	4.2	44.0	0.1	2.9
Moldova	527.0	10.3	47.2	8.2	38.3	6.3	3.4
Mongolia	575.0	4.7	51.4	0.9	41.9	5.8	8.4
Montenegro	1,015.0	6.6	55.3	2.7	41.4	0.6	3.4
Morocco	505.0	5.9	33.1	7.6	58.4	0.9	5.6
Mozambique	92.0	7.8	10.6	0.6	8.5	80.2	7.4
Myanmar	121.0	2.5	36.2	-	45.6	18.2	9.4
Namibia	936.0	9.3	53.5	31.2	6.9	8.4	5.2
Nepal	138.0	5.8	28.6	5.9	47.7	17.8	3.1
Netherlands	5,234.0	10.7	88.4	6.3	5.3	-	3.9
New Zealand	4,050.0	11.0	82.3	6.6	11.0	-	4.2
Nicaragua	450.0	9.1	50.9	3.8	37.3	8.0	3.6
Niger	66.0	6.7	26.3	-	49.5	24.2	0.6
Nigeria	225.0	3.7	22.1	0.8	70.1	7.0	7.5
Norway	6,537.0	10.0	83.1	3.7	13.2	-	3.3
Oman	1,467.0	3.5	91.8	2.3	5.9	-	1.6
Pakistan	132.0	2.7	32.1	6.1	55.4	6.4	2.0



Recipient country	Total health spending per capita (2015 purchasing power parity dollars)	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995 - 2014 (%)
Panama	1,743.0	8.0	72.5	4.5	22.3	0.8	4.8
Papua New Guinea	108.0	4.4	60.1	3.9	10.1	25.9	3.5
Paraguay	863.0	9.8	45.6	4.6	49.3	0.5	4.7
Peru	626.0	5.2	63.3	6.3	30.0	0.4	4.4
Philippines	330.0	4.7	33.6	10.2	54.3	1.9	4.4
Poland	1,629.0	6.3	71.4	5.0	23.6	-	5.0
Portugal	2,697.0	9.3	66.6	5.9	27.6	-	3.3
Qatar	2,663.0	2.2	85.7	7.4	6.9	-	0.7
Republic of the Congo	312.0	5.2	80.7	0.3	17.4	1.7	4.5
Romania	1,077.0	5.5	79.1	0.4	18.9	1.6	7.2
Russia	1,877.0	7.1	51.8	2.8	45.5	-	5.4
Rwanda	158.0	9.4	-	22.4	22.6	55.0	7.9
Saint Lucia	755.0	6.7	49.2	0.8	45.6	4.4	1.4
Saint Vincent and the Grenadines	917.0	8.8	46.1	2.0	48.2	3.6	3.4
Samoa	365.0	7.2	87.2	-	5.9	6.9	4.5
Sao Tome and Principe	251.0	7.9	31.1	8.0	11.9	49.0	1.9
Saudi Arabia	2,320.0	4.4	78.7	6.2	15.1	-	5.0
Senegal	121.0	5.2	39.4	-	33.8	26.9	2.1
Serbia	1,392.0	10.3	62.5	0.3	37.0	0.1	6.9
Seychelles	853.0	3.3	93.6	4.0	2.4	0.1	(0.2)
Sierra Leone	255.0	13.5	5.1	9.2	50.1	35.6	3.0
Singapore	3,981.0	4.8	42.4	1.9	55.7	-	6.5
Slovakia	2,203.0	7.7	76.3	-	23.7	-	5.1
Slovenia	2,845.0	9.1	73.2	14.5	12.3	-	3.5
Solomon Islands	107.0	5.8	67.0	-	4.0	29.1	2.7
Somalia	33.0	6.9	25.0	1.2	28.5	45.2	1.9
South Africa	1,172.0	8.9	47.0	44.2	6.4	2.4	2.1
South Korea	2,507.0	7.1	56.0	6.6	37.4	-	7.6
South Sudan	94.0	3.6	21.0	-	40.7	38.3	1.8
Spain	3,096.0	9.0	71.1	4.8	24.1	-	2.6
Sri Lanka	402.0	3.5	54.5	1.0	42.3	2.1	5.2
Sudan	334.0	8.3	20.4	0.9	76.6	2.2	9.0
Suriname	731.0	4.3	67.6	15.5	15.2	1.7	2.0
Swaziland	745.0	9.5	66.6	8.4	10.0	15.0	4.7
Sweden	5,446.0	11.8	85.1	0.6	14.2	-	4.0
Switzerland	7,831.0	12.8	60.3	15.2	24.5	-	3.2
Syria	562.0	3.4	44.5	3.3	51.6	0.6	(1.4)
Tajikistan	200.0	7.3	22.9	8.7	57.9	10.6	7.3
Tanzania	166.0	6.4	20.3	17.1	20.2	42.4	7.2
Thailand	633.0	4.1	78.7	8.6	12.1	0.7	3.7
The Bahamas	1,996.0	7.7	45.9	24.9	29.2	-	1.2

TABLE B6

## Health spending by source, 2014, continued

Recipient country	Total health spending per capita (2015 purchasing power parity dollars)	Total health expenditure per gross domestic product (%)	Domestic government health spending per total health spending (%)	Prepaid private spending per total health spending (%)	Out of pocket spending per total health spending (%)	Development assistance for health per total health spending (%)	Annualized rate of change in total health spending per capita, 1995 - 2014 (%)
The Gambia	151.0	9.2	47.4	-	13.6	39.0	5.8
Timor-Leste	105.0	1.9	51.6	-	7.4	41.0	8.3
Togo	81.0	5.5	29.7	7.8	44.3	18.3	1.9
Tonga	253.0	5.3	69.5	0.4	11.7	18.5	1.7
Trinidad and Tobago	1,823.0	5.8	54.5	6.8	38.7	-	6.2
Tunisia	791.0	6.9	57.2	4.5	38.1	0.2	3.5
Turkey	1,040.0	5.3	78.4	3.5	18.0	0.1	6.6
Turkmenistan	396.0	2.3	59.2	8.7	31.6	0.6	5.3
Uganda	347.0	18.1	0.9	64.8	16.4	18.0	9.3
Ukraine	659.0	7.0	51.3	0.9	46.8	0.9	2.9
United Arab Emirates	2,561.0	3.6	72.3	9.9	17.8	-	(0.4)
United Kingdom	3,749.0	9.1	83.1	7.1	9.7	-	3.4
United States	9,237.0	16.6	49.8	38.8	11.4	-	2.9
Uruguay	1,837.0	8.6	71.2	13.2	15.6	-	2.9
Uzbekistan	397.0	5.9	51.9	2.6	43.7	1.7	3.6
Vanuatu	149.0	5.4	56.7	-	5.4	37.9	4.1
Venezuela	1,010.0	5.3	29.3	6.3	64.3	-	1.0
Vietnam	398.0	7.0	53.0	6.9	37.4	2.7	7.0
Yemen	233.0	5.8	14.3	1.7	74.7	9.3	3.0
Zambia	216.0	5.4	32.6	-	27.7	39.7	4.8

Notes: In millions of 2015 purchasing power parity dollars. Total health spending includes direct domestic and donor spending on health. It is composed of government, prepaid private, and out-of-pocket health spending and development assistance for health. Government health spending includes only domestic resources, including social health insurance and general budget support. Prepaid private spending includes spending on private health insurance and health spending by non-governmental organizations. Out-of-pocket health spending includes private non-prepaid spending, including deductibles, copayments, and user fees. Total health spending does not include illicit transfers or indirect costs associated with health care such as transportation, lost wages, or cost of informal caregivers.

Source: Financing Global Health Database 2016

TABLE B 7

## National health spending relative to expected, 2014

Recipient country	Total health spending relative to modeled total health spending (%)	Government health spending relative to modeled government health spending (%)	Prepaid private spending relative to modeled prepaid private spending (%)	Out-of-pocket spending relative to modeled out-of-pocket-spending (%)	Development assistance for health relative to modeled development assistance for health (%)
Afghanistan	153.8	64.0	0.3	123.7	96.3
Albania	99.5	78.6	0.6	141.5	170.3
Algeria	118.0	113.8	30.3	80.0	8.8
Andorra	141.7	99.6	167.6	88.2	-
Angola	52.0	122.2	-	70.3	109.7
Antigua and Barbuda	81.1	98.7	293.5	84.8	9.6
Argentina	65.2	77.2	475.9	124.3	30.8
Armenia	78.7	69.0	158.5	142.9	162.4
Australia	121.3	91.4	333.2	98.6	-
Austria	154.6	100.6	191.4	83.2	-
Azerbaijan	91.3	31.4	164.4	242.1	263.9
Bahrain	66.0	84.5	354.1	121.9	-
Bangladesh	49.2	56.7	-	149.9	76.7
Barbados	120.6	98.2	264.0	92.2	-
Belarus	84.3	98.7	5.5	111.0	232.0
Belgium	142.9	101.2	144.0	88.9	-
Belize	100.1	109.7	498.3	62.2	131.1
Benin	82.8	120.8	-	79.3	115.9
Bhutan	62.9	123.3	-	66.3	137.8
Bolivia	110.7	128.8	225.1	59.0	68.2
Bosnia and Herzegovina	162.4	114.9	-	78.6	154.6
Botswana	86.4	75.9	1,352.6	16.4	3,595.7
Brazil	131.4	70.0	1,104.9	81.0	33.1
Brunei	45.0	119.9	2.8	33.1	-
Bulgaria	130.6	82.1	33.2	145.0	72.0
Burkina Faso	80.1	152.7	-	88.2	80.0
Burundi	119.3	161.9	-	49.3	124.5
Cambodia	109.2	35.0	-	149.9	137.0
Cameroon	67.3	45.1	404.5	155.1	63.6
Canada	138.7	93.8	475.0	68.8	-
Cape Verde	83.0	105.6	9.4	57.3	446.0
Central African Republic	77.4	59.1	-	88.4	125.3
Chad	63.1	151.3	168.8	83.1	57.9
Chile	111.6	70.8	693.3	115.4	3.3
China	83.9	94.7	208.7	103.9	5.9
Colombia	118.8	113.1	394.1	46.0	586.2
Comoros	111.9	99.1	2,797.1	98.6	44.5
Congo	90.7	150.8	17.6	44.0	31.0
Costa Rica	147.8	112.5	71.1	78.0	8.3
Cote d'Ivoire	90.7	53.6	869.3	125.5	105.6
Croatia	113.0	117.9	253.3	40.5	-

TABLE B7

## National health spending relative to expected, 2014, continued

Recipient country	Total health spending relative to modeled total health spending (%)	Government health spending relative to modeled government health spending (%)	Prepaid private spending relative to modeled prepaid private spending (%)	Out-of-pocket spending relative to modeled out-of-pocket-spending (%)	Development assistance for health relative to modeled development assistance for health (%)
Cuba	177.8	146.9	-	13.7	44.9
Cyprus	98.4	63.6	157.4	200.1	-
Czech Republic	98.4	114.6	28.1	62.2	-
Democratic Republic of the Congo	66.9	134.1	-	93.5	95.1
Denmark	147.3	109.7	62.3	67.9	-
Djibouti	186.7	143.9	-	79.4	47.5
Dominica	92.9	111.7	135.8	80.5	3.5
Dominican Republic	72.4	99.4	472.1	63.1	789.2
Ecuador	153.4	78.5	96.8	139.9	59.0
Egypt	91.0	65.1	68.6	165.3	20.8
El Salvador	117.8	110.7	262.7	77.3	66.3
Equatorial Guinea	48.7	104.6	-	96.9	480.8
Eritrea	78.2	136.8	-	86.0	100.3
Estonia	86.0	108.6	9.6	85.0	-
Ethiopia	87.6	122.7	-	65.6	131.3
Federated States of Micronesia	273.0	-	-	17.5	566.3
Fiji	77.8	107.8	390.3	62.4	277.3
Finland	124.2	101.9	105.6	92.2	-
France	150.0	104.9	467.6	31.1	-
Gabon	52.9	101.1	332.0	72.4	853.0
Georgia	126.5	32.3	941.1	162.8	151.8
Germany	154.4	100.0	311.0	67.6	-
Ghana	61.0	114.5	286.3	64.4	159.6
Greece	111.0	85.8	124.1	138.0	-
Grenada	102.0	74.5	88.4	148.8	27.3
Guatemala	108.6	64.7	477.2	137.2	85.3
Guinea	115.4	103.8	-	81.5	120.9
Guinea-Bissau	83.7	29.2	-	121.8	116.5
Guyana	92.9	92.0	155.8	97.7	275.7
Haiti	142.4	-	4,032.0	67.1	133.3
Honduras	153.3	96.0	413.0	105.1	54.1
Hungary	99.8	95.4	159.5	106.5	-
Iceland	118.2	106.8	-	88.9	-
India	77.6	59.5	175.1	164.5	10.8
Indonesia	42.5	69.8	124.6	151.0	93.9
Iran	102.6	66.6	204.4	162.2	15.6
Iraq	92.8	90.4	121.4	117.3	105.0
Ireland	108.8	86.9	457.8	94.9	-
Israel	101.9	82.1	393.6	123.1	-
Italy	119.0	102.7	32.4	99.7	-
Jamaica	92.9	85.4	1,005.4	75.5	112.7

Recipient country	Total health spending relative to modeled total health spending (%)	Government health spending relative to modeled government health spending (%)	Prepaid private spending relative to modeled prepaid private spending (%)	Out-of-pocket spending relative to modeled out-of-pocket-spending (%)	Development assistance for health relative to modeled development assistance for health (%)
Japan	134.4	110.7	84.7	64.6	-
Jordan	124.4	107.9	358.9	60.6	422.4
Kazakhstan	60.0	75.9	1.2	177.3	649.7
Kenya	108.6	96.8	428.7	53.2	217.6
Kiribati	154.9	323.3	-	6.4	58.3
Kuwait	51.6	109.7	37.6	70.3	-
Kyrgyzstan	117.6	114.4	139.3	86.0	98.0
Laos	34.7	53.7	30.4	91.8	570.8
Latvia	82.8	89.5	61.3	132.4	-
Lebanon	100.1	72.2	574.1	116.6	422.6
Lesotho	194.8	175.0	30.2	33.8	115.3
Liberia	575.9	-	-	20.0	203.9
Libya	80.2	113.5	0.2	81.9	8.3
Lithuania	89.1	93.8	28.9	126.3	-
Luxembourg	182.2	108.5	116.6	59.1	-
Macedonia	106.8	99.0	-	109.8	63.2
Madagascar	57.3	146.3	-	80.4	99.2
Malawi	197.6	197.2	2,043.1	22.9	104.1
Malaysia	57.0	78.6	293.6	138.4	59.1
Maldives	219.3	123.2	81.5	56.8	2.9
Mali	121.0	72.1	1,399.1	97.2	98.4
Malta	130.7	93.9	70.4	123.0	-
Marshall Islands	293.5	149.1	220.6	27.2	170.7
Mauritania	64.0	96.6	128.7	106.2	87.6
Mauritius	70.5	75.4	27.0	161.6	242.8
Mexico	97.7	77.9	161.4	142.9	45.1
Moldova	179.8	93.3	641.7	94.2	84.3
Mongolia	78.7	82.1	37.5	122.3	752.2
Montenegro	105.8	85.0	105.8	129.1	177.0
Morocco	102.8	56.4	405.2	157.4	37.8
Mozambique	119.0	61.0	93.7	20.7	196.6
Myanmar	44.2	73.7	-	110.7	215.1
Namibia	158.4	88.2	1,495.1	19.2	600.0
Nepal	95.9	87.8	732.5	106.5	81.7
Netherlands	147.9	114.1	206.3	27.3	-
New Zealand	145.5	109.3	231.1	50.8	-
Nicaragua	157.9	101.8	306.9	91.3	101.0
Niger	99.0	168.1	-	124.4	55.2
Nigeria	65.6	41.3	53.1	177.4	127.5
Norway	163.8	106.1	107.2	72.6	-
Oman	46.3	120.0	76.9	28.9	-

TABLE B7

## National health spending relative to expected, 2014, continued

Recipient country	Total health spending relative to modeled total health spending (%)	Government health spending relative to modeled government health spending (%)	Prepaid private spending relative to modeled prepaid private spending (%)	Out-of-pocket spending relative to modeled out-of-pocket-spending (%)	Development assistance for health relative to modeled development assistance for health (%)
Pakistan	46.3	64.2	486.2	135.6	81.2
Panama	116.5	104.8	163.9	79.6	758.5
Papua New Guinea	73.5	181.5	488.4	22.5	121.6
Paraguay	169.9	77.2	239.1	133.7	25.0
Peru	87.6	101.4	276.0	87.0	48.7
Philippines	80.9	59.8	614.9	141.5	50.7
Poland	87.6	100.0	180.6	91.6	-
Portugal	125.1	91.4	210.2	113.5	-
Qatar	72.6	112.2	137.1	37.8	-
Romania	84.1	116.9	15.1	64.2	1,012.3
Russia	98.5	72.3	100.0	178.1	-
Rwanda	149.8	-	3,072.2	51.5	174.6
Saint Lucia	113.2	79.7	37.3	130.3	441.0
Saint Vincent and the Grenadines	150.1	75.7	95.9	135.3	284.7
Samoa	125.8	173.2	-	14.5	90.4
Sao Tome and Principe	133.8	77.6	874.5	27.2	320.8
Saudi Arabia	63.0	101.2	197.0	79.4	-
Senegal	85.6	122.7	-	75.3	120.5
Serbia	167.5	98.1	13.4	111.2	23.9
Seychelles	46.5	131.3	143.3	9.2	181.7
Sierra Leone	218.9	19.2	1,235.0	112.7	125.6
Singapore	98.1	54.3	47.7	311.5	-
Slovakia	103.5	104.9	-	97.1	-
Slovenia	120.2	99.2	516.1	52.7	-
Solomon Islands	94.2	260.3	-	9.0	99.6
Somalia	87.6	142.7	164.2	72.2	107.2
South Africa	146.2	74.0	1,850.3	19.2	411.3
South Korea	93.9	74.7	233.0	168.7	-
South Sudan	61.1	61.1	-	91.1	190.8
Spain	118.4	95.1	170.8	107.6	-
Sri Lanka	58.9	88.0	45.8	121.5	229.0
Sudan	143.6	44.8	80.1	180.9	19.7
Suriname	66.5	102.1	592.7	49.1	716.5
Swaziland	164.8	115.5	473.5	26.6	519.4
Sweden	160.3	110.3	20.8	71.9	-
Switzerland	199.2	77.1	452.0	133.2	-
Syria	53.1	67.6	127.1	165.3	216.1
Tajikistan	123.6	63.6	1,024.3	130.3	56.5
Tanzania	107.3	58.5	2,069.5	45.2	213.9
Thailand	65.2	120.9	337.4	37.7	195.2
The Bahamas	107.4	64.3	899.4	113.4	-

Recipient country	Total health spending relative to modeled total health spending (%)	Government health spending relative to modeled government health spending (%)	Prepaid private spending relative to modeled prepaid private spending (%)	Out-of-pocket spending relative to modeled out-of-pocket-spending (%)	Development assistance for health relative to modeled development assistance for health (%)
The Gambia	145.7	202.4	-	31.1	121.6
Timor-Leste	33.0	99.1	-	18.6	634.8
Togo	86.0	140.6	1,091.4	103.0	51.9
Tonga	92.3	141.4	32.8	28.4	217.7
Trinidad and Tobago	77.9	74.0	242.1	164.9	-
Tunisia	117.2	92.4	202.5	109.3	18.0
Turkey	80.2	115.7	130.9	61.3	35.7
Turkmenistan	35.6	89.2	331.7	102.5	238.5
Uganda	293.2	3.3	8,624.8	36.7	64.8
Ukraine	120.5	85.8	45.9	128.7	53.6
United Arab Emirates	63.4	92.4	273.9	98.6	-
United Kingdom	121.4	109.0	244.6	46.9	-
United States	243.7	63.8	1,211.9	60.7	-
Uruguay	126.1	103.3	485.1	55.2	6.8
Uzbekistan	102.4	93.5	165.1	113.0	41.6
Vanuatu	90.0	155.2	-	12.2	208.0
Venezuela	79.9	43.4	236.0	217.4	1.5
Vietnam	121.9	100.8	494.6	93.7	44.3
Yemen	100.2	31.5	161.1	176.4	83.5
Zambia	93.7	72.1	-	65.3	351.9

**Notes:** In millions of 2015 purchasing power parity dollars. Total health spending includes direct domestic and donor spending on health. It is composed of government, prepaid private, and out-of-pocket health spending and development assistance for health. Government health spending includes only domestic resources, including social health insurance and general budget support. Prepaid private spending includes spending on private health insurance and health spending by non-governmental organizations. Out-of-pocket health spending includes private non-prepaid spending, including deductibles, copayments, and user fees. Total health spending does not include illicit transfers or indirect costs associated with health care such as transportation, lost wages, or cost of informal caregivers. Expected spending is considered the average spending conditional on a country's level of economic development as determined by penalized regression spline. Expected spending is not necessarily a reflection of the resources needed to fund the health system. It is determined by peer countries and is relative to a country's GDP per capita. Dashes indicate inapplicable.

Source: Financing Global Health Database 2016

TABLE B8

## Expected health spending in 2030 and 2040

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
GLOBAL	1,279	8.3	1,983 (1,793-2,199)	8.2 (7.4-9.1)	2,872 (2,426-3,522)	8.2 (7.0-10.1)	3.0 (2.4-3.8)
<b>INCOME GROUP</b>							
High-income	5,221	11.7	7,334 (6,786-7,815)	12.5 (11.5-13.3)	9,215 (8,475-9,967)	13.1 (12.0-14.2)	2.1 (1.8-2.4)
Upper-middle income	914	5.9	2,072 (1,698-2,583)	6.4 (5.2-7.9)	3,903 (2,770-5,741)	6.9 (4.9-10.1)	5.3 (4.1-6.8)
Lower-middle income	267	4.3	525 (485-582)	4.7 (4.3-5.1)	844 (739-1,004)	5.0 (4.4-6.0)	4.2 (3.8-4.9)
Low-income	120	7.3	154 (133-181)	6.6 (5.8-7.8)	195 (157-258)	6.7 (5.4-8.9)	1.8 (1.0-2.8)
<b>REGION</b>							
Central Europe, Eastern Europe, and Central Asia	1,364	6.7	1,877 (1,766-2,018)	6.9 (6.5-7.4)	2,417 (2,252-2,637)	7.1 (6.6-7.7)	2.1 (1.9-2.4)
Global burden of disease high-income	5,460	12.3	7,643 (7,076-8,146)	13.1 (12.1-14.0)	9,556 (8,791-10,337)	13.8 (12.7-14.9)	2.1 (1.8-2.4)
Latin America and Caribbean	1,082	7.3	1,534 (1,350-1,745)	8.2 (7.2-9.3)	2,047 (1,720-2,494)	8.9 (7.5-10.8)	2.3 (1.7-3.1)
North Africa and Middle East	870	5.2	1,246 (1,137-1,416)	5.8 (5.3-6.6)	1,630 (1,431-1,975)	6.3 (5.5-7.6)	2.3 (1.8-3.0)
South Asia	223	4.2	529 (467-619)	4.8 (4.2-5.6)	935 (773-1,203)	5.3 (4.4-6.8)	5.3 (4.6-6.2)
Southeast Asia, East Asia, and Oceania	588	4.8	1,867 (1,436-2,471)	5.6 (4.3-7.4)	4,035 (2,640-6,314)	6.3 (4.1-9.9)	7.0 (5.6-8.8)
Sub-Saharan Africa	218	5.9	259 (238-286)	5.6 (5.2-6.2)	307 (269-365)	5.7 (5.0-6.8)	1.3 (0.8-1.9)
<b>COUNTRY</b>							
Afghanistan	159	9.7	201 (161-268)	10.2 (8.1-13.6)	249 (179-388)	10.6 (7.6-16.5)	1.6 (0.4-3.3)
Albania	642	5.9	1,202 (1,022-1,424)	6.6 (5.6-7.8)	1,733 (1,404-2,144)	6.7 (5.5-8.3)	3.7 (2.9-4.5)
Algeria	1,004	7.2	1,567 (1,248-2,146)	9.1 (7.2-12.4)	2,080 (1,439-3,337)	10.4 (7.2-16.6)	2.6 (1.3-4.4)
Andorra	5,723	8.1	7,230 (5,789-8,606)	8.6 (6.9-10.3)	8,357 (5,791-10,773)	8.7 (6.1-11.3)	1.4 (0.0-2.3)
Angola	228	3	256 (169-321)	2.5 (1.7-3.1)	308 (154-414)	2.5 (1.2-3.3)	1.0 (-1.5-2.2)
Antigua and Barbuda	1,213	5.5	2,165 (1,727-2,767)	7.4 (5.9-9.4)	2,987 (2,175-4,321)	8.5 (6.2-12.4)	3.3 (2.2-4.7)
Argentina	1,322	4.8	2,177 (1,769-2,985)	5.7 (4.6-7.8)	3,012 (2,202-4,807)	6.2 (4.6-10.0)	3.0 (1.9-4.8)
Armenia	395	4.5	674 (549-907)	4.9 (4.0-6.7)	997 (727-1,578)	5.3 (3.9-8.4)	3.4 (2.3-5.1)
Australia	4,032	9	5,606 (5,186-6,165)	9.7 (9.0-10.7)	6,970 (6,206-8,111)	10.2 (9.1-11.9)	2.0 (1.6-2.6)
Austria	5,471	11.2	7,416 (6,788-8,143)	11.6 (10.6-12.7)	9,257 (8,270-10,607)	12.0 (10.8-13.8)	1.9 (1.5-2.5)
Azerbaijan	1,030	5.9	1,734 (1,524-1,978)	6.3 (5.5-7.2)	2,502 (2,033-3,062)	6.5 (5.3-7.9)	3.3 (2.5-4.0)
Bahrain	2,258	4.8	3,289 (2,738-4,136)	5.3 (4.4-6.7)	4,380 (3,426-6,336)	5.8 (4.5-8.4)	2.4 (1.5-3.8)
Bangladesh	92	2.9	173 (149-198)	2.8 (2.4-3.2)	266 (206-327)	2.8 (2.2-3.5)	3.9 (3.0-4.7)
Barbados	1,116	7.5	1,641 (1,412-1,926)	8.7 (7.5-10.2)	2,155 (1,705-2,736)	9.5 (7.5-12.0)	2.4 (1.6-3.3)
Belarus	1,093	5.6	1,825 (1,432-2,308)	7.0 (5.5-8.9)	2,369 (1,648-3,243)	7.4 (5.1-10.1)	2.8 (1.5-4.0)
Belgium	4,751	10.6	6,437 (5,759-7,278)	11.2 (10.0-12.7)	8,005 (6,950-9,572)	11.7 (10.2-14.0)	1.9 (1.4-2.6)



	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Belize	503	5.8	678 (593-776)	6.3 (5.5-7.2)	844 (703-1,017)	6.6 (5.5-8.0)	1.9 (1.2-2.6)
Benin	105	5.1	169 (134-221)	6.2 (4.9-8.1)	232 (161-357)	7.3 (5.0-11.2)	2.8 (1.6-4.5)
Bhutan	279	3.6	563 (397-774)	3.5 (2.5-4.8)	940 (517-1,558)	3.6 (2.0-5.9)	4.4 (2.3-6.4)
Bolivia	404	6.3	673 (565-814)	7.3 (6.1-8.8)	943 (736-1,252)	8.0 (6.3-10.7)	3.1 (2.2-4.2)
Bosnia and Herzegovina	992	9.5	1,734 (1,331-2,104)	10.4 (8.0-12.6)	2,613 (1,921-3,416)	11.6 (8.6-15.2)	3.5 (2.4-4.6)
Botswana	903	5.5	1,395 (1,168-1,723)	6.3 (5.2-7.7)	1,878 (1,452-2,524)	6.8 (5.3-9.2)	2.7 (1.8-3.8)
Brazil	1,357	8.3	1,994 (1,657-2,402)	10.0 (8.3-12.1)	2,770 (2,150-3,708)	11.3 (8.7-15.1)	2.6 (1.7-3.7)
Brunei	1,811	2.6	2,254 (1,741-3,135)	3.5 (2.7-4.8)	2,612 (1,859-4,315)	4.0 (2.8-6.5)	1.2 (0.1-3.2)
Bulgaria	1,490	8.4	2,659 (2,116-3,624)	9.7 (7.7-13.2)	3,870 (2,896-5,754)	10.7 (8.0-15.9)	3.5 (2.5-5.0)
Burkina Faso	83	5	108 (93-127)	5.0 (4.3-5.9)	128 (101-168)	5.1 (4.0-6.6)	1.6 (0.7-2.6)
Burundi	65	8.3	85 (62-120)	9.6 (7.0-13.6)	104 (65-176)	10.1 (6.3-17.1)	1.6 (0.0-3.7)
Cambodia	209	6.4	397 (352-448)	6.0 (5.3-6.7)	642 (543-760)	6.1 (5.2-7.2)	4.1 (3.5-4.8)
Cameroon	116	4	156 (135-179)	4.1 (3.5-4.7)	190 (150-238)	4.3 (3.4-5.4)	1.8 (0.9-2.6)
Canada	4,576	10.3	5,926 (5,389-6,601)	10.7 (9.7-11.9)	7,248 (6,516-8,528)	11.1 (10.0-13.1)	1.7 (1.3-2.3)
Cape Verde	318	4.8	529 (412-686)	4.8 (3.8-6.3)	768 (523-1,124)	5.0 (3.4-7.4)	3.2 (1.8-4.7)
Central African Republic	35	5.7	46 (29-77)	9.4 (6.0-15.8)	58 (25-145)	13.8 (6.0-34.2)	1.5 (-1.2-5.3)
Chad	89	3.8	111 (74-150)	3.9 (2.6-5.3)	138 (75-212)	4.2 (2.3-6.4)	1.5 (-0.7-3.2)
Chile	1,780	7.8	3,217 (2,622-3,793)	8.8 (7.1-10.3)	4,791 (3,724-6,105)	9.5 (7.4-12.1)	3.6 (2.7-4.6)
China	697	5.1	2,493 (1,851-3,402)	6.0 (4.5-8.2)	5,703 (3,571-9,218)	6.7 (4.2-10.8)	7.7 (6.1-9.6)
Colombia	975	7.2	1,620 (1,168-2,206)	7.8 (5.7-10.7)	2,398 (1,616-3,727)	8.5 (5.7-13.2)	3.2 (1.9-5.0)
Comoros	111	7.1	121 (101-148)	8.6 (7.1-10.5)	132 (96-184)	9.8 (7.1-13.6)	0.6 (-0.5-1.9)
Congo(Brazzaville)	312	5.2	424 (336-543)	6.1 (4.8-7.8)	544 (394-736)	7.1 (5.1-9.6)	2.0 (0.9-3.2)
Costa Rica	1,418	9.3	2,142 (1,628-2,636)	9.0 (6.8-11.1)	3,050 (2,207-4,077)	9.3 (6.8-12.5)	2.8 (1.6-3.9)
Côte d'Ivoire	179	5.3	242 (214-275)	5.4 (4.8-6.1)	292 (246-352)	5.6 (4.7-6.7)	1.8 (1.2-2.5)
Croatia	1,734	7.8	2,263 (2,064-2,445)	7.8 (7.1-8.5)	2,795 (2,482-3,032)	8.2 (7.3-8.9)	1.8 (1.3-2.1)
Cuba	1,706	11.1	2,326 (1,635-3,134)	11.3 (7.9-15.2)	3,097 (2,091-4,454)	12.3 (8.3-17.7)	2.1 (0.8-3.6)
Cyprus	2,019	7.2	2,864 (2,520-3,352)	8.0 (7.0-9.4)	3,655 (3,021-4,619)	8.7 (7.2-10.9)	2.2 (1.5-3.1)
Czech Republic	2,384	7.4	3,146 (2,753-3,657)	7.1 (6.3-8.3)	3,856 (3,240-4,708)	7.3 (6.2-9.0)	1.8 (1.1-2.5)
Democratic Republic of the Congo	46	4.5	67 (52-86)	5.1 (3.9-6.6)	83 (56-123)	5.5 (3.8-8.2)	2.1 (0.8-3.7)
Denmark	5,075	10.8	6,251 (5,488-6,890)	10.7 (9.4-11.8)	7,373 (5,855-8,735)	10.8 (8.6-12.8)	1.4 (0.5-2.0)
Djibouti	357	10.9	613 (486-838)	13.9 (11.0-18.9)	842 (598-1,324)	15.6 (11.1-24.5)	3.1 (1.9-4.8)

TABLE B8

## Expected health spending in 2030 and 2040, continued

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Dominica	599	5.5	859 (740-1,012)	6.2 (5.3-7.3)	1,092 (874-1,406)	6.6 (5.3-8.5)	2.2 (1.4-3.2)
Dominican Republic	601	4.4	1,211 (930-1,567)	4.9 (3.7-6.3)	1,833 (1,316-2,498)	5.1 (3.7-6.9)	4.1 (2.9-5.3)
Ecuador	1,071	9.2	1,491 (1,261-1,758)	10.2 (8.6-12.0)	1,935 (1,534-2,410)	11.0 (8.7-13.7)	2.2 (1.3-3.0)
Egypt	581	5.4	903 (820-1,016)	5.5 (4.9-6.1)	1,212 (1,070-1,453)	5.5 (4.9-6.6)	2.7 (2.3-3.4)
El Salvador	567	6.8	1,018 (826-1,354)	7.7 (6.3-10.3)	1,520 (1,089-2,337)	8.6 (6.1-13.2)	3.6 (2.4-5.2)
Equatorial Guinea	1,411	3.7	1,435 (1,163-1,792)	3.6 (2.9-4.5)	1,746 (1,302-2,291)	3.8 (2.8-4.9)	0.8 (-0.3-1.8)
Eritrea	59	5.1	68 (53-88)	4.8 (3.7-6.2)	84 (56-129)	5.1 (3.4-7.9)	1.2 (-0.2-2.9)
Estonia	1,830	6.4	3,274 (2,683-4,230)	7.9 (6.5-10.2)	4,554 (3,386-6,301)	8.7 (6.5-12.1)	3.3 (2.3-4.6)
Ethiopia	85	5.5	149 (115-197)	4.9 (3.8-6.5)	212 (153-311)	4.6 (3.3-6.7)	3.3 (2.2-4.8)
Federated States of Micronesia	490	16.1	608 (359-972)	17.2 (10.1-27.5)	767 (302-1,703)	19.4 (7.7-43.1)	1.3 (-1.8-4.6)
Fiji	399	4.5	558 (503-614)	4.6 (4.1-5.0)	705 (630-804)	4.7 (4.2-5.4)	2.1 (1.7-2.6)
Finland	3,935	9.3	5,061 (4,654-5,562)	9.5 (8.8-10.5)	6,209 (5,648-6,920)	9.9 (9.0-11.1)	1.7 (1.3-2.1)
France	4,589	11.3	5,963 (5,487-6,689)	11.6 (10.6-13.0)	7,402 (6,768-8,671)	12.0 (11.0-14.1)	1.8 (1.4-2.4)
Gabon	612	3.4	985 (799-1,248)	4.7 (3.9-6.0)	1,336 (966-1,900)	5.8 (4.2-8.2)	2.8 (1.7-4.2)
Georgia	700	7.3	1,236 (1,026-1,427)	8.9 (7.4-10.3)	1,608 (1,268-1,972)	9.2 (7.3-11.3)	3.1 (2.2-3.8)
Germany	5,356	11.2	7,612 (6,630-8,575)	12.0 (10.5-13.5)	9,659 (8,134-11,311)	12.7 (10.7-14.8)	2.2 (1.5-2.8)
Ghana	146	3.5	218 (177-264)	3.7 (3.0-4.4)	288 (214-381)	3.8 (2.8-5.0)	2.5 (1.4-3.5)
Greece	2,170	8.1	2,833 (2,484-3,383)	8.3 (7.3-9.9)	3,462 (2,923-4,570)	8.6 (7.3-11.4)	1.7 (1.1-2.8)
Grenada	737	6.1	1,096 (967-1,259)	6.3 (5.6-7.2)	1,412 (1,157-1,755)	6.6 (5.4-8.2)	2.4 (1.7-3.2)
Guatemala	466	6.2	594 (540-648)	6.2 (5.6-6.7)	715 (622-808)	6.3 (5.4-7.1)	1.6 (1.1-2.0)
Guinea	101	7.4	127 (100-163)	7.9 (6.2-10.1)	165 (114-243)	8.9 (6.1-13.0)	1.8 (0.4-3.2)
Guinea-Bissau	77	5.3	98 (75-131)	5.7 (4.4-7.6)	115 (74-194)	6.0 (3.9-10.2)	1.4 (-0.1-3.4)
Guyana	438	5.4	685 (589-812)	5.8 (5.0-6.9)	903 (733-1,142)	6.1 (5.0-7.7)	2.7 (1.9-3.5)
Haiti	154	8.9	205 (164-262)	9.4 (7.5-12.0)	250 (178-385)	9.6 (6.8-14.7)	1.7 (0.5-3.4)
Honduras	420	8.8	568 (513-654)	8.8 (8.0-10.1)	716 (625-887)	9.0 (7.9-11.2)	2.0 (1.5-2.8)
Hungary	1,855	7.2	2,706 (2,522-3,028)	7.3 (6.8-8.2)	3,441 (3,140-4,128)	7.5 (6.9-9.0)	2.3 (1.9-3.0)
Iceland	3,959	8.7	5,491 (4,824-6,314)	9.2 (8.1-10.6)	6,869 (5,809-8,455)	9.6 (8.1-11.8)	2.0 (1.4-2.8)
India	253	4.5	629 (550-747)	5.1 (4.4-6.0)	1,138 (927-1,488)	5.6 (4.6-7.3)	5.5 (4.8-6.6)
Indonesia	265	2.5	509 (443-588)	2.6 (2.3-3.0)	793 (640-986)	2.7 (2.2-3.4)	4.0 (3.3-4.9)
Iran	1,073	6.5	1,558 (1,263-1,874)	7.3 (5.9-8.8)	2,051 (1,489-2,709)	7.8 (5.7-10.4)	2.4 (1.2-3.4)
Iraq	828	5.7	1,018 (787-1,401)	5.9 (4.6-8.2)	1,230 (860-1,897)	6.4 (4.5-9.9)	1.4 (0.1-3.1)

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Ireland	4,006	7.6	5,989 (4,758-7,222)	7.8 (6.2-9.4)	7,363 (5,145-9,737)	8.1 (5.7-10.7)	2.2 (0.9-3.3)
Israel	2,722	7.7	3,747 (3,312-4,249)	8.4 (7.4-9.5)	4,534 (3,695-5,491)	8.7 (7.1-10.5)	1.9 (1.1-2.6)
Italy	3,311	9	4,154 (3,805-4,502)	8.8 (8.1-9.6)	5,135 (4,580-5,713)	9.2 (8.2-10.2)	1.6 (1.2-2.0)
Jamaica	477	5.4	773 (650-955)	7.0 (5.9-8.6)	1,000 (748-1,399)	7.7 (5.8-10.8)	2.7 (1.7-4.0)
Japan	3,816	10.2	5,729 (4,452-6,820)	11.7 (9.1-13.9)	7,695 (6,122-9,315)	13.0 (10.3-15.7)	2.6 (1.8-3.3)
Jordan	839	7.4	1,097 (982-1,226)	7.4 (6.6-8.3)	1,335 (1,144-1,565)	7.6 (6.5-8.9)	1.7 (1.1-2.3)
Kazakhstan	1,143	4.3	1,545 (1,343-1,817)	4.2 (3.6-4.9)	2,047 (1,787-2,500)	4.3 (3.8-5.3)	2.1 (1.7-2.9)
Kenya	197	6.4	237 (194-302)	5.9 (4.9-7.6)	286 (209-423)	6.1 (4.5-9.0)	1.3 (0.2-2.8)
Kiribati	168	9.6	184 (81-281)	9.9 (4.4-15.2)	214 (58-386)	10.8 (2.9-19.6)	0.5 (-3.9-3.1)
Kuwait	2,075	3	3,208 (2,309-4,950)	4.2 (3.0-6.5)	4,368 (2,792-8,124)	4.9 (3.1-9.1)	2.6 (1.1-5.1)
Kyrgyzstan	236	6.9	315 (272-369)	7.4 (6.4-8.6)	384 (302-492)	7.7 (6.1-9.9)	1.8 (0.9-2.7)
Laos	113	2	186 (144-234)	1.5 (1.2-1.9)	285 (178-419)	1.4 (0.9-2.1)	3.3 (1.7-4.8)
Latvia	1,427	5.9	2,036 (1,833-2,247)	5.8 (5.2-6.4)	2,564 (2,246-2,898)	5.8 (5.1-6.6)	2.2 (1.7-2.6)
Lebanon	1,060	6.4	1,484 (1,222-1,825)	6.3 (5.2-7.8)	1,895 (1,458-2,499)	6.5 (5.0-8.5)	2.1 (1.2-3.2)
Lesotho	319	11.6	521 (371-667)	12.3 (8.8-15.8)	726 (464-1,010)	13.0 (8.3-18.0)	3.0 (1.4-4.3)
Liberia	345	39.3	287 (257-333)	27.1 (24.3-31.4)	276 (224-373)	22.2 (18.0-29.9)	-0.9 (-1.6-0.3)
Libya	751	5	781 (534-1,147)	6.8 (4.7-10.0)	979 (590-1,637)	8.8 (5.3-14.7)	0.8 (-0.9-2.9)
Lithuania	1,830	6.5	2,904 (2,579-3,381)	6.6 (5.9-7.7)	3,871 (3,242-4,809)	6.7 (5.6-8.3)	2.8 (2.1-3.6)
Luxembourg	7,105	6.9	10,593 (9,569-12,306)	7.4 (6.7-8.6)	13,924 (11,726-17,455)	7.9 (6.6-9.9)	2.5 (1.9-3.3)
Macedonia	887	6.5	1,368 (1,240-1,504)	6.8 (6.2-7.5)	1,742 (1,549-1,931)	6.9 (6.1-7.7)	2.5 (2.1-2.9)
Madagascar	52	3.7	65 (54-80)	4.2 (3.5-5.2)	73 (56-106)	4.4 (3.4-6.4)	1.3 (0.3-2.7)
Malawi	148	12.9	184 (148-233)	13.4 (10.8-17.0)	219 (160-320)	13.9 (10.1-20.2)	1.4 (0.3-2.9)
Malaysia	1,047	4.1	1,783 (1,576-2,102)	4.1 (3.6-4.8)	2,528 (2,099-3,249)	4.1 (3.4-5.3)	3.2 (2.6-4.2)
Maldives	1,980	13.5	3,623 (2,656-5,154)	13.1 (9.6-18.6)	6,070 (3,725-9,978)	13.9 (8.6-22.9)	4.0 (2.3-6.0)
Mali	162	7.4	229 (193-275)	7.3 (6.2-8.8)	300 (231-402)	7.9 (6.1-10.6)	2.2 (1.3-3.4)
Malta	3,058	9.7	5,997 (5,097-7,328)	12.1 (10.3-14.8)	8,840 (6,975-11,329)	13.5 (10.7-17.4)	3.9 (3.1-4.9)
Marshall Islands	599	17.2	679 (495-851)	15.7 (11.5-19.7)	785 (448-1,130)	15.8 (9.0-22.7)	0.9 (-1.1-2.3)
Mauritania	153	3.7	204 (171-251)	4.0 (3.3-4.9)	258 (193-366)	4.4 (3.3-6.2)	1.9 (0.9-3.2)
Mauritius	880	4.6	1,942 (1,454-2,542)	5.5 (4.1-7.2)	3,459 (2,435-5,042)	6.4 (4.5-9.4)	5.0 (3.8-6.5)
Mexico	1,088	6.3	1,413 (1,217-1,611)	6.7 (5.8-7.7)	1,726 (1,403-2,084)	7.1 (5.8-8.6)	1.7 (0.9-2.4)
Moldova	527	10.3	711 (620-822)	10.5 (9.1-12.1)	910 (755-1,122)	10.7 (8.8-13.1)	2.0 (1.3-2.8)

TABLE B8

## Expected health spending in 2030 and 2040, continued

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Mongolia	575	4.7	1,078 (837-1,406)	4.7 (3.7-6.2)	1,685 (1,177-2,462)	4.8 (3.4-7.0)	3.9 (2.7-5.4)
Montenegro	1,015	6.6	1,613 (1,373-2,074)	7.5 (6.4-9.6)	2,189 (1,734-3,138)	8.2 (6.5-11.8)	2.8 (2.0-4.2)
Morocco	505	5.9	765 (700-833)	5.6 (5.2-6.1)	1,056 (945-1,160)	5.7 (5.1-6.2)	2.7 (2.3-3.1)
Mozambique	92	7.8	96 (62-142)	5.3 (3.4-7.8)	117 (59-222)	4.9 (2.5-9.3)	0.7 (-1.6-3.3)
Myanmar	121	2.5	394 (273-613)	3.3 (2.3-5.1)	979 (476-2,210)	4.5 (2.2-10.1)	7.4 (5.1-10.8)
Namibia	936	9.3	1,437 (1,277-1,692)	9.8 (8.7-11.5)	1,929 (1,590-2,499)	10.2 (8.4-13.2)	2.7 (2.0-3.6)
Nepal	138	5.8	226 (197-259)	5.6 (4.9-6.5)	321 (263-388)	5.6 (4.6-6.7)	3.1 (2.4-3.8)
Netherlands	5,234	10.7	7,799 (6,370-9,036)	12.2 (10.0-14.2)	10,186 (8,436-12,098)	13.4 (11.1-16.0)	2.5 (1.8-3.1)
New Zealand	4,050	11	5,496 (4,595-6,193)	11.4 (9.5-12.9)	6,868 (5,624-8,063)	11.9 (9.8-14.0)	1.9 (1.2-2.5)
Nicaragua	450	9.1	652 (518-753)	9.3 (7.4-10.7)	830 (618-1,005)	9.5 (7.1-11.5)	2.2 (1.2-3.0)
Niger	66	6.7	81 (66-101)	6.8 (5.6-8.5)	98 (73-139)	7.3 (5.4-10.4)	1.4 (0.4-2.8)
Nigeria	225	3.7	287 (245-343)	3.8 (3.2-4.5)	343 (268-449)	3.9 (3.0-5.1)	1.5 (0.6-2.6)
Norway	6,537	10	9,758 (8,486-11,459)	11.6 (10.1-13.6)	12,734 (10,505-16,034)	12.7 (10.5-16.0)	2.4 (1.8-3.3)
Oman	1,467	3.5	2,507 (1,908-4,034)	4.5 (3.4-7.2)	3,631 (2,369-7,390)	5.2 (3.4-10.5)	3.1 (1.8-6.0)
Pakistan	132	2.7	212 (184-250)	2.9 (2.6-3.5)	296 (237-383)	3.2 (2.6-4.2)	3.0 (2.2-4.0)
Panama	1,743	8	3,094 (2,659-3,563)	8.0 (6.9-9.2)	4,569 (3,750-5,565)	8.1 (6.7-9.9)	3.6 (2.8-4.3)
Papua New Guinea	108	4.4	168 (139-206)	4.7 (3.9-5.7)	224 (167-304)	5.0 (3.8-6.8)	2.7 (1.6-3.8)
Paraguay	863	9.8	1,374 (1,146-1,760)	10.8 (9.0-13.8)	1,916 (1,460-2,827)	11.6 (8.9-17.1)	2.9 (1.9-4.4)
Peru	626	5.2	942 (807-1,158)	5.3 (4.6-6.5)	1,276 (1,032-1,692)	5.5 (4.5-7.3)	2.6 (1.9-3.7)
Philippines	330	4.7	559 (494-624)	5.2 (4.6-5.8)	787 (661-920)	5.5 (4.6-6.4)	3.2 (2.6-3.8)
Poland	1,629	6.3	2,836 (2,528-3,134)	5.9 (5.3-6.5)	4,264 (3,679-4,873)	5.9 (5.1-6.7)	3.6 (3.0-4.1)
Portugal	2,697	9.3	3,774 (3,110-4,600)	9.8 (8.1-12.0)	4,784 (3,934-6,355)	10.5 (8.7-14.0)	2.1 (1.4-3.2)
Qatar	2,663	2.2	3,785 (2,922-5,426)	2.7 (2.1-3.9)	5,006 (3,392-8,591)	3.1 (2.1-5.3)	2.2 (0.9-4.3)
Romania	1,077	5.5	2,258 (1,703-3,063)	6.8 (5.1-9.2)	3,500 (2,608-4,864)	7.7 (5.7-10.7)	4.3 (3.3-5.6)
Russia	1,877	7.1	2,287 (2,100-2,623)	7.5 (6.9-8.6)	2,665 (2,416-3,206)	7.7 (7.0-9.3)	1.3 (0.9-2.0)
Rwanda	158	9.4	217 (165-289)	8.5 (6.4-11.3)	278 (188-448)	8.4 (5.6-13.4)	2.0 (0.6-3.9)
Saint Lucia	755	6.7	1,023 (897-1,212)	6.8 (6.0-8.1)	1,340 (1,086-1,782)	7.4 (6.0-9.8)	2.1 (1.3-3.2)
Saint Vincent and the Grenadines	917	8.8	1,203 (968-1,545)	8.7 (7.0-11.2)	1,506 (1,106-2,137)	9.2 (6.8-13.1)	1.8 (0.7-3.1)
Samoa	365	7.2	433 (338-643)	6.7 (5.2-9.9)	555 (403-856)	7.3 (5.3-11.2)	1.5 (0.4-3.2)
Sao Tome and Principe	251	7.9	317 (241-416)	8.1 (6.2-10.6)	397 (262-608)	8.9 (5.9-13.7)	1.6 (0.2-3.3)
Saudi Arabia	2,320	4.4	3,355 (2,554-5,027)	5.3 (4.0-8.0)	4,590 (3,089-8,043)	6.3 (4.2-11.1)	2.4 (1.1-4.6)

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Senegal	121	5.2	153 (130-184)	5.3 (4.5-6.4)	182 (140-245)	5.7 (4.4-7.7)	1.5 (0.5-2.6)
Serbia	1,392	10.3	1,864 (1,714-2,037)	10.4 (9.6-11.4)	2,319 (2,113-2,616)	10.7 (9.8-12.1)	1.9 (1.5-2.3)
Seychelles	853	3.3	1,599 (1,118-2,226)	4.0 (2.8-5.5)	2,498 (1,355-3,834)	4.5 (2.5-7.0)	3.8 (1.7-5.6)
Sierra Leone	255	13.5	250 (214-311)	15.7 (13.4-19.5)	290 (227-423)	15.9 (12.5-23.1)	0.4 (-0.4-1.9)
Singapore	3,981	4.8	6,990 (5,335-9,135)	6.0 (4.6-7.9)	10,035 (7,204-14,611)	7.0 (5.0-10.2)	3.4 (2.2-4.8)
Slovakia	2,203	7.7	3,798 (3,306-4,375)	8.0 (7.0-9.2)	5,354 (4,571-6,557)	8.2 (7.0-10.1)	3.3 (2.7-4.0)
Slovenia	2,845	9.1	3,970 (3,482-4,776)	9.4 (8.2-11.3)	4,961 (4,010-6,494)	9.8 (7.9-12.8)	2.0 (1.3-3.1)
Solomon Islands	107	5.8	111 (75-157)	4.9 (3.3-7.0)	141 (82-230)	5.4 (3.2-8.8)	0.9 (-1.0-2.8)
Somalia	33	6.9	36 (27-50)	6.9 (5.2-9.5)	42 (27-72)	7.3 (4.7-12.4)	0.8 (-0.7-2.9)
South Africa	1,172	8.9	1,499 (1,346-1,684)	9.7 (8.7-10.9)	1,815 (1,555-2,165)	10.3 (8.9-12.3)	1.6 (1.0-2.3)
South Korea	2,507	7.1	4,838 (4,088-5,783)	9.0 (7.6-10.8)	6,859 (5,323-8,897)	10.1 (7.9-13.2)	3.7 (2.8-4.7)
South Sudan	94	3.6	120 (84-182)	5.1 (3.6-7.7)	145 (78-283)	6.4 (3.4-12.5)	1.4 (-0.7-4.1)
Spain	3,096	9	4,245 (3,808-4,645)	9.0 (8.0-9.8)	5,194 (4,510-5,846)	9.1 (7.9-10.2)	1.9 (1.4-2.4)
Sri Lanka	402	3.5	911 (716-1,180)	3.8 (3.0-5.0)	1,645 (1,207-2,289)	4.3 (3.1-5.9)	5.2 (4.1-6.4)
Sudan	334	8.3	457 (380-543)	8.0 (6.6-9.5)	594 (478-730)	8.1 (6.5-9.9)	2.1 (1.3-2.9)
Suriname	731	4.3	940 (765-1,171)	4.2 (3.4-5.2)	1,195 (856-1,630)	4.3 (3.1-5.9)	1.8 (0.6-3.0)
Swaziland	745	9.5	1,132 (923-1,430)	11.5 (9.4-14.5)	1,467 (1,062-2,094)	12.8 (9.2-18.2)	2.4 (1.3-3.8)
Sweden	5,446	11.8	8,048 (6,984-9,231)	13.1 (11.4-15.0)	10,194 (8,079-12,326)	13.9 (11.1-16.9)	2.3 (1.5-3.0)
Switzerland	7,831	12.8	9,702 (8,612-10,687)	13.4 (11.9-14.7)	11,365 (9,797-12,870)	14.0 (12.1-15.9)	1.4 (0.8-1.8)
Syria	562	3.4	736 (618-908)	3.7 (3.1-4.5)	926 (703-1,274)	4.0 (3.0-5.5)	1.8 (0.8-3.0)
Tajikistan	200	7.3	309 (266-362)	8.9 (7.7-10.5)	398 (324-509)	9.8 (8.0-12.6)	2.5 (1.8-3.4)
Tanzania	166	6.4	239 (194-303)	6.2 (5.0-7.8)	308 (225-445)	6.4 (4.6-9.2)	2.2 (1.1-3.6)
Thailand	633	4.1	1,113 (861-1,390)	4.3 (3.4-5.4)	1,689 (1,315-2,326)	4.7 (3.7-6.5)	3.6 (2.7-4.8)
The Bahamas	1,996	7.7	2,658 (2,387-3,054)	8.6 (7.7-9.8)	3,306 (2,792-4,163)	9.1 (7.7-11.5)	1.8 (1.2-2.7)
The Gambia	151	9.2	174 (138-228)	10.2 (8.1-13.4)	199 (134-326)	11.4 (7.7-18.6)	0.9 (-0.4-2.8)
Timor-Leste	105	1.9	216 (139-329)	3.0 (2.0-4.6)	302 (155-532)	3.5 (1.8-6.1)	3.7 (1.5-6.0)
Togo	81	5.5	114 (99-134)	6.1 (5.2-7.1)	142 (113-187)	6.4 (5.1-8.4)	2.1 (1.2-3.1)
Tonga	253	5.3	399 (279-594)	6.4 (4.5-9.5)	553 (352-954)	7.6 (4.8-13.1)	2.8 (1.2-4.9)
Trinidad and Tobago	1,823	5.8	2,518 (2,216-2,919)	6.3 (5.5-7.3)	3,177 (2,671-4,034)	6.5 (5.5-8.3)	2.0 (1.4-2.9)
Tunisia	791	6.9	1,099 (992-1,232)	7.2 (6.5-8.1)	1,390 (1,195-1,653)	7.5 (6.4-8.9)	2.1 (1.5-2.7)
Turkey	1,040	5.3	1,748 (1,556-2,032)	5.7 (5.1-6.6)	2,441 (2,096-3,065)	6.0 (5.1-7.5)	3.1 (2.6-4.0)

TABLE B8

## Expected health spending in 2030 and 2040, continued

	2014		2030		2040		2014-2040
	Health spending per capita (\$)	Health spending per GDP (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Health spending per capita with uncertainty interval (\$)	Health spending per GDP with uncertainty interval (%)	Annualized rate of change, health spending per capita with uncertainty interval (%)
Turkmenistan	396	2.3	925 (763-1,132)	2.7 (2.2-3.3)	1,638 (1,237-2,191)	3.0 (2.3-4.1)	5.2 (4.2-6.3)
Uganda	347	18.1	313 (262-370)	11.6 (9.7-13.7)	384 (307-489)	11.6 (9.3-14.8)	0.3 (-0.5-1.3)
Ukraine	659	7	673 (584-781)	7.5 (6.5-8.7)	715 (557-899)	7.7 (6.0-9.7)	0.3 (-0.6-1.1)
United Arab Emirates	2,561	3.6	3,290 (2,724-4,287)	4.2 (3.4-5.4)	4,182 (3,227-6,245)	4.6 (3.5-6.8)	1.8 (0.9-3.3)
UK	3,749	9.1	5,002 (4,276-5,803)	9.3 (7.9-10.8)	6,169 (5,056-7,605)	9.6 (7.9-11.8)	1.8 (1.1-2.6)
USA	9,237	16.6	12,448 (11,293-13,528)	17.7 (16.0-19.2)	15,026 (13,412-16,776)	18.5 (16.5-20.7)	1.8 (1.4-2.2)
Uruguay	1,837	8.6	2,766 (2,289-3,130)	8.9 (7.4-10.1)	3,716 (2,963-4,400)	9.3 (7.4-11.1)	2.6 (1.8-3.2)
Uzbekistan	397	5.9	802 (648-1,024)	7.2 (5.8-9.2)	1,299 (931-1,894)	8.3 (6.0-12.1)	4.3 (3.2-5.8)
Vanuatu	149	5.4	214 (145-331)	7.3 (5.0-11.3)	283 (162-524)	8.9 (5.1-16.5)	2.2 (0.3-4.7)
Venezuela	1,010	5.3	1,125 (988-1,277)	5.7 (5.0-6.5)	1,285 (1,082-1,528)	6.0 (5.1-7.2)	0.9 (0.3-1.5)
Vietnam	398	7	919 (740-1,123)	7.6 (6.1-9.2)	1,545 (1,121-2,038)	7.9 (5.8-10.5)	5.0 (3.8-6.0)
Yemen	233	5.8	229 (179-299)	7.0 (5.5-9.1)	276 (197-400)	7.4 (5.3-10.7)	0.6 (-0.6-2.0)
Zambia	216	5.4	287 (232-363)	5.6 (4.5-7.1)	345 (251-497)	5.7 (4.2-8.2)	1.7 (0.6-3.1)

**Notes:** In millions of 2015 purchasing power parity dollars. Total health spending includes direct domestic and donor spending on health. It is composed of government, prepaid private, and out-of-pocket health spending and development assistance for health. Total health spending does not include illicit transfers or indirect costs associated with health care such as transportation, lost wages, or cost of informal caregivers.

**Source:** Financing Global Health Database 2016

TABLE B9

## Expected health spending by source in 2040

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
<b>GLOBAL</b>	59.2%	17.4%	22.8%	0.6%	65.3% (58.7-72.3)	12.9% (10.1-16.0)	21.4% (16.5-26.2)	0.4% (0.1-0.9)
<b>Income level</b>								
High-income	63.4%	22.7%	13.9%	0%	65.5% (62.0-68.5)	22.0% (19.7-25.2)	12.5% (11.2-13.9)	0.0% (0.0-0.0)
Upper-middle income	57.2%	8.7%	33.8%	0.3%	71.2% (59.3-82.6)	6.4% (3.9-9.6)	22.3% (12.8-32.9)	0.0% (0.0-0.1)
Lower-middle income	35.9%	3.1%	58%	3%	45.6% (38.5-54.5)	2.7% (2.2-3.2)	50.5% (42.1-57.2)	1.2% (0.4-2.7)
Low-income	18%	17.2%	29.1%	35.7%	29.4% (20.8-38.3)	14.4% (10.4-18.1)	29.9% (21.9-37.0)	26.3% (12.1-44.9)
<b>REGION</b>								
Central Europe, Eastern Europe, and Central Asia	58.5%	2.8%	38.5%	0.3%	62.5% (57.7-65.8)	3.2% (2.7-4.2)	34.1% (31.0-39.1)	0.2% (0.0-0.5)
Global Burden of Disease high-income	62.8%	23.4%	13.8%	0%	64.8% (61.2-67.9)	22.8% (20.4-26.0)	12.5% (11.2-13.9)	0.0% (0.0-0.0)
Latin America and Caribbean	51.6%	16.1%	31.7%	0.7%	59.6% (52.1-67.4)	14.7% (11.3-19.1)	25.5% (20.3-30.9)	0.2% (0.1-0.5)
North Africa and Middle East	60.1%	4.3%	34.9%	0.7%	63.9% (58.6-70.5)	3.9% (3.1-4.8)	31.6% (25.7-36.6)	0.6% (0.2-1.4)
South Asia	31%	2.6%	64.7%	1.7%	43.5% (33.0-56.6)	2.1% (1.5-2.5)	54.0% (41.5-64.1)	0.4% (0.1-1.1)
Southeast Asia, East Asia, and Oceania	58.6%	5.2%	35.7%	0.5%	73.2% (58.8-85.7)	4.9% (2.7-8.1)	21.8% (11.0-35.1)	0.1% (0.0-0.2)
Sub-Saharan Africa	33.5%	20.8%	29.2%	16.6%	39.0% (32.0-45.4)	15.5% (12.7-18.0)	31.1% (25.6-36.3)	14.4% (5.9-27.3)
<b>COUNTRY</b>								
Afghanistan	15%	0%	54.1%	30.9%	19.1% (9.0-43.0)	0.5% (0.3-0.9)	50.2% (30.7-65.9)	30.1% (15.1-53.4)
Albania	48.3%	0%	49.8%	1.9%	58.1% (49.4-68.0)	0.8% (0.6-1.0)	41.0% (31.2-49.6)	0.1% (0.0-1.2)
Algeria	72.7%	0.7%	26.5%	0%	80.7% (72.4-89.0)	0.6% (0.3-1.0)	18.7% (10.6-26.7)	0.0% (0.0-0.1)
Andorra	78%	6%	15.9%	0%	78.5% (69.5-84.4)	6.5% (4.5-9.9)	15.0% (10.5-21.5)	0.0% (0.0-0.0)
Angola	70%	0%	26.6%	3.4%	61.9% (32.3-76.0)	2.3% (1.5-4.4)	32.7% (19.8-59.5)	3.1% (0.7-8.5)
Antigua and Barbuda	68.3%	8%	23.7%	0%	77.6% (68.9-85.4)	6.4% (4.1-9.4)	16.0% (10.1-23.2)	0.0% (0.0-0.0)
Argentina	55.8%	13.2%	30.9%	0%	65.0% (53.6-79.7)	11.3% (6.5-16.3)	23.7% (13.3-33.3)	0.0% (0.0-0.0)
Armenia	40.6%	3%	52.8%	3.6%	52.8% (40.1-71.7)	3.3% (1.9-5.3)	42.3% (25.0-54.7)	1.5% (0.0-6.0)
Australia	70.4%	9.9%	19.7%	0%	72.0% (66.7-76.7)	9.8% (7.8-12.7)	18.2% (14.8-23.3)	0.0% (0.0-0.0)
Austria	78%	5.8%	16.2%	0%	79.3% (76.0-82.6)	5.7% (4.6-8.1)	15.0% (12.4-17.6)	0.0% (0.0-0.0)
Azerbaijan	20.9%	4.3%	74.2%	0.6%	26.5% (18.1-39.1)	4.1% (3.0-5.8)	69.4% (57.2-77.9)	0.0% (0.0-0.0)
Bahrain	65.3%	10.6%	24.1%	0%	71.8% (64.1-81.2)	9.9% (6.3-14.3)	18.3% (12.1-24.1)	0.0% (0.0-0.0)
Bangladesh	22.7%	0%	65.6%	11.7%	30.2% (21.3-42.6)	1.8% (1.4-2.4)	63.6% (51.0-73.1)	4.5% (0.8-11.6)
Barbados	63.5%	6.6%	29.9%	0%	69.2% (60.0-77.1)	6.1% (4.3-8.8)	24.7% (17.7-33.3)	0.0% (0.0-0.0)

TABLE B9

## Expected health spending by source in 2040, continued

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
Belarus	66.9%	0.1%	32.6%	0.4%	68.2% (55.0-79.0)	0.8% (0.5-1.3)	31.0% (20.3-44.0)	0.0% (0.0-0.0)
Belgium	77.9%	4.3%	17.8%	0%	79.9% (76.6-83.6)	4.1% (3.2-5.2)	16.1% (12.9-18.8)	0.0% (0.0-0.0)
Belize	64.7%	9.5%	23%	2.9%	68.2% (61.2-74.8)	9.7% (7.3-13.1)	19.8% (15.2-24.7)	2.3% (0.5-5.7)
Benin	35%	0%	35.5%	29.6%	56.1% (39.3-73.7)	1.2% (0.6-2.0)	25.7% (15.6-36.3)	16.9% (6.0-34.4)
Bhutan	70.7%	0%	25.1%	4.2%	76.0% (58.4-88.1)	1.6% (0.8-2.7)	22.2% (10.7-39.0)	0.2% (0.0-1.9)
Bolivia	70.2%	3.4%	23.1%	3.3%	77.5% (70.1-84.2)	2.9% (1.8-4.6)	18.2% (12.4-24.6)	1.5% (0.4-3.6)
Bosnia and Herzegovina	70%	0%	28%	2%	78.8% (70.6-86.4)	0.5% (0.3-0.6)	20.4% (12.9-28.2)	0.4% (0.0-2.3)
Botswana	49.9%	35%	5.1%	10%	60.7% (49.2-72.1)	34.5% (24.2-45.2)	4.2% (2.9-5.7)	0.6% (0.0-7.0)
Brazil	45.9%	28.5%	25.5%	0.1%	56.1% (44.4-68.3)	24.8% (17.5-33.0)	19.1% (13.0-26.1)	0.0% (0.0-0.1)
Brunei	93.9%	0.1%	6%	0%	94.0% (89.4-97.0)	1.4% (0.8-2.1)	4.6% (2.1-8.9)	0.0% (0.0-0.0)
Bulgaria	54.7%	0.9%	44.3%	0.2%	61.1% (49.5-75.1)	0.7% (0.4-1.3)	38.3% (24.4-49.7)	0.0% (0.0-0.0)
Burkina Faso	35.8%	0%	38.6%	25.6%	40.5% (28.9-50.5)	1.1% (0.7-1.7)	38.1% (27.5-48.9)	20.3% (7.9-38.7)
Burundi	23.7%	0%	19.1%	57.2%	36.2% (17.2-55.4)	0.8% (0.4-1.4)	16.9% (8.9-26.8)	46.1% (23.0-71.0)
Cambodia	14.2%	0%	65.4%	20.4%	25.0% (15.1-34.8)	1.0% (0.7-1.5)	67.3% (56.9-77.7)	6.7% (1.6-16.5)
Cameroon	17%	3.5%	68.5%	10.9%	24.9% (16.1-37.7)	3.4% (2.5-4.8)	63.4% (51.0-73.8)	8.3% (2.9-17.8)
Canada	72.1%	14.1%	13.8%	0%	74.8% (71.5-79.1)	12.9% (10.7-14.8)	12.3% (9.6-14.7)	0.0% (0.0-0.0)
Cape Verde	58.4%	0.1%	22.2%	19.2%	68.4% (52.9-80.4)	1.2% (0.7-2.0)	21.9% (14.1-31.4)	8.6% (1.2-21.4)
Central African Republic	9%	0%	34.2%	56.7%	10.1% (2.9-20.1)	0.5% (0.1-1.0)	18.4% (5.8-36.2)	71.0% (44.8-90.7)
Chad	48.5%	1.3%	37.2%	12.9%	51.0% (20.7-71.8)	1.6% (0.8-2.8)	36.0% (20.2-60.4)	11.5% (3.3-26.6)
Chile	49.5%	19%	31.5%	0%	57.1% (45.8-67.0)	16.0% (12.1-20.7)	26.8% (20.1-34.5)	0.0% (0.0-0.0)
China	60.3%	5%	34.6%	0%	74.7% (59.1-87.5)	4.9% (2.6-8.3)	20.4% (9.3-34.8)	0.0% (0.0-0.0)
Colombia	71.9%	9.5%	15.3%	3.2%	77.8% (67.8-86.7)	10.4% (6.0-15.9)	11.7% (6.5-17.6)	0.1% (0.0-1.5)
Comoros	22.1%	20.1%	42.8%	14.9%	26.0% (14.2-43.2)	16.4% (11.4-22.1)	38.6% (25.3-52.3)	19.0% (6.6-39.8)
Congo (Brazzaville)	80.7%	0.3%	17.4%	1.7%	84.5% (77.2-89.6)	0.7% (0.5-1.1)	13.5% (8.9-20.5)	1.2% (0.4-3.1)
Costa Rica	73.1%	1.8%	25%	0%	73.5% (63.8-81.4)	1.8% (1.3-2.6)	24.6% (17.1-33.9)	0.0% (0.0-0.0)
Côte d'Ivoire	22.1%	8.2%	54.6%	15.1%	30.5% (22.4-40.6)	8.3% (6.2-10.9)	50.3% (41.2-58.7)	10.9% (3.7-22.9)
Croatia	81.9%	6.9%	11.2%	0%	81.9% (77.8-84.9)	7.5% (6.1-10.2)	10.7% (8.0-14.4)	0.0% (0.0-0.0)
Cuba	95.5%	0%	4.4%	0.2%	95.4% (93.1-97.1)	0.4% (0.3-0.6)	4.1% (2.6-6.3)	0.0% (0.0-0.2)
Cyprus	46%	4.4%	49.6%	0%	54.2% (45.6-64.5)	4.3% (3.0-6.2)	41.4% (32.0-49.4)	0.0% (0.0-0.0)
Czech Republic	84.8%	0.8%	14.4%	0%	85.1% (81.7-88.3)	0.9% (0.7-1.5)	14.0% (10.9-17.3)	0.0% (0.0-0.0)



	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
Democratic Republic of the Congo	21.3%	0%	37.4%	41.3%	33.6% (18.8-53.0)	1.0% (0.6-1.7)	35.5% (21.0-50.8)	29.9% (11.9-53.6)
Denmark	84.8%	1.9%	13.4%	0%	84.3% (80.1-87.5)	2.2% (1.7-3.3)	13.4% (10.5-17.1)	0.0% (0.0-0.0)
Djibouti	58.3%	0%	34.6%	7.1%	67.6% (54.9-81.4)	0.3% (0.2-0.5)	27.3% (15.7-38.4)	4.8% (1.4-11.4)
Dominica	68.7%	3%	28.3%	0%	73.0% (64.4-80.7)	2.7% (1.8-4.1)	24.3% (17.1-32.7)	0.0% (0.0-0.1)
Dominican Republic	63.4%	11.4%	21%	4.2%	74.0% (63.3-82.7)	11.1% (7.3-16.5)	14.9% (8.6-22.4)	0.0% (0.0-0.0)
Ecuador	48.8%	2.2%	48.5%	0.5%	53.1% (42.1-63.7)	2.0% (1.4-3.0)	44.6% (34.3-55.4)	0.3% (0.0-0.8)
Egypt	39.9%	1.5%	58.3%	0.2%	39.5% (33.5-49.5)	1.7% (1.2-2.5)	58.8% (49.0-64.7)	0.0% (0.0-0.2)
El Salvador	64.7%	4.9%	28.8%	1.6%	73.8% (63.5-84.5)	4.8% (2.7-7.6)	20.7% (11.8-29.8)	0.6% (0.0-2.1)
Equatorial Guinea	79.2%	0%	20.7%	0.1%	77.1% (65.6-84.4)	1.4% (1.0-1.9)	21.5% (14.5-33.1)	0.0% (0.0-0.0)
Eritrea	23.4%	0%	35.2%	41.4%	26.4% (12.4-42.3)	1.1% (0.7-1.7)	35.5% (21.5-50.9)	37.1% (16.6-61.2)
Estonia	79%	0.3%	20.8%	0%	82.1% (74.5-88.6)	0.6% (0.4-0.8)	17.3% (10.9-24.9)	0.0% (0.0-0.0)
Ethiopia	26.9%	0%	28.4%	44.7%	38.8% (24.2-53.2)	1.3% (0.7-2.0)	31.9% (19.6-43.9)	28.0% (9.6-52.3)
Federated States of Micronesia	0%	0%	7.7%	92.3%	8.3% (2.4-19.4)	0.3% (0.1-0.7)	7.9% (2.9-16.9)	83.5% (64.6-94.3)
Fiji	63.8%	7.5%	23%	5.7%	64.2% (57.0-69.8)	8.2% (6.4-10.7)	22.6% (18.3-29.5)	4.9% (1.2-12.0)
Finland	78%	3.1%	18.9%	0%	79.2% (76.5-82.0)	3.1% (2.6-4.0)	17.7% (15.0-20.2)	0.0% (0.0-0.0)
France	79.9%	13.6%	6.5%	0%	80.0% (76.2-83.5)	14.2% (11.4-17.8)	5.9% (4.5-7.1)	0.0% (0.0-0.0)
Gabon	67.4%	8.8%	22%	1.8%	81.0% (72.9-87.8)	5.3% (3.3-8.3)	13.3% (8.1-20.0)	0.4% (0.0-2.2)
Georgia	19.4%	18.9%	59.1%	2.6%	23.4% (15.5-36.1)	31.8% (20.8-40.9)	43.4% (33.4-54.3)	1.4% (0.0-4.9)
Germany	77.3%	9.4%	13.3%	0%	79.8% (75.8-83.2)	8.3% (6.8-10.0)	12.0% (9.7-14.6)	0.0% (0.0-0.0)
Ghana	52.8%	3.1%	27.1%	17%	61.1% (47.5-72.6)	3.1% (2.1-4.9)	25.6% (18.0-35.2)	10.2% (3.4-21.5)
Greece	61.7%	3.4%	34.9%	0%	63.4% (56.8-72.4)	3.9% (2.8-5.7)	32.7% (24.6-38.8)	0.0% (0.0-0.0)
Grenada	46.6%	2%	51.2%	0.2%	51.2% (42.8-62.1)	2.4% (1.8-3.0)	46.4% (35.8-54.6)	0.1% (0.0-0.3)
Guatemala	36.9%	8.2%	52.1%	2.8%	38.3% (31.3-45.5)	8.6% (7.2-10.8)	50.6% (43.8-57.1)	2.4% (0.7-5.7)
Guinea	20.4%	0%	34.5%	45.1%	40.2% (22.9-57.8)	1.0% (0.5-1.5)	31.2% (19.7-44.4)	27.6% (11.1-50.7)
Guinea-Bissau	6%	0%	52.1%	41.9%	3.2% (1.4-6.8)	0.9% (0.5-1.3)	48.1% (26.7-69.6)	47.8% (24.9-71.1)
Guyana	53.5%	2.9%	36.5%	7.1%	57.6% (47.4-67.7)	3.0% (2.1-4.3)	34.8% (26.2-44.2)	4.7% (1.2-11.5)
Haiti	0%	29.6%	29.6%	40.8%	1.1% (0.3-2.9)	34.4% (21.3-46.8)	27.6% (16.6-38.4)	37.0% (15.9-60.3)
Honduras	47.2%	5%	43.3%	4.6%	50.9% (44.3-60.8)	5.3% (3.7-7.5)	40.6% (32.2-46.9)	3.2% (0.6-7.8)
Hungary	68.1%	4.4%	27.5%	0%	68.6% (63.0-74.2)	4.1% (3.3-4.8)	27.3% (22.3-33.1)	0.0% (0.0-0.0)
Iceland	82.3%	0%	17.7%	0%	83.2% (79.7-86.8)	0.5% (0.4-0.6)	16.3% (12.7-19.8)	0.0% (0.0-0.0)

TABLE B9

## Expected health spending by source in 2040, continued

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
India	31.3%	2.4%	65.6%	0.7%	43.7% (32.5-57.5)	1.9% (1.4-2.4)	54.3% (41.0-65.2)	0.1% (0.0-0.4)
Indonesia	42.7%	2.7%	53.5%	1.1%	47.7% (37.3-58.8)	3.0% (2.0-4.4)	49.3% (38.5-59.4)	0.1% (0.0-0.6)
Iran	43.8%	5.3%	50.8%	0%	47.0% (30.6-61.0)	5.9% (3.9-9.1)	47.1% (34.1-62.8)	0.0% (0.0-0.0)
Iraq	58.2%	3%	38.4%	0.5%	62.1% (47.9-76.9)	3.3% (1.9-5.0)	34.4% (21.0-47.4)	0.2% (0.0-0.7)
Ireland	67.6%	14.3%	18.1%	0%	66.8% (53.3-76.2)	16.1% (11.2-23.6)	17.1% (11.8-24.5)	0.0% (0.0-0.0)
Israel	61.5%	11.2%	27.3%	0%	62.0% (53.7-69.4)	11.9% (9.1-15.7)	26.1% (20.7-32.4)	0.0% (0.0-0.0)
Italy	77.4%	0.9%	21.7%	0%	78.0% (72.0-83.1)	0.9% (0.8-1.1)	21.0% (16.0-27.2)	0.0% (0.0-0.0)
Jamaica	50.5%	19.4%	27.8%	2.3%	62.5% (50.8-74.1)	15.7% (10.4-21.9)	20.3% (13.9-27.1)	1.5% (0.2-4.3)
Japan	83.6%	2.4%	13.9%	0%	86.6% (82.9-89.5)	2.3% (1.7-3.6)	11.1% (8.5-14.2)	0.0% (0.0-0.0)
Jordan	66.8%	8%	21.1%	4.1%	67.4% (60.5-74.0)	9.2% (7.1-12.0)	20.2% (14.9-26.3)	3.2% (0.0-7.8)
Kazakhstan	54.4%	0%	45.3%	0.3%	55.3% (49.0-63.8)	1.2% (0.9-1.4)	43.5% (35.3-49.8)	0.0% (0.0-0.0)
Kenya	37.8%	3.8%	23.4%	35%	39.5% (25.5-58.4)	4.9% (3.2-6.6)	25.6% (16.1-35.2)	30.1% (12.4-51.7)
Kiribati	79.3%	0%	2.8%	17.9%	68.3% (22.4-90.8)	0.6% (0.3-1.8)	3.1% (1.3-8.9)	27.9% (6.7-71.0)
Kuwait	85.9%	1.3%	12.7%	0%	89.9% (83.0-95.2)	1.1% (0.6-1.7)	9.0% (4.1-15.6)	0.0% (0.0-0.0)
Kyrgyzstan	47.7%	1.3%	37.3%	13.7%	52.4% (40.5-64.3)	1.3% (0.9-2.0)	34.6% (25.2-44.6)	11.6% (3.9-24.7)
Laos	28.3%	0.4%	36.6%	34.7%	44.4% (25.5-65.7)	3.6% (2.0-6.3)	41.9% (23.9-61.4)	10.1% (0.0-32.5)
Latvia	63.2%	1.7%	35.1%	0%	63.4% (56.5-70.4)	2.0% (1.5-3.5)	34.6% (27.4-41.5)	0.0% (0.0-0.0)
Lebanon	47.6%	14.9%	36.4%	1.1%	50.5% (38.3-63.9)	16.2% (11.7-21.5)	33.1% (22.1-43.4)	0.2% (0.0-1.4)
Lesotho	63.4%	0.3%	15%	21.3%	70.7% (52.5-83.0)	0.5% (0.3-0.8)	12.6% (7.8-20.0)	16.3% (5.3-34.8)
Liberia	0%	0%	7.8%	92.2%	1.8% (0.2-6.5)	0.3% (0.2-0.4)	13.8% (9.8-17.8)	84.2% (78.5-89.1)
Libya	73.5%	0%	26.5%	0%	82.0% (65.1-91.6)	0.6% (0.3-1.0)	17.3% (8.0-34.2)	0.1% (0.0-0.4)
Lithuania	67.9%	0.8%	31.3%	0%	66.9% (60.2-73.8)	0.9% (0.6-1.3)	32.3% (25.5-38.8)	0.0% (0.0-0.0)
Luxembourg	83.9%	5.5%	10.6%	0%	85.3% (81.6-89.0)	5.5% (4.0-8.1)	9.2% (6.6-11.6)	0.0% (0.0-0.0)
Macedonia	63.1%	0%	36.6%	0.3%	62.1% (56.6-68.2)	0.7% (0.6-0.9)	37.2% (31.0-42.7)	0.0% (0.0-0.3)
Madagascar	29.5%	0%	34.3%	36.2%	39.0% (26.0-50.4)	1.3% (0.8-2.1)	30.5% (19.9-41.2)	29.2% (12.3-52.0)
Malawi	33.5%	14%	9.3%	43.1%	46.4% (30.2-60.7)	12.7% (8.0-17.8)	8.8% (5.6-12.7)	32.1% (14.2-54.8)
Malaysia	56%	8.1%	35.8%	0%	56.3% (48.5-67.3)	9.8% (6.9-13.5)	34.0% (24.4-41.4)	0.0% (0.0-0.0)
Maldives	79.4%	2%	18.5%	0%	78.1% (66.0-87.7)	2.3% (1.2-3.9)	19.6% (11.0-30.5)	0.0% (0.0-0.0)
Mali	22%	10.9%	43.6%	23.5%	36.8% (24.3-52.0)	9.6% (5.9-14.7)	38.3% (27.1-49.3)	15.2% (5.3-31.3)
Malta	69.2%	2%	28.9%	0%	78.0% (71.0-84.6)	1.7% (1.2-2.5)	20.4% (14.0-27.0)	0.0% (0.0-0.0)

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
Marshall Islands	62.9%	2.1%	11.8%	23.2%	63.1% (38.6-79.2)	2.6% (1.5-4.6)	13.0% (8.1-21.8)	21.3% (6.7-45.4)
Mauritania	44.5%	1.4%	44.7%	9.3%	53.3% (40.2-68.7)	1.5% (0.9-2.1)	38.6% (25.6-50.8)	6.7% (2.2-14.9)
Mauritius	50.8%	0.7%	48%	0.4%	65.7% (53.1-79.1)	0.9% (0.5-1.7)	33.3% (20.2-45.7)	0.0% (0.0-0.0)
Mexico	51.7%	4.2%	44%	0.1%	55.5% (45.3-63.6)	4.6% (3.4-6.5)	39.8% (32.2-49.9)	0.0% (0.0-0.1)
Moldova	47.2%	8.2%	38.3%	6.3%	47.2% (37.8-56.9)	9.4% (6.9-13.5)	38.9% (29.9-48.5)	4.5% (0.3-15.3)
Mongolia	51.4%	0.9%	41.9%	5.8%	57.4% (42.2-73.6)	1.2% (0.8-2.0)	41.2% (25.4-56.3)	0.2% (0.0-2.6)
Montenegro	55.3%	2.7%	41.4%	0.6%	62.2% (52.7-74.3)	2.4% (1.4-4.0)	35.4% (24.1-44.5)	0.0% (0.0-0.3)
Morocco	33.1%	7.6%	58.4%	0.9%	30.5% (24.9-35.3)	8.8% (7.2-11.3)	60.3% (55.4-65.7)	0.4% (0.0-1.2)
Mozambique	10.6%	0.6%	8.5%	80.2%	16.7% (4.9-37.3)	1.1% (0.5-2.1)	17.3% (8.1-31.1)	64.9% (38.9-84.6)
Myanmar	36.2%	0%	45.6%	18.2%	73.5% (51.8-90.7)	1.5% (0.5-2.9)	23.7% (8.3-44.0)	1.3% (0.0-8.3)
Namibia	53.5%	31.2%	6.9%	8.4%	61.8% (53.2-71.7)	29.2% (21.8-36.0)	6.2% (4.4-8.3)	2.8% (0.0-9.9)
Nepal	28.6%	5.9%	47.7%	17.8%	37.1% (29.3-46.4)	6.6% (4.7-9.7)	47.5% (37.6-55.3)	8.8% (1.5-21.3)
Netherlands	88.4%	6.3%	5.3%	0%	90.0% (87.1-92.2)	5.6% (4.3-7.8)	4.3% (3.1-6.4)	0.0% (0.0-0.0)
New Zealand	82.3%	6.6%	11%	0%	83.1% (78.9-86.4)	7.1% (5.4-9.5)	9.8% (7.5-12.4)	0.0% (0.0-0.0)
Nicaragua	50.9%	3.8%	37.3%	8%	54.9% (40.6-64.3)	4.1% (2.9-6.2)	35.9% (27.4-48.1)	5.1% (0.9-12.5)
Niger	26.3%	0%	49.5%	24.2%	39.8% (25.4-58.1)	0.8% (0.5-1.3)	45.4% (30.5-58.9)	14.0% (4.6-32.1)
Nigeria	22.1%	0.8%	70.1%	7%	24.7% (12.3-41.3)	1.5% (1.0-2.2)	67.1% (51.5-79.7)	6.8% (2.2-14.8)
Norway	83.1%	3.7%	13.2%	0%	86.8% (83.6-90.0)	3.1% (2.2-4.5)	10.1% (7.5-12.8)	0.0% (0.0-0.0)
Oman	91.8%	2.3%	5.9%	0%	93.6% (89.8-97.2)	1.9% (0.8-3.1)	4.5% (1.8-7.8)	0.0% (0.0-0.0)
Pakistan	32.1%	6.1%	55.4%	6.4%	47.6% (37.1-60.6)	5.4% (3.8-7.8)	42.9% (31.8-52.6)	4.1% (1.3-9.3)
Panama	72.5%	4.5%	22.3%	0.8%	75.0% (68.3-81.7)	5.4% (4.0-7.4)	19.6% (13.5-25.6)	0.0% (0.0-0.0)
Papua New Guinea	60.1%	3.9%	10.1%	25.9%	74.0% (59.3-84.6)	1.9% (1.3-2.6)	9.7% (6.2-14.5)	14.4% (4.9-29.8)
Paraguay	45.6%	4.6%	49.3%	0.5%	54.4% (42.3-70.2)	4.2% (2.6-6.1)	41.1% (26.7-52.7)	0.2% (0.0-0.7)
Peru	63.3%	6.3%	30%	0.4%	66.0% (57.3-75.5)	6.2% (4.4-9.1)	27.7% (19.4-35.8)	0.1% (0.0-0.5)
Philippines	33.6%	10.2%	54.3%	1.9%	43.1% (33.4-51.6)	10.3% (8.0-13.6)	45.7% (38.0-54.2)	0.9% (0.2-2.3)
Poland	71.4%	5%	23.6%	0%	72.4% (66.4-78.9)	6.0% (4.5-9.1)	21.6% (15.4-27.1)	0.0% (0.0-0.0)
Portugal	66.6%	5.9%	27.6%	0%	67.5% (59.1-77.1)	6.8% (4.5-9.6)	25.7% (17.6-34.1)	0.0% (0.0-0.0)
Qatar	85.7%	7.4%	6.9%	0%	89.1% (82.9-94.4)	6.1% (3.1-10.0)	4.8% (2.1-9.0)	0.0% (0.0-0.0)
Romania	79.1%	0.4%	18.9%	1.6%	86.6% (81.0-91.5)	0.7% (0.5-1.1)	12.7% (7.9-18.1)	0.0% (0.0-0.0)
Russia	51.8%	2.8%	45.5%	0%	53.2% (43.9-58.7)	3.0% (2.2-4.5)	43.9% (38.4-53.6)	0.0% (0.0-0.0)

TABLE B9

## Expected health spending by source in 2040, continued

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
Rwanda	0%	22.4%	22.6%	55%	1.7% (0.4-5.0)	28.1% (16.1-40.7)	27.3% (15.6-39.5)	42.9% (20.5-66.7)
Saint Lucia	49.2%	0.8%	45.6%	4.4%	58.9% (49.6-70.1)	0.9% (0.6-1.4)	37.6% (27.3-46.0)	2.6% (0.0-8.6)
Saint Vincent and the Grenadines	46.1%	2%	48.2%	3.6%	51.1% (37.0-67.1)	1.7% (1.0-3.3)	44.6% (29.6-58.1)	2.5% (0.0-7.6)
Samoa	87.2%	0%	5.9%	6.9%	84.9% (73.9-92.5)	0.7% (0.4-1.0)	5.8% (3.3-8.4)	8.5% (2.6-19.3)
Sao Tome and Principe	31.1%	8%	11.9%	49%	47.3% (27.7-65.4)	5.9% (3.2-9.9)	10.6% (5.8-17.1)	36.2% (15.9-60.2)
Saudi Arabia	78.7%	6.2%	15.1%	0%	82.7% (74.4-91.2)	5.5% (2.7-8.7)	11.7% (5.8-18.7)	0.0% (0.0-0.0)
Senegal	39.4%	0%	33.8%	26.9%	46.8% (33.6-60.2)	1.1% (0.7-1.7)	31.9% (22.3-41.9)	20.3% (7.8-38.5)
Serbia	62.5%	0.3%	37%	0.1%	61.9% (55.4-66.5)	0.5% (0.4-0.8)	37.6% (33.0-44.1)	0.0% (0.0-0.3)
Seychelles	93.6%	4%	2.4%	0.1%	96.0% (92.4-97.9)	2.5% (1.3-5.3)	1.5% (0.6-3.1)	0.0% (0.0-0.0)
Sierra Leone	5.1%	9.2%	50.1%	35.6%	7.4% (4.0-12.0)	9.0% (5.6-12.3)	49.0% (32.7-63.0)	34.7% (22.0-55.1)
Singapore	42.4%	1.9%	55.7%	0%	56.2% (41.2-71.0)	1.7% (1.0-2.8)	42.1% (27.9-56.7)	0.0% (0.0-0.0)
Slovakia	76.3%	0%	23.7%	0%	77.5% (71.1-84.3)	0.6% (0.5-0.8)	21.9% (15.1-28.3)	0.0% (0.0-0.0)
Slovenia	73.2%	14.5%	12.3%	0%	73.1% (66.4-80.1)	15.6% (11.2-21.0)	11.3% (8.1-14.2)	0.0% (0.0-0.0)
Solomon Islands	67%	0%	4%	29.1%	55.9% (30.8-78.4)	1.0% (0.6-1.7)	4.5% (2.5-7.6)	38.5% (15.8-64.9)
Somalia	25%	1.2%	28.5%	45.2%	24.5% (11.6-38.0)	1.2% (0.6-2.0)	28.5% (15.5-42.2)	45.8% (22.4-70.7)
South Africa	47%	44.2%	6.4%	2.4%	53.8% (46.3-61.7)	38.7% (31.8-45.3)	5.2% (3.8-6.6)	2.4% (0.0-6.2)
South Korea	56%	6.6%	37.4%	0%	66.7% (57.0-75.7)	5.9% (4.0-8.9)	27.4% (19.6-35.8)	0.0% (0.0-0.0)
South Sudan	21%	0%	40.7%	38.3%	27.5% (9.1-58.3)	0.9% (0.4-1.5)	23.9% (11.0-40.1)	47.7% (20.0-75.4)
Spain	71.1%	4.8%	24.1%	0%	71.2% (64.4-76.8)	4.7% (3.9-6.2)	24.1% (18.4-31.0)	0.0% (0.0-0.0)
Sri Lanka	54.5%	1%	42.3%	2.1%	62.8% (50.6-74.2)	1.7% (1.0-2.7)	35.6% (24.6-47.1)	0.0% (0.0-0.0)
Sudan	20.4%	0.9%	76.6%	2.2%	22.9% (14.1-32.0)	1.0% (0.7-1.6)	74.5% (65.3-83.5)	1.6% (0.5-3.7)
Suriname	67.6%	15.5%	15.2%	1.7%	68.6% (56.5-78.3)	16.4% (11.1-23.5)	14.9% (9.3-22.2)	0.1% (0.0-1.7)
Swaziland	66.6%	8.4%	10%	15%	70.3% (55.0-82.3)	6.5% (4.2-9.6)	8.1% (5.1-12.2)	15.1% (5.3-31.1)
Sweden	85.1%	0.6%	14.2%	0%	86.8% (82.5-89.7)	0.6% (0.4-1.0)	12.6% (9.8-16.8)	0.0% (0.0-0.0)
Switzerland	60.3%	15.2%	24.5%	0%	66.2% (60.4-70.7)	10.3% (8.8-12.1)	23.5% (20.0-28.7)	0.0% (0.0-0.0)
Syria	44.5%	3.3%	51.6%	0.6%	52.3% (40.4-67.0)	3.3% (2.1-4.9)	43.8% (29.8-55.7)	0.6% (0.1-1.4)
Tajikistan	22.9%	8.7%	57.9%	10.6%	39.6% (29.1-53.3)	5.0% (2.9-9.9)	47.9% (36.7-57.7)	7.5% (2.4-16.6)
Tanzania	20.3%	17.1%	20.2%	42.4%	34.0% (20.7-53.1)	23.3% (14.9-32.0)	20.1% (12.6-28.5)	22.7% (8.5-43.0)
Thailand	78.7%	8.6%	12.1%	0.7%	82.1% (75.8-88.2)	8.8% (5.7-13.0)	9.1% (5.1-13.2)	0.0% (0.0-0.0)
The Bahamas	45.9%	24.9%	29.2%	0%	49.7% (41.1-60.6)	23.4% (17.8-29.5)	26.8% (19.9-35.3)	0.0% (0.0-0.0)

	2014				2040			
	Government spending as share of total (%)	Prepaid private spending as share of total (%)	Out-of-pocket spending as share of total (%)	DAH as share of total (%)	Government spending as share of total with uncertainty interval (%)	Prepaid private spending as share of total with uncertainty interval (%)	Out-of-pocket spending as share of total with uncertainty interval (%)	DAH as share of total with uncertainty interval (%)
The Gambia	47.4%	0%	13.6%	39%	46.2% (26.2-64.0)	0.5% (0.3-0.9)	12.0% (6.7-18.3)	41.4% (19.7-66.3)
Timor-Leste	51.6%	0%	7.4%	41%	58.5% (27.0-82.7)	1.6% (0.8-2.9)	5.4% (2.2-11.5)	34.5% (11.7-66.4)
Togo	29.7%	7.8%	44.3%	18.3%	41.5% (29.9-55.9)	7.0% (5.1-9.2)	39.0% (28.5-48.5)	12.5% (4.4-26.2)
Tonga	69.5%	0.4%	11.7%	18.5%	75.7% (57.5-89.0)	0.8% (0.4-1.4)	8.2% (4.3-12.5)	15.3% (4.5-33.8)
Trinidad and Tobago	54.5%	6.8%	38.7%	0%	56.3% (46.9-66.8)	7.1% (5.0-9.7)	36.7% (27.1-46.5)	0.0% (0.0-0.0)
Tunisia	57.2%	4.5%	38.1%	0.2%	60.7% (53.6-67.4)	4.4% (3.5-6.1)	34.8% (28.6-41.6)	0.1% (0.0-0.3)
Turkey	78.4%	3.5%	18%	0.1%	79.5% (75.3-84.4)	3.0% (2.2-3.6)	17.5% (13.2-21.5)	0.0% (0.0-0.0)
Turkmenistan	59.2%	8.7%	31.6%	0.6%	67.6% (57.4-76.8)	6.1% (4.3-8.3)	26.2% (18.5-35.2)	0.0% (0.0-0.0)
Uganda	0.9%	64.8%	16.4%	18%	3.7% (1.3-8.0)	52.5% (40.1-62.3)	25.1% (18.7-31.4)	18.7% (7.2-35.8)
Ukraine	51.3%	0.9%	46.8%	0.9%	48.1% (34.8-56.8)	1.0% (0.7-1.7)	49.0% (40.4-62.3)	2.0% (0.2-7.0)
United Arab Emirates	72.3%	9.9%	17.8%	0%	75.7% (66.9-84.9)	9.0% (5.4-13.5)	15.3% (9.1-22.7)	0.0% (0.0-0.0)
United Kingdom	83.1%	7.1%	9.7%	0%	83.3% (79.3-86.9)	7.1% (5.6-8.9)	9.5% (7.3-12.6)	0.0% (0.0-0.0)
United States	49.8%	38.8%	11.4%	0%	51.9% (46.2-57.4)	37.8% (33.2-43.2)	10.2% (8.7-11.9)	0.0% (0.0-0.0)
Uruguay	71.2%	13.2%	15.6%	0%	74.2% (67.0-79.6)	12.7% (9.8-17.2)	13.1% (9.3-17.7)	0.0% (0.0-0.0)
Uzbekistan	51.9%	2.6%	43.7%	1.7%	69.3% (57.6-80.6)	1.6% (1.0-2.2)	28.5% (17.7-39.6)	0.6% (0.0-1.7)
Vanuatu	56.7%	0%	5.4%	37.9%	69.0% (43.2-88.4)	0.7% (0.3-1.3)	3.6% (1.7-6.0)	26.7% (8.2-53.2)
Venezuela	29.3%	6.3%	64.3%	0%	35.7% (26.0-46.0)	6.4% (4.8-8.8)	58.0% (48.4-67.0)	0.0% (0.0-0.0)
Vietnam	53%	6.9%	37.4%	2.7%	66.9% (54.5-77.9)	5.7% (4.1-7.8)	27.1% (17.0-38.5)	0.4% (0.0-1.8)
Yemen	14.3%	1.7%	74.7%	9.3%	13.5% (3.9-27.7)	1.4% (0.9-2.2)	67.8% (48.0-83.9)	17.3% (5.2-39.0)
Zambia	32.6%	0%	27.7%	39.7%	44.7% (29.2-59.8)	1.1% (0.7-1.7)	27.2% (17.8-37.6)	26.9% (10.6-49.2)

**Notes:** In millions of 2015 purchasing power parity dollars. Total health spending includes direct domestic and donor spending on health. It is composed of government, prepaid private, and out-of-pocket health spending and development assistance for health. Government health spending includes only domestic resources, including social health insurance and general budget support. Prepaid private spending includes spending on private health insurance and health spending by non-governmental organizations. Out-of-pocket health spending includes private non-prepaid spending, including deductibles, copayments, and user fees. Total health spending does not include illicit transfers or indirect costs associated with health care such as transportation, lost wages, or cost of informal caregivers.

Source: Financing Global Health Database 2016

TABLE B10

## Potential total and government health spending for low-income and middle-income countries in 2040

	Total health spending per capita in 2040 with uncertainty interval (\$)		Government health spending per capita in 2040 with uncertainty interval (\$)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
Afghanistan	249 (179-388)	272 (249-405)	49 (25-142)	58 (49-184)	213 (170-262)	237 (175-351)
Albania	1,733 (1,404-2,144)	2,292 (1,733-3,129)	1,013 (732-1,406)	1,684 (1,013-3,152)	1,809 (1,280-2,434)	2,913 (1,624-4,449)
Algeria	2,080 (1,439-3,337)	2,114 (2,080-3,316)	1,696 (1,061-2,954)	1,752 (1,696-3,065)	2,951 (1,696-4,187)	3,005 (1,858-4,189)
Angola	308 (154-414)	1,190 (595-1,893)	198 (56-291)	506 (198-1,670)	745 (198-1,822)	1,379 (558-2,439)
Argentina	3,012 (2,202-4,807)	4,020 (3,012-6,243)	1,999 (1,274-3,799)	2,144 (1,999-4,787)	6,906 (4,356-9,293)	7,202 (4,808-10,088)
Armenia	997 (727-1,578)	1,718 (1,128-2,367)	539 (337-1,106)	981 (539-2,283)	1,203 (661-1,926)	2,057 (1,177-3,137)
Azerbaijan	2,502 (2,033-3,062)	3,308 (2,502-4,978)	671 (424-1,141)	1,433 (671-3,408)	2,263 (1,357-3,466)	4,505 (2,338-7,650)
Bangladesh	266 (206-327)	919 (531-1,330)	81 (53-128)	365 (122-780)	224 (160-308)	965 (429-1,569)
Belarus	2,369 (1,648-3,243)	2,802 (2,369-3,845)	1,634 (952-2,496)	5,473 (2,214-10,802)	1,649 (1,634-2,507)	5,496 (2,390-10,802)
Belize	844 (703-1,017)	1,212 (844-1,645)	578 (443-747)	834 (578-1,391)	965 (711-1,264)	1,361 (862-2,049)
Benin	232 (161-357)	352 (232-477)	133 (75-250)	167 (133-349)	276 (163-448)	326 (195-476)
Bhutan	940 (517-1,558)	2,379 (1,364-3,313)	728 (320-1,349)	1,420 (728-3,316)	1,826 (810-3,360)	3,078 (1,541-4,702)
Bolivia	943 (736-1,252)	1,126 (943-1,596)	734 (533-1,038)	962 (734-1,836)	983 (734-1,360)	1,266 (773-1,961)
Bosnia and Herzegovina	2,613 (1,921-3,416)	2,613 (2,613-3,376)	2,069 (1,407-2,847)	2,362 (2,069-4,442)	2,467 (2,069-3,005)	2,782 (2,069-4,525)
Botswana	1,878 (1,452-2,524)	2,420 (1,878-3,756)	1,152 (777-1,780)	1,677 (1,152-3,860)	2,253 (1,513-3,184)	3,145 (1,923-5,459)
Brazil	2,770 (2,150-3,708)	2,771 (2,770-3,774)	1,572 (994-2,509)	1,644 (1,572-2,850)	3,551 (2,066-5,144)	3,660 (2,306-5,211)
Bulgaria	3,870 (2,896-5,754)	3,895 (3,870-5,805)	2,412 (1,516-4,264)	2,789 (2,412-5,934)	4,102 (2,762-5,681)	4,577 (3,144-6,558)
Burkina Faso	128 (101-168)	281 (178-393)	52 (37-62)	100 (52-189)	125 (70-202)	232 (121-367)
Burundi	104 (65-176)	127 (104-188)	36 (19-56)	53 (36-109)	64 (36-101)	90 (51-147)
Cambodia	642 (543-760)	1,026 (642-1,458)	162 (86-250)	367 (162-773)	522 (297-806)	1,100 (551-1,695)
Cameroon	190 (150-238)	469 (328-609)	48 (30-82)	98 (48-193)	218 (140-309)	428 (237-609)
Cape Verde	768 (523-1,124)	1,421 (902-1,991)	532 (294-874)	1,046 (532-2,177)	895 (532-1,461)	1,642 (879-2,554)
Central African Republic	58 (25-145)	64 (58-151)	5 (2-6)	21 (6-56)	9 (5-17)	34 (16-82)
Chad	138 (75-212)	358 (218-548)	74 (16-142)	183 (74-535)	155 (74-329)	321 (150-618)
China	5,703 (3,571-9,218)	6,658 (5,703-9,661)	4,326 (2,357-7,776)	5,429 (4,326-12,550)	9,191 (6,338-12,763)	11,233 (6,662-16,657)
Colombia	2,398 (1,616-3,727)	2,555 (2,398-3,708)	1,888 (1,107-3,215)	2,573 (1,888-5,485)	2,512 (1,888-3,379)	3,316 (2,108-5,490)
Comoros	132 (96-184)	160 (132-214)	35 (19-65)	53 (35-121)	79 (45-126)	118 (67-176)
Congo (Brazzaville)	544 (394-736)	768 (544-1,097)	461 (316-651)	658 (461-1,397)	655 (461-1,114)	871 (461-1,433)
Costa Rica	3,050 (2,207-4,077)	3,087 (3,050-4,049)	2,261 (1,437-3,273)	3,393 (2,261-6,331)	2,651 (2,261-3,468)	3,885 (2,338-6,331)

	Total health spending per capita in 2040 with uncertainty interval (\$)		Government health spending per capita in 2040 with uncertainty interval (\$)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
Côte d'Ivoire	292 (246-352)	542 (367-736)	90 (63-132)	227 (100-449)	210 (130-316)	509 (274-773)
Cuba	3,097 (2,091-4,454)	3,113 (3,097-4,468)	2,961 (1,955-4,323)	3,063 (2,961-4,822)	3,371 (2,961-4,284)	3,470 (2,961-4,822)
Democratic Republic of the Congo	83 (56-123)	176 (90-276)	28 (16-53)	42 (28-108)	106 (43-202)	141 (70-235)
Djibouti	842 (598-1,324)	846 (842-1,324)	579 (358-1,057)	586 (579-1,062)	811 (579-1,119)	817 (579-1,119)
Dominica	1,092 (874-1,406)	1,533 (1,092-2,056)	802 (605-1,106)	928 (802-1,604)	1,733 (1,122-2,473)	1,945 (1,283-2,729)
Dominican Republic	1,833 (1,316-2,498)	3,071 (1,877-4,419)	1,367 (861-2,019)	3,766 (1,367-8,015)	1,651 (1,367-2,471)	4,354 (2,049-8,015)
Ecuador	1,935 (1,534-2,410)	1,937 (1,935-2,403)	1,035 (697-1,466)	1,416 (1,035-2,645)	1,488 (1,035-2,078)	1,966 (1,231-2,987)
Egypt	1,212 (1,070-1,453)	1,966 (1,270-2,607)	481 (384-708)	930 (481-1,697)	1,291 (821-1,866)	2,408 (1,353-3,493)
El Salvador	1,520 (1,089-2,337)	1,673 (1,520-2,292)	1,136 (743-1,953)	1,136 (1,136-1,868)	3,541 (2,905-4,166)	3,541 (2,905-4,166)
Equatorial Guinea	1,746 (1,302-2,291)	3,905 (2,057-7,064)	1,350 (927-1,872)	2,232 (1,350-5,465)	3,964 (1,545-7,506)	5,826 (2,727-10,675)
Eritrea	84 (56-129)	190 (126-264)	22 (11-36)	30 (22-68)	121 (60-195)	152 (88-230)
Ethiopia	212 (153-311)	476 (241-843)	81 (59-113)	281 (85-691)	141 (81-262)	446 (164-913)
Federated States of Micronesia	767 (302-1,703)	772 (767-1,643)	53 (27-86)	58 (53-114)	404 (291-537)	431 (299-593)
Fiji	705 (630-804)	1,399 (947-1,901)	452 (401-525)	729 (452-1,189)	1,015 (712-1,416)	1,604 (965-2,369)
Gabon	1,336 (966-1,900)	2,075 (1,344-2,884)	1,088 (723-1,643)	1,466 (1,088-2,956)	2,099 (1,220-3,269)	2,689 (1,640-4,001)
Georgia	1,608 (1,268-1,972)	1,694 (1,608-2,263)	380 (243-657)	718 (380-1,709)	1,069 (645-1,673)	1,893 (1,042-2,993)
Ghana	288 (214-381)	765 (451-1,107)	178 (110-264)	330 (178-746)	465 (217-794)	783 (401-1,279)
Grenada	1,412 (1,157-1,755)	1,928 (1,412-2,806)	729 (550-1,051)	928 (729-1,805)	1,970 (1,273-2,837)	2,447 (1,548-3,823)
Guatemala	715 (622-808)	1,089 (734-1,424)	275 (205-354)	747 (338-1,306)	444 (323-607)	1,182 (648-1,702)
Guinea	165 (114-243)	214 (165-283)	66 (33-115)	101 (66-210)	119 (66-203)	170 (97-259)
Guinea-Bissau	115 (74-194)	221 (140-318)	3 (2-8)	18 (5-54)	42 (14-95)	173 (84-284)
Guyana	903 (733-1,142)	1,381 (931-1,828)	523 (380-741)	877 (523-1,625)	983 (598-1,449)	1,583 (925-2,314)
Haiti	250 (178-385)	294 (250-410)	3 (1-7)	4 (3-14)	156 (120-199)	241 (141-362)
Guyana	903 (733-1,142)	1,381 (931-1,828)	523 (380-741)	877 (523-1,625)	983 (598-1,449)	1,583 (925-2,314)
Haiti	250 (178-385)	294 (250-410)	3 (1-7)	4 (3-14)	156 (120-199)	241 (141-362)
Honduras	716 (625-887)	800 (716-1,074)	366 (302-529)	587 (366-1,122)	516 (370-692)	805 (475-1,243)
India	1,138 (927-1,488)	1,822 (1,138-2,666)	505 (307-848)	959 (505-2,112)	1,234 (994-1,518)	2,226 (1,135-3,615)
Indonesia	793 (640-986)	2,524 (1,483-3,592)	382 (252-565)	1,216 (433-2,529)	1,078 (739-1,491)	3,259 (1,561-5,182)
Iran	2,051 (1,489-2,709)	2,341 (2,051-3,318)	980 (498-1,554)	3,011 (980-6,876)	1,125 (980-1,669)	3,319 (1,516-6,876)

TABLE B10

## Potential total and government health spending for low-income and middle-income countries in 2040, continued

	Total health spending per capita in 2040 with uncertainty interval (\$)		Government health spending per capita in 2040 with uncertainty interval (\$)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
Iraq	1,230 (860-1,897)	1,740 (1,230-2,654)	783 (424-1,444)	862 (783-1,751)	2,413 (1,047-4,132)	2,598 (1,409-4,143)
Jamaica	1,000 (748-1,399)	1,217 (1,000-1,759)	634 (386-1,034)	813 (634-1,713)	1,130 (701-1,617)	1,416 (879-2,165)
Jordan	1,335 (1,144-1,565)	1,632 (1,335-2,450)	901 (740-1,118)	1,426 (901-2,576)	1,266 (901-1,893)	1,930 (1,152-3,286)
Kazakhstan	2,047 (1,787-2,500)	3,972 (2,466-5,564)	1,138 (896-1,587)	3,326 (1,508-6,221)	2,010 (1,296-2,945)	5,627 (2,938-8,574)
Kenya	286 (209-423)	490 (329-636)	112 (83-213)	195 (112-404)	266 (184-387)	452 (258-657)
Kyrgyzstan	384 (302-492)	514 (384-738)	202 (143-291)	409 (202-887)	262 (202-422)	502 (242-900)
Laos	285 (178-419)	1,793 (908-2,675)	127 (65-230)	267 (127-672)	1,111 (705-1,617)	2,159 (1,022-3,587)
Lebanon	1,895 (1,458-2,499)	2,559 (1,895-4,858)	968 (603-1,549)	2,481 (968-6,948)	1,467 (968-2,684)	3,426 (1,476-8,244)
Lesotho	726 (464-1,010)	729 (726-1,003)	516 (294-757)	523 (516-773)	755 (523-987)	760 (527-987)
Liberia	276 (224-373)	277 (276-377)	5 (1-18)	8 (5-32)	81 (29-150)	112 (55-185)
Libya	979 (590-1,637)	1,142 (979-2,158)	811 (441-1,470)	868 (811-1,962)	1,875 (1,256-2,453)	1,976 (1,260-2,949)
Macedonia	1,742 (1,549-1,931)	2,234 (1,742-3,016)	1,080 (954-1,211)	1,895 (1,080-2,951)	1,630 (1,161-2,328)	2,803 (1,652-4,112)
Madagascar	73 (56-106)	193 (121-285)	28 (24-33)	144 (60-291)	32 (28-49)	160 (72-295)
Malawi	219 (160-320)	223 (219-327)	100 (77-135)	136 (100-260)	119 (100-181)	157 (100-262)
Malaysia	2,528 (2,099-3,249)	5,014 (3,226-6,840)	1,428 (1,126-2,117)	2,281 (1,428-4,204)	4,856 (3,393-6,525)	7,506 (4,449-11,002)
Maldives	6,070 (3,725-9,978)	6,095 (6,070-9,722)	4,823 (2,464-8,764)	4,996 (4,823-9,589)	6,896 (4,823-9,314)	7,072 (4,823-9,811)
Mali	300 (231-402)	409 (300-554)	112 (67-191)	154 (112-321)	287 (167-426)	376 (203-560)
Marshall Islands	785 (448-1,130)	788 (785-1,111)	502 (228-729)	1,293 (502-2,853)	504 (502-729)	1,294 (502-2,853)
Mauritania	258 (193-366)	602 (378-820)	140 (89-244)	175 (140-376)	516 (271-801)	621 (360-885)
Mauritius	3,459 (2,435-5,042)	4,438 (3,459-6,149)	2,308 (1,365-3,890)	4,450 (2,308-9,867)	3,498 (2,714-4,538)	6,485 (3,433-10,491)
Mexico	1,726 (1,403-2,084)	2,178 (1,726-2,889)	962 (672-1,253)	1,526 (962-2,585)	1,752 (1,467-2,084)	2,714 (1,695-3,940)
Moldova	910 (755-1,122)	928 (910-1,220)	429 (332-579)	655 (429-1,222)	596 (429-887)	881 (515-1,432)
Mongolia	1,685 (1,177-2,462)	2,982 (1,685-4,412)	981 (566-1,731)	1,565 (981-3,579)	2,841 (1,304-4,932)	4,136 (2,112-6,479)
Montenegro	2,189 (1,734-3,138)	2,394 (2,189-3,258)	1,376 (942-2,314)	1,823 (1,376-3,803)	2,348 (1,879-2,842)	3,043 (2,118-4,445)
Morocco	1,056 (945-1,160)	1,708 (1,083-2,472)	322 (248-382)	547 (322-968)	1,241 (862-1,692)	2,050 (1,140-3,174)
Mozambique	117 (59-222)	267 (141-384)	18 (7-43)	20 (18-51)	257 (135-392)	274 (155-401)
Myanmar	979 (476-2,210)	1,987 (979-3,099)	752 (269-2,005)	1,074 (752-3,391)	1,995 (1,266-2,630)	2,597 (1,400-4,288)
Namibia	1,929 (1,590-2,499)	1,955 (1,929-2,563)	1,200 (913-1,752)	1,308 (1,200-2,257)	2,234 (1,565-2,902)	2,392 (1,635-3,279)
Nepal	321 (263-388)	592 (383-840)	119 (93-160)	268 (120-517)	267 (152-438)	568 (295-914)



	Total health spending per capita in 2040 with uncertainty interval (\$)		Government health spending per capita in 2040 with uncertainty interval (\$)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
Nicaragua	830 (618-1,005)	883 (830-1,136)	459 (265-600)	1,158 (495-2,085)	468 (459-611)	1,170 (532-2,085)
Niger	98 (73-139)	159 (104-226)	40 (23-75)	40 (40-76)	162 (117-210)	163 (120-212)
Nigeria	343 (268-449)	877 (538-1,202)	86 (36-177)	477 (113-1,245)	204 (86-469)	921 (453-1,441)
Pakistan	296 (237-383)	897 (579-1,146)	142 (95-227)	330 (142-641)	429 (241-698)	934 (516-1,324)
Panama	4,569 (3,750-5,565)	4,857 (4,569-6,570)	3,432 (2,676-4,386)	5,369 (3,432-10,023)	4,471 (3,432-6,044)	6,806 (3,664-10,906)
Papua New Guinea	224 (167-304)	465 (307-707)	166 (120-235)	236 (166-492)	312 (210-421)	432 (263-713)
Paraguay	1,916 (1,460-2,827)	1,916 (1,916-2,741)	1,067 (665-1,979)	1,250 (1,067-2,870)	1,696 (1,067-2,358)	1,948 (1,197-3,121)
Peru	1,276 (1,032-1,692)	2,057 (1,291-2,807)	848 (635-1,253)	2,066 (880-3,965)	1,079 (848-1,416)	2,573 (1,268-4,033)
Philippines	787 (661-920)	1,335 (866-1,930)	340 (226-454)	979 (432-1,864)	540 (401-705)	1,514 (799-2,396)
Romania	3,500 (2,608-4,864)	3,868 (3,500-5,144)	3,041 (2,162-4,400)	4,656 (3,041-8,158)	3,655 (3,041-5,076)	5,491 (3,233-8,320)
Russia	2,665 (2,416-3,206)	3,013 (2,665-4,031)	1,413 (1,281-1,635)	1,787 (1,413-2,841)	3,268 (2,198-4,350)	4,064 (2,704-5,923)
Rwanda	278 (188-448)	364 (278-545)	4 (1-13)	7 (4-25)	219 (130-345)	320 (177-518)
Saint Lucia	1,340 (1,086-1,782)	1,666 (1,340-2,423)	798 (574-1,237)	821 (798-1,404)	2,537 (1,790-3,379)	2,586 (1,809-3,419)
Saint Vincent and the Grenadines	1,506 (1,106-2,137)	1,568 (1,506-2,142)	784 (442-1,393)	1,038 (784-2,218)	1,397 (888-2,027)	1,805 (1,133-2,683)
Samoa	555 (403-856)	766 (555-1,077)	474 (333-775)	616 (474-1,243)	656 (474-966)	823 (495-1,279)
Sao Tome and Principe	397 (262-608)	474 (397-648)	184 (113-281)	328 (184-720)	279 (184-516)	456 (233-732)
Senegal	182 (140-245)	345 (227-456)	85 (63-127)	134 (85-255)	194 (139-266)	298 (169-446)
Serbia	2,319 (2,113-2,616)	2,320 (2,319-2,618)	1,434 (1,287-1,608)	1,542 (1,434-2,096)	2,416 (1,998-2,834)	2,587 (2,120-3,411)
Sierra Leone	290 (227-423)	291 (290-419)	21 (12-34)	62 (21-167)	65 (26-134)	165 (50-322)
Solomon Islands	141 (82-230)	291 (176-419)	78 (41-131)	81 (78-139)	310 (208-426)	317 (213-427)
Somalia	42 (27-72)	74 (43-107)	10 (6-13)	37 (11-69)	13 (10-18)	47 (19-80)
South Africa	1,815 (1,555-2,165)	1,821 (1,815-2,174)	981 (751-1,315)	1,289 (981-2,192)	1,489 (1,204-1,794)	1,930 (1,340-2,737)
South Sudan	145 (78-283)	256 (182-336)	41 (15-113)	41 (41-114)	291 (172-545)	298 (179-545)
Sri Lanka	1,645 (1,207-2,289)	3,323 (1,964-4,684)	1,048 (617-1,693)	3,100 (1,056-6,644)	1,664 (1,048-2,575)	4,574 (2,237-7,322)
Sudan	594 (478-730)	741 (594-1,017)	136 (81-198)	653 (192-1,409)	179 (136-309)	790 (353-1,409)
Suriname	1,195 (856-1,630)	2,430 (1,635-3,257)	828 (500-1,253)	2,099 (828-5,089)	1,463 (828-2,989)	3,231 (1,788-5,337)
Swaziland	1,467 (1,062-2,094)	1,467 (1,467-2,111)	1,036 (699-1,614)	1,119 (1,036-2,006)	1,321 (1,036-1,815)	1,411 (1,036-2,056)
Syria	926 (703-1,274)	2,077 (1,242-2,971)	492 (327-814)	747 (492-1,698)	1,852 (1,060-2,902)	2,639 (1,434-4,162)
Tajikistan	398 (324-509)	439 (398-594)	160 (102-264)	232 (160-482)	283 (168-429)	395 (223-603)

TABLE B10

## Potential total and government health spending for low-income and middle-income countries in 2040, continued

	Total health spending per capita in 2040 with uncertainty interval (\$)		Government health spending per capita in 2040 with uncertainty interval (\$)			
	Expected	Potential	Expected	Increase in government spending	Increase in health sector prioritization	Increase in government spending and health sector prioritization
Tanzania	308 (225-445)	507 (308-714)	106 (62-213)	200 (106-462)	271 (147-455)	474 (237-743)
Thailand	1,689 (1,315-2,326)	3,086 (2,004-4,388)	1,392 (1,023-2,031)	2,080 (1,392-4,139)	2,910 (2,187-3,741)	4,190 (2,608-6,445)
The Gambia	199 (134-326)	212 (199-315)	88 (68-118)	156 (88-292)	99 (88-152)	171 (91-292)
Togo	142 (113-187)	252 (162-358)	60 (38-99)	91 (60-192)	147 (72-244)	208 (115-316)
Tonga	553 (352-954)	740 (553-1,027)	424 (244-814)	474 (424-973)	788 (424-1,186)	854 (528-1,219)
Tunisia	1,390 (1,195-1,653)	1,713 (1,390-2,380)	847 (672-1,085)	1,427 (847-2,530)	1,239 (960-1,539)	2,034 (1,223-3,157)
Turkey	2,441 (2,096-3,065)	3,421 (2,441-4,850)	1,946 (1,613-2,570)	2,103 (1,946-3,513)	4,936 (3,814-6,212)	5,322 (3,921-7,459)
Turkmenistan	1,638 (1,237-2,191)	4,423 (2,345-7,144)	1,117 (730-1,668)	2,674 (1,117-6,216)	2,927 (1,491-4,977)	6,439 (2,886-11326)
Uganda	384 (307-489)	392 (384-506)	14 (5-31)	41 (14-116)	113 (68-169)	309 (148-496)
Ukraine	715 (557-899)	910 (715-1,376)	343 (232-413)	625 (343-1,221)	547 (354-814)	954 (517-1,642)
Uzbekistan	1,299 (931-1,894)	1,448 (1,299-2,093)	912 (564-1,496)	945 (912-1,712)	2,017 (1,191-2,802)	2,091 (1,303-2,902)
Vanuatu	283 (162-524)	348 (283-546)	197 (106-426)	287 (197-749)	236 (197-430)	335 (197-749)
Venezuela	1,285 (1,082-1,528)	1,931 (1,285-2,976)	463 (295-677)	1,000 (463-2,250)	1,197 (626-1,994)	2,376 (1,162-4,193)
Vietnam	1,545 (1,121-2,038)	1,794 (1,545-2,466)	1,040 (660-1,509)	2,078 (1,040-4,032)	1,166 (1,040-1,599)	2,279 (1,113-4,032)
Yemen	276 (197-400)	404 (276-548)	37 (10-85)	85 (37-228)	166 (107-239)	357 (192-538)
Zambia	345 (251-497)	622 (377-820)	153 (108-224)	319 (153-618)	309 (179-519)	604 (316-877)

**Notes:** In millions of 2015 purchasing power parity dollars. Total health spending includes direct domestic and donor spending on health. It is composed of government, prepaid private, and out-of-pocket health spending and development assistance for health. Government health spending includes only domestic resources, including social health insurance and general budget support. Prepaid private spending includes spending on private health insurance and health spending by non-governmental organizations. Out-of-pocket health spending includes private non-prepaid spending, including deductibles, copayments, and user fees. Total health spending does not include illicit transfers or indirect costs associated with health care such as transportation, lost wages, or cost of informal caregivers. Potential spending is determined according to each country's level of economic development and all-sector government spending. It is based on frontier analysis and is not calculated for countries considered high-income by the World Bank in FY2016.

Source: Financing Global Health Database 2016



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