



Global Spending on Health: A World in Transition





WHO/HIS/HGF/HFWorkingPaper/19.4

© World Health Organization 2019

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-Share-Alike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. Global spending on health: a world in transition. Geneva: World Health Organization; 2019 (WHO/HIS/HGF/HFWorkingPaper/19.4). Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who.int/about/licensing.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Photo credits: pages vi, viii, xii, 4, 26, 36, © WHO/Yoshi Shimizu; page 14, © WHO/Andy Craggs.

Printed in Switzerland

Contents

Acknowledgements

ney	illessages	
Pref	ace	
	oter 1 al health spending in transition – More domestic, more public	5
	oter 2 health financing transition – Under fast economic growth	15
	oter 3 institutional transition – From models to functions	27
	oter 4 ing the financing transition work – For primary health care	37
Anne 1.1 2.1 4.1	Low and lower middle income countries with donor spending at more than a fifth of health spending, 2017 Fast economic growth countries included in this chapter The 88 countries with HC/PHC data, latest year of available data shown	47 48 49
Boxe 1 1.1	From the political declaration of the high-level meeting on universal health coverage to build a healthier world September 23, 2019 UN General Assembly Catastrophic health spending and out-of-pocket spending as a share of total health	2
1.2 2.1 2.2 3.1	expenditure – Two different concepts Methods for tracking development assistance for health The health financing transition Fast-growing economic countries Hungary: Same system, changing sources	10 11 16 16 31
4.1	Primary health care spending: Global definition for cross-country comparison	39

_	10	41	ш	100	\mathbf{a}	c
	ıv	ш	ч		┖	3

1.1	Health spending is growing faster than GDP	6
1.2	With rapid global economic growth, middle income countries' share of global health	
1.0	spending grew gradually	6
1.3	Richer countries spend more on health, but there are large variations among countries of similar incomes	-
1.4	Overall health spending growth was dominated by government funding	2
1.5	The transition to more public spending on health continues	2
1.6	Across income groups, health systems are becoming less reliant on out-of-pocket	•
	spending	9
1.7	Out-of-pocket spending is still the largest source funding health in low income countries	9
1.8	Donor funding is a very small share of global health spending	11
1.9	Donor funding has been falling since 2014	12
1.10	High income countries are devoting smaller shares of GDP to development assistance	
	for health	12
1.11	Donor funding is shifting to countries most in need	12
2.1	Fast economic growth countries between 2000 and 2017	17
2.2	Between 2000 and 2017, the growth of health spending outpaced GDP in most fast-	1 -
2.3	growing economies Most fact growing economies increased tax revenue and government spending	17 18
2.3 2.4	Most fast-growing economies increased tax revenue and government spending Both government and out-of-pocket spending grew but public policy makes a	IC
2.4	difference	19
2.5	Growth is not enough – prioritizing health in budgets is key	20
2.6	Changes in government spending do not seem to be clearly associated with changes	
	in service coverage	20
2.7	Higher government spending on health is associated with less inequality among the	
	health financing transition countries	22
2.8	Larger shares of government spending in total health spending tend to go with lower	
	catastrophic health spending for countries making the health financing transition	22
2.9	Most of the 42 fast-growing economy countries still receive aid for health	23
2.10	The health financing transition is mainly driven by public policy	23
3.1	126 countries had social health insurance in 2017	29
3.2	The share of social health insurance spending increased in middle income countries	30
3.3	Social health insurance spending grew faster than other health spending in low and	20
2 /	middle income countries	30
3.4 3.5	Budget transfers to SHI are more common in upper middle and high income countries Social health insurance does not mean better service coverage	33
4.1	PHC data are available in more countries	40
4.1	GDP per capita and primary health care spending per capita go hand in hand	40
4.3	The composition of spending on PHC differs between countries at different incomes	41
4.4	The share of health spending on primary health care is greater in lower income	71
	than in higher income countries	42
4.5	Primary health care takes a greater share of government health spending in low	-
	income than in higher income countries	43
4.6	Less primary health care is funded by government spending in low and lower middle	
	income countries	43
4.7	Governments fund little medicine or other medical goods	43
4.8	The source of most prevention spending in low income countries is attributed to	
	external aid	44
4.9	The share of primary health care funded by government is associated with better	
	service coverage in low and lower middle income countries	44

Tables

1.1	2017 key health expenditure indicators, by income group	10
2.1	Health financing transition countries, government spending and health priority	21
3.1	Characteristics and classification of Thailand's three main financing arrangements	28
4.1	A 1% of GDP increase in public spending on primary health care would yield a major	
	increase in primary health care spending per capita	41





Acknowledgements

This report is the product of the collective effort of many people around the world, led by the Health Expenditure Tracking team in WHO Headquarters in Geneva. The core writing team of the report includes Ke Xu, Agnès Soucat, Joseph Kutzin, Andrew Siroka, Maria Aranguren Garcia, Julien Dupuy, Natalja Eigo, Dongxue Li, Chandika Indikadahena, Hapsatou Touré, Hélène Barroy and Gabriela Flores.

We are grateful for the contributions of numerous individuals and agencies for their support in making this report possible, for their contributions to comments and suggestions in producing this report and for their efforts in improving the quality and completeness of the data that form the basis of this report. From the WHO Global Health Financing Team, these include Baktygul Akkazieva, Callum Brindley, Veneta Cherilova, Camilo Cid, Gregory Coudrier, Seydou Coulibaly, Peter Cowley, Ilker Dastan, Valeria De Oliveira Cruz, Gwenael Dhaene, Gael Kernen, Tamas Evetovits, Wayne Irava, Grace Kabaniha, Hyppolite Kalambay Ntembwa, Roshan Karn, Awad Mataria, Mai Mo, Benjamin Nganda. Claudia Pescetto, Tomaš Roubal, Nathalie Vande Maele, Lluis Vinyals and Hui Wang.

We are also grateful to Mark Blecher, Richard E. Cibulskis, Andrew Mirelman, William Savedoff and Ajay Tandon who provided valuable comments to the report.

Thanks also go to the consultants that helped countries in preparing the data publication: Ines Ayadi, Jean-Edouard Doamba, Evgeniy Dolgikh, Fe Vida N Dy-Liacco, Mahmoud Farag, David Gzirishvili, Patricia Hernandez, Kieu Huu Hanh, Eunkyoung Kim, Ange Mibindzou Mouelet, Eddy Mongani Mpotongwe, Simon Nassa, David Njuguna,

Anastasiya Nitsoy, Daniel Osei, Magdalena Rathe, Ezrah Rwakinanga, Shakthi Selvaraj, Katerina Sharapka, Ronald Tamangan, Neil Thalagala, Cor van Mosseveld and Thongleck Xiong.

We also wish to recognize the contributions to data quality improvement made by numerous World Bank staff, as well as the collaboration provided through the P4H network. Our ongoing collaboration with the OECD Health Accounts Team and Eurostat, as well as with the European Observatory on Health Systems and Policies, has played a key role in ensuring the routine production of health expenditure data from most high-income countries.

Most important of all, we express our appreciation to the country Health Accounts teams and the strong support provided by the ministries of health of the Member States.

We would like to thank the Bill & Melinda Gates Foundation; the Global Fund to Fight AIDS, Tuberculosis and Malaria; Gavi Alliance; United States Agency for International Development; the Department for International Development of the United Kingdom; the European Commission; the Government of Japan; the Government of the French Republic; and the Government of the Grand Duchy of Luxembourg for their funding support to WHO's health financing work, which has played a critical role in enabling us to make health expenditure tracking data, and the analysis of these data, a valuable global public good.

Thanks go as well to a team at Communications Development Incorporated – led by Bruce Ross-Larson and including Joe Brinley, Joe Caponio, Mike Crumplar, Debra Naylor, Chris Trott and Elaine Wilson – for editing and laying out the report.





Key messages

Health spending is transitioning globally, with a rapid increase in domestic spending, both out-of-pocket and publicly funded

- Two years into the Sustainable Development Goals era, global spending on health continues to rise. It was US\$ 7.8 trillion in 2017, or about 10% of GDP and \$1,080 per capita up from US\$ 7.6 trillion in 2016.
- The health sector continues to expand faster than the economy. Between 2000 and 2017, global health spending in real terms grew by 3.9% a year while the economy grew 3.0% a year.
- Middle income countries are rapidly converging towards higher levels of spending. In those countries, health spending rose 6.3% a year between 2000 and 2017 while the economy rose by 5.9% a year. Health spending in low income countries rose 7.8% a year.
- Across low income countries, the average health spending was only US\$ 41 a person in 2017, compared with US\$ 2,937 in high income countries a difference of more than 70 times. High income countries account for about 80% of global spending, but the middle income country share increased from 13% to 19% of global spending between 2000 and 2017.
- Public spending represents about 60% of global spending on health and grew at 4.3% a year between 2000 and 2017. This growth has been decelerating in recent years, from 4.9% a year growth in 2000–2010 to 3.4% in 2010–2017.
- As the health sector grew, it became less reliant on out-of-pocket spending. Total out-of-pocket spending more than doubled in low and middle income countries from 2000 to 2017 and increased 46% in high income countries. But it grew more slowly than public spending in all income groups.
- Donor funding represents 0.2 % of health spending globally. It continues to be an important source in low income countries at 27% of health spending and 3% in lower middle income countries.

In countries with fast-growing economies, health spending increased dramatically as they moved up the income ladder

• Between 2000 and 2017, overall health spending dramatically increased in a group of 42 countries that experienced fast economic growth. On average, real health spending per capita grew by 2.2 times and increased by 0.6 percentage points as a share of GDP. For most, the growth of health spending was faster than that of GDP.

- In the 42 fast-growing economies government spending increased by 2 percentage points of GDP on average, yet in a third of the countries, fiscal capacity failed to expand despite economic growth.
- Most fast-growing countries embarked on the health financing transition, increasing their domestic public spending per capita, as a share of public expenditure and as a share of total health spending. In 17 of these countries, however, public spending on health fell as a share of current health spending, even as the economy was growing. Giving priority to health – or not – is clearly a political choice.
- In 2017, total aid to fast-growing countries still represents about 36% of total health aid, close
 to what low income countries received (40%). The data do not show a specific effect of aid
 on the health financing transition, with no observable substitution between aid and out-ofpocket spending.

Health institutions are transitioning from models of social health insurance to functions of health financing

- The number of countries with social health insurance (SHI) has gradually increased since 2000, with the number of WHO Member States implementing it reaching 126 in 2017, up from 113 in 2000.
- The spending flowing through SHI schemes accounted for more than 5% of public spending on health in 97 countries.
- The share of SHI in current health spending varied from 1% to 2% in low income countries, 4.5% to 8.5% in lower middle and 16% to 20% in upper middle income countries.
- The growth of SHI health spending is greater in the 42 fast-economic growth countries, which moved to upper income status between 2000 and 2017. Their average share of current health expenditure flowing through SHI arrangements increased by 6 percentage points, from 11% in 2000 to 17% in 2017.
- About two-thirds of countries with SHI use government budget transfers as a funding source.
- SHI spending has grown, but what that means for progress towards universal health coverage is unclear. At similar levels of GDP and government health spending per capita, countries with SHI arrangements do not seem to have better population coverage with health services.

Primary health care is the route to making the financing transition work for universal health coverage

- Measurement of primary health care (PHC) spending is improving: country-specific data on primary health care spending are now available for 88 countries, up from 50 in 2018; and 45 countries have more than one year of data.
- Across the 88 countries, PHC spending ranges from 33% to 88% of health spending. Per capita spending is higher in wealthier countries, but PHC takes a greater share of health spending in low and middle income countries.
- The priority governments give to PHC varies from 42% in upper middle income countries to 55% in lower middle income countries and 65% in low income countries.
- Yet only a third of total PHC spending comes from governments. The lower the country income, the lower the public share: in low income countries private sources represent half of PHC spending. Across all income groups, governments provide very limited funding for medicines.
- Development assistance funds 20%-40% of PHC spending in low income countries. This is mostly a consequence of funds channeled through categorical programs, with little funding going through integrated services.







Preface

e are now 10 years away from the 2030 Sustainable Development Goal (SDG) finish line. Five years into the SDG journey that started in September 2015 [1], the world continues to make progress on human development on many fronts. Poverty continues to decline at all poverty lines, levels of education are progressing, and child mortality continues to fall.

Most countries have experienced economic growth and growing market demand over the past two decades. Economic growth and improvements in efficiency of public taxation have also increased public revenue, contributing to increases in both private and public spending on health, with the health sector growing faster than the economy as a whole. As a result, people's access to needed health services continues to progress in all regions of the world and for all country income groups [2].

Yet this progress continues to leave too many countries and too many people behind. Progress in access to services is slowing globally, with lower annual rates of increase between 2010 and 2015 than between 2000 and 2010 [2]. While markets adapted quickly to growing demand, public policy to address market failures in health care and protect the most vulnerable has adjusted more slowly.

Large inequities remain between and within countries. Progress is particularly slow in improving access to skilled health workers and essential medicines. Progress also comes at a cost, with an increase in out-of-pocket spending globally as social protection

policies and institutions adapt to the new parameters of health service markets [3].

Progress can be accelerated. The targets set for universal health coverage (UHC) in the SDGs in low and middle income countries can be achieved through the primary health care (PHC) route with a relatively modest additional investment of around \$370 billion a year – \$200 billion for PHC and \$170 billion for other services to reach UHC. Health financing institutions are transforming, if slowly.

Public spending on health is growing globally and is associated with less financial hardship. More countries have legislative and legal frameworks for UHC. Looking forward, most countries can make substantial progress by using domestic resources to increase PHC spending, through higher public spending on health, reallocations towards PHC or a combination of the two. Allocating or reallocating at least an additional 1% of GDP of public spending for PHC is within reach in all countries [2].

The global community renewed its strong commitment to Universal Health Coverage at the UHC High Level Meeting in New York in September 2019 (Box 1). Heads of State and Government and representatives of States and Governments, "reaffirm that health is a precondition for and an outcome and indicator of the social, economic and environmental dimensions of sustainable development and the implementation of the 2030 Agenda for Sustainable Development, and strongly recommit to achieve universal health coverage by 2030". The political declaration of the high-level meeting on universal health coverage: Moving together

BOX 1

From the political declaration of the high-level meeting on universal health coverage to build a healthier world September 23, 2019 UN General Assembly

- Pursue efficient health financing policies, including through close collaboration among relevant authorities, including finance and health authorities, to respond to unmet needs and to eliminate financial barriers to access to quality, safe, effective, affordable and essential health services, medicines, vaccines, diagnostics and health technologies, reduce out-of-pocket expenditures leading to financial hardship and ensure financial risk protection for all throughout the life course, especially for the poor and those who are vulnerable or in vulnerable situations, through better allocation and use of resources, with adequate financing for primary health care, in accordance with national contexts and priorities.
- Scale up efforts to ensure there are nationally appropriate spending targets for quality investments in public health services, consistent with national sustainable development strategies, in accordance with the Addis Ababa Action Agenda, and transition towards sustainable financing through domestic public resource mobilization.
- Ensure sufficient domestic public spending on health, where appropriate, expand pooling of resources

- allocated to health, maximize efficiency and ensure equitable allocation of health spending, to deliver cost-effective, essential, affordable, timely and quality health services, improve service coverage, reduce impoverishment from health expenditure and ensure financial risk protection, while noting the role of private sector investment, as appropriate.
- Optimize budgetary allocations on health, sufficiently broaden fiscal space, and prioritize health in public spending, with the focus on universal health coverage, while ensuring fiscal sustainability, and in this regard encourage countries to review whether public health expenditure is adequate to ensure sufficiency and efficiency of public spending on health and, based on such review, to adequately increase public spending, as necessary, with a special emphasis on primary health care, where appropriate, in accordance with national contexts and priorities, while noting the World Health Organization recommended target of an additional 1 per cent of gross domestic product or more.

Source: https://undocs.org/en/A/RES/74/2.

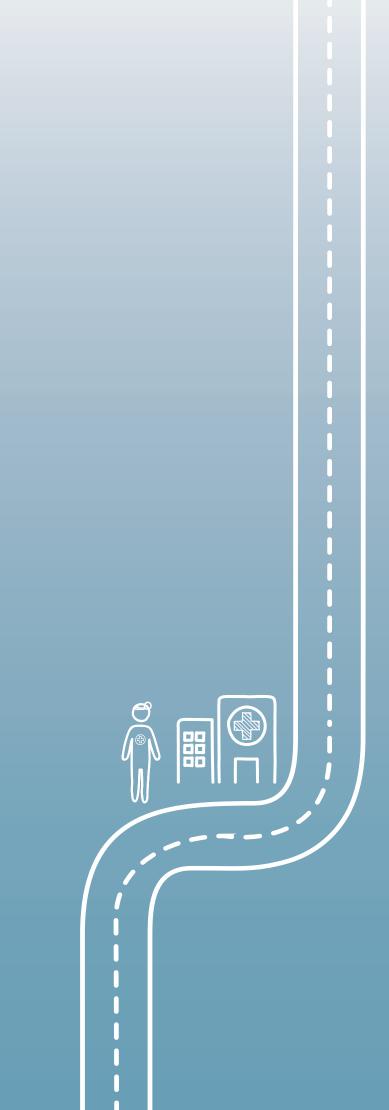
to build a healthier world – is the most comprehensive declaration adopted by members of the United Nations on the universal right to access to services. Central to this declaration is the recommendation that countries develop the capabilities of their health financing institutions to sustain appropriate domestic financing of health and to increase public spending on primary health care by at least 1% of GDP.

This 2019 report Global health spending: A world in transition examines how countries progress towards financing UHC in a world in transition. It updates the upward trends in global health spending, confirming the increasing convergence of middle income countries towards high income countries' health spending profiles, with increased domestic and public spending and the decreasing role of overseas development assistance. The report highlights how most countries that experienced high rates of economic growth also undertook a health financing transition towards increasing the share of health spending funded publicly, while the transition from

aid is slower. The health financing transition is also accompanied by a transition of institutions with increased pooling and increased public financing. And while there is more and more evidence on the levels of spending on PHC, more analysis is needed to understand how countries can ensure adequate financing to prioritize primary health care.

References

- United Nations. Resolution adopted by the General Assembly on 25 September 2015. A/RES/70/1. New York: United Nations General Assembly; 2015. https:// www.un.org/ga/search/view_doc.asp?symbol=A/ RES/70/1&Lang=E.
- WHO. Primary health care on the road to universal health coverage: 2019 monitoring report. Geneva: WHO; 2019. https://www.who.int/healthinfo/universal _health_coverage/report/uhc_report_2019.pdf.
- WHO, World Bank. Global monitoring report on financial protection in health 2019. World Health Organization and International Bank for Reconstruction and Development/World Bank; 2019. Licence: CC BY-NC-SA 3.0 IGO.







Global health spending in transition

MORE DOMESTIC, MORE PUBLIC

Key messages

- Two years into the Sustainable Development Goals era, global spending on health continues to rise. It was US\$ 7.8 trillion in 2017, or about 10% of GDP and \$1,080 per capita up from US\$ 7.6 trillion in 2016.
- The health sector continues to expand faster than the economy. Between 2000 and 2017, global health spending in real terms grew by 3.9% a year while the economy grew 3.0% a year.
- Middle income countries are rapidly converging towards higher levels of spending. In those countries, health spending rose 6.3% a year between 2000 and 2017 while the economy rose by 5.9% a year. Health spending in low income countries rose 7.8% a year.
- Across low income countries, the average health spending was only US\$ 41 a person in 2017, compared with US\$ 2,937 in high income countries a difference of more than 70 times. High income countries account for about 80% of global spending, but the middle income country share increased from 13% to 19% of global spending between 2000 and 2017.
- Public spending represents about 60% of global spending on health and grew at 4.3% a year between 2000 and 2017. This growth has been decelerating in recent years, from 4.9% a year growth in 2000–2010 to 3.4% in 2010–2017.
- As the health sector grew, it became less reliant on out-of-pocket spending. Total out-of-pocket spending more than doubled in low and middle income countries from 2000 to 2017 and increased 46% in high income countries. But it grew more slowly than public spending in all income groups.
- Donor funding represents 0.2 % of health spending globally. It continues to be an important source in low income countries at 27% of health spending and 3% in lower middle income countries.

Ten years before the 2030 SDG horizon, health spending continues to increase globally

Two years into the Sustainable Development Goals era, global health spending continues to rise rapidly – to US\$ 7.8 trillion in 2017, or about 10% of GDP and \$1,080 per capita – up from US\$ 7.6 trillion in 2016.

About 60% of this spending was public¹ and 40% private, with donor funding representing less than 0.2% of the total.

THE HEALTH SECTOR CONTINUES TO EXPAND FASTER THAN THE REST OF THE ECONOMY

The most recent health spending data confirm the trend of fast growth identified in previous reports.¹ Between 2000 and 2017, global

FIGURE 1.1 Health spending is growing faster than GDP

Real growth by country income group, 2000–2017 (%)

8

6

4

2

Low Lower middle Upper middle High

Health spending GDP

FIGURE 1.2 With rapid global economic growth, middle income countries' share of global health spending grew gradually

Global population and health expenditure, 2000 and 2017 (%)

80

40

Population Health spending Population Health spending 2000

Low income Lower middle income

Upper middle income

High income

health spending in real terms grew by 3.9% a year while global GDP grew 3.0%.

The increase in health spending was even faster in low income countries, where it rose 7.8% a year between 2000 and 2017 while the economy grew by 6.4% (Figure 1.1). In middle income countries, health spending grew more than 6% a year. In high income countries, the average annual growth was 3.5%, about twice as fast as economic growth.

MOST HEALTH SPENDING IS IN HIGH INCOME COUNTRIES, BUT MIDDLE INCOME COUNTRIES ARE SLOWLY CLOSING THE GAP

Health spending by high income countries continues to represent the largest share of global spending (81%) despite covering only 16% of the world's population, down from 87% in 2000 (Figure 1.2).

Since 2000, lower middle and upper middle income countries have consistently increased their share of global spending, reaching 19% of the total in 2017. In 2000, middle income countries represented only 13% of total health spending. The main driver of this change was income growth in many large countries (particularly India and China) as they moved to higher income groups. Just over 40% of the world's population lived in low income countries in 2000, but this had dropped below 10% by 2017 (Figure 1.2). The largest spending increase was in upper middle income countries, whose population share more than doubled over the period (due to China's large population joining that group), while their share of global health spending nearly doubled. The spending shares of all other income groups declined.

DESPITE THIS CONVERGING PATTERN, THE DISTRIBUTION OF GLOBAL HEALTH SPENDING REMAINS HIGHLY UNEQUAL

Even though health spending as share of GDP grew consistently in lower middle and upper middle income countries, large inequalities across countries remain. For low income countries, health spending was only US\$41 a person in 2017, compared with US\$2,937 in high income countries – a difference of more than 70 times. This discrepancy in spending is associated with differences in wealth. Moreover, high income countries devote a greater share of their income to health than do low income countries.¹

North America, Western Europe and Oceania have the highest levels of spending, and West, Central and East Africa the lowest, followed closely by South Asia (see Figure 1.3).

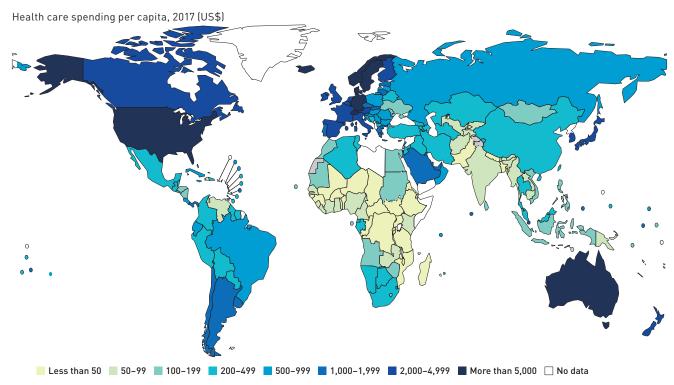


FIGURE 1.3 Richer countries spend more on health, but there are large variations among countries of similar incomes

While the general pattern is that wealthier countries spend more on health, there are large variations in spending among countries of similar incomes. For example, Brazil spent more than twice as much per capita on health as Turkey did even though they have a similar GDP per capita.

Government spending grew faster than other sources

The global pattern of rising real per capita health spending appears to be dominated by government sources (Figure 1.4). Government spending represented about 60% of global spending on health in 2017, up from 56% in 2000. Global public spending on health grew at 4.3% a year between 2000 and 2017. Even so, its growth has been decelerating from 4.9% a year in 2000-2010 to 3.4% in 2010-2017.

The low income group has had an upward swing since 2015, following stagnation. Last year's report raised concerns that government spending fell while donor resources increased during the MDG era. 1 But in the most recent years government spending started to rise again, and this encouraging trend continued in 2017, as out-of-pocket spending falls (Figure 1.5). The trend requires close monitoring given its importance for progress towards UHC.

As the health sector grew, it became less reliant on out-of-pocket spending

Alongside economic growth, out-of-pocket spending per capita increased globally between 2000 and 2017. But the increase was slower than that of government spending, so the share of out-of-pocket expenditure in overall health spending has been consistently declining across all income groups since 2000 (Figures 1.6 and 1.7).

Low income countries

Out-of-pocket spending per capita in low income countries grew from US\$ 14 in 2000 to US\$ 18 in 2017. But because of increased public funding, these countries experienced the greatest average decline in the share of out-of-pocket spending, from half of total spending in 2000 to 41% in 2017. This decline has been offset by government funds in recent years, accounting for a quarter of total health spending in 2017. This increase in government financing reaffirms the uptick reported in 2018.

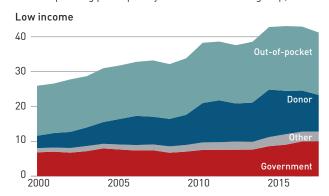
Lower middle income countries

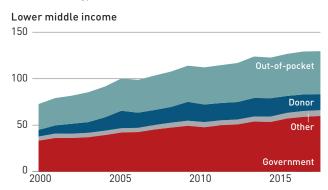
Average out-of-pocket spending per capita rose 66% from 2000 to 2017 in lower middle income countries. This was the highest growth rate over that period across all income

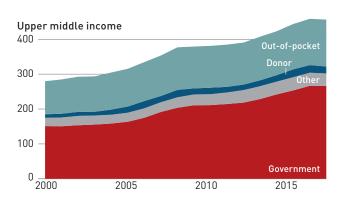
8 • Global health spending in transition

FIGURE 1.4 Overall health spending growth was dominated by government funding

Health spending per capita by source and income group, 2000-2017 (constant 2017 US\$)







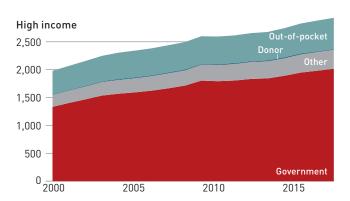
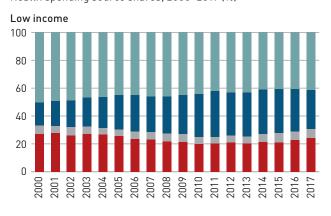
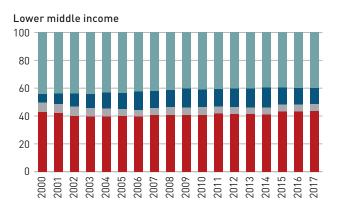
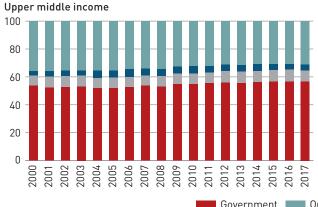


FIGURE 1.5 The transition to more public spending on health continues

Health spending source shares, 2000–2017 (%)







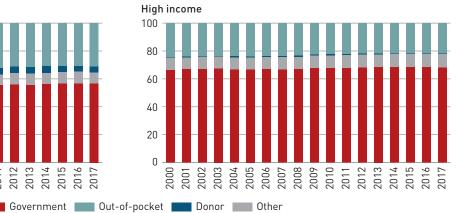


FIGURE 1.6 Across income groups, health systems are becoming less reliant on out-of-pocket spending

Out-of-pocket and government spending shares of health spending, 2000–2017 [%]

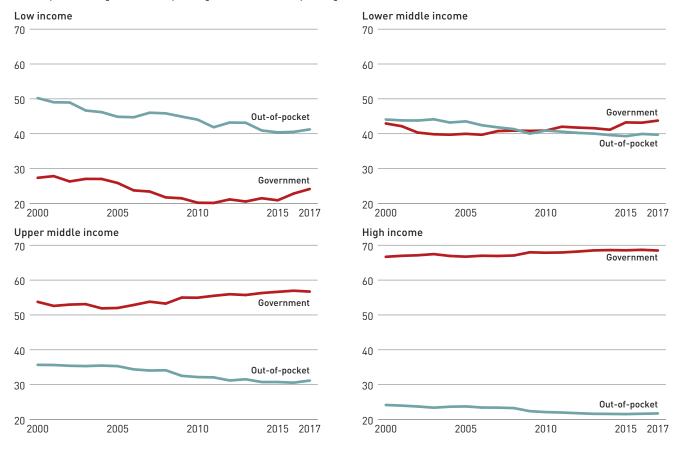
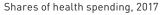
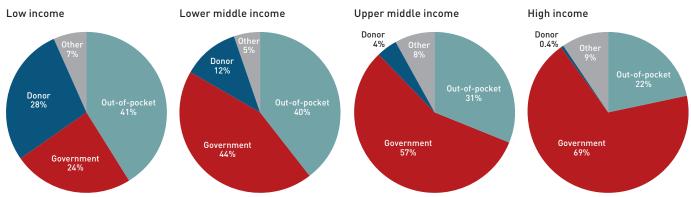


FIGURE 1.7 Out-of-pocket spending is still the largest source funding health in low income countries





groups. But spending by governments surpassed out-of-pocket spending in lower middle income countries in 2009. The government share was 44% in 2017, and the out-of-pocket share, 39%.

Upper middle income countries

Out-of-pocket spending rose from US\$ 93 per capita to US\$ 132 in real terms in upper middle income countries. But as a percentage of total spending, it declined from 36% to 32%.

High income countries

Out-of-pocket spending per capita grew from US\$ 427 to US\$ 565 between 2000 and 2017 in high income countries. This group of countries had the slowest decline in out-of-pocket spending as a share of total spending, falling

TABLE 1.1 2017 key health expenditure indicators, by income group

	Low (n = 30)	Lower middle (<i>n</i> = 45)	Upper middle (n =54)	High (<i>n</i> = 58)	Global (n = 187)
Health spending (% of GDP)	6.3%	5.3%	6.6%	7.8%	6.6%
Health spending per capita (US\$)	41	130	471	2,937	1,085
Government spending per capita (US\$)	10	60	277	2,021	723
Donor spending (% of health spending)	29%	12%	4.1%	_	_
Out-of-pocket (% of health spending)	41%	39%	32%	22%	32%
Out-of-pocket spending per capita (US\$)	18	46	132	565	228

Note: 2017 World Bank income groups. In this table, unweighted averages are reported.

BOX 1.1

Catastrophic health spending and out-of-pocket spending as a share of total health expenditure – Two different concepts

Out-of-pocket spending (OOPS) is a payment by house-holds directly to providers to obtain services and health products. It includes purely private transactions (individual payments to private doctors and pharmacies), official patient cost-sharing (user fees / co-payments) within defined public or private benefit packages, and informal payments (payments beyond what is prescribed within benefit entitlements, both in cash and in kind). Thus, OOPS can occur as an explicit part of policy or simply through market transactions, or both.

OOPS as a share of total current health expenditure measures the size of OOPS in the total national current health spending. It shows how much the health system relies on households' out-of-pocket spending to finance it.

Catastrophic health spending measures household financial hardship. It reflects a concern for households having to choose between spending on health for the services and products they need AND meeting other basic needs such as education, housing and food. In the SDG monitoring framework, it is defined as out-of-pocket payments as a share of total household consumption or income exceeding 10% or 25% [2]. There are other ways to define catastrophic health spending based on other definitions of ability to pay than total consumption or income and using different thresholds to determine when the out-of-pocket share is catastrophic [3–5].

How the two differ

Catastrophic health spending and OOPS as a share of total current health expenditure are different measures, though both relate to household out-of-pocket spending. In general, when a system relies largely on OOPS to finance health services, more households face catastrophic spending [6]. But cross-country variation in the incidence of catastrophic spending at a similar OOPS share implies that a reduction in the OOPS share is not enough to improve financial protection in all contexts. In other words, policies matter [7]. The way coverage policies are designed, implemented and governed plays a critical role for financial catastrophe and impoverishment due to OOPS.

Globally, the number of individuals with catastrophic health spending increased between 2000 and 2015. Real per capita OOPS also increased, but OOPS as a share of total health spending steadily declined [3]. This suggests that while health systems tend to depend relatively less on household direct payments, financial hardship due to such payments is increasing (as tracked within the SDG monitoring framework). The reasons for this are not known with certainty, but it is plausible that policies to protect individuals from hardship arising from the continuing increase in real OOPS per capita have not been sufficiently effective.

only 2.2 percentage points from 2000 to 2017; however, 68% of health spending came from government sources.

Donor funding, though a small share globally, is critical for most low income countries

DONOR FUNDING IS ONLY 0.2% OF GLOBAL SPENDING ON HEALTH, AND HAS BEEN FALLING IN **RECENT YEARS**

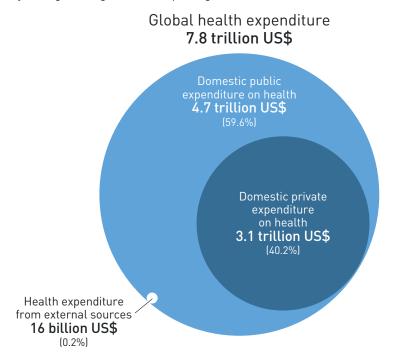
In 2017, external funding for health totaled US\$ 16 billion, or 0.2% of global health spending (Figure 1.8). Given the concentration of spending in high income countries, this is not surprising. See Box 1.2 for the methodology and data sources used to identify donor spending.

In a rising global economy, donor funding fell from its high point of US \$18 billion in 2014 to US\$ 16 billion in 2017. It fell in per capita US\$ and as a proportion of total health spending in low and lower middle income countries markedly since 2014 (Figure 1.9).

In 2017, donor funding for health to recipient countries was just over 0.03% of high income country GDP, and this fraction has fallen since

FIGURE 1.8 Donor funding is a very small share of global health spending

Major categories of global health spending, 2017



BOX 1.2

Methods for tracking development assistance for health

Data on development assistance for health (DAH) in this report are taken from the Global Health Expenditure Database. According to the System of Health Accounts (SHA) 2011 framework, domestic and external sources of funding are classified under different categories [9]. While external source can be mainly development assistance, as in low and middle income countries, they also include cross-border health service financing, particularly among the EU countries.

DAH includes grants, concessional loan and aid in kind from bilateral, multilateral or private foundations, such as the Bill & Melinda Gates Foundation. Commercial loans are not considered external funding, since they will be repaid from domestic budgets in the future. The boundary of DAH in this report is aligned with the SHA 2011 framework defined by health care functions, and where medical education and research and development are not counted. Spending on social determinants of health is not included, either. Capital and current spending are reported separately. In this report, spending takes into account only current health care spending.

The primary sources of DAH data are systematic country reports using the SHA 2011 framework. If this information is not complete, other data sources - such as surveys and reports from donors, governments, non-profit institutions and health care providers - are used to produce the best estimate possible. The Creditor Reporting System (CRS) database of the OECD Development Co-operation Directorate (DAC) is one of many secondary data sources for DAH. The OECD DAC database reports disbursements by sector and purpose, but not the actual expenditure of aid resources in recipient countries [10].

FIGURE 1.9 Donor funding has been falling since 2014

Donor funding as a share of health spending for low and lower middle income countries

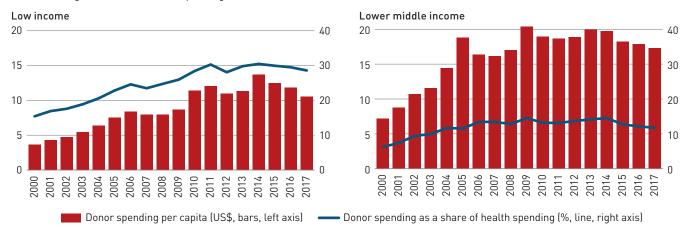


FIGURE 1.10 High income countries are devoting smaller shares of GDP to development assistance for health

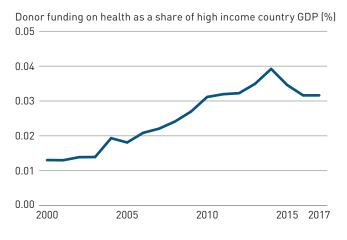
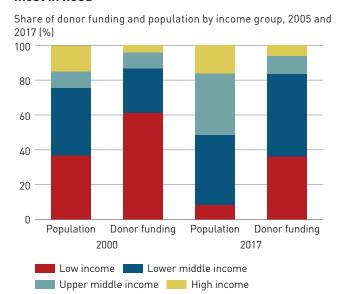


FIGURE 1.11 Donor funding is shifting to countries most in need



2014 (Figure 1.10). The fraction is much lower than the target of 0.7% of national income for all official development assistance (not only health) agreed to in 1970 to help developing economies in achieving faster growth.⁸

DONOR FUNDING FOR HEALTH IS STILL IMPORTANT IN MANY LOW AND LOWER MIDDLE INCOME COUNTRIES

In 2017, more than 140 countries across all income groups received external funding for health. Low income countries received 40% of the total, with lower middle income countries receiving 44% and upper middle income countries 9.8%. More than half of donor funding for health went to 14 countries, and a fifth to only four countries (India, Kenya, Nigeria and

Uganda). Donor funding for health that went to low and lower middle income countries accounted for 74% of total donor funding in 2005 and 84% in 2017 (Figure 1.11), while the share of the global population living in low and lower middle income countries fell from 75% to 48%, primarily due to China moving up to the upper middle income group.

The pattern is consistent with donor efforts to concentrate a greater share of aid on poorer countries. In 2017, aid represented 29% of the health spending in low income countries and 12% in lower middle income countries. In fact, 26 low and lower middle income countries, 20 of them in Sub-Saharan Africa, rely on donor funding for more than one-fifth of their health spending (Annex 1.1).

Note

1. In this report, government/public spending refers to government spending from domestic sources, including transfers from government domestic revenue (allocated to health purposes) and revenues from social insurance contributions.

References

- 1. Xu K, Soucat A, Kutzin J, Brindley C, Vande Maele N, Toure H. Public Spending on Health: A Closer Look at Global Trends. WHO. http://www.who.int/health financing/documents/health-expenditure-report -2018/en/. Accessed December 6, 2019.
- 2. United Nations Statistics Division. Indicator 3.8.2: Proportion of population with large household expenditure on health as a share of total household expenditure or income.https://unstats.un.org/sdgs/metadata/files/Meta data-03-08-02.pdf. Accessed December 7, 2019.
- 3. WHO. Primary Health Care on the Road to Universal Health Coverage. 2019. https://www.who.int/newsroom/events/detail/2019/09/22/default-calendar/ primary-health-care-on-the-road-to-universal -health-coverage. Accessed September 22, 2019.
- 4. Cylus J, Thomson S, Evetovits T. Catastrophic health spending in Europe: equity and policy implications of different calculation methods. Bull World Health Organ. 2018;96(9):599. doi:10.2471/BLT.18.209031.

- 5. Hsu J, Flores G, Evans D, Mills A, Hanson K. Measuring financial protection against catastrophic health expenditures: methodological challenges for global monitoring. Int J Equity Health. 2018;17. doi:10.1186/ s12939-018-0749-5.
- 6. Xu K, Evans DB, Carrin G, Aguilar-Rivera AM, Musgrove P, Evans T. Protecting households from catastrophic health spending. Health Aff Proj Hope. 2007;26(4):972-983. doi:10.1377/hlthaff.26.4.972
- 7. Thomson S, Cylus J, Evetovits T. Can people afford to pay for health care? New evidence on financial protection in Europe (2019). http://www.euro.who. int/en/publications/abstracts/can-people-afford-to -pay-for-health-care-new-evidence-on-financial -protection-in-europe-2019. Published June 20, 2019. Accessed December 7, 2019.
- 8. OECD. The 0.7% ODA/GNI target: A history. https:// www.oecd.org/dac/stats/the07odagnitarget-ahistory .htm. Accessed November 12, 2019.
- 9. OECD, Eurostat and World Health Organization. A System of Health Accounts 2011: Revised edition, OECD Publishing, Paris. 2017. Available from: https://www.who.int/health-accounts/methodology/ sha2011.pdf?ua=1.
- 10. WHO. Methodology for the update of the Global Health Expenditure Database, 2000-2017. Geneva: World Health Organization; 2019. Available from: http:// apps.who.int/nha/database/DocumentationCentre/ Index/en.





The health financing transition

UNDER FAST ECONOMIC GROWTH

Key messages

- Between 2000 and 2017, overall health spending dramatically increased in a group of 42 countries that experienced fast economic growth. On average, real health spending per capita grew by 2.2 times and increased by 0.6 percentage points as a share of GDP. For most, the growth of health spending was faster than that of GDP.
- In the 42 fast growing economies government spending increased by 2 percentage points of GDP on average, yet in a third of the countries, fiscal capacity failed to expand despite economic growth.
- Most fast-growing countries effectively undertook the health financing transition, increasing
 their domestic public spending per capita, as a share of public expenditure and as a share
 of total health spending. In 17 of these countries, however, public spending on health fell as
 a share of current health expenditure, even as the economy was growing. Giving priority to
 health or not is clearly a political choice.
- In 2017, total aid to fast-growing economy countries still represents about 36% of total health aid, close to the amount received by low income countries (40%). The data do not show a specific effect of aid on the health financing transition, with no observed substitution between aid and out-of-pocket spending.

etween 2000 and 2017, the global economy grew 1.6 times in real GDP per capita. As countries became richer, the demand for health care increased along with people's expectations for their government to increase access to quality services. Concurrently, the cost of health services rose because of more expensive technologies. These factors drove up health spending globally. The increase has been particularly rapid in lower middle income and upper middle income countries, with their increases in domestic health spending converging, as seen in Chapter 1).

Chapter 1 also suggests that the health financing transition (Box 2.1) is accompanying the growing demand for health services, with societies choosing to have health care funded through collective arrangements. This trend is captured by the faster increase of public funding for health relative to general economic growth. The increase in health spending – accompanied by an increased share of that spending coming from government sources and a relative reduction in out-of-pocket spending as a share of total health spending – is associated with more progress towards universal health coverage [1].

As the world became wealthier, countries both small (Guyana and Bhutan) and large (China, India, Indonesia) had rapid economic growth, driving up government revenues that enabled greater public financing for all sectors, including health. Some countries moved from a low income to middle income status,

BOX 2.1

The health financing transition

The health financing transition is an increase in per capita health spending accompanied by an increase in government spending as a share of total health spending. The definition emphasizes domestic public spending on health as a criterion for making the financing transition [2, 3]. That transition is critical for achieving universal health coverage and health-related SDG goals, and for sustaining financing to meet the health needs of the population.

BOX 2.2

Fast-growing economic countries

This chapter identifies countries as experiencing fast economic growth as those whose World Bank country income classification changed from low to lower middle or from lower middle to upper middle income and had a GDP per capita cumulative growth rate greater than 1.3 times, in real terms from 2000 to 2017. Countries who moved from higher to lower income group, and countries with population size smaller than 600,000 were not included in the analysis. By these criteria, 42 countries are identified as fast economic growth countries in this report (Annex 2.1).

and others from lower middle to upper middle income. This chapter examines the trajectory of these countries and analyses the role of economic growth in fostering the health financing transition. It also examines the changes in patterns of health spending, and how they relate to fiscal revenues, budget priorities and development assistance for health.

Fast economic growth is associated with increased health spending

Despite the 2008–2010 global financial crisis, 42 low and middle income countries sustained rapid economic growth between 2000 and 2017 (Box 2.2). Most of them are in Asia, the Middle East and Latin America and include China, India and Indonesia (Figure 2.1). Their fast economic growth is generally associated with higher government revenues and health spending.

HEALTH SPENDING INCREASED IN ALL COUNTRIES WITH FAST ECONOMIC GROWTH

In all 42 fast-growing economy countries, health spending increased in real per capita terms. On average across these countries, real health spending per capita grew by 2.2 times and increased by 0.6 percentage point as a share of GDP from 2000 to 2017. For most, the growth of health spending was faster than

0 0

FIGURE 2.1 Fast economic growth countries between 2000 and 2017

Note: Changes in income group calculated based on the World Bank income classification between 2000 and 2017.

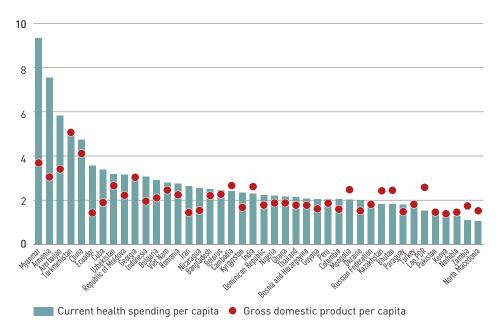
that of GDP (Figure 2.2). In Armenia, Cuba, Ecuador, Indonesia, Kyrgyzstan and Myanmar, the cumulative growth of health spending was more than twice the income growth. Yet, not

all countries followed that pattern: 10 countries, such as Lao PDR, Mongolia and Zambia, experienced health spending growth that was lower than economic growth.

FIGURE 2.2 Between 2000 and 2017, the growth of health spending outpaced GDP in most fast-growing economies

Cumulative growth of GDP and recurrent health spending, 2000-2017

Low to lower middle (n = 21) Lower middle to upper middle (n = 21)



Note: The cumulative growth is calculated using health spending and gross domestic product per capita dollars in constant terms (2017). Base year 2000 = 1.0.

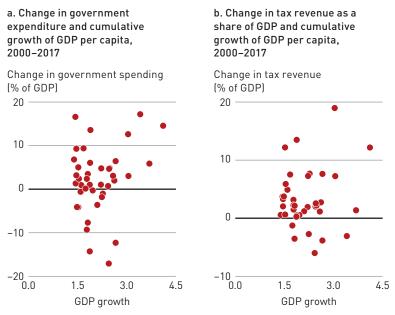
NOT ALL FAST-GROWING ECONOMIES HAVE FULLY REALIZED THEIR POTENTIAL TO FOSTER HIGHER TAX REVENUE

Both tax revenue and expenditure as a share of GDP increased in fast-growing economies overall. But several countries have not realized the potential of increasing tax revenues (Figure 2.3a). While, on average, countries had a 2 percentage point increase in government spending as a share of GDP. A third of the countries had public spending decline as a share of GDP, despite their growing economies (Figure 2.3b). While the data do not indicate the specific reasons for this in each case, the pattern is consistent with these countries having had difficulties in adjusting to the rapid change in their economies and in strengthening institutional capacity to collect tax revenue.

ECONOMIC GROWTH DOES NOT AUTOMATICALLY TRANSLATE INTO A HEALTH FINANCING TRANSITION

While all fast-growing economies increased real per capita spending on health from 2000 to 2017, most effectively undertook the transition of their health financing landscape, shifting the way they fund health services towards more public spending, and often building or

FIGURE 2.3 Most fast-growing economies increased tax revenue and government spending



Note: Changes in government spending correspond to the difference between the 3-year average of the government spending as a percentage of GDP in 2000 and in 2017. Changes in tax revenue correspond to the difference between the 3-year average of tax revenue as a percentage of GDP. The reference period for tax revenue varies across countries depending on the data availability. The cumulative growth rate is calculated using GDP per capita in constant terms (2017). Base year 2000 = 1.0.

Source: Tax revenue as reported by the International Monetary Fund, Government Finance Statistics.

strengthening pooling institutions (chapter 3). Twenty-five countries are increasing their government spending on health and decreasing out-of-pocket spending as a share of spending on health (Figure 2.4a). This happened as out-of-pocket spending per capita was rising, except in Thailand, Kenya and North Macedonia where OOPS fell (Figure 2.4b). In 17 countries, however, the health financing transition did not take place as government spending on health as a share of health spending fell and out-of-pocket spending went up as a share of health spending and in per capita real terms. The possible explanations for this are that private spending grew more rapidly as a consequence of fast economic growth. In addition, public spending may not have kept pace in the countries where fiscal capacity did not increase despite economic growth. Finally, another possible reason why public spending on health did not keep pace was due to political reasons, in particular, decisions by some governments to de-prioritize health in public resource allocation.

In a context of fast economic growth, both private and public spending on health increased, responding to increased demand for health services (see Figure 2.4c). Markets are expected to respond quicker to this demand. But in countries with a financing transition, collective action expressed as public spending responded to the increased health demand and grew significantly faster than private spending. In parallel, the increase in private spending in health financing transition countries was much slower than that in the countries which did not experience health financing transition.

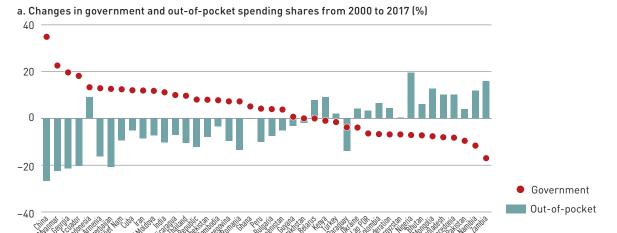
In the countries without health financing transition, private spending outpaced public spending (see Figure 2.4c). The differences observed between the transition and non-transition countries is mostly in the change of trajectory of public spending, which reflects the political choices on priorities of public spending.

Increasing reliance on domestic public sources to fund health can move countries towards UHC

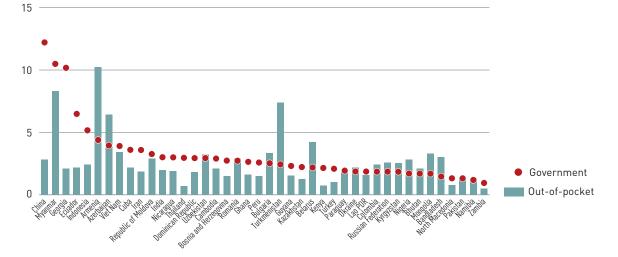
RELYING ON PUBLIC FUNDS TO FINANCE HEALTH IS LARGELY A POLITICAL CHOICE

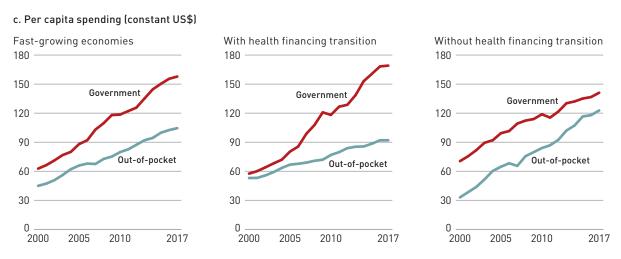
Setting priorities for health in budget allocations is a choice by governments and society. Government spending on health is constrained by fiscal capacity and nondiscretionary obligations such as debt servicing

FIGURE 2.4 Both government and out-of-pocket spending grew but public policy makes a difference



b. Cumulative growth of government and out-of-pocket spending per capita from 2000 to 2017 [%]





Note: Changes in government spending on health correspond to the difference between the 3-year average of government spending on health as a share of health spending in 2000 and in 2017. Changes in out-of-pocket spending correspond to the difference between the 3-year average of out-of-pocket spending as a share of health spending in 2000 and in 2017. The cumulative growth rate is calculated using government and out-ofpocket spending per capita in constant terms (2017). Base year 2000 = 1.0.

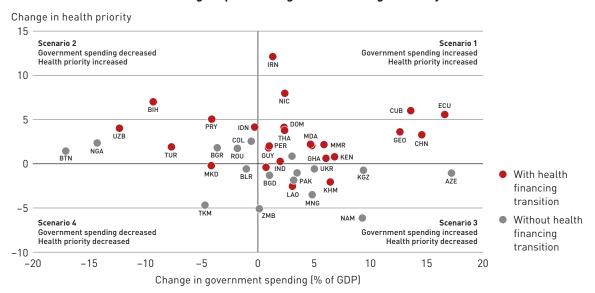


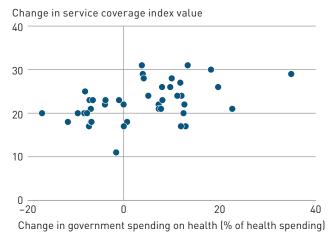
FIGURE 2.5 Growth is not enough - prioritizing health in budgets is key

Note: Changes in health priority correspond to the difference between the 3-year average of government spending on health as a share of government spending in 2000 and in 2017. Changes in government spending correspond to the difference between the 3-year average of government spending as a share of GDP in 2000 and in 2017.

requirements [4]. But as countries enjoy fast economic growth, the increase in government revenues that usually results does not always translate to a larger budget share for health. Indeed, in some cases the share has declined, as countries use the added government revenues for other priorities.

In countries in the right-hand quadrants in Figure 2.5, the growth in overall government spending exceeded GDP growth. Countries in the upper right quadrant also increased the

FIGURE 2.6 Changes in government spending do not seem to be clearly associated with changes in service coverage



Note: Changes in government spending on health correspond to the difference between the 3-year average of the government spending on health as a share of health spending in 2000 and in 2017. Changes in the service cov-

a share of health spending in 2000 and in 2017. Changes in the service coverage index correspond to the difference between the 3-year average of service coverage in 2000 and in 2017 based on data availability.

share of the budget going to the health sector. For instance, between 2000 and 2017 in Vietnam, changes in overall government spending and the budget priority increased respectively by 4.7 and 2.2 times. But countries in the lower right quadrant reduced the priority to health. In Mongolia, for example, while overall government expenditure increased (by 4.8 times), the health share in the budget fell (-3.5; Table 2.1).

Countries in the left-hand quadrants had their fiscal capacity contract relative to GDP, with government spending not keeping pace with the fast economic growth since 2000. Most countries in this group, such as Turkey, opted to sustain or increase their share of the budget going to health services (upper left quadrant). But in a few cases (lower left quadrant), such as Turkmenistan and North Macedonia, the budget priority for health fell, leaving economic growth as the only driver of higher government health spending.

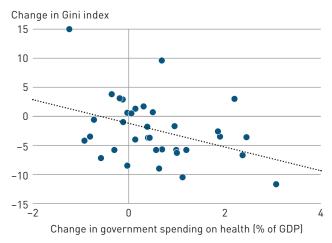
MORE PUBLIC SPENDING LEADS TO HIGHER SERVICE COVERAGE, BUT A FAST FINANCING TRANSITION DOES NOT LEAD TO FASTER PROGRESS

For the 42 fast-growing countries, the service coverage index – tracked within the SDG monitoring framework by indicator 3.8.1 – was, on average, 42 in 2000, and rose above 66 in 2017, in line with global trends [5]. Depending on the country, the increase ranged from 10 points to more than 30 points. But a faster transition to government spending is not correlated with

TABLE 2.1 Health financing transition countries, government spending and health priority

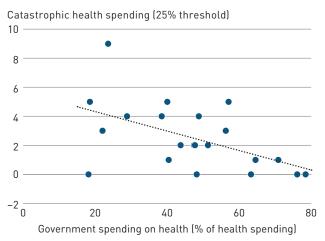
Country	Health financing transition	Change in health priority (percentage points)	Change in government spending as a share of GDP (percentage points)	Scenario
Iran	V	12.1	1.3	Scenario 1
Nicaragua	V	8.0	2.4	Scenario 1
Cuba	V	6.0	13.6	Scenario 1
Ecuador	V	5.6	16.6	Scenario 1
Dominican Republic	V	4.1	2.3	Scenario 1
Thailand	V	3.8	2.4	Scenario 1
Georgia	V	3.6	12.6	Scenario 1
China	V	3.3	14.6	Scenario 1
Viet Nam	· · · · · · · · · · · · · · · · · · ·	2.2	4.7	Scenario 1
Myanmar	· ·	2.2	5.9	Scenario 1
Republic of Moldova	· ·	2.1	4.8	Scenario 1
Peru	V	2.0	1.0	Scenario 1
Guyana	V	1.8	0.9	Scenario 1
Armenia		0.9	3.0	Scenario 1
Kenya	· · · · · · · · · · · · · · · · · · ·	0.8	6.8	Scenario 1
Ghana		0.6	6.1	Scenario 1
India	V	0.3	2.0	Scenario 1
Bosnia and Herzegovina		7.0	-9.3	Scenario 2
Paraguay	V	5.1	-4.1	Scenario 2
Indonesia		4.2	-0.3	Scenario 2
Uzbekistan		4.0	-12.3	Scenario 2
Colombia	<u>.</u>	2.6	-0.6	Scenario 2
Nigeria		2.4	-14.3	Scenario 2
Turkey		1.9	-7.7	Scenario 2
Bulgaria	·	1.8	-3.6	Scenario 2
Romania		1.7	-1.8	Scenario 2
Bhutan		1.4	-17.1	Scenario 2
Kazakhstan		-0.4	0.7	Scenario 3
Ukraine		-0.6	5.0	Scenario 3
Kyrgyzstan		-0.7	9.4	Scenario 3
Russian Federation		-1.0	3.5	Scenario 3
Azerbaijan		-1.1	17.2	Scenario 3
Bangladesh		-1.3	1.0	Scenario 3
Pakistan		-1.9	3.2	Scenario 3
Cambodia		-2.1	6.4	Scenario 3
Lao PDR		-2.5	3.1	Scenario 3
Mongolia	-	-3.5	4.8	Scenario 3
Zambia			0.1	Scenario 3
Namibia		-6.1	9.3	Scenario 3
North Macedonia		-0.2	-4.1	Scenario 4
Belarus		-0.6	-1.0	Scenario 4
Turkmenistan		-4.7	-4.7	Scenario 4

FIGURE 2.7 Higher government spending on health is associated with less inequality among the health financing transition countries



Note: The Gini index measures the income inequality among individuals or households within an economy. A low Gini coefficient means less inequality. Changes in Gini index correspond to the difference between the earliest and latest Gini index available between 2000 and 2017. Uzbekistan was excluded since the latest Gini index available is from 2003. Changes in government spending correspond to the difference between the 3-year average of the government spending on health as a share of GDP in 2000 and in 2017.

FIGURE 2.8 Larger shares of government spending in total health spending tend to go with lower catastrophic health spending for countries making the health financing transition



Note: The Y axis denotes the percentage of the population with out-of-pocket health spending exceeding 25% of a household budget (SDG indicator 3.8.2). The X axis denotes the share of government health spending in current health spending.

a fast expansion of service coverage (Figure 2.6). The variation reflects the diverse level of health spending in 2000, the budget priority given to the health sector, the effectiveness of government spending, and the role of the private sector – but also factors beyond the scope of the health financing system. In lower income countries, progress in service coverage has come from progress in interventions for infectious diseases and, to less extent, for reproductive, maternal, new-born and child health services. Further study of each country's situation can provide more insights and draw lessons to accelerate the advance to universal health coverage.

INCREASING RELIANCE ON PUBLIC HEALTH SPENDING TENDS TO HAVE BETTER FINANCIAL PROTECTION OUTCOMES IN FAST-GROWING COUNTRIES

UHC is a social stabilizer, and government spending on social sectors can smooth income through the redistribution effect of direct and indirect taxes. The Gini coefficient of income inequality generally fell in most fast-growing economy countries, similar to the global trend. And higher government spending on health as a share of GDP tends to be associated with lowering the Gini coefficient, or slowing its pace of increase (Figure 2.7).

Among the fast-growing countries, those embarking on the health financing transition

- to higher levels of government spending in total current health spending - also tend to provide better financial protection to their population as tracked by SDG indicator 3.8.2 (see Box 1.1). Figure 2.8 shows its negative association with catastrophic expenditure, using 25% as the threshold, pointing to better outcomes, similar to finding with the 10% threshold. The large variation reflects differences in the services the government funds and the populations benefitting from them. It confirms that increasing government spending alone will not be enough to achieve universal health coverage even in countries making the health financing transition [1, 6].

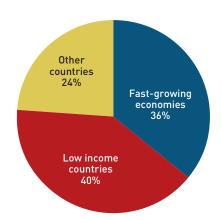
The transition from aid does not always go hand in hand with the health financing transition

THE FAST-ECONOMIC GROWTH COUNTRIES ABSORBED 36% OF TOTAL HEALTH AID

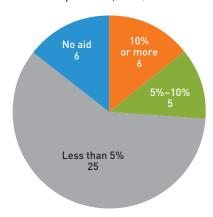
With steady economic growth, low and middle income countries are expected to move towards higher reliance on domestic funds to finance progress toward UHC. Yet the relationship between the transition from aid (declining aid) and the health financing transition (more public funding) is not straightforward. In 2017, most of the fast-growing countries still received health aid. The total aid to these countries still represents about

FIGURE 2.9 Most of the 42 fast-growing economy countries still receive aid for health

a. Share of total aid



b. Countries distribution by percentage of aid received in current health expenditure, 2017 (number of countries)



36% of total health aid, close to the 40% received by low income countries (Figure 2.9a). The reasons are unknown, but this does raise questions about the scope for further targeting aid to relative need. In addition, the potential to focus aid in fast-growth middle income countries more on technical assistance and capacity building for national institutions should be considered, to better position them to make the health financing transition and sustain their progress towards UHC.

AID CONTINUES TO HAVE A ROLE IN FUNDING **HEALTH IN SOME FAST-GROWING ECONOMIES**

In most fast-growing countries, aid is now below 5% of health spending (Figure 2.9b). But in some countries, the level of external resources to finance health continued above 10% in 2017, a somewhat counterintuitive finding. Higher income is generally associated with lower aid, but with large variation across countries, reflecting the many other factors that determine health aid.

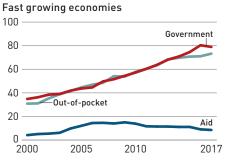
AID NEITHER FACILITATES NOR HAMPERS THE **HEALTH FINANCING TRANSITION IN COUNTRIES EXPERIENCING RAPID ECONOMIC GROWTH**

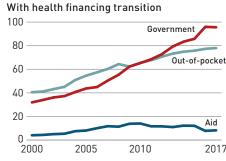
Among those receiving aid above 5% of current spending on health, aid increased as a share of health spending between 2000 and 2006. It then started to fall from 2006 to 2017, in parallel with a rapid increase in public spending (Figure 2.10). On average across those countries, aid seemed to have a neutral effect, with neither fungibility between aid and public spending nor substitution between aid and out-of-pocket spending [7].

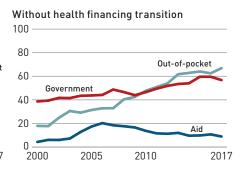
Private spending seems to respond the quickest to increased demand for health services. In both health financing transition and nontransition countries, out-of-pocket continues to increase on a stable trajectory. The difference is in the changing trajectory of public spending. For countries making the health financing transition, public spending responded to the increased health demand and grew faster than private spending. For nontransition countries, the increase in both

FIGURE 2.10 The health financing transition is mainly driven by public policy

Per capita spending (constant US\$)







24 • The health financing transition

private and public health spending continues, and the increase in public spending does not seem to affect the trend of private spending.

More country analysis can help understand the dynamic relationship between domestic public and private funding with external aid and in better supporting an effective transition. When countries graduate from low income, health aid would be expected to fall. But developing health financing institutions may not keep up with the speed of their economic growth. Health aid to lower middle and upper middle income countries, if it remains important, should strengthen the capacity of health financing institutions and move away from services that can increasingly be funded by the much larger domestic resources.

References

- 1. WHO, World Bank. Global monitoring report on financial protection in health 2019. World Health Organization and International Bank for Reconstruction and Development / The World Bank; 2019. Licence: CC BY-NC-SA 3.0 IGO.
- 2. Fan, Victoria Y., and William D. Savedoff. 2014. "The Health Financing Transition: A Conceptual Framework and Empirical Evidence." Social Science & Medicine, 105:112-121.
- 3. Savedoff, William D., David de Ferranti, Amy L. Smith and Victoria Y. Fan. 2012. "Political and Economic Aspects of the Transition to Universal Health Coverage." The Lancet, 380(9845):924-932. September 8.
- 4. Tandon, Ajay; Fleisher, Lisa; Li, Rong; Yap, Wei Aun. 2014. Reprioritizing government spending on health: pushing an elephant up the stairs? (English). Health, Nutrition, and Population (HNP) discussion paper. Washington, DC; World Bank Group. http://

- documents.worldbank.org/curated/en/91133146 8331765809/Reprioritizing-government-spending -on-health-pushing-an-elephant-up-the-stairs.
- 5. World Health Organization, 2019. Primary Health Care on the Road to Universal Health Coverage: 2019 Monitoring Report. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO
- Wagstaff A, Flores G, Hsu J, Smitz M-F, Chepynoga K, Buisman LR et al. Progress on catastrophic health spending: results for 133 countries. A retrospective observational study. Lancet Global Health. 2017.
- Tandon, A, J Cain, C Kurowski, I Postolovska (2018). Intertemporal dynamics of public financing for universal health coverage: accounting for fiscal space across countries. Health, Nutrition and Population Discussion paper. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/ 10986/31211 License: CC BY 3.0 IGO.





3

The institutional transition

FROM MODELS TO FUNCTIONS

Key messages

- The number of countries with social health insurance (SHI) has gradually increased since 2000, reaching 126 in 2017, 13 more than in 2000.
- The spending flowing through SHI schemes accounted for more than 5% of public spending on health in 97 countries.
- Growth in the share of SHI in current health spending varied from 1% to 2% in low income countries, 4.5% to 8.5% in lower middle income countries and 16% to 20% in upper middle income countries.
- The growth of SHI spending is greater in the 42 fast-economic growth countries, which moved to upper income status between 2000 and 2017. Their average share of current health spending flowing through SHI arrangements increased by 6 percentage points, from 11% in 2000 to 17% in 2017.
- About two-thirds of countries with SHI use government budget transfers as a funding source.
 Such transfers made up more than 30% of SHI revenue in 30 countries. The majority of high and upper middle income countries finance more than 10% of their SHI spending with government budget transfers.
- SHI spending has grown, but what that means for progress towards universal health coverage is unclear. At similar levels of GDP and government health spending per capita, countries with SHI arrangements do not seem to have better population coverage with health services.

The number of countries with social health insurance has gradually increased since 2000, as has the public spending channelled to it

MORE COUNTRIES HAVE SOCIAL HEALTH INSURANCE

The 2017 report unpacked the sources of social health insurance (SHI) spending [1]. This chapter looks at changes in SHI spending since 2000 and how the revenue sources for this spending have evolved. The SHA 2011 methodology helps in examining these changes and in knowing whether and how SHI may be contributing to UHC (or possibly detracting from progress by making systems more inequitable).

SHI is not a "source" of health spending but a health financing arrangement for that spending to flow. From a technical perspective, the key defining characteristic of SHI is that the entitlement to benefits derives from a contribution made by or on behalf of each covered person, with coverage mandatory for some or all of the population.1 Such contributory-based entitlement distinguishes SHI from the other large categories of compulsory financing arrangements that rely on noncontributory automatic entitlement - based on citizenship, residence, age, or income or poverty. The terms contributory and noncontributory refer to the basis for entitlement, not to the way revenues are raised. Even in noncontributory systems, people contribute in that they pay taxes, but their tax contributions do not provide the basis for their entitlement to benefits.

This technical distinction, essential for cross-country analysis, requires further clarification. First, an institutional split between purchaser and provider is not part of the definition. Many countries have a financing arrangement that includes an explicit purchasing agency, sometimes called a health insurance fund, but with general revenues as

the sole funding source and population entitlement on a noncontributory basis.

To illustrate, of Thailand's three main health financing arrangements for personal health services, only one - the Social Security Scheme (SSS) - is considered to be SHI under the SHA 2011 classifications. The Civil Servants Medical Benefits Scheme and the Universal Coverage Scheme are fully budgetfunded, but for the analysis here, only the share of budget transfers to the SSS is considered. This is a reminder that international comparative analysis can go only so far, so country-specific health accounts that distinquish the sources and uses of funds by each financing arrangement (rather than categories of financing arrangements) are essential. In the Thai case, such analysis reveals the important differences between the three arrangements in levels of public funding per capita, something not visible in the global database.

The technical definition used here is in no way meant to impose a terminology on countries. The label that a country applies to its health financing arrangements is a matter of national policy, and what matters for analysis at country level is to assess each distinct financing arrangement individually and collectively. But the international classification of health expenditures is driven by objectively verifiable criteria rather than labels, and the SHA 2011 classifications provide this.

Based on this technical definition, the spending data indicate that the financing systems of about two-thirds of countries include SHI arrangements. The number of WHO Member States implementing SHI reached 126 in 2017, 13 more than in 2000. Fourteen new countries have introduced a social health insurance scheme since 2000, while only one terminated the SHI after four years of implementation. Prior to that time, there were some notable examples of moving away from SHI in Europe, including Denmark, Italy,

TABLE 3.1 Characteristics and classification of Thailand's three main financing arrangements [3]

Health financing arrangement	Basis for entitlement	Funding sources	Explicit purchasing agency?	Classify as SHI under SHA 2011?
Civil Servants Medical Benefits Scheme	Civil servants and family members (noncontributory)	General budget revenues	No (Ministry of Finance)	No
Social Security Scheme	Private formal sector workers (contributory)	Employer, employee, and government contributions	Yes	Yes
Universal Coverage Scheme	All Thais not affiliated to other two arrangements (non-contributory)	General budget revenues	Yes	No

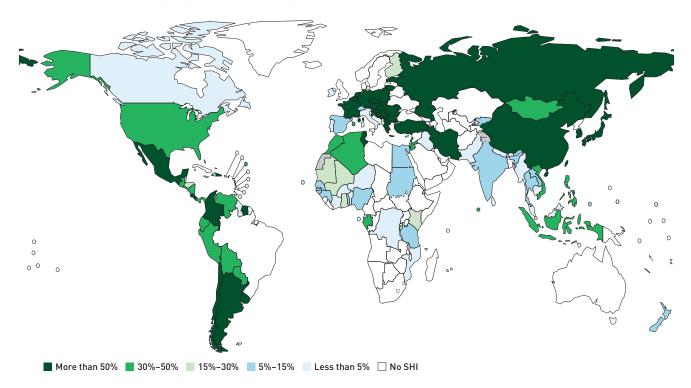


FIGURE 3.1 126 countries had social health insurance in 2017

Portugal, Greece and Spain during the 1970s and 1980s [4]. Kazakhstan introduced SHI in 1996 but cancelled the program after only two years [5].

THE SHARE OF PUBLIC SPENDING FLOWING THROUGH SOCIAL HEALTH INSURANCE HAS **GROWN BUT VARIES WIDELY**

Among the 126 countries, spending through SHI was very small in 29 countries in 2017 (less than 5% of public spending on health), while in 38 upper middle and high income countries, more than half of public spending on health flows through SHI. In total, 97 countries with expenditures flowing through SHI schemes accounted for more than 5% of their public spending on health (Figure 3.1). Of countries that have SHI, there is a strong relationship between their income and the SHI spending share of both public and overall spending on health (Figure 3.2).

No country relies exclusively on SHI for its public spending on health because all countries also spend on population-based public health services provided on a noncontributory basis. However, several countries have changed their health financing arrangements since 2000, including 9 countries where the share of public spending flowing through SHI increased to above 50% by 2017. Seven other countries showed a similar trend, with a substantial increase in the SHI spending

share but not yet reaching 50%. As a result of these developments, the number of countries where most public spending flows through SHI schemes increased from 35 in 2000 to 40 in 2017. And if current trends continue, the number should continue to grow in the near future.

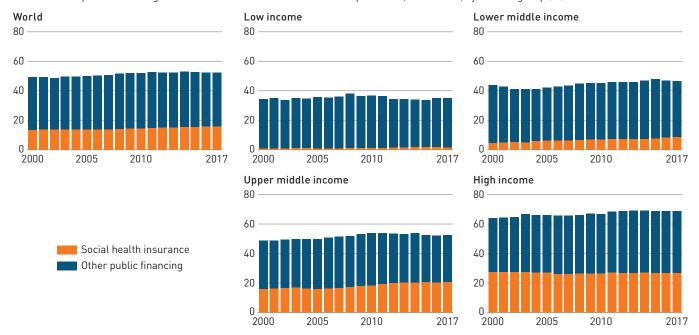
THE SHARE OF SOCIAL HEALTH INSURANCE IN HEALTH SPENDING INCREASED IN MIDDLE **INCOME COUNTRIES**

Among all countries, the overall share of public financing arrangements in current health spending increased slightly, as did the average share of this spending financed through SHI, rising from 13% to 16% between 2000 and 2017. The growth trends in the share of SHI in current health spending varied by country income group: from 1% to 2% in low income countries, 4.5% to 8.5% in lower middle and 16% to 20% in upper middle income countries. In high income countries, SHI on average remained stable at 27% of current health spending (Figure 3.2).

The growth of SHI health spending is greater in the 42 fast-economic growth countries (see chapter 2), which moved to upper middle income status between 2000 and 2017. Their average share of current health expenditure flowing through SHI arrangements increased by 6 percentage points, from 11% in 2000 to 17% in 2017.

FIGURE 3.2 The share of social health insurance spending increased in middle income countries

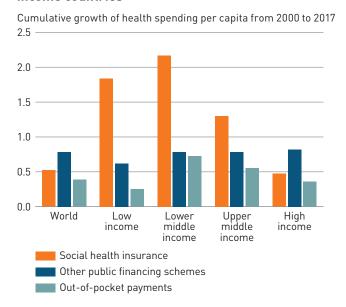
SHI and other public financing schemes as a share of current health expenditure, 2000-2017, by income group (%)



In absolute terms, SHI spending grew faster than the rest of health spending in low, lower middle and upper middle income countries, but slower than other public spending in high income countries (Figure 3.3).

While these developments are notable, the global spending data must be supplemented with other information and analysis before concluding whether the growing financial role of SHI has had positive or negative implications

FIGURE 3.3 Social health insurance spending grew faster than other health spending in low and middle income countries



for progress towards UHC. Indeed, while public spending through SHI has clearly increased, it is less clear whether this was purely additional or offset by some declines in public spending through other financing arrangements. To inform these and other policy-relevant conclusions, further information is needed, only some of which can be derived from global spending data.

Countries have increased budget funding for social health insurance, often softening the link between entitlement and contribution

THE ORIGINAL MODEL OF FUNDING SOCIAL HEALTH INSURANCE IS NOT CONSISTENT WITH UNIVERSAL HEALTH COVERAGE – AND IS DYING OUT

Traditionally, social health insurance revenues came from the mandatory contributions of employers and employees, sometimes referred to as payroll taxes. Many lower middle income countries that have SHI have seen it as a way to increase public funding through this revenue source. In many countries, however, the revenue sources for SHI have diversified, modifying the traditional funding model, with governments turning general budget revenues to support SHI. This has been a response to the limitations of traditional SHI for governments interested in using this arrangement as a means towards UHC. Using wage-based contributions in high

and middle income countries with aging populations raises concerns with employment and competitiveness, and the small size of formal workforce in low and lower middle income countries greatly limits the potential for raising revenues from this source. So in all contexts, governments are recognizing the need to use general budget revenues to sustain or increase funding for SHI. These explicit budget transfers are made for different purposes, with different policy implications for each:2

- Transfers to subsidize the contributions of formal sector affiliates, as for the Thai Social Security Scheme, where employers, employees and the government each contribute one-third of the premium [3].
- Transfers to subsidize and encourage the contribution and affiliation of persons in the informal sector – as for the affiliation of farmers in the Republic of Korea [6] or the wider informal sector in China's rural and urban insurance programs [7].
- Transfers to cover specific groups in the population that do not make any explicit contribution for SHI affiliation - as for the poor or otherwise economically inactive population, as in the Czech Republic [8] or in Gabon, where a mandatory health insurance levy paid by companies was specifically designed to finance the extension of social health insurance to poor Gabonese [9].
- General transfers to the schemes (not on behalf of specific groups of the population) – as for the inclusion of specific health services, to support overall operations as transfer ex ante, or ex post to cover negative budget balances, with Hungary using several types of transfers for these reasons [10].

While the global data show the magnitude of general budget revenue transfers to SHI, understanding the policy implications requires unpacking the role of these transfers. This requires country-specific analysis of who benefits from these transfers, both directly and indirectly, to determine whether the results are pro-poor and contribute to progress towards UHC.

ABOUT TWO-THIRDS OF COUNTRIES WITH SOCIAL HEALTH INSURANCE USE GOVERNMENT BUDGET TRANSFERS AS A FUNDING SOURCE

Among the 97 countries where more than 5% of government health spending flowed through SHI in 2017, 59 used general budget transfers to SHI. Such transfers made up more than 30% of SHI revenue in 30 countries. Since 2000, 24 countries showed growth in

BOX 3.1

Hungary: Same system, changing sources

Hungary is a high income country that altered its revenue sources in line with employment and other macroeconomic concerns, while maintaining its SHI financing arrangement with near-universal population affiliation. In 1995, the payroll tax provided to the Health Insurance Fund accounted for nearly 90% of its revenues, and government transfers about 10%. Since that time, there has been a marked shift in the revenue mix, with the payroll tax share declining to just under 60% between 2005 and 2008, followed by a sharper decline after the economic crisis of 2009. By 2015, it was only 30%, with budget transfers almost 70%.

The contribution rate paid by employers fell from 11% in 2000 to 0% in 2017 (in 2013, the employer contribution was replaced with a social tax). This policy was aimed at formalizing the informal labour market and fighting unemployment, particularly after the European economic crisis of 2008–09. Policymakers hoped that the lower health insurance contribution rates would encourage job creation and employment-generating investments. The decline in revenues from the employer contribution was compensated in part by the increase in the employee social health insurance contribution rate, and more generally by the injection of additional tax transfers from the central government budget [10].

the share of SHI spending financed by budget transfers across the 97 countries, and the average budget transfer share increased from 15% to 21% (Figure 3.4). Such budget transfers to SHI are more commonly practiced in high and upper middle income countries and are also larger, typically with the aim of enabling universal or near-universal affiliation to SHI in these countries. While more than half of high and upper middle income countries finance more than 10% of their SHI spending with government budget transfers, the number is much smaller in low and lower middle income countries, where such transfers do not exist in more than half the cases.

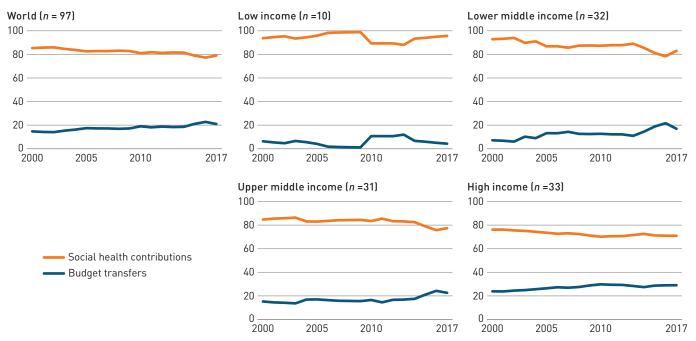
Social health insurance does not always bring more resources to the health system, but does it improve performance?

NEW OR HIGHER EARMARKED PAYROLL TAXES FOR HEALTH INSURANCE MAY NOT ALWAYS INCREASE **REVENUE FOR PUBLIC SPENDING ON HEALTH**

In lower middle income countries in particular, the introduction or expansion of SHI

FIGURE 3.4 Budget transfers to SHI are more common in upper middle and high income countries

Shares of social health insurance revenues in 97 countries with SHI, 2000-2017 (%)



is usually motivated by a desire to increase funding levels, often but not only from new or increased payroll taxes. But as with the revenue source, there is always the potential for offsetting declines in allocating more discretionary revenues to the health sector. In fact, the experience has been quite diverse, with SHI associated with increased public spending in some countries but not others.

In perhaps one of the most extreme unintended consequences, the introduction of a payroll-tax-funded SHI scheme in Kazakhstan in 1996 resulted in a decline in public spending on health by about 0.7% of GDP by 1998. The new payroll tax raised about 0.5% of GDP in revenues each year, but this was more than offset by a decline in state budget health spending by 1.5% of GDP relative to 1995. Regional governments that had previously been the main source of public spending on health shifted away from health following the introduction of SHI. The SHI reform was cancelled after 1998, and public funding for health services began to recover [11].

In other countries, the story was different.

 In Tunisia, public spending through non-SHI arrangements gradually declined as a percent of GDP from 2000 to 2009 and then recovered slightly. After 2009, SHI spending increased resulting in a net increase in public health spending by about 1% of GDP

- and more than doubling in real per capita terms by 2017.
- Ghana showed a large initial increase in both SHI and non-SHI public spending after the introduction of an earmarked VAT for its National Health Insurance Scheme in 2007. Overall public spending on health reached more than 2.5% between 2011 and 2013, but then declined after that, with the pattern showing an overall declining share of health in public spending and declines in real per capita public spending after 2013, indicating some offsets.
- Conversely in China, the government committed to universalize affiliation to public health insurance schemes since 2000 through both individual contributions and budget transfers in the priority for health in public spending. This spending more than doubled as a percent of GDP. And given the country's rapid economic growth, there was between an eightfold and ninefold increase in real per capita public spending on health.

These divergent patterns suggest there is no magic in SHI that leads automatically to increases in revenue and spending. What matters is the political choice by countries to increase health spending. And for low and middle income countries, the choice is about the level of budget funding, whether channelled through SHI or not.

DOES EXPANDING SOCIAL HEALTH INSURANCE SPENDING RESULT IN PROGRESS TOWARDS UNIVERSAL HEALTH COVERAGE? NOT NECESSARILY

Having SHI does not always mean better results on the path to universal health coverage: progress is clearly linked to the level of public spending on health, but there is no clear pattern of UHC performance that differentiates SHI from noncontributory public financing arrangements. For example, at similar levels of GDP and government health spending per capita, countries with SHI arrangements do not have better service coverage, based on the UHC index of essential service coverage (Figure 3.5). Nor is there a difference in financial protection between systems that rely mainly on SHI or on publicly funded noncontributory based entitlement [12, 13].

There is no conceptual reason why systems in which most public funds flow through SHI arrangements should do better than those that do not. Indeed, in many settings, there are concerns that linking entitlement to contribution will yield more inequitable results, particularly if budget subsidies for noncontributors do not counter the advantaged position of those who work in the formal sector. On their own, the SHA 2011 classifications and global spending data do not offer insights into some critical determinants of health financing performance, notably the extent to which services are purchased strategically or the equity in the distribution of the benefits of this spending. The spending data can and should be used in conjunction with other information to unpack whether and how a country's overall health financing arrangements contribute to or detract from progress towards UHC.

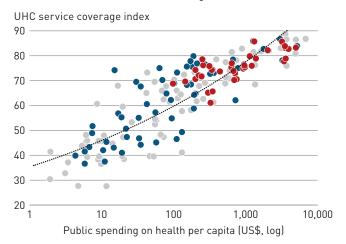
Social health insurance spending has grown, but what that means for progress towards universal health coverage is unclear

More countries now channel funds through SHI arrangements, and that SHI spending accounts for a larger share of public spending on health than in the past. In many countries, the funding sources for SHI are diverse, with general budget revenues often playing a key role, and in some cases, providing the majority of funds for SHI. The spending patterns and trends reveal some interesting points while raising many issues that demand investigation, generally country-specific.

Organization of the data according to the SHA 2011 classifications has been an important step towards changing thinking away

FIGURE 3.5 Social health insurance does not mean better service coverage

Domestic public health spending and service coverage with or without social health insurance arrangements, 2017



- SHI more than 50% of public health spending (n = 37)
- SHI 5%-50% of public health spending (n = 54)
- SHI does not exist or is small (less than 5% of public health spending) (n = 86)

from traditional models of health financing. In particular, the data lend credence to the view that contrasting "tax-funded systems" vs "social health insurance systems" is both incorrect and unhelpful. Sources are not systems. SHI is not a source. And there are simply too many cases of "tax-funded SHI" to ianore.

There are also fully tax-funded systems that use a distinct purchasing agency, have representative governance arrangements, and use explicit processes for deciding on benefit packages. And with UHC as the goal, the role of general revenues clearly is critical to success for countries at all levels of income [14]. The data here thus contribute to efforts to shift thinking about health financing from models to functions.

Such conceptual clarity is important, but it is not enough to conclude whether SHI in a country is helping progress towards UHC. To address whether increased spending through SHI has moved a country closer to UHC or has made progress more difficult requires knowing who is being subsidized, and for what purpose?

Budget transfers that directly subsidize the contributions of the private formal sector in lower middle income countries (as with the Thai Social Security Scheme) are likely to be pro-rich because this part of the population has higher than average income. Such approaches reflect either political capture

by the formal sector or simply confusion between having a sustainable financing scheme and designing a scheme to enable equitable progress towards UHC.

- Budget transfers that directly subsidize the affiliation of the poor and vulnerable are, conversely, likely to be pro-poor.
- Both the equity and efficiency effects of budget transfers that partially subsidize the inclusion of the nonpoor informal sector are unclear. If affiliation remains voluntary de facto, there is a high likelihood of adverse selection and related high administrative costs linked to determining who can and cannot contribute. If the choice is available, it may be better to simply move to noncontributory entitlement, with the potentially inequitable consequences of needing to weigh this against the costs of routinely implementing an effective targeting mechanism.
- Knowing who benefits from SHI the capture of both direct and indirect subsidies by SHI beneficiaries – is critical for understanding the implications of such a

reform. While benefit incidence analysis is needed for a definitive assessment, a shorthand approach compares the share of health spending that flows through SHI with the share of the population covered by SHI. To the extent that the spending share is greater than the population share, SHI beneficiaries are capturing more from the system than the uninsured. This could have severe implications for equity, particularly where resources such as skilled clinical and administrative staff are in short supply. They are likely to be diverted to serve the insured, leaving less available to meet the needs of the uninsured.

Addressing these questions requires country-specific analysis that brings in additional data and includes analysis of the subsidy policies. Past work has shown that design matters: SHI can be designed as an integral step towards UHC, or it may be an obstacle by reinforcing underlying social inequalities [15]. The global spending data help in refining the questions to address, but answers must come from applied country work.

Notes

- 1. The SHA 2011 defines social health insurance as a public mandatory financing arrangement that ensures access to health care based on a payment of a non-risk-related contribution by or on behalf of the eligible person. The social health insurance scheme is established by a specific public law, defining, among others, the eligibility, benefit package and rules for the contribution payment [2].
- 2. "Explicit" is used to describe subsidies that flow to the scheme or to members to support their affiliation. Policymakers should also be concerned with implicit subsidies to scheme members, as occur when covered services include government health services funded through supply-side budgets. To the extent that SHI coverage is not universal and influences service use, there may be differences in the overall capture of these implicit subsidies related to a country's health financing arrangements. Benefit incidence analysis can unpack these issues.

References

- Xu K, Soucat A, Kutzin J, Brindley C, Dale E, Van de Maele N, Roubal T, Indikadahena C, Toure H, Cherilova V. New Perspectives on Global Health Spending for Universal Health Coverage. Geneva: World Health Organization, 2018. http://www.who.int/health_financing/documents/health-expenditure-report-2017/en/.
- OECD, Eurostat and World Health Organization. A System of Health Accounts 2011: Revised edition. Paris: OECD Publishing, 2017. Available from: https://www.who.int/health-accounts/methodology/sha2011.pdf?ua=1.
- Tangcharoensathien V., Witthayapipopsakul W., Panichkriangkrai W., Patcharanarumol W., Mills A. Health systems development in Thailand: a solid platform for successful implementation of universal health coverage. The Lancet 2018; 391(10126):1205–1223.
- 4. Saltman RB. Social health insurance in perspective: the challenge of sustaining stability. In Saltman RB, Busse R, Figueras J, Eds. Social health insurance systems in Western Europe. Copenhagen: World Health Organization, 2004.
- Kutzin J, Cashin C. Health system funding. In McKee M, Healy J, Falkingham J, Eds. Health Care in Central Asia. European Observatory on Health Care Systems. Buckingham, UK: Open University Press, 2002.
- 6. Kwon S. Thirty years of national health insurance in South Korea: lessons for achieving universal health

- care coverage. *Health Policy and Planning* 2009; 24:63–71.
- Meng Q, Fang H, Liu X, Yuan B, Xu J. Consolidating the social health insurance schemes in China: towards an equitable and efficient health system. The Lancet 2015; 386:1484–1492.
- Alexa J, Rečka L, Votápková J, Van Ginneken E, Spranger A, Wittenbecher F. Czech Republic: Health system review. Copenhagen: World Health Organization Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies. 2015.
- 9. World Health Organization. Gabon gets everyone under one social health insurance roof. *Bulletin World Health Organization* 2013; 91(5):318–319.
- Szigeti S, Evetovits T, Kutzin J, Gaál P. Tax-funded social health insurance: an analysis of revenue sources, Hungary. *Bulletin of the World Health Organi*zation 2019; 97(5):335–348.
- 11. Sheiman I, Langenbrunner J, Kehler J, Cashin C, Kutzin J. Sources of funds and revenue collection: reforms and challenges. In Kutzin J, Cashin C, Jakab M, Eds. Implementing Health Financing Reform: Lessons from Countries in Transition. Copenhagen, Denmark: World Health Organization, on behalf of the European Observatory on Health Systems and Policies, 2010.
- Xu K, Evans DB, Carrin G, Aguilar-Rivera AM, Musgrove P, Evans T. Protecting Households from Catastrophic Health Spending. *Health Affairs* 2007; 26 [4]: 972–983. http://content.healthaffairs.org/cgi/content/abstract/26/4/972.
- Xu K, Evans D, Kawabata K, Zeramdini R, Klavus J, Murray CJ. Household catastrophic health expenditure: A multi-country analysis. *The Lancet* 2003; 362(9378):111–117.
- 14. Kutzin J, Yip W, Cashin C. Alternative financing strategies for Universal Health Coverage. In Scheffler R.M., Eds. Handbook of Global Health Economics and Public Policy. Volume 1; Ch. 5; p.267–309; The Economics of Health and Health Systems. World Scientific Publishing, 2016.
- 15. Kutzin J, Jakab M, Shishkin S. From scheme to system: social health insurance funds and the transformation of health financing in Kyrgyzstan and Moldova. In Chernichovsky D. and Hanson K., Eds. Innovations in Health System Finance in Developing and Transitional Economies. Advances in Health Economics and Health Services Research, Volume 21, pp.291–312. Bingley, UK: Emerald Group Publishing, 2009.





4

Making the financing transition work

FOR PRIMARY HEALTH CARE

Key messages

- Measurement of primary health care (PHC) spending is improving: country-specific data on primary health care spending are now available for 88 countries, up from 50 in 2018; and 45 countries have more than one year of data.
- Across the 88 countries, PHC spending ranges from 33% to 88% of health spending. Per capita spending is higher in wealthier countries, but PHC takes a greater share of health spending in low and middle income countries.
- The average spending governments give to PHC varies from 42% in upper middle income countries to 55% in lower middle income countries and 65% in low income countries.
- Yet only a third of total PHC spending comes from governments. The lower the country income, the lower the public share: in low income countries private sources represent half of PHC spending. Across all income groups, governments provide very limited funding for medicines.
- Development assistance funds 20%-40% of PHC spending in low income countries. This is
 mostly a consequence of funds channeled through categorical programs, with little funding
 going through integrated services.

he Political Declaration of the Highlevel Meeting on Universal Health Coverage and adopted at the September 2019 session of the United Nations General Assembly urges governments to shift their public spending to reach the unreached and to increase their public spending to leave no one behind [1]. Primary health care is widely recognized as the most cost-effective way to reach this goal and address comprehensive health needs close to people's homes and communities [2]. And it is the most effective and equitable route to making progress towards UHC by emphasizing disease prevention and health promotion, ensuring equity of access to most essential interventions [3].

The additional spending to strengthen platforms and expand coverage of PHC interventions for 67 low and middle income countries is estimated to be about \$200 billion a year (an additional \$32 a person) [4]. This is only a rough indication of resource needs: costs vary considerably, and each country must carry out its own analysis. Most importantly, effective policy implementation is needed to ensure that both existing and new resources deliver PHC more efficiently. Scaling up PHC interventions across low and middle income countries would save at least 60 million lives and increase average life expectancy by 3.7 years by 2030 [4].

For low and middle income countries, the estimated cost of expanding PHC services varies from 0.2% of GDP to more than 10% of GDP [4]. An increase in public spending for PHC would allow most countries to greatly expand PHC access and quality. As a shortterm measure to improve the efficiency and equity of public health spending, WHO recommends that countries at all incomes allocate (or reallocate) an additional 1% of their gross domestic product (GDP) from public sources to PHC [3]. This is consistent with the recommendation of the Lancet Commission on Investing in Health for a public spending increase of 1%-2% of GDP on health by 2035 [5]. Government and donor spending on PHC are reported in the Global Health Expenditure Database for monitoring progress towards the commitment of the High-level meeting.

Monitoring in PHC spending – particularly public spending – should complement the assessment of the health financing transition, how much priority countries give to ensuring basic health services to all. WHO developed a standard methodology to monitor PHC spending and allow comparisons among countries [6]. The 2018 global health spending report

estimated that for 50 low and middle income countries. This chapter builds on the 2018 report and expands its reporting to 88 countries, thereby providing revised estimates of the PHC spending patterns and funding sources.

Measurement of primary health care spending is improving

Until recently, little information on PHC spending was available, except for a small set of countries. And even where available, it was not standardized and did not allow cross-country comparisons. In 2018, WHO developed a method based on SHA 2011 [7], the international standard for classifying health spending. In 2018, and for the first time, WHO published comparable cross-country PHC spending data on the Global Health Expenditure Database (GHED) [8].

While SHA 2011 has no ready made PHC expenditure classification, it provides at least three options for constructing PHC spending [9]. The first is to use the health provider (HP) classification, which records health spending by the type of service provider, such as clinics, hospitals and pharmacies. The second is to use the health care function (HC) classification, which records health spending by the type of services, such as outpatient services, inpatient services and prevention. The third is to cross the HP and HC classifications to provide more detailed information on, say, how much a country spends on the outpatient services that are provided by hospitals.

After consultation with country representatives, policymakers, researchers and health account experts, the HC-based measure was chosen for cross-country comparison (Box 4.1) [10]. Comparability was the primary consideration in choosing this approach. The HP classification is much more country specific than the HC classification, reducing the validity of comparison. For example, in most high income countries, hospitals rarely provide general outpatient services, while in most developing countries they provide much of those services. Under the HP classification, the outpatient services provided in hospitals are not included in PHC.

Cross-country comparisons provide useful benchmarks and encourage joint learning among countries. But the HC-based measure may not be appropriate for all countries and settings, given the different ways that countries organize their service delivery systems. As more countries collect data on their PHC

BOX 4.1

Primary health care spending: Global definition for cross-country comparison

Following a global consultation on how to use System of Health Accounts (SHA) 2011 to track primary health care spending, and with country feedback after the first publication of country data on primary health care in 2018, the following spending categories from the health care function classification (HC) (specific codes from the SHA 2011 manual are in parentheses below) are used for cross-country comparisons [6]:

- General outpatient and home-based consultation.
 - o General outpatient curative care (HC.1.3.1).
 - Dental outpatient curative care (HC.1.3.2).
 - Curative outpatient care, not elsewhere classified (HC.1.3.nec)*.
 - Home-based curative care (HC.1.4).
 - o Outpatient (HC.3.3) and home-based (HC.3.4) long-term health care.
- Preventive care (HC.6).
- Part of "medical goods provided outside health care services", which is mostly comprised of medicines purchased outside of health facilities (e.g. in pharmacies and markets) or paid separately from the consultation fee (80% of HC.5).
- Part of health system administration and governance costs (80% of HC.7).

Note: * This category was not included in the 2018 report.

spending for policy development, planning and monitoring, the methodology behind the global definition will be further advanced, and country-specific definitions will also emerge.

Country-specific data on primary health care spending are increasingly available

Thanks to the efforts of countries and the international community, this is the second year for WHO to publish country data on PHC spending. The 2018 report provided data for 50 countries [8]. This 2019 report provides data for 88 countries (22 of them OECD countries) and covers 3.4 billion people (45% of the world's population). Of these countries, 84 have data for 2016, 49 for 2017, and 45 countries for both years. (See Annex 4.1 for the list of countries and their levels of PHC spending per capita and as a share of overall health spending.)

For the first time, this 2019 report also provides PHC spending data by revenue source, showing external resources flowing to PHC. Of the 88 countries, 56 make health (and PHC) spending available by source (government and donor). Most of the 56 are low and middle income countries (Figure 4.1). This information enables analysis of health care functions and primary health care spending by both governments and donors.

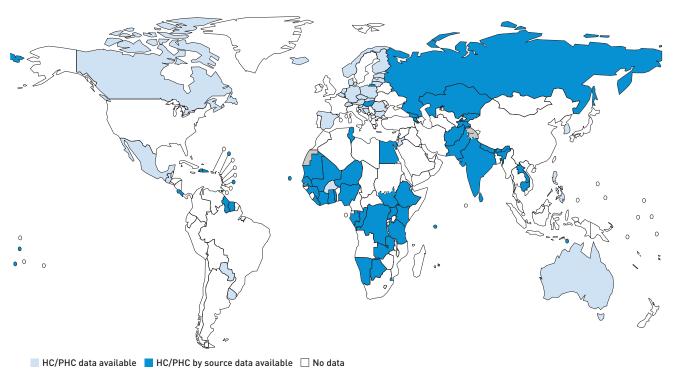
Wealthier countries spend more on primary health care than lower income countries

Overall PHC spending in the 88 countries was US\$ 799 billion, or 45% of their total health spending. PHC spending varies considerably across countries, driven primarily by country income (Figure 4.2). In the countries with data are available, Switzerland spends the most per capita (\$3,884), and Democratic Republic of the Congo the least (\$11). Low income countries in this sample spent US\$ 26 per capita on average, and high income countries spent more than US \$1,303 per capita (Annex 4.1).

The Political Declaration of the High-level Meeting on Universal Health Coverage calls for increased public spending on PHC. WHO recommends that all countries increase their public spending on PHC by an additional 1% of GDP, asserting that there is room for countries in all income groups to allocate or reallocate more to PHC through a combination of government and donor resources.

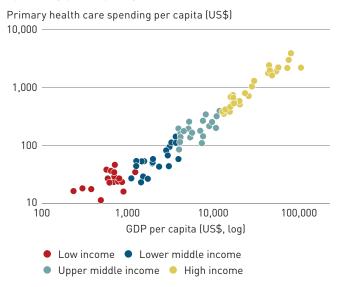
Adding 1% of GDP to current PHC expenditures would mean large differences between

FIGURE 4.1 PHC data are available in more countries



Note: Data available in 2016 or 2017.

FIGURE 4.2 GDP per capita and primary health care spending per capita go hand in hand



income groups in both percentage and absolute per capita increases. For example, in low income countries the increase in PHC spending per capita would be 25%, from US\$ 26 to US\$ 33. If only government and donor spending are considered, the increase would be 52%, from about US\$ 14 to US\$ 20 per capita. In the lower middle income country group, a 1% of GDP increase would imply an increase

of 37% in total spending and 74% in public/donor spending, equating to increases of US\$ 23 in total per capita spending and US\$ 22 in public/donor per capita spending. In higher income groups, the proportional increases in absolute spending would be (much) higher, though the percentage increase declines with income group. Combined with effective policies, such increases could make PHC services better and more readily available.

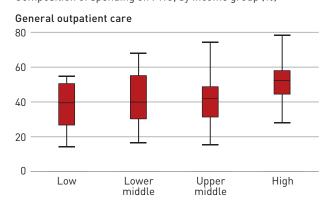
The composition of PHC spending also differs between countries at different incomes. Median spending on general outpatient services is more than 50% of PHC spending in high income countries but around 40% in low income and lower middle income countries (Figure 4.3). Medicines absorb a greater share of PHC spending in middle income countries than in either low income or high income countries.1 This can be thought of as a health-sector version of the middle income trap in which household demand for medicines grows in middle income countries, but public financing systems do not stay on pace to cover them. Medicine spending also have the largest variation across countries in the same income group, expressing the importance of both the way medicines are priced and the capacity of governments to implement specific cost-sharing policies to influence

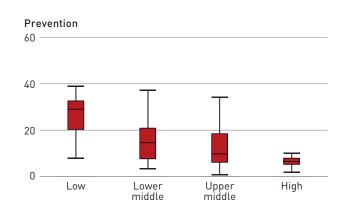
TABLE 4.1 A 1% of GDP increase in public spending on primary health care would yield a major increase in primary health care spending per capita

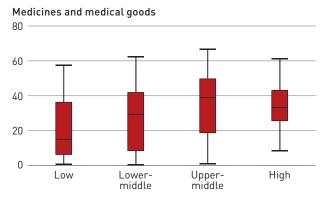
Total PHC spending per capita (US\$)			PHC spending by government and donor per capita (US\$)					
Income group	Current average	With extra 1% GDP	Implied increase	N (88)	Current average	With extra 1% GDP	Implied increase	N (56)
Low	26	33	25%	17	14	20	52%	16
Lower middle	61	84	37%	21	30	52	74%	20
Upper middle	193	261	35%	21	98	165	68%	15
High	1,303	1,662	28%	29	261	419	61%	5

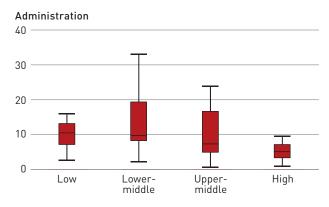
FIGURE 4.3 The composition of spending on PHC differs between countries at different incomes²

Composition of spending on PHC, by income group (%)









out-of-pocket spending on medicines [11]. In some countries, most or all medicine spending is included in the consultation tariff, while in others, medicine bills are paid separately to pharmacies, and in still others, these costs are not covered at all by the system and patients have to pay fully out of pocket.

Low and lower middle income countries also spend much larger shares of their PHC on prevention (as measured by SHA 2011) than upper middle and high income countries. This may reflect the fact that most preventive services are relatively inexpensive and costeffective interventions. Higher income groups

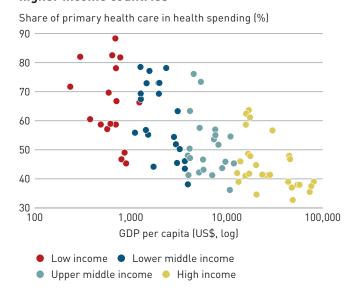
spent more on outpatient services and medicines for PHC, so the share spent for prevention was smaller. The difference among income groups may also reflect a bias in the way spending is reported. Using the SHA 2011 classifications, countries easily capture prevention spending through defined programs, but encounter more difficulty in capturing preventive services delivered in a more integrated way, as during a primary care consultation. So, the higher level of prevention spending in lower income countries may reflect large categorical (vertical) programs that include prevention. And the administration spending attributed to PHC in low and lower middle income countries accounts for about 10% of the total but is much smaller in upper middle and high income countries, reflecting the burden of a fixed administrative cost on a limited budget (see Figure 4.3).

Primary health care takes a greater share of lower income countries' health spending

Among the 88 countries studied, PHC spending as a share of total current health spending is 54% overall, ranging from 33% to 88%. The higher the income, the smaller the share of PHC in current health spending (Figure 4.4). The causes require analysis beyond the data reported here and range from differences in policy choices to artifacts of the measurement methodology. The relatively low share of PHC spending in high income countries may be related to their greater capacity to pay for more expensive specialized inpatient care and advanced medical technology. It may also be related to the way health systems have developed institutionally and to the different demographic and epidemiological profiles of populations, with higher income countries having a greater proportion of people who demand more from health services, particularly for noncommunicable and age-related diseases such as stroke, cancer and heart disease.

The observed share of spending going to PHC also incorporates differences in the

FIGURE 4.4 The share of health spending on primary health care is greater in lower income than in higher income countries



attributed distribution of out-of-pocket spending. Because out-of-pocket spending is proportionally higher in low income countries and middle income countries than in high income countries, and because the proportion of spending for outpatient medicines attributed to PHC, is considered similar in both low income and high income countries using our current methodology, it might appear that low income countries and middle income countries devote more of their total health spending to PHC. And the share of out-of-pocket spending going to services other than PHC is higher in low income countries, not because of explicit policy, but because higher income countries have greater capacity to protect their populations from the burden of out-ofpocket spending.

For the low and lower middle income countries, however, the association between income and the share of PHC spending is not clear. Most of these countries are still building the foundations of their health system's ability to provide PHC services up to a certain quality. Most also receive considerable external aid, and much of that is attributed to PHC. These factors partially explain why an increase in income is not necessarily associated with a decrease in a focus on PHC. More in-depth country studies would examine the specifics, differentiating the differences in policy choices from the differences that arise from the methodology used to attribute health spending to PHC.

Governments in low income countries devote the largest share of their health spending to primary health care

The government priority given to PHC varies considerably. But low income countries seem to especially prioritize PHC, allocating 65% of government health spending to it (median). In lower middle income countries, the share is 55%, while in upper middle income countries, it is 42% (Figure 4.5). There are large variations reflecting the different policy choices countries make. Within low and lower middle income groups, variations may also relate to the dynamic between government and donor funding.

Only a third of PHC spending comes from government, and the lower the country income, the lower the public share

Among the 88 countries studied in this chapter, PHC spending in richer ones comes more

FIGURE 4.5 Primary health care takes a greater share of government health spending in low income than in higher income countries

Government expenditure on primary health care as a share of government expenditure on health (%)

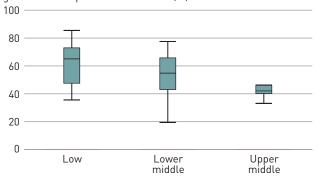
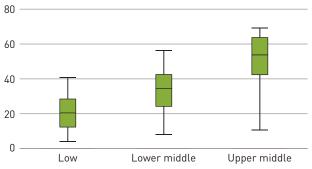


FIGURE 4.6 Less primary health care is funded by government spending in low and lower middle income countries

Government expenditure on primary health care as a share of PHC (%)



from domestic government sources. In upper middle income countries, the median share is 45%, and in the lower middle income countries. 34%.

In lower middle income countries, however. about half of PHC spending comes from private sources (Figure 4.6). Across low income countries, government shares range from 10% to 30% of overall PHC spending, despite the higher priority those governments give to PHC in public spending. Private sources mainly represent out-of-pocket spending, but in some countries they also include voluntary health insurance and services that large corporations provide to their workforces.

The distribution of government spending among primary health care components is different

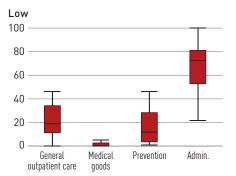
Across all income groups, governments provide very limited funding for PHC medicines. In upper middle income countries, government funds at the median about 80% of prevention and 60% of outpatient services. In lower middle income countries, governments fund about 40% of PHC spending, mostly for outpatient care and prevention. For the low income group, government shares in all categories are lower than in the higher income groups, with outpatient spending lower than 20%, and prevention accounting for 12% (Figure 4.7).

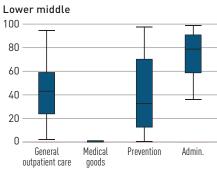
External resources play a large role in funding categorical preventive programs in low and lower middle income countries

Aid plays a major role in funding PHC in low income countries and several lower middle income countries. In low income countries. 20%-40% of all PHC spending is attributed to aid. In general, a larger percentage of donor funding goes to PHC than the percentage of government health spending. Across health spending PHC components, aid funds most categorical programs termed "prevention" in low income countries, together with a considerable portion of outpatient services. In lower middle income countries, aid is mainly

FIGURE 4.7 Governments fund little medicine or other medical goods

Share of PHC categories funded by government sources (%)





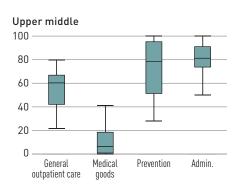
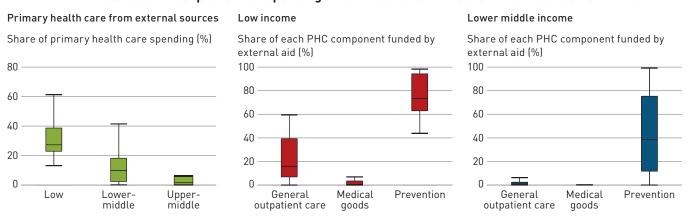


FIGURE 4.8 The source of most prevention spending in low income countries is attributed to external aid



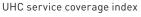
focused on prevention, but with huge variations (Figure 4.8).

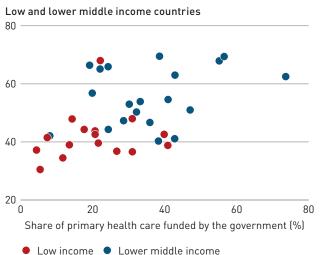
Donors may not be explicitly funding PHC. Part of what is observed is a consequence of the methods for attributing spending. For example, whether or not disease- and intervention-specific aid is given to support people-centred integrated PHC or to support the control of specific diseases (both laudable intentions), much aid spending is attributed to PHC due to the accounting definition this chapter uses. The accounting definitions cannot distinguish whether spending is through integrated service delivery or through categorical programs, even though such a distinction is critical for understanding PHC and whether or not aid is supporting it. To address this issue requires going beyond the aggregate expenditure data and undertaking country-specific analysis of how aid is channelled and what that implies for integrated service delivery, a cornerstone of PHC.

Low and lower middle income countries that fund primary health care through government revenues tend to have better service coverage

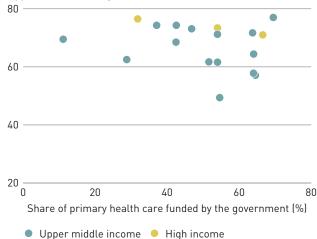
Government health financing is key to ensure equity [12]. On average, low and lower middle income countries with public sources as a larger share of total PHC have better population coverage than their comparators, though large variations remain across countries with similar shares of government spending in PHC spending (Figure 4.9). Part of the variation can be explained by the absolute level of spending on PHC. Other factors may include

FIGURE 4.9 The share of primary health care funded by government is associated with better service coverage in low and lower middle income countries





Upper middle and high income countries



differences in benefit design, health service purchasing and provider payment systems. So, countries cannot simply "spend their way to UHC." The variation at similar levels of spending suggests that effective policy implementation matters [13].

In upper middle income countries, the pattern is less clear. More public spending on PHC is not associated with better population coverage. In these countries, however, service coverage is already high in most countries. Increased government funding for PHC may affect the quality of services and the degree of financial protection coverage, an area for further research.

Re-orienting the health system towards primary health care requires prioritizing health sector resource allocation

Information on PHC spending and the source of this spending are critical for national policymakers and the global community to monitor on the road to Universal Health Coverage. This analysis of the PHC spending of 88 countries demonstrates the diversity of PHC spending patterns.

In low income countries, governments allocate a greater share of public funding to PHC than governments do in higher income countries, but only one-third of PHC spending is funded by governments. More needs to be known about the amounts and nature of PHC funding. The health financing transition bringing more resources and more public funding to a collective health agenda. can help make services available in low and lower middle income countries. In higher income countries, which made tremendous progress towards universal service coverage over the past decade, more government spending on PHC may have more impact on the quality and efficiency of people-centred services. This also needs to be further investigated.

Finally, aid remains a major funding source for PHC in low income countries, particularly for prevention. However, the data do not clearly show whether the way these funds are channelled truly contributes to implementing a more integrated, people-centred system or drives categorized programs. Further understanding of the implications for PHC of the dynamic between the levels of aid and government spending, as well as the ways aid is channelled, will help countries to better transition from aid to domestic financing of more efficient and equitable services.

While more and more evidence is available on the levels of spending on PHC, more analysis is needed to understand how countries can ensure adequate financing to meet the priority the global community gives to primary health care.

Notes

- Throughout this chapter, medicines refer to medicines and medical supplies provided outside health care services (HC.5 under the SHA 2011 framework).
 These are distinctly different from pharmaceuticals classified under the factors of provision classification (FP.3.2.1 under SHA 2011). Only a portion of all pharmaceuticals are included in this analysis as those delivered at the point of care are already accounted for in the amounts for inpatient care, outpatient care, and so on.
- Boxplots show the interquartile range (25th-75th
 percentile) of values, with the median marked by a
 line inside the bar. The lines from the bars extend
 to the maximum and minimum values with outliers
 excluded.

References

- United Nations. Political Declaration of the Highlevel Meeting on Universal Health Coverage: "Universal health coverage: moving together to build a healthier world." 2019.
- World Health Organization, UNICEF. A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals. 2018. https://apps.who.int/iris/ handle/10665/328065. Accessed December 6, 2019.
- 3. WHO. Primary Health Care on the Road to Universal Health Coverage. 2019. https://www.who.int/news-room/events/detail/2019/09/22/default-calendar/primary-health-care-on-the-road-to-universal-health-coverage. Accessed September 22, 2019.
- 4. Stenberg K, Hanssen O, Edejer TT-T, et al. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low income and middle income countries.

- Lancet Glob Health. 2017;5(9):e875-e887. doi:10.1016/ S2214-109X(17)30263-2
- 5. Jamison DT, Summers LH, Alleyne G, et al. [Global health 2035: a world converging within a generation]. *Lancet* 2015;57(5):444–467.
- 6. World Health Organization. Guidelines for the estimation of Primary Health Care expenditure and health expenditure by functions (HC) (under review). 2019.
- OECD, Eurostat, WHO. A System of Health Accounts. 2011. https://www.who.int/health-accounts/methodology/sha2011.pdf.
- Xu K, Soucat A, Kutzin J, Brindley C, Vande Maele N, Toure H. Public Spending on Health: A Closer Look at Global Trends. WHO. http://www.who.int/health_ financing/documents/health-expenditure-report-2018 /en/. Accessed December 6, 2019.
- OECD. Deriving preliminary estimates of primary care spending under the SHA2011 framework. 2019. https:// www.oecd.org/health/health-systems/Preliminary -Estimates-of-Primary-Care-Spending-under-SHA -2011-Framework.pdf. Accessed August 30, 3019.
- Van de Maele N, Xu K, Soucat A, Fleisher L, Aranguren M, Wang H. Measuring primary healthcare expenditure in low income and lower middle income countries. BMJ Glob Health. 2019;4(1). doi:10.1136/ bmjqh-2019-001497
- Cylus J, Thomson S, Evetovits T. Catastrophic health spending in Europe: equity and policy implications of different calculation methods. *Bull World Health* Organ. 2018;96(9):599. doi:10.2471/BLT.18.209031
- WHO. Financing for Universal Health Coverage: Dos and Don'ts. 2019. https://p4h.world/en/news/ financing-universal-health-coverage-dos-and-donts. Accessed October 30, 2019.
- WHO. Together on the road to universal health coverage. WHO. http://www.who.int/universal_health _coverage/road-to-uhc/en/. Published 2017. Accessed December 6, 2019.



Annexes

ANNEX 1.1 Low and lower middle income countries with donor spending at more than a fifth of health spending, 2017

Country	Donor % of health spending
Micronesia (Federated States of)	72
South Sudan	68
Mozambique	61
Central African Republic	55
Malawi	52
Rwanda	50
Haiti	43
Zambia	43
Uganda	43
Democratic Republic of the Congo	42
Gambia	42
São Tomé and Príncipe	39
United Republic of Tanzania	32

Country	Donor % of health spending
Burundi	31
Liberia	29
Mali	28
Vanuatu	26
Djibouti	26
Eswatini	24
Solomon Islands	23
Madagascar	23
Timor-Leste	22
Ethiopia	22
Kiribati	21
Chad	21
Lesotho	20

ANNEX 2.1 Fast economic growth countries included in this chapter

Country	Health financing transition	Income
Bosnia and Herzegovina	Yes	Upper middle
China	Yes	Upper middle
Cuba	Yes	Upper middle
Dominican Republic	Yes	Upper middle
Ecuador	Yes	Upper middle
Georgia	Yes	Lower middle
Ghana	Yes	Lower middle
Guyana	Yes	Upper middle
Indonesia	Yes	Lower middle
India	Yes	Lower middle
Iran	Yes	Upper middle
Kazakhstan	Yes	Upper middle
Kenya	Yes	Lower middle
Cambodia	Yes	Lower middle
Lao PDR	Yes	Lower middle
Republic of Moldova	Yes	Lower middle
North Macedonia	Yes	Upper middle
Myanmar	Yes	Lower middle
Namibia	Yes	Upper middle
Nicaragua	Yes	Lower middle
Peru	Yes	Upper middle
Paraguay	Yes	Upper middle
Thailand	Yes	Upper middle
Turkey	Yes	Upper middle
Uzbekistan	Yes	Lower middle
Viet Nam	Yes	Lower middle

Upper middle Upper middle Lower middle Upper middle Upper middle
Lower middle Upper middle Upper middle
Upper middle Upper middle
Upper middle
Lower middle
Upper middle
Lower middle
Lower middle
Lower middle
Lower middle
Upper middle
Upper middle
Upper middle
Lower middle
Lower middle

ANNEX 4.1 The 88 countries with HC/PHC data, latest year of available data shown

Afghanistan 57 38 Armenia 48 196 Australia 38 1,898 Austria 37 1,830 Barbados 64 741 Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ilvoire 77 54 Democratic Republic of the Congo 59 11 Democratic Republic 41 179	Country	PHC as a percentage of health spending	PHC spending per capita (US\$)
Armenia 48 196 Australia 38 1,898 Austria 37 1,830 Barbados 64 741 Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Crogo 55 29 Coyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Democratic Republic 41 179 Egypt 54 82	·	·	
Australia 38 1,898 Austria 37 1,830 Barbados 64 741 Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Demomark 38 2,202 Dominican Republic 41 179 Estonia 45 582			
Austria 37 1,830 Barbados 64 741 Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji			
Barbados 64 741 Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland			
Belgium 39 1,759 Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Democratic Republic 41 179 Egypt 54 82 Estonia 45 582 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24			
Bhutan 45 44 Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Demorratic Republic of the Congo 59 11 Egypt 54 82 Estonia 45 582 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138	Belaium	39	1.759
Bosnia and Herzegovina 42 194 Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Ge		45	
Botswana 57 266 Bulgaria 52 344 Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia	Bosnia and Herzegovina		194
Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana		57	266
Burkina Faso 83 37 Burundi 82 18 Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana	Bulgaria	52	344
Cape Verde 63 95 Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guyana 76 177 Haiti <td< td=""><td></td><td>83</td><td>37</td></td<>		83	37
Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Democratic Republic of the Congo 59 11 Demoratk 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 <t< td=""><td>Burundi</td><td>82</td><td>18</td></t<>	Burundi	82	18
Cambodia 69 54 Canada 47 2,237 Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Democratic Republic of the Congo 59 11 Demoratic Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guy	Cape Verde	63	95
Congo 55 29 Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 <td>·</td> <td>69</td> <td>54</td>	·	69	54
Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Demark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36<	Canada	47	2,237
Costa Rica 45 394 Croatia 39 352 Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36	Congo	 55	
Cyprus 41 712 Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Demmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47		45	394
Czech Republic 35 511 Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Croatia	39	352
Côte d'Ivoire 77 54 Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Cyprus	41	712
Democratic Republic of the Congo 59 11 Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Czech Republic	35	511
Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Côte d'Ivoire	77	54
Denmark 38 2,202 Dominican Republic 41 179 Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Democratic Republic of the Congo	59	11
Egypt 54 82 Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Denmark	38	2,202
Estonia 45 582 Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Dominican Republic	41	179
Eswatini 50 113 Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Egypt	54	82
Ethiopia 88 24 Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Estonia	45	582
Fiji 73 138 Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Eswatini	50	113
Finland 47 1,968 Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Ethiopia	88	24
Gabon 54 110 Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Fiji	73	138
Georgia 46 142 Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Finland	47	1,968
Germany 48 2,412 Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Gabon	54	110
Ghana 73 49 Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Georgia	46	142
Guatemala 63 158 Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Germany	48	2,412
Guinea 78 29 Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Ghana	73	49
Guyana 76 177 Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Guatemala	63	158
Haiti 59 35 Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Guinea	78	29
Hungary 42 384 Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Guyana	76	177
Iceland 36 2,162 India 44 27 Jordan 47 140 Kazakhstan 55 144	Haiti	59	35
India 44 27 Jordan 47 140 Kazakhstan 55 144	Hungary	42	384
Jordan 47 140 Kazakhstan 55 144	Iceland	36	2,162
Kazakhstan 55 144	India	44	27
	Jordan	47	140
Kenya 73 54	Kazakhstan	55	144
	Kenya	73	54

Country spending capital IOS\$ Kyrgyzstan 67 53 Lao People's Democratic Republic 78 43 Latvia 41 382 Liberia 67 46 Lithuania 49 524 Luxembourg 38 2,194 Mali 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Mepal 49 24 Netherlands 33 1,608 Niger 41 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian		PHC as a percentage of health	PHC spending per
Lao People's Democratic Republic 78 43 Latvia 41 382 Liberia 67 46 Lithuania 49 524 Luxembourg 38 2,194 Mali 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 53 S	Country	spending	capita (US\$)
Latvia 41 382 Liberia 67 46 Lithuania 49 524 Luxembourg 38 2,194 Mati 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Senegal 66 35 Senegal			
Liberia 67 46 Lithuania 49 524 Luxembourg 38 2,194 Mali 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48	<u>'</u>		
Lithuania			
Luxembourg 38 2,194 Mati 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepat 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 53 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovakia <t< td=""><td></td><td></td><td></td></t<>			
Mati 82 24 Mauritania 56 27 Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovakia 48 567 South Sudan <t< td=""><td></td><td></td><td></td></t<>			
Mauritius 56 27 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovakia 48 567 Slovakia 48 567 Spain 41 1,038 Sri Lanka <t< td=""><td></td><td></td><td></td></t<>			
Mauritius 46 254 Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Stovakia 48 567 Stovakia 48 567 Stovenia 41 796 South Sudan 72 16 Spain <t< td=""><td></td><td></td><td></td></t<>			
Mexico 44 216 Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Stovakia 48 567 Stovakia 48 567 Stovakia 48 567 Spain 41 796 South Sudan 72 16 Spain 41			
Namibia 58 257 Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Stovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland			
Nepal 49 24 Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan	-		
Netherlands 33 1,608 Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Stovakia 48 567 Stovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Lest			-
Niger 61 18 Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Stovakia 48 567 Stovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajjikistan 47 27 Timor-Leste 73 58 Togo	·		
Nigeria 69 51 Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga			
Norway 37 2,975 Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tob			
Pakistan 57 23 Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 <td></td> <td></td> <td></td>			
Paraguay 43 164 Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 <			· · · · · · · · · · · · · · · · · · ·
Philippines 52 67 Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United R			
Poland 46 417 Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			
Republic of Korea 57 1,294 Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			
Romania 36 201 Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	-		
Russian Federation 55 320 Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			· · · · · · · · · · · · · · · · · · ·
Saint Kitts and Nevis 61 533 Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			
Samoa 50 114 Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			
Senegal 66 35 Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665			
Seychelles 59 464 Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665		66	
Slovakia 48 567 Slovenia 41 796 South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665		59	464
South Sudan 72 16 Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665		48	567
Spain 41 1,038 Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Slovenia	41	796
Sri Lanka 38 58 Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	South Sudan	72	16
Suriname 47 166 Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Spain	41	1,038
Switzerland 39 3,885 Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Sri Lanka	38	58
Tajikistan 47 27 Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Suriname	47	166
Timor-Leste 73 58 Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Switzerland	39	3,885
Togo 70 27 Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Tajikistan	47	
Tonga 41 85 Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Timor-Leste	73	58
Trinidad and Tobago 62 682 Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Togo	70	27
Tunisia 43 112 Uganda 59 23 United Republic of Tanzania 45 16 Uruguay 42 665	Tonga	41	85
Uganda5923United Republic of Tanzania4516Uruguay42665	Trinidad and Tobago	62	682
United Republic of Tanzania 45 16 Uruguay 42 665	Tunisia	43	112
Uruguay 42 665	Uganda	59	23
	United Republic of Tanzania	45	16
Zambia 79 44	Uruguay	42	665
	Zambia	79	44

