High-Performance Health Financing for Universal Health Coverage

Driving Sustainable, Inclusive Growth in the 21st Century

WORLD BANK GROUP

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ACRONYMS

AMR | Antimicrobial Resistance
BEPS | Base Erosion and Profit Shifting
BRICS | Brazil, Russia, India, China and South Africa
CABRI | Collaborative Africa Budget Reform Initiative
CEPI | Coalition for Epidemic Preparedness Innovations
CFE | WHO's Contingency Fund for Emergencies
CPIA | Country Policy and Institutional Assessment
DAH | Development Assistance for Health
DFID | Department of Foreign and International Development
DRC | Democratic Republic of Congo
DRUM | Domestic Resource Use Mobilization
GAP | WHO-led Global Action Plan for Healthy Lives and Wellbeing for All
Gavi | Gavi, the Vaccine Alliance
GDP | Gross Domestic Product
GFF | Global Financing Facility for Women, Children and Adolescents
GFTAM | Global Fund to Fight AIDS, Tuberculosis and Malaria
GNI | Gross National Income
GUFR | Global UHC Financing Report
HIC | High-Income Country
HTA | Health Technology Assessments
IDA | International Development Association
IHR | International Health Regulation
ILO | International Labor Organization
IMF | International Monetary Fund
JEE | Joint External Evaluation
LIC | Low-Income Country
LMIC | Lower-Middle-Income Country
LTC | Long-Term Care
MIC | Middle-Income Country
MTEF | Medium Term Expenditure Framework
NCD | Non-communicable Disease
OECD | Organization for Economic Co-operation and Development
OOP | Out-Of-Pocket
PEF | Pandemic Emergency Financing Facility
PFM | Public Financial Management
SDG | Sustainable Development Goal
UHC | Universal Health Coverage
UMIC | Upper-Middle-Income Country
WHO | World Health Organization

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Executive summary

The majority of developing countries will fail to achieve their targets for Universal Health Coverage (UHC)[1] and the health- and poverty-related Sustainable Development Goals (SDGs) unless they take urgent steps to strengthen their health financing. Just over a decade out from the SDG deadline of 2030, 3.6 billion people do not receive the most essential health services they need, and 100 million are pushed into poverty from paying out-of-pocket for health services. The evidence is strong that progress towards UHC, core to SDG 3, will spur inclusive and sustainable economic growth, yet this will not happen unless countries achieve high-performance health financing, defined here as funding levels that are adequate and sustainable; pooling that is sufficient to spread the financial risks of ill-health; and spending that is efficient and equitable to assure desired levels of health service coverage, quality, and financial protection for all people—with resilience and sustainability.

The UHC financing agenda fits squarely within the core mission of the G20 to promote sustainable, inclusive growth and to mitigate potential risks to the global economy. All countries stand to benefit from realizing quality and efficiency gains and freeing productive resources in one of the largest global industries. All countries will also benefit from health financing designed to strengthen health security, thus reducing the frequency, spread and impacts of disease outbreaks, and other negative cross-border spillover effects of failing health systems. Anchoring this agenda in the G20 Finance Track and promoting joint leadership by finance and health ministers provides the opportunity to break down the silos and tackle the political economy challenges that continue to hamper progress toward high-performance health financing for UHC.

High-performance health financing advances UHC and sustainable, inclusive growth

It is no longer plausible to argue that health spending is purely consumption. High-performance health financing is an investment that benefits the economy through six main channels:

- **Building human capital.** Investments in essential primary and community health services such as maternal, neonatal, and child health interventions, including immunization and nutrition, fuels the creation of human capital during children's critical early years, laying the foundation of improved educational performance and earning potential. Essential promotive, preventive, and curative health services boost workers' productivity throughout their lifetimes, often with rapid impact.

- **Increasing skills and jobs, labor market mobility and formalization of the labor force.** The changing nature of work requires skills such as complex problem-solving,

1. **Universal health coverage (UHC)** is the goal that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship. UHC has two pillars: coverage with essential, quality health services and financial protection. UHC embodies the commitment to giving priority to the worse off—the sickest, those with the lowest coverage, and the poor—and to health as a human right.

teamwork, innovation and self-reliance. Investing in health is a prerequisite to build and maintain these skills and increase countries' capacities to innovate and generate jobs and growth. High-performance health financing also guarantees financial protection regardless of where people live or their employment status, making it easier for people to change jobs and take advantage of new opportunities. It also reduces the costs for private firms to grow and create jobs, increasing the rate of workforce formalization and the proportion of people in full-time employment.

- **Reducing poverty and inequity.** Scaling up prepaid and pooled financing to reduce out-of-pocket payments can have a swift, substantial benefit for poverty reduction. Financial protection has other benefits: people no longer need to sell assets or borrow to meet health payments. They conserve resources that they can then spend or invest in other ways. Financial protection also allows the sick and poor to protect, maintain and improve their health and increase their earnings. As a result, income inequality falls.

- **Improving efficiency and financial discipline.** Improvements in the efficiency of pooling and purchasing allow expanding the range and quality of guaranteed health services and increasing the extent of financial protection within existing resource envelopes, while controlling cost escalation. Combined with measures to increase efficiency in resource mobilization, they ensure financial discipline in the sector over the short and long term. This can have an immediate impact on public spending given that the health sector now represents a significant share of government expenditures in many countries—on average more than 11 percent.

- **Fostering consumption and competitiveness.** Financial protection frees people from making precautionary savings and can stimulate expenditures on other goods and services. The ability of a country's entrepreneurs, companies, and workers to continually adapt and innovate is paramount to future competitiveness, facilitated by the impact of UHC and health and human capital accumulation. By driving efficiency gains in the health sector, health financing also frees productive resources for new strategic uses, supporting countries to gain or keep a comparative advantage in international trade.

- **Strengthening health security.** The West Africa Ebola crisis of 2013-2016 demonstrated that pandemics can leave lasting economic scars and set development back for years, if not decades. Investments in preparedness capabilities including surveillance, primary and community health workers, public-health laboratory networks, and information systems are essential to detect and mitigate infectious disease outbreaks before they spread out of control. In addition to saving lives, investing in preparedness and early action to stop outbreaks also help prevent macro-economic shocks and much more costly emergency response efforts.

Critical health-financing shortcomings and emerging threats put UHC at risk

Despite these multiple benefits, the majority of developing countries have yet to seize the growth and development opportunities offered by high-performing health financing. Major coverage gaps for essential health services persist; for those who receive services, coverage is too often ineffective, as the quality of services is low. To expand equitable coverage with both quality services and financial protection, the overall levels of health spending, the mix of revenue sources, pooling, and the efficient and equitable use of resources matter. This report identifies critical health-financing constraints, including:

- **Total per capita health spending from all sources is very low in developing countries,** averaging $40 in low-income countries (LICs), $135 in lower middle-income countries (LMICs), and $477 in upper middle-income countries (UMICs). This compares to $3,135 in high-income countries (HICs).

- **Part of this low spending is because many developing countries allocate relatively small shares of total government spending to health—levels that are inadequate to support coverage with essential quality health services for all.** Developing countries devote on average 10 percent of government expenditure to

health, compared to 15 percent in HICs. There are very large variations, from around 3 percent up to nearly 30 percent, with some UMICs giving the lowest priority to health.

- **Part of low government spending can also be attributed to the low capacity to mobilize revenues.** In close to half of developing countries, government efforts to raise taxes consistently fall short of 15 percent of gross domestic product (GDP), a threshold that the IMF has identified as critical to engender sustained, inclusive growth.

- **Low levels of domestic government financing mean that there is currently a substantial gap between the costs of financing an essential package of quality services for everyone and resources available in low- and lower middle-income countries.** Even with good economic growth, this gap is not expected to narrow greatly over the next decade, remaining at approximately $176 billion for the 54 countries that are unlikely to reach upper-middle-income status by 2030.

- **As a result of low levels of government spending, out-of-pocket payments constitute a large share of health expenditures in developing countries, amounting to more than half a trillion dollars or $80 per capita annually.** As noted earlier, these payments deter some people from using needed health services, and push others into poverty or trap them once there.

- **Inefficiencies and inequities in health financing are widespread.** Estimates suggest that between 20 and 40 percent of health funding is wasted across all countries, on average. In terms of equity, poor people often contribute a higher proportion of their incomes in health payments than the rich, without subsequent compensation through fiscal transfers in cash or in kind, while frequently receiving fewer health services of lower quality.

- **Rapid increases in development assistance for health (DAH) since 2000 have resulted in major health gains in the poorest countries, yet DAH levels have stagnated in recent years and DAH must evolve to help accelerate progress toward UHC.** In the past, DAH has predominantly supported infectious disease programs. Additional international assistance is needed to catalyze similar advancements in other disease areas, strengthen health systems, support governments in tackling low government revenue generation and strengthen their capacities to carry out all health-financing functions required for accelerated progress towards UHC.

Emerging and intensifying challenges are driving up health care costs and pose risks for future domestic revenue mobilization, efficiency, and equity. Some of the leading challenges include rising consumer expectations; population aging and the corresponding increase in the burden of non-communicable diseases and demand for long-term care; progress in medical technology; limited administrative capacity to raise revenues; slow formalization of economies; changes in the form and content of work; pandemic threats; anti-microbial resistance; and forced displacement of populations. If not addressed early, these factors may make it even harder for countries to attain the high-performance health financing required for UHC.

Closing the substantial UHC financing gap in 54 low- and lower middle-income countries will require a strong mix of domestic and international investment. Countries' own fiscal measures to increase taxes as a share of GDP and the share of government expenditures dedicated to health, on top of economic growth, could reduce the estimated financing gap in 2030 by about one-third, from a total of about $176 billion to approximately $114 to $122 billion. Additional inflows may come from the private commercial sector, but the amounts are likely to be limited. Current levels of DAH totaling $11 billion for these countries will not be nearly enough to close the gap. A substantial increase in DAH with support to develop the capacity to absorb external financing, stronger engagement of the private sector, and innovative health-financing policy solutions in countries will all be needed for countries to have a chance of reaching UHC and realizing the ensuing benefits of sustainable, inclusive growth.

A roadmap for country action

Global consensus has emerged around three lines of action for countries to build high-performance health financing:

- **Scale what works.** Countries can make substantial progress by adapting proven health-financing principles and policies to their specific contexts. Broad agreement exists on key options, including: improve the efficiency and equity of resource use, for example through prioritizing investments in good quality primary and community health services; increase resources for health from general revenue, and, where appropriate and feasible, obligatory health insurance contributions from those with the ability to pay.

- **Focus on the "big picture".** Leaders can improve health-financing results by developing a "big-picture" perspective in two ways: first, by connecting health-financing policy across sectors in a whole-of-government approach; second, by consistently adopting a medium-term timeframe and routinely assessing the likely future threats to revenue generation, health costs, efficiency, and equity, adjusting their health-financing strategies before emerging problems become entrenched. Together, these two approaches will reinforce health-financing resilience and sustainability.

- **Strengthen health-financing leadership, governance, and organizational capacity.** Joint leadership between ministries of finance and health can accelerate the development and implementation of health-financing solutions, particularly in areas where, despite broad consensus about principles and policies, progress lags. Often such slowdowns are due to political obstacles. Joint leadership between ministries of finance and health is equally critical to strengthen health-financing governance and organizational capacity.

International collaboration to accelerate progress

Many international initiatives are designed to support health financing in developing countries. Bilateral and multilateral agencies and development banks, and global alliances, networks, and platforms are making important contributions beyond development finance to facilitate technical collaboration, policy dialogue, and global learning. These include, inter alia, the World Health Organization (WHO)-led Global Action Plan for Healthy Lives and Well-being, including the financing accelerator; the P4H Network; UHC 2030; the Joint Learning Network for UHC; various networks of budget officials (e.g., the OECD Joint Network of Senior Health and Budget Officials and the Collaborative Africa Budget Reform Initiative); the African Union's Africa Scorecard and Tracker on Domestic Financing for Health as well as planned regional health-financing hubs; Gavi, the Vaccine Alliance; the Global Financing Facility for Women, Children and Adolescents (GFF); and the Global Fund to fight AIDS, Tuberculosis, and Malaria. Each of these partnerships and platforms plays a valuable role in helping countries respond to today's pressing health-financing problems.

However, given the persistent challenges in overcoming UHC financing shortcomings, new avenues for international collaboration to support country UHC financing efforts are needed in two main areas: (1) **health-financing research and development** that will provide countries with new evidence on open questions and areas of controversy, new strategies to improve financial resilience and sustainability, and financing innovations that might allow step changes in progress toward UHC; and (2) **a sizeable increase as well as a strategic shift in DAH** toward strengthening health-financing leadership, governance, and organizational capacity, improved domestic resource use and mobilization, and increased global health security.

G20 Finance Ministers and Central Bank Governors can champion a UHC financing resilience and sustainability agenda

G20 Finance Ministers and Central Bank Governors can help countries seize the opportunities of high-performance health financing by adopting and steering a UHC financing resilience and sustainability agenda. Leadership by G20 Finance Ministers and Central Bank Governors is critical, as core aspects of this agenda extend beyond the purview of health into public finance. G20 Finance Ministers and Central Bank Governors can lead by example in demonstrating how finance and health authorities can successfully collaborate to build and sustain strong health-financing systems that deliver better health services and financial protection.

To advance this agenda, G20 Finance Ministers and Central Bank Governors can:

1) **Convene biennial UHC financing resilience and sustainability dialogues between ministers of finance and health at future G20 meetings.** The meetings would identify priorities for country and global action to detect and manage health-financing threats; define an innovation agenda; and foster political commitments for UHC financing. The meetings would offer a venue for dialogue between ministries of finance and health on the forces driving health expenditures, options to improve efficiency and raise revenue, including a new generation of DAH. The biennial dialogues would be grounded in a UHC financing resilience and sustainability assessment. The development of the analytical approach would be coordinated by the WBG working closely with WHO. Implementation would be facilitated by existing networks and partnerships that would connect financing experts from around the world to learn and hone their skills in assessing and responding to health-financing threats and opportunities. Development of the assessment and preparation of the dialogues could be overseen by a UHC financing resilience and sustainability advisory panel comprised of former ministers of finance and health and globally recognized experts in health financing, health, public finance, and fiscal policy.

2) **Sponsor a UHC financing grand challenge portfolio.** The portfolio would target investments toward solving the health-financing challenges identified in the G20 UHC financing resilience and sustainability dialogues, with a focus on those with the greatest potential for global economic and health impact and enabling step-change progress toward UHC. This could take the form of an innovation fund dedicated to developing more effective health-financing solutions, and/or G20 countries that invest in existing Grand Challenge funds choosing to direct more of those portfolios toward relevant health-financing priorities.

3) **Champion more and better DAH that catalyzes sustainable domestic resource mobilization to accelerate progress toward UHC by 2030.** As noted previously, substantial increases in DAH will be essential to help low- and lower middle-income countries close the financing gaps and reach their UHC targets. The next generation of DAH can also do more to catalyze efficient and equitable use, pooling, and mobilization of domestic resources, and strengthen country capacities in sustainable health financing, as well as in pandemic prevention and response. The replenishments in 2019 and 2020 of the major global health funding mechanisms, including the Global Fund, Gavi, and the WBG's IDA provide near-term opportunities to champion these shifts toward a longer term approach of more and better DAH to assist countries in accelerating progress toward UHC.

Conclusion

Advancing UHC through high-performance health financing will generate more rapid, sustained, and inclusive growth. Yet global progress toward UHC remains slow because few developing countries have fully seized the opportunity to develop well-performing health financing. The good news is that a global consensus, based on country experience, is emerging on how countries can most effectively construct high-performance health financing for UHC and how countries and partners can collaborate to accelerate these efforts. This convergence in strategic thinking opens an unprecedented opportunity to realize the economic gains associated with progressive realization of UHC.

As champions and stewards of a UHC financing resilience and sustainability agenda, G20 Finance Ministers and Central Bank Governors can play a critical role in supporting countries as they ready themselves to manage the emerging and intensifying threats that today place progress toward UHC and economic growth at risk. Equitable stewardship from a group committed to the common good is the catalyst required to turn risk into resolute action. Through these mechanisms, G20 leaders will help their partner countries advance toward prosperity based on fair opportunities for all, the surest foundation for global stability, prosperity, and peace.

Introduction

We reaffirm the need for stronger health systems providing cost-effective and evidence-based intervention to achieve better access to health care and to improve its quality and affordability to move towards Universal Health Coverage (UHC) in line with their national contexts and priorities.

G20 Leaders' Declaration, Buenos Aires, November 2018

Unless they take urgent steps to strengthen health financing, a foundational component of health systems, many developing countries[2] will fail to achieve their targets for Universal Health Coverage (UHC) and several of the Sustainable Development Goals (SDGs). Just over a decade out from the SDG deadline of 2030, countries face a tight window to raise the necessary revenues, ensure risk pooling, and improve the efficiency and equity of their health spending. The evidence is strong that progress toward UHC will spur inclusive and sustainable economic growth, yet this will not happen unless countries achieve high-performance health financing (HPHF)—financing that accelerates coverage with affordable, quality health services and financial protection while anticipating and tackling emerging threats to improve financing resilience and sustainability.

THE UNIQUE ROLE OF THE G20 AND ITS FINANCE TRACK

G20 Finance Ministers and Central Bank Governors have identified strengthening financing for UHC in developing countries as a priority for the G20 Finance Track. There are four main arguments for G20 and its Finance Track leadership on this agenda:

- UHC financing fits squarely within the core mission of the G20 to "achieve stable, sustainable world growth that benefits all" and to mitigate risks to the global economy. As this report will demonstrate, resilient and sustainable health financing not only accelerates progress toward UHC but also spurs national and global economic growth and reduces poverty and inequity, while enabling all countries to more effectively manage and mitigate future health and economic shocks.
- The diversity and credibility of the G20 countries—embodying a wide range of experiences, coupled with their considerable economic influence—make them well-placed to facilitate sharing experiences and challenges that all countries are facing and in particular to speak to the aspirations and concerns of emerging economies with regard to health financing, UHC, and growth.

2. In line with Shared Understanding Document, the report uses the term "developing countries", meaning here low- and middle-income countries using the World Bank Group income classification.

BOX 0.1

KEY TERMS AND DEFINITIONS

UNIVERSAL HEALTH COVERAGE (UHC)

Universal health coverage (UHC) is the goal that all people and communities can use the promotive, preventive, curative, rehabilitative, and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship (WHO 2010). UHC has two pillars: coverage with essential, quality health services and financial protection. UHC embodies the commitment to giving priority to the worse off—the sickest, those with the lowest coverage, and the poor—and to health as a human right. Under SDG3, Target 3.8, countries have committed to achieve UHC, "including financial risk protection, access to quality, essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all."

HEALTH FINANCING

Health financing is a core component of health systems, concerned with the mobilization, pooling, and allocation of financial resources, including the purchasing of products and services. Good health-financing systems are a necessary, though not sufficient, condition for progress toward UHC.

HIGH-PERFORMANCE HEALTH FINANCING (HPHF) FOR UHC

High-performance health financing (HPHF) for UHC means that funding is adequate and sustainable, pooling sufficient to spread the financial risks of ill-health, and spending both efficient and equitable to assure the desired[3] levels of service coverage, quality, and financial protection for all people. An additional critical attribute of what we call HPHF for UHC is that the system regularly reassesses progress and risks and adjusts to challenges

3. This recognizes that financial and capacity constraints differ across countries.

- Anchoring the UHC Financing agenda in the G20 Finance Track provides the opportunity to break down the silos that continue to block progress toward both UHC and sustainable financing. As this report will discuss, joint leadership between ministries of finance and health will be vital to transform health financing.

- By working with nonmember developing countries to build strong, sustainable health financing, G20 nations will also benefit: advancing efficiency gains in one of the largest global industries frees productive resources that can further contribute to global economic growth. At the same time, greater resilience and sustainability in health financing will enable developing countries to contribute as effective partners to global health security, reducing the frequency and impacts of disease outbreaks, forced population displacements, and other negative cross-border effects with possible global impacts.

ADDING VALUE TO EXISTING EFFORTS AND ALLIANCES

Work on health financing for UHC has progressed over decades, and numerous partnerships and platforms contribute to this work and coordinate efforts. Bilateral and multilateral agencies and development banks, along with alliances, networks, and partnerships such as P4H, UHC 2030, the Joint Learning Network for UHC, networks of budget officials, and the African Union's Scorecard and Tracker on Domestic Financing for Health facilitate technical collaboration, policy dialogue, and global learning, and supplement countries' domestic resources.[4] Many international organizations and partners have contributed to the development of the WHO-led Global Action Plan (GAP) and financing accelerator to drive progress towards the health-related SDGs (WHO 2018).

The present report and the initiatives it recommends for countries and partners, including the G20, aim to identify specific unmet needs to which the G20 Finance Track can contribute, consistent with the guidance on health financing for UHC emerging through the GAP.

REPORT STRUCTURE

Part 1 of this report, entitled "Time to Act," aims to show why health financing for UHC matters and why now. Section 1.1 explains how robust health financing and UHC gains together contribute to sustainable, inclusive economic growth. It also goes beyond well-established arguments on health, productivity, and growth to show how effective health financing can advance additional policy objectives important for finance ministers, including financial discipline, increased international competitiveness, and stronger health security, with its associated economic benefits. Sections 1.2 and 1.3 then show that downside risks are growing, in light of slow UHC progress to date, coupled with emerging epidemiologic, demographic, and other threats that will both intensify upward pressures on health expenditures and constrain countries' capacity to generate revenues for health. The net result is a strong case for action to reinforce health-financing capacities and institutions in developing countries now.

Part 2, "A Roadmap for Action," sets out an agenda for progress toward high-performance health financing. Section 2.1 presents an emerging consensus on key actions that countries can take to build robust health financing for UHC. Section 2.2 shows how collaboration among countries and partners can accelerate gains. Finally, Section 2.3 explains how G20 Finance Ministers and Central Bank Governors can make decisive contributions to this agenda.

4. The organizations cited are examples highlighted by G20 leaders and other experts during the preparation and review of this report. Numerous other valuable global collaborative efforts in health finance could be cited. An exhaustive mapping of institutions and partners active in the space is beyond the scope of this report. This report follows the G20.

/1/

Time to Act

TIME TO ACT

/1.1/

Health financing, UHC, and the economy

Countries can use health financing for UHC to accelerate inclusive economic growth, make their economies more competitive, and advance other important policy goals—including efficiency in public spending and global health security. In turn, growth reinforces sustainable health financing, which again speeds the advance toward UHC.

The economic case for investing in health is strong. There is evidence accumulated over decades that, when certain basic macro- conditions such as well-functioning labor markets are met, population health gains can boost growth, with positive effects on productivity especially well documented.[5] Health spending is an investment rather than purely consumption. People in all societies also value health and the associated availability of affordable health services for their own sake (Narayan et al. 2000a; Narayan et al. 2000b; Jamison et al. 2013).

Economic gains from high-performance health financing for UHC are wide-ranging—and they can happen fast. A large and growing number of countries have adopted UHC as the goal of health systems development to advance population health while ensuring financial protection. Robust health financing is indispensable to service delivery and financial protection under UHC. Both UHC and its financing exert their own direct effects on the economy. For example, the financial protection offered by UHC directly reduces the number of people living in poverty, stimulates economic growth, and boosts human security. Health-financing arrangements can stimulate improvements in sector efficiency and control cost escalation in the health sector, as well as affect labor mobility and workforce formalization. These additional economic gains can materialize with short-term benefits rapidly evident.

Pathways for action. High-performance health financing drives progress toward UHC and benefits the economy through six main pathways (Figure 1): health and human capital development; workforce and labor-market effects; poverty reduction and equity; increased efficiency and financial discipline; wider economic impacts that strengthen consumption and competitiveness; and greater health and human security. The remainder of this section traces each of these channels in detail. Mapping the pathways clarifies how specific policy options exert their effects, laying the groundwork for the recommendations to be presented later in this report.

5. See e.g., Commission on Macroeconomics and Health 2001; World Bank 1993; World Bank 2019c.

/ 1.1.1 /
HEALTH AND HUMAN CAPITAL

Strengthening the foundations of human capital. A first key channel through which financing for UHC improves economic results is by improving health and thus strengthening human capital—the sum of people's health, education, capabilities, and skills (World Bank 2018d). Effective financing for UHC enhances the health dimension of human capital by multiple means. Here, the discussion focuses on two intervention areas for which there is strong micro evidence that they increase productivity (measured as earnings). Most of these interventions are widely classified as health "best buys." They yield strong population health gains for modest investment and can be delivered at low cost through primary and community health services.

By channeling investment to essential primary and community health services, such as maternal, neonatal, and child health interventions, including childhood immunization and nutrition programs, high-performance health financing supports the creation of irreplaceable human capital foundations during children's early years. Deprivation and poor health in early childhood compromise children's physical and cognitive development and future earning potential, while interventions with components including prenatal care, immunization, micronutrients, breast-feeding and appropriate complementary feeding, parental outreach, and preschooling redress the balance and create the basis for higher productivity when today's children reach adult life (Baird et al. 2016; Flabbi and Gatti 2018; Richter et al. 2018; Shekar et al. 2017; World Bank 2019c).

A second intervention area provides benefits that workers and employers can see rapidly. By adequately funding promotive and preventive services for adults, balanced with necessary treatment, high-performance health financing allows people to work more productively throughout their lifetimes. There is considerable evidence that workers' productivity can rise swiftly when they receive low-cost essential health and nutrition services, such as deworming, vitamin A and iron supplementation, and malaria treatment (Jamison et al. 2013; Thomas et al. 2004; World Bank 2019c). Similarly, HIV antiretroviral therapy improves people's strength, endurance, and productivity (Thirumurthy, Zivin and Goldstein 2008; Baranov and Kohler 2018).

The World Bank has calculated the effect of childhood stunting on productivity as a proxy for measuring the impact of human capital on economic growth. A meta-analysis suggests that countries incur a penalty of 6 percent of GDP per capita, on average, for not having eliminated stunting when today's workers were children (Galasso and Wagstaff 2016). For its Human Capital Initiative,[6] the World Bank estimates that if a country could increase its human capital index from 0.5 to the highest possible score of 1.0 through maximizing the health, nutrition, and educational possibilities of its children, GDP per worker would double from current levels (World Bank 2018c, World Bank 2019c).

/ 1.1.2 /
WORKFORCE AND LABOR MARKETS

Skills and capacity to innovate. The nature of work is changing. New business models are emerging that stress, for example, teamwork, flexibility, and innovation, while the use of technology and automation is increasing. This requires different skills, including cognitive capacities such as complex problem-solving, socio-behavioral skills such as the ability to cooperate with others, and personal skills such as reasoning and self-reliance (World Bank 2019c). Together, these new skills increase a country's capacity to innovate, which is critical to generating economic growth and jobs over time. Health is a prerequisite to build and maintain these skills throughout the life course, and an important contributor to improved health is high-performance financing for UHC.

Labor mobility. Other features of the changing nature of work include increasing contract employment, workers holding multiple jobs simultaneously, and people switching jobs more often than in the past (e.g., Rivers 2018; World Bank 2019c). There is also increasing

6. http://www.worldbank.org/en/publication/human-capital

HOW HIGH-PERFORMANCE HEALTH FINANCING FOR UHC DRIVES SUSTAINABLE, INCLUSIVE GROWTH

FIGURE 1

* Other policies, such as development of human resources for health and multisectoral action, complement the health financing improvements.

labor mobility within and between countries, including for health workers (Buchan, Dhillon and Campbell 2017; WHO 2016a; OECD 2016b). Labor mobility can be restricted by the lack of portability of health insurance coverage. People without portable insurance who do move in response to labor market demands risk financial catastrophe and impoverishment from paying out-of-pocket (OOP) for health care (Chen et al. 2017; Holzmann 2018; Tu 2019). This phenomenon can occur in settings where health insurance is provided for some of the population by employers or is geographically based, with respect either to enrollment or care delivery sites. People tend to stay in their jobs longer with employer-based health insurance, so-called "job lock," and are less likely to change their place of residence for work because of the fear of losing their insurance (Buchmueller and Valleta 1996; Farooq and Kugler 2016; Milcent 2018; Rao 2019).

High-performance health financing guarantees financial protection regardless of where people live or their employment status—as, for example, with the European Union's Cross-Border Directive—contributing to labor mobility. The Cross-Border Directive ensures coverage throughout the whole EU territory. Such a model also ensures that people do not suffer catastrophic OOP health payments, if they move in response to labor-market demands and opportunities.

Labor force formalization. On balance, payroll taxes to fund social protection, including social health insurance, tend to reduce the rate of labor market formalization, although it is still a matter of debate whether this occurs everywhere and whether it affects all sectors to the same extent (Wagstaff and Moreno-Serra 2009; Angel-Urdinola, Barry and Guennouni 2016). The mechanism is that these taxes reduce the demand for labor by raising labor costs, while deterring small firms from declaring their activities to avoid paying social insurance contributions for their employees.

In 1999, the OECD recommended that its member countries lower payroll taxes for this reason (OECD 1999), although the evidence of a subsequent increase in the rate of formalization and employment is mixed (OECD 2015b; Wagstaff 2010). Yet in other countries—for example, Colombia and Argentina—natural experiments suggest that, when payroll taxes have been reduced, more people enter formal employment, and there is an increase in full-time as opposed to part-time employment (Bitran 2014; Garganta and Gasparini 2015; Kugler, Kugler and Prada 2017). When formal-sector health insurance or other forms of social protection funded by wage-based deductions exist alongside protection financed from general government revenues for people without formal employment, including the poor, this may further discourage formalization (Bobba, Flabbi and Levy 2017).

Development of high-performance health financing requires a thorough examination of the mix of revenue sources and pooling. In many countries, careful adjustment of financing instruments could increase the rate of workforce formalization, the number of people in formal employment, and possibly the proportion of people in full-time work (Bitran 2014). Changing health-financing systems in this way can yield subsequent benefits for revenue generation as well. Moving people out of precarious informal employment to the formal sector increases their capacity to pay taxes and health insurance contributions, while at the same time making it easier to collect these revenues. Meanwhile, the health sector itself is a large and growing source of high-quality, formal jobs in most countries (Box 1.1).

/1.1.3/ POVERTY AND INEQUITY

One of the most important, and only more recently understood contributions of high-performance health financing for UHC is in its potential to reduce poverty and income inequalities. The impact on poverty and income distribution can be both rapid and lasting.

High-performance health financing achieves this through both components of UHC: service coverage and financial protection. Access to quality essential health and nutrition services allows the poor to protect and maintain their health, to work more and more productively, and to increase their earnings. It enhances the cognitive capacities and educational attainment of children in lower-income families, ultimately increasing their future income. As a result, income inequality falls over time (World Bank 2019c).

Expanding financial protection immediately reduces the chance that people will fall into poverty by paying for health services out-of-pocket. Currently, 100 million people are pushed into poverty each year because they have to make out-of-pocket health payments (WHO and World Bank 2017). This is equivalent to approximately 15 percent of all people living in extreme poverty. Reductions in out-of-pocket payments especially among the poor and vulnerable, would have a swift, substantial benefit for poverty reduction. Reductions in the reliance on out-of-pocket payments, through high-performance health financing have many other benefits. Increased prepayment and pooling result in efficiency gains, for example, from enhanced bargaining power of purchasers. Moreover, people do not forego health care and no longer need to sell assets or borrow to meet health payments. This means they can cover health costs while continuing to spend and invest in other areas. This contributes to reducing poverty and inequities, while also spurring economic growth (Box 1.2).

BOX 1.1

THE HEALTH SECTOR AS A SOURCE OF JOBS

The health sector currently provides formal, often well-paid employment for roughly 50 million people worldwide, disproportionately women. Health's share of the total workforce is growing fast in many countries. In OECD countries, employment in health and social work grew by 42 percent between 2000 and 2015, while jobs in industry and agriculture declined. Many developing countries are following similar patterns (WHO 2016a). The main challenge in developing countries remains under-staffing.

Highly skilled health-sector jobs generate additional economic activity that spurs "knock-on" job growth for less-skilled labor. For example, each professionally trained health worker is supported by an estimated one to two other workers, although the ratio varies considerably across countries (WHO 2016a). For governments seeking to generate formal jobs, investment in the health sector creates such opportunities.

/1.1.4/ EFFICIENCY AND FINANCIAL DISCIPLINE

Given the sector's magnitude and growth, efficiency and financial discipline in the health sector are critical for a country's overall fiscal outlook. Sources of inefficiency and options for reducing it lie in all three functions of health financing: revenue generation, pooling, and purchasing. By creating structures that can keep health costs under control while progressively expanding service coverage and quality and financial protection, robust health financing for UHC contributes to greater value for money while ensuring financial discipline and

sustainability. And because health represents a significant share of government expenditures—averaging 11 percent in 2016, albeit with significant variation across countries—efficiency improvements and cost containment in the health sector can have a substantial impact on overall government spending and fiscal discipline.

Improvements in the efficiency of revenue generation are fundamental. On one hand, efficiency gains in revenue generation increase the resources available for health. Increasing the administrative efficiency and yield of revenue collection is more the role of the ministry of finance, however, than the ministry of health. On the other hand, health-financing policy can contribute to broader revenue generation by encouraging the optimal use of revenue mobilization instruments that shape healthy lifestyles, such as taxes on products that are harmful to health. In addition, health-financing policy can seek efficiency gains by advancing multi-sector and whole-of-government approaches, along with sector-wide, performance informed planning and budgeting, enhanced budget execution, and stronger systems of public financial management more generally (Barroy et al. 2018; Cashin et al. 2017; OECD 2015a).

BOX 1.2

HEALTH FINANCING, GROWTH, AND ECONOMIC INCLUSION: JAPAN'S EXPERIENCE

Japan's Social Health Insurance (SHI) system was established in 1922. The country formally adopted a UHC goal in the 1950s, and insurance coverage gradually expanded until it reached 100 percent of the population in 1961. Japan's experience shows how health-financing tools can accelerate national economic development while improving population well-being and promoting equity.

Leave no one behind. Foundational to Japan's health-financing model was a commitment to inclusiveness. The country's SHI consists of a combination of employment-based and residence-based insurance plans that cover the informal sector. Japan progressively expanded mandatory enrollment through these two types of insurance plans, while the financial burden on lower-income people enrolling with SHI was mitigated by public subsidies.

Reductions in economic inequality, thanks to public financing of health. The power of UHC to promote inclusion and social cohesion was reflected in a large differential between Japan's pre-tax and transfer versus post-tax and transfer Gini coefficient in the 1960s and early 1970s—implying more **income equality achieved through deliberate policy action.** Japan's UHC gains allowed average life expectancy and other health and nutrition indicators to improve steadily for both men and women, while regional disparities declined. This has been documented as one factor helping to consolidate the country's social stability.

Health, jobs, and shared prosperity. Achieving UHC early in the country's development process helped Japan enhance social well-being through a positive economic growth feedback loop. Improved health, workforce participation, and labor productivity all contributed to Japan's economic growth. As robust health financing promoted a more equitable distribution of income and opportunities within society, it consolidated the foundations of shared prosperity and increased government revenue through taxation. In turn, higher public revenues enabled government to continuously improve health service packages and financial protection. This pattern of mutually reinforcing gains accelerated economic development while strengthening socioeconomic inclusion.

Source: Oshio and Honda 2019.

/ 1.1.5 / WIDER BENEFITS FOR THE ECONOMY

As the multiple positive effects described above accumulate and reinforce each other over time, high-performance health financing for UHC yields broad benefits for a country's economy: in particular by reducing the need for precautionary savings in anticipation of health emergencies and by strengthening countries' international competitiveness through human capital and efficiency gains.

Precautionary savings. Where financial protection systems are insufficient, people may feel obliged to set aside relatively large portions of their income in the form of savings to guard against future health emergencies. When it reaches high levels, such defensive saving can weaken economies. In a number of economies—including China, the USA, and Taiwan, China—studies have confirmed that the absence of health insurance combined with high out-of-pocket payments has led households to set aside substantial savings against the unpredictable shock of future health expenses (Baldacci et al. 2010; Kuan and Chen 2013; Bai and Wu 2014; Kopecky and Koreshkova 2014). This is similar to the effect that political or economic uncertainty has on precautionary saving, reducing consumption and the associated economic growth (Aaberge, Liu and Zhu 2017). Steps taken to adjust health-financing strategies by increasing financial protection have been shown to reduce precautionary savings in some settings (Kuan and Chen 2013; Bai and Wu 2014; Cheung and Padieu 2015). Expenditures on other types of goods and services then increased, providing a stimulus to economic growth.

International competitiveness. The ability of a country's entrepreneurs, companies, and workers to continually adapt and innovate is paramount to future competitiveness (World Bank 2019c). Already, levels of "intellectual capital" have been shown to be highly correlated with a country's competitiveness in international trade and its associated growth (Ogrean and Herciu 2015). Through the pathways discussed above, high-performance health financing for UHC strengthens both the health and cognitive-behavioral dimensions of human capital. By driving efficiency gains in the health sector, robust health-financing models also free productive resources for new strategic uses, supporting countries' efforts to gain or keep a comparative advantage in international trade.

/ 1.1.6 / HEALTH AND HUMAN SECURITY

Health security. Pandemics have caused considerable damage to people, societies, and economies, so there is now a general understanding that pro-active risk reduction is more cost-effective than recovery efforts following an event (Lee and McKibbin 2004; Huber, Finelli and Stevens 2018). Yet people and societies frequently underestimate the personal and societal risks and impacts of pandemics before they happen. This also leads to underinvestment in the capacities for preparedness and response—including the important components of frontline health workers, supply chains (e.g., vaccines, micronutrients), public-health laboratories, and information systems (WHO 2018).

Pandemics leave lasting economic scars. Pandemics usually start as a locally concentrated epidemic. When they are not effectively contained, a window of opportunity closes, and a much larger problem develops. There is considerable evidence that pandemics such as the 2013-16 West African Ebola crisis absorb vast quantities of domestic resources that must be diverted from other uses to crisis response. Economic growth rates in the affected countries suffer for many years (Huber, Finelli and Stevens 2018). For example, Liberia was growing at 8.7 percent in 2013, sank to negative growth by 2015, and only rebounded to 3 percent growth as of 2018—largely, although not exclusively, due to the Ebola outbreak and its impact on businesses, new investment, and overall economic activity.[7]

Health financing is a crucial lever to improve health security. Health financing that ensures appropriate funding for

7. Annual growth data and forecasts at: https://data.worldbank.org

preparedness reduces the risks of an outbreak occurring in the first place. Appropriate financing for monitoring, preparedness, and response reduces the eventual impact of any epidemic and lessens the chance of it becoming a pandemic. Many lower-income countries will be unable to fund all of the necessary activities from domestic resources, and access to external sources of financing and technical support will be required. However, high-performance health financing at the domestic level is also critical. It not only reduces the risks of a major shock to human well-being and economic growth, but also contributes to increased social stability.

Human security. The combined effect of many of the high-performance health-financing policies discussed so far is to drive swift increases in health-service coverage and financial protection, assuring the population that the services they might need to use are available, of good quality, and affordable. High-performance health-financing policies also reduce poverty and increase equity in health outcomes and in income distribution. The net result is that these changes foster social cohesion and preempt potential tensions as a society grows more affluent. Thus, countries can use robust health financing to advance multiple components of stability and human security (United Nations 2012).

/ 1.1.7 /
TIMING AND LINKING EFFORTS

The sooner the better. Countries reap the greatest economic and human-security rewards when they incorporate robust UHC financing strategies early in their development process (Oshio and Honda 2019). Timing matters, because the benefits of high-performance health finance are cumulative. Early health-financing policy decisions can put in place a process that multiplies positive impacts over time.

Linking efforts across sectors. While they may recognize the importance of investments in health, countries often face what appear to be tough trade-offs among sectors integral to human capital development and growth, including health, education, and social welfare, but also water and sanitation, transport, and others. There are several ways to preempt tensions and facilitate collaboration across sectors. Some involve increasing overall fiscal space: for example, by increasing general government revenue or cutting ineffective expenditures (e.g., fuel subsidies). Another strategy is to move toward a whole-of-government approach. The latter option will be discussed in Section 2.1.

TIME TO ACT

/1.2/

Missed opportunities

Today, many developing countries have yet to fully seize the growth and development opportunities that high-performance health financing offers. This section describes the generally slow progress toward UHC targets, identifies underlying health financing shortcomings, and discusses the barriers that policy makers must address, if countries are to accelerate UHC gains.

/1.2.1/ TOO FEW PEOPLE ARE GETTING THE HEALTH SERVICES AND FINANCIAL PROTECTION THEY NEED

In 2016, over 3.6 billion people, roughly half of the world's population, did not receive the essential health services they needed, because those services were unavailable, of low quality, or unaffordable (WHO and World Bank 2017). Major coverage gaps for essential services persist mostly in developing countries.

For people who receive services, coverage is often ineffective, as the quality of services is low (Kruk et al. 2018). Shortfalls in quality of care, and especially inadequate compliance with clinical standards, are not restricted to developing countries. In these countries, however, inadequate provider knowledge and behavior are often compounded by lack of resources. For example, in 10 developing countries,[8] 98 percent of health facilities lacked one or more of the most basic rapid diagnostic tests (Leslie et al. 2017). Meanwhile, poor quality is not only the result of under-provision of services and doing the wrong things at the wrong time, but can also result from the wasteful overprovision of services (WHO 2010).

Global progress in financial protection also lags. Every year, between 2000 and 2010, approximately 100 million people were pushed into extreme poverty, and over 800 million people suffered financial catastrophe, from paying for health care out-of-pocket (WHO and World Bank 2017). No major improvements were registered in these numbers over time in the countries where time series data are available. Many people facing financial catastrophe sell assets, go into debt, or reduce their consumption of other necessities (Saksena, Hsu and Evans 2014). To avoid such consequences, others forego health services from the outset. The impoverishing and welfare effects of inadequate financial protection are concentrated in developing countries, but are by no means limited to them.

Coverage of quality services and financial protection is uneven within countries, to the detriment of the poor. In LICs and LMICs over the period 2005 to 2015, for example, only 17 percent of mother and child pairs

8. Bangladesh, Haiti, Kenya, Malawi, Namibia, Nepal, Rwanda, Senegal, Uganda, and the United Republic of Tanzania.

in the poorest wealth quintiles received at least six out of seven basic health interventions, compared to 74 percent in the richest income quintile (WHO and World Bank 2017). Studies have shown that improvements in average service coverage may not necessarily yield reductions in inequities (World Bank 2018a). Health-service quality is also unequally distributed. Low quality particularly afflicts services available to the poor and people with low levels of education (Amo-Adjei et al. 2018). On the financial protection side, while out-of-pocket spending can be catastrophic and impoverishing to people at all income levels depending on the country, people living close to the poverty line can be pushed into poverty even by small expenditures (World Bank 2018a; Wagstaff et al. 2018).

/1.2.2/ INADEQUATE FUNDING FOR HEALTH EXPLAINS PART OF THE GLOBAL UHC SHORTFALL

For coverage with quality essential services and financial protection, the overall level of health spending and the sources of revenue matter. Levels of health spending rise as countries develop economically (Fan and Savedoff 2014). In 2016, total per capita health spending averaged $40 in LICs, compared to $135 in LMICs, $477 in UMICs and $3,135 in HICs. Similarly, the share of prepaid and pooled funding, which is critical for equitable coverage with quality services and financial protection, grows with national per-capita income. The main source of prepaid and pooled resources is government funding, whether it flows from allocations of general revenue or direct contributions to social health insurance. In 2016, domestic government spending (excluding development assistance for health) as a share of current health expenditure was 25.9 percent on average in LICs, compared to 41.5 percent in LMICs, 56.3 percent in UMICs, and 72.2 percent in HICs.

Economic growth is an important determinant of the capacity of governments to spend on health. It allows revenues to increase even if governments do not modify their fiscal policies.

Another critical determinant is a governments' ability to raise revenue. Developing countries raise on average 29.5 percent of gross domestic product as government revenue, compared to 41.2 percent in high-income countries. A critical component of a government's capacity to mobilize revenue is its ability to raise taxes. When countries manage to raise taxes consistently above 15 percent of gross domestic product, they tend to benefit from sustained, inclusive growth (Gaspar et al. 2016). Currently, only about half of developing countries have surpassed this threshold. Among those that fall short are 20 out of 28 LICs, 17 out of 43 LMICs, and 16 out 39 UMICs, including three G20 countries. Health taxes can help countries develop their tax capacity and move toward and ultimately beyond the 15 percent threshold.

A third, important determinant of government health spending is the priority that governments give to health in budget decisions. Developing countries on average devote 10 percent of government expenditure to health, compared to 15 percent in high-income countries.[9] While in general the share grows with income, there are very large variations across developing countries, from around 3 percent to close to 30 percent, and some upper middle-income countries are those that give the lowest priority to health.

Progress in raising more government revenue as a share of GDP as well as giving greater priority to health in budget decisions has been slow in many developing countries. In lower middle-income countries, economic growth has been a more important contributor to increased health spending than the impact of improvements in revenue generation and increasing priority to health (Tandon et al. 2018).

As a result of slow progress in raising more government revenue for health, out-of-pocket payments continue to constitute a large share of health expenditures in developing countries, amounting to more than half a trillion dollars or $80 per capita annually. As noted earlier, these payments deter some people from using needed health services, and push others into poverty or trap them once there.

9. These averages include on-budget external funding in both numerator and denominator.

Notwithstanding these global trends, assessing the adequacy of a country's domestic government spending is not a straightforward task. Most importantly, the variation in levels of domestic government spending on health among countries of similar levels of economic development depends on social preferences for solidarity and equity.

Nevertheless, it is possible to gauge whether domestic government per capita spending on health is sufficient to ensure universal coverage with the most essential health services. WHO (2017b) estimated that LICs will need to spend $112 per capita, while LMICs will need to spend $146 per capita to ensure access to essential health services. Assuming that governments need to finance between 80 percent and 100 percent of these amounts to ensure sufficient levels of prepayment and pooling, minimum per capita spending requirements are $90 for LICs and $117 for LMICs. It is important to note that these benchmarks are indicative. Meeting them does not necessarily mean attainment of universal coverage with essential health services, as factors other than the level of spending are critical, for example, the efficient and equitable use of resources.

In both LICs and LMICs, average amounts of domestic government spending fall short of these benchmarks. In 2016, in LICs, levels of domestic government spending on health remained below $10 per capita, far short of the $90 target. And, while per capita domestic government spending in LMICs has almost doubled since 2000, rising to $57 in 2016, it still stands at only half of the $112 benchmark.

Countries with the lowest ability to raise funds benefited from large increases in development assistance for health (DAH) starting in the early 2000s, but more recently levels of DAH have stagnated. The large increases contributed to important health gains during the Millennium Development Goal era. Since 2014, though, external receipts have fallen, most recently standing at $10.8 per capita in LICs, $7.2 in LMICs, and $3.9 in UMICs.

DAH has enabled many improvements in health in developing countries and must evolve to effectively catalyze progress toward UHC. Over the last two decades, DAH has predominantly supported infectious disease programs. While infection rates started to fall, international support needs to help catalyze similar advancements in in other disease areas and increasingly strengthen country health systems to ensure that investments are sustainable. In 2017, for example, only 11.3 percent of DAH was invested in health systems strengthening (IHME 2018). External assistance must also play a stronger role in supporting countries to address low government revenue generation and strengthen capacities to carry out all health-financing functions required to ensure accelerated towards UHC (Dieleman and Hanlon 2014; Van de Maele, Evans and Tan- Torres 2012; World Bank 2016a; World Bank 2018b).[10]

A further complexity is the transition toward self-reliance. As their economies grow, countries are increasingly transitioning from support mechanisms such as Gavi, the Vaccine Alliance, and the Global Fund to Fight AIDS, Tuberculosis and Malaria (World Bank 2018b). When countries did not sufficiently invest their own public funds into health, it can become a significant problem for maintaining existing programs, let alone moving more rapidly toward UHC. At the same time, transitioning can also present an opportunity to pro-actively plan country efforts to increase domestic resource mobilization and the efficiency with which resources are used.

/1.2.3 / INEFFICIENCIES AND INEQUITIES ARE WIDESPREAD

Inefficiencies associated with health financing. The health sector is not immune to inefficiencies and waste in countries at all income levels. A recent report suggested that 20 percent of all health expenditure in OECD countries was wasted and did not contribute to the desired health outcomes (OECD 2017b). The proportion of wasted health funds in developing countries may be even higher (WHO 2010). One recent estimate suggests that countries could save as much through efficiency efforts in health, education, and infrastructure as they

10. Questions of absorptive capacity of DAH are considered in Section 2.

could raise through tax reform (Gaspar et al. 2019).

Only some efficiency gains save money—for example, reducing corruption and leakages, or the prices paid for key inputs such as medicines. Others will not necessarily save money, but will lead to higher levels of health for the available funds.

Inefficiencies are associated with each of the health-financing components. Revenue generation systems sometimes raise only a small proportion of the revenue that could potentially be mobilized from the taxes and charges on the books. Pooling is frequently inefficient due to fragmentation into small pools that are able to offer financial protection for only a very small package of needed health services, and that often entail high administrative costs.

Inefficiencies in purchasing are associated with the wrong services purchased or provided, or available at the wrong level of care. This includes wasteful clinical care (inappropriate and ineffective care), poor use of resources that do not directly contribute to patient care (e.g., fragmented procurement, low use of generics), and governance-related waste. Adverse events in hospitals, for example, add 13–16 percent to hospital costs (Jackson 2009), and 28–72 percent of them are considered avoidable (Rafter et al. 2017; OECD 2017b). Average losses due to fraud, largely associated with purchasing, in seven OECD countries were estimated at 6.2 percent of total health spending (Gee and Button 2015). Payment methods can create or distort incentives for efficient and high-quality provision of care: for example, fee-for-service payment in hospitals in a set of European and Central Asian countries was associated with 20 percent higher national health spending, and more inpatient admissions than patient-based payments such as Diagnostic Related Groups (Moreno-Serra and Wagstaff 2010).

Inefficiencies can also result from the lack of coordination of health investments with other sectors—including, for example, with transport, water, and sanitation. Early childhood development, critical to the future education and earnings of children and the future productivity of society, is frequently pursued separately by the education, health, and agricultural sectors (e.g., for nutrition), when coordinated action would be more effective and efficient.

Inefficiencies in the health sector exacerbate the problems of limited funding. Even with the funds currently available, most developing countries could achieve better UHC and health outcomes than they currently do.

Inequities associated with health financing. Countries frequently raise, pool and use funds for health inequitably. Inequities can be found in financial contributions: for example, the poor contribute a higher proportion of their incomes than the rich, without subsequent compensation through fiscal transfers.

Inequities in coverage and benefits derived from pooled funds commonly persist both across and within pools. Where national pools are fragmented into different financing schemes, typically with different financing arrangements for civil servants and formal sector workers compared to other population groups, or fragmentation into subnational pools, some groups obtain fewer and lower-quality services than others, unless effective forms of risk equalization are implemented across pools. Even within pools with uniform entitlements, inequities can run deep. Typically, fewer services are available in areas where poor people live, so the rich capture a disproportionate share of the benefits (Meng et al. 2015; Kutzin, Yip and Cashin 2016).

Investments in primary and community health services are critical to ensure access to the most cost-effective interventions. Yet in many countries, patients do not seek help or bypass primary health care facilities due to poor accessibility (distance to facility and cost of treatment), low quality (e.g., clinician competence), lack of pharmaceuticals, and weak gatekeeping mechanisms (Kruk et al. 2018). In India, for example, 67 percent of patients living in the vicinity of the PHC facility bypassed it when seeking treatment, largely due to poor clinical competence of the health care provider (Rao and Sheffel 2018). Low spending on primary and community health services is commonly perceived as one of the major causes of both inequities and inefficiency. The level of spending on primary and community

health services is difficult to gauge, as definitions vary from country to country. Recent efforts to shed light on the prioritization of these services show a wide range of spending levels, and country comparisons will only become possible as data improve over time (Van de Maele et al. 2019). What is evident today, though, is that many countries identify the strengthening of PHC as a policy priority; however, this prioritization does not show in longitudinal spending data.

/1.2.4/ CLOSING UHC FINANCING GAPS IN LOW- AND LOWER MIDDLE-INCOME COUNTRIES BY 2030

The limited ability to raise domestic financing for UHC in low- and lower middle-income countries poses a major threat to the attainment of their UHC targets Fifty-four countries, home to approximately 1.5 billion people, are unlikely to meet the gross national income (GNI) per capita threshold for upper-middle-income status by 2030 (Annex A). In these countries, through economic growth alone, domestic government spending on health will increase on average to $13 per capita in LICs and $57 in LMICs by 2030. These amounts still fall far short of cost estimates for the provision of essential services, approximately $90 per capita in LICs and $118 per capita in LMICs. The result is a projected UHC funding gap of $68 billion in LICs and $108 billion in LMICs in 2030.

In an optimistic scenario, domestic government revenue mobilization efforts, such as improvements in the capacity to raise government revenue and prioritization of health in budgets, could increase prepaid and pooled spending on health in these 54 countries to, on average, $22 in LICs and $85 in LMICs by 2030. These increases are large compared to the growth-only scenario, yet all the countries, except for seven LMICs, would still fall substantially short of the respective health-spending thresholds. The anticipated funding gaps in 2030 would still amount to $59 billion in LICs and $70 billion in LMICs.

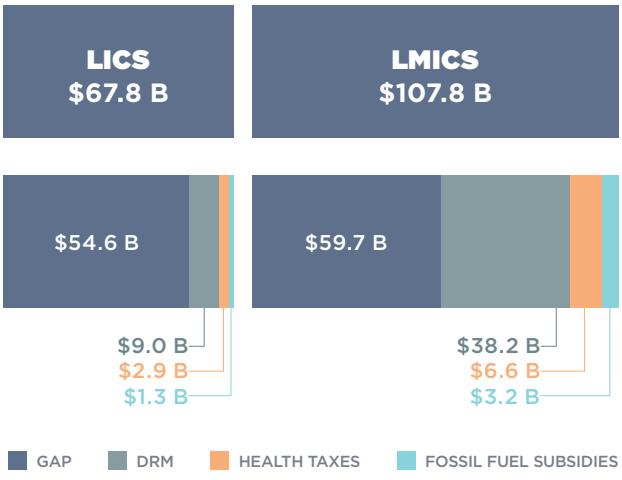
Excise taxes on health "bads" such as tobacco, alcohol, and sugar-sweetened beverages remain underutilized as tools to improve health (Task Force on Fiscal Policy for Health 2019; Marquez and Moreno-Dodson 2017). Excise tax increases that increase the prices of tobacco, alcohol, and sugar-sweetened beverages by 50 percent could raise additional revenues of $20 trillion worldwide over the next 50 years (Task Force on Fiscal Policy for Health 2019). A similar increase in retail prices could generate additional revenues of approximately $24.7 billion in 2030 in the 54 countries that are unlikely to reach UMIC status by 2030[11]. Of the $24.7 billion total revenue gain, approximately $5.9 billion would be generated in LICs and $18.8 billion in LMICs. These excise tax increases would raise the tax-to-GDP ratio on average by 0.7 percentage points in LICs and 0.7 percentage points in LMICs. If the additional revenues were allocated to health according to the current levels of prioritization in government spending, the financing gap for UHC would decrease by $0.5 billion in LICs and $0.8 billion in LMICs. If allocated to health at a level of 50 percent, the excise tax increases would lower the financing gap by $2.9 billion in LICs and $6.6 billion in LMICs. The tax increase would have the additional advantage of reducing future health care costs by curbing the growth of noncommunicable disease (NCD) burdens.

Fossil fuel subsidies impose large fiscal costs worldwide, but are highly inefficient as a means to provide support to low-income households, as rich households typically capture the benefits (Coady et al. 2019). Potential fiscal revenue gains from this source are estimated at about $3.2 trillion, or 4 percent of global GDP in 2017. Estimates are limited to the effects of underpricing. The potential gains are lower than in the past, mostly due to the global decline in international fuel prices. Fiscal benefits would flow from both the removal of pre-tax subsidies—the difference between the price paid by consumers and the cost of supplying energy—and post-tax subsidies—differences between the price paid by consumers and the prices necessary to fully reflect supply plus environmental costs and foregone revenue in terms of general taxes. Fiscal revenues from eliminating fossil fuel subsidies in the 54 study countries would have amounted in 2015 to

11. Estimates are based on data provided by the Center for Disease Dynamics, Economics and Policy (Annex A).

$9.4 billion in LICs and $84.2 billion in LMICs[12]. If countries were to eliminate these subsidies and allocate the pre-tax component of the additional fiscal revenue to social spending in 2030, UHC financing gaps would fall by $1.3 billion in LICs and $3.2 billion in LMICs. Additional benefits would include cuts in CO_2 emissions and reductions in the NCD burden from air pollution.

NARROWING THE PROJECTED UHC FUNDING GAP IN 2030 FIGURE 2



Note: Analysis includes 54 LICs and LMICs that, based on growth projections, will not transition to UMIC status by 2030. For details on definitions, data and methods see text and Annex B.

Combined, the fiscal measures described above, on top of economic growth, could reduce the financing gap from a total of $176 billion to approximately $114-122 billion (depending on the assumptions about the allocation of excise taxes to health), with the gaps almost equally divided between LICs and LMICs.

External financing in the form of DAH will further reduce these domestic funding gaps. Currently, in the 54 study countries, external financing stands at approximately $5.4 billion in LICs and $5.0 billion in LMICs. After stagnation in the growth of DAH over the past years, a substantial increase in DAH would be necessary if countries are to have a chance of reaching UHC goals.

12. Estimates are based on data provided by the IMF (Annex A).

Additional funds to reduce the financing gap may come from the private commercial sector, but the amounts are likely to be limited. Foreign direct investment in health care has been increasing rapidly, but remains below $10 billion per year in developing countries. Most of these funds go to middle-income countries. Moreover, the private sector generally recoups its investments, and its involvement, even in the context of public-private partnerships, is more likely to result in a front-loading of investments than in additional revenues for health. Both domestic government funding and DAH could eventually have a role in leveraging increased commercial private sector investment through blended financing. Most recent evidence of the impact of DAH on private sector investment suggests a leverage ratio from $0.37 to $1.06 for each public dollar (Attridge and Engen 2019).

The projections discussed in the preceding pages assume efficient practices in health financing and service delivery, such as reducing fraud and corruption, appropriate mix of interventions delivered in the right settings, and efficient use of human resources for health, including task shifting. Weak health-financing capacity in LICs and LMICs, though, could prevent countries from attaining these levels of efficiency. As discussed in the previous section, inefficiencies in purchasing are found in most countries and can lead to significant wastage of resources. If current inefficient practices persist, under the assumption that at least 20 percent of spending is wasted (WHO 2010), the financing gap in LICs and LMICs in 2030 would be $137 to $147 billion, despite growth and the described fiscal measures.

/1.2.5 / MANY OBSTACLES CONSTRAIN HEALTH-FINANCING ADVANCES

The preceding discussion has demonstrated significant health-financing shortcomings. To overcome these constraints, developing countries will need to substantially reconfigure their health-financing policies, practices, and organizations. Many countries

have made strides in reforming components of their health financing to raise more funds; give higher priority to health in budgets; provide greater incentives for efficiency; and raise, pool, and use funds more equitably; but few have managed to sustain comprehensive reforms (Gottret, Schieber and Waters 2008; Cotlear et al. 2015). The constraints vary by country, but several reasons are common. One is that many of the necessary changes to health-financing policy have political implications, opposed by powerful interest groups. For example, raising taxes is never popular in the business community.

Health-financing reforms require strong leadership from ministries of finance and health in their own domains, and also strong collaboration between them. However, even in many OECD countries, ministries of finance consult with line ministries only for purposes of budget preparation (OECD 2015a). In addition, half of OECD countries report a lack of capacity at their ministry of finance for assessing health policies. Different definitions and understanding of common terms can create further confusion. For ministries of finance, it is often also challenging to reconcile short-term financing pressures with the medium- and long-term nature of a health reform. Creating a common understanding of challenges and priorities between ministries of finance and health is therefore critical for ensuring that countries move toward high-performance health financing.

It is not easy to evaluate a country's leadership, governance, and organizational management capacities specifically in health financing. There are a number of indexes of governance that cover much more than health financing per se, including the World Bank's Country Policy and Institutional Assessment (CPIA). It suggests that governance is less than optimal in many developing countries. For example, an assessment of countries in Sub-Saharan Africa showed they scored, on average, 3.1 out of the maximum possible score of 6. The lowest score was 1.6, the maximum score 4.0 (Chuhan-Pole et al. 2018).

Three ways of considering the strength of governance and organizational capacity specifically in health financing suggest problems, at least in some countries. There is evidence that some countries have developed official policies seeking to increase government revenues as a share of GDP, but that, even after several years, they have made little progress. Data from Public Expenditure and Financial Accountability assessments in 65 countries indicate that, at the end of the budget cycle, ministries of health tend to lose out in terms of the allocated budget versus actual expenditures in comparison to both the education ministry and the aggregate budget, indicating: (i) low prioritization of health in the re-budgeting process, (ii) tighter constraints in the flow of funds, and (iii) greater bottlenecks in the spending of released funds (World Bank calculations). Indeed, budget execution rates are often much lower than optimal in ministries of health, sometimes leading to funds having to be returned to the ministry of finance. Recent public expenditure reviews from six African countries show that the approved budget underspending ranged from $10 to $120 million a year, equivalent to lost per capita spending of between $1 and $3.50 annually (WHO 2016b). Another obstacle to progress is that the health sector has traditionally been slow in adopting new technologies and other opportunities.

Many of these UHC financing challenges converge in countries affected by fragility, conflict, and violence (FCV), where by definition governance and organizational capacity is weak. FCV situations span the income range of developing countries. FCV countries are home to 2 billion people, and more than 50 percent of the world's poor will live in them by 2030. The disease burden is high in FCV-affected countries, compared to stable countries at the same income level. This is in part because conflict and violence lead to a higher incidence of injuries, mental health issues, and gender-based violence (Graves, Haakenstad and Dieleman 2015). Government revenue mobilization for health tends to be low and external financing high in FCV settings. Yet, compared to stable low-income countries, DAH per capita is roughly one-third lower in FCV-affected LICs (Graves, Haakenstad, and Dieleman 2015). DAH is highly fragmented, and the transition from humanitarian to development assistance often results in high volatility of health funding, threatening the sustainability of priority health programs.

TIME TO ACT

/1.3/

Emerging and intensifying challenges

The challenges described in the preceding section are—or soon will be—compounded by emerging and intensifying difficulties that will further test health financing. Pressures to increase health expenditures will rise, while it will become more difficult to generate revenues. Pressures to spend inefficiently and inequitably could also increase.

While these challenges affect countries at all income levels, the risk in developing countries is that the gap between the demands for health spending and available public resources will widen, prolonging the reliance on inefficient and inequitable out-of-pocket health payments and impeding progress toward UHC. Similar pressures will put the same strains on the entire social security system, further tightening the fiscal space for health.

This section analyzes the most pertinent of these pressure points in three groups: (i) pressures to spend more on health, which also has implications for efficiency and equity; (ii) constraints to raising revenue; and (iii) unanticipated shocks to the health system with possible spill-over effects on the economy.

/1.3.1/ PRESSURES TO SPEND MORE ON HEALTH

Rising expectations for more and better health services. People tend to demand more and better health services as they get richer and more educated, increasing the pressure for health spending (Ke, Saksena and Holly 2011; Fletcher and Frisvold 2014; Amo-Adjei et al. 2018; Katyal 2018). In addition, the globalization of information means that aspirations for living a long and healthy life are rising everywhere, among the poor and rich alike. People are increasingly seeking health information online; in Europe, the percentage almost doubled in less than a decade, rising from 28 percent in 2008 to 51 percent in 2017 (Moreira

2018). With expanded mobile phone use and Internet access even in the poorest countries, more people around the world have access to health information and the benefits of healthy living than ever before (World Bank, forthcoming). As people begin to search more for specific medical treatments or procedures, demand for high-cost secondary and tertiary care and access to the newest medical technologies is likely to continue to increase.

Progress in medical technology. Some estimates suggest that technological advances have accounted for between 25 and 75 percent of growth in health expenditures in high-income countries since 1960 (Smith, Newhouse and Freeland 2009). In the future, some emerging technological advancements may reduce the costs of care and health administration—through digitization and advanced robotics, for example. However, the OECD has argued that demographic and income determinants are likely to outgrow the potential cost-lowering effects of these technological innovations (OECD 2013). In resource-constrained environments, rising demand for higher-cost technologies is likely to place investments in more cost-effective primary and community health services in jeopardy. From a UHC perspective, it will be critical to prioritize the expenditures most likely to drive rapid progress toward coverage with essential quality services for all, together with financial protection.

Aging populations. Once a concern mainly for high-income countries, the share and number of older people is rising in virtually all societies, linked to improvements in health services and in social determinants of health (Braveman and Gottlieb 2014). The number of people aged 60 years or more in developing countries increased from 273 million or 5.4 percent of the world's population in 2000, to 405 million or 6.6 percent in 2015, and is expected to reach 1.2 billion or 14.1 percent by 2050.[13]

Rising numbers of older people increase the need for health services, associated with the growing non-communicable disease (NCD) burden and the need for long-term care discussed below (Lee and Mason 2017). Projections of public spending on health for 50 advanced and emerging economies from 2010–30 show that aging will account for approximately one-third of the spending increase in advanced economies and half of the increase in emerging economies (IMF 2010). Aging puts pressure on public finance in additional ways, particularly through pension schemes (Lee and Mason 2017). People living longer receive pensions for longer, and there is growing recognition that pension systems in high-income settings need to be reformed as a result (e.g., Kitao 2018).

Some of the cost pressures related to aging can be offset through policies aimed at promoting more active and healthier older populations, such that older people can continue to work if they wish (OECD 2017c; Beard et al. 2016; WHO 2015; Oxley 2009). This also has implications for health-financing strategies: funding is needed for healthy aging policies to work, but until the impact of these policies starts to be felt, there will be a growing need to fund treatment associated with chronic morbidity and long-term care at the same time, putting even more pressure on public finance.

Growing burden of NCDs. The NCD burden, including from diabetes, cardiovascular disease, cancer, and mental health conditions, is growing rapidly in countries at all income levels, yet in many developing countries public policy and development assistance have focused on maternal, neonatal, and child health and control of communicable diseases (Roth et al. 2017). In 2000, the share of NCDs in developing countries in terms of healthy life years lost—that is, the cumulative number of years lost due to ill-health, disability, and early death—was 43 percent, or approximately 1 billion lost years. In 2017, this share had grown to 59 percent, or more than 2 billion years of healthy life lost (IHME 2019).[14]

The rise in NCDs threatens health systems with rapid cost increases, especially when people seek care late and/or from high-level providers. In OECD countries, NCDs accounted for 60 percent of health spending in 2011, and

13. World Population Prospects 2017 (database), United Nations Department of Economic and Social Affairs, Population Division, New York (accessed May 15, 2019), https://population.un.org/wpp/Download/Standard/Population/

14. Global Burden of Disease 2017 (database), Institute for Health Metrics and Evaluation (IHME), Seattle, WA (accessed May 15, 2019), http://ghdx.healthdata.org/gbd-results-tool

spending in developing countries is likely to reach similar proportions without immediate and effective action to curb the NCD epidemic (OECD 2016a). In developing countries, households often bear the brunt of rising costs associated with NCDs. In India, for example, the share of NCDs in total out-of-pocket health expenditures increased over a decade from 31.6 percent to 47.3 percent, while in Sri Lanka, people with NCDs were more likely to incur catastrophic health expenditures despite the existence of a national health system (Mahal, Karan and Engelgau 2010; Pallegedara 2018).

As with aging, some of the increasing cost pressures from NCDs can be reduced by modifications to health-financing strategies. Revenue generation strategies that tax products that are harmful to health, such as tobacco, alcohol, and sugar-sweetened beverages, offer one example. Similarly, reducing fossil fuel subsidies not only reduces carbon emissions but also mobilizes additional revenue. Increased funding for health promotion and disease prevention services will also contribute to reducing the NCD burden over time. To date, however, only a few developing countries have modified their health-financing strategies to account for this growing threat.

Demands for long-term care. As population aging and the rise in NCDs exert their combined effects, all countries face a growing demand for long-term care (LTC), including medical services, palliative care, and social and residential support (WHO 2015; Beard et al. 2016; Yeung and Thang 2018). This is being compounded by societal changes in many developing countries, where the predominant form of LTC is still provided by families or friends or so-called informal care (Lei, Feng and Wu 2016; Datta 2017; Yeung and Thang 2018; Hu 2018). This is changing as a result of factors such as higher rates of female labor market participation, divorce, and childlessness (e.g., Zhu 2015).

The capacity to deliver formal LTC is still nascent in most developing countries (Angel et al. 2016; Johnson et al. 2018). Some studies suggest that the supply of LTC meets at best a small fraction of the needs, often with no services available in rural areas (Yeung and Thang 2018). Anecdotal evidence suggests that waiting lists and times for beds in residential institutions are long, and opinion polls highlight the rising expectations for governments to expand access (Glinskaya and Feng 2018). In OECD countries, for example, LTC spending is projected to rise sharply, from on average 0.8 percent today to between 1.6 and 2.1 percent of GDP in 2060. Some countries, such as Chile, Estonia, Korea, Mexico, and Turkey are likely to experience even higher increases (Maisonneuve and Martins 2014).

/1.3.2 / FISCAL CAPACITY CONSTRAINTS

The capacity of developing countries to increase tax revenues is fairly limited. Along with the aforementioned rising cost pressures, many developing countries also have fairly limited administrative capacity to manage and enforce existing tax laws; as well as high levels of income inequality which restrict the size of the population that can afford to pay taxes. Many developing countries are also relatively susceptible to external economic shocks and terms-of-trade changes (Le, Moreno-Dodson and Bayraktar 2012; Fenochietto and Pessino 2013; Morrissey et al. 2016). Corruption further reduces tax yields and fuels administrative costs; tax losses from corruption were recently estimated at $1 trillion annually (Imam and Jacobs 2014; IMF 2019). While some of these constraints to revenue generation may subside over time as countries develop their financing capacities, problems associated with tax avoidance and evasion may prove to be stickier, unless action is taken at both at country and global levels.

Critical issues that countries must address include:

- **Tax avoidance and evasion (e.g., base erosion and profit** shifting, or BEPS) **and capital flight transfer of wealth offshore, where it is not declared for tax purposes.** Estimates from developing countries range from $70 billion to $420 billion per year (UNCTAD 2009; Crivelli et al. 2015).

- **Tax exemptions, tax credits, preferential tax rates, and/or deferred tax liability to attract foreign investors (O'Hare 2015)** are often popular policies, yet there is limited evidence that they actually result in more foreign investment with a subsequent impact on growth. On the

other hand, eliminating these policies could help developing countries increase tax revenues by between 20 and 30 percent (Mascagni, Moore, and McCluskey, 2014).

- **Resource wealth displaces domestic taxation in many countries, particularly where there is low institutional capacity.** Large windfall resource revenues provide low incentives for economic and tax diversification and may increase rent-seeking and corruption (Mascagni, Moore, and McCluskey, 2014).

The G20 Finance Track's focus on BEPS, in collaboration with the OECD, as well as work on tax transparency, tax certainty, and digitization are already contributing to alleviating some of these problems (OECD 2018c; EY tax insights 2016).

Labor market informality is persistent and in some countries increasing. In developing countries, informal sector output on average accounts for about one-third of GDP while employing 70 percent of the working population (World Bank 2019b). In absolute numbers, 2 billion workers, more than 61 percent of the world's employed population, are in the informal economy (ILO 2018). Many governments have assumed, based on the experiences of high-income countries, that economic development would rapidly increase employment in the formal sector, but informal employment has actually increased as national income has grown in some countries, and where it has fallen, it has done so less rapidly than expected (World Bank 2019a).

One contributor to slow formalization is the changing pattern of economic growth. In high-income settings, growth was associated with a major expansion of industrial production, marked by increasing productivity, scale and firm size, and growing wage labor. Firms and workers were easy to regulate, track, and tax. In emerging economies, industrialization has intensified to a certain point, but service sectors have become important at an earlier stage of the economic transition, particularly services that do not require skilled labor (World Bank 2019a). These new patterns of economic transformation result in a duality of formal and informal activity with much slower rates of formalization.

Informality compromises countries' ability to raise income taxes or health insurance contributions because economic activity is difficult to observe and measure accurately. The implication for health financing is that policymakers in developing countries cannot assume that they will be able to rely on income-based contributions (taxes, insurance) to increase their health spending in the short to medium term. They will need to adapt revenue generation systems to the reality of a large and persistent informal sector, which generally implies broad-based taxes such as value-added taxes.

The changing nature of work is also restricting the ability of countries at higher levels of income to mobilize more domestic resources for health. In high-income countries and also in some upper middle-income countries such as Brazil, Mexico, and Turkey, the composition of the workforce is shifting away from traditional full-time jobs, as alternative work models—such as self, part-time, and temporary employment and zero-hours contracts—have spread rapidly (Apella and Zunino 2018). This is partly because businesses have sought to avoid costs related to hiring full-time employees (including the costs of health insurance) by favoring flexible, short-term, or on-demand work arrangements ("gigs") with contractors and freelancers.

Increasing automation poses another threat to revenue mobilization. Estimates of how automation will impact work suggest the impact will differ by country. Estimates for OECD countries suggest that about 14 percent of all jobs are highly automatable, and 32 percent of jobs will experience a significant change in the way they are performed (OECD 2018b). Estimates for developing countries suggest even higher shares. On average, approximately two-thirds of jobs, largely unskilled, may be automatable (World Bank 2016c). As a result, job losses may rise, and unless workers are provided with the necessary retraining and career services, unemployment could increase, with long-term effects on tax revenue and social health insurance contributions and upward pressures on social assistance spending.

Dependency ratios are high.[15] In developing countries, the total dependency ratio—defined as the non-working-age population in relation to the working-age population—is on average almost twice as high as in HICs (85.7 versus 47.0 percent, 2015).[16]

While dependency ratios tend to fall with increasing levels of GNI per capita, there is substantial variation across countries at similar levels of development. In 20 countries, largely in Sub-Saharan Africa, the dependency ratio is considerably higher than predicted by GNI per capita—from 10 to over 40 percentage points (World Bank calculations). These high ratios are driven by unusually high fertility rates in the recent past. High dependency ratios mean that each worker needs to financially support more dependents, sometimes called the demographic burden (Matytsin, Moorty and Richter 2015). As more young people enter the workforce each year, there are also more dependents for them to support. Hence, while tax revenues will increase, tax rates might also need to increase to cover health and education costs of the increased number of children and adolescents.

In low-fertility environments, increasing dependency ratios are a result of aging. The size of the working population can actually fall, as in some high-income settings, and tax revenues and social security contributions also fall (Lee and Mason 2017). Taxes would have to increase to maintain existing levels of per capita social benefits, which can strain fiscal social contracts and the willingness of workers to contribute increasingly higher proportions of their incomes to others. While this is not likely to affect low- and lower middle-income countries for some time, it will affect some upper-middle countries more rapidly (World Bank calculations).

15. The dependency ratio is commonly defined as the ratio of people younger than 15 and older than 64, to the population between 15 and 64. As increasing numbers of people continue to work beyond the age of 64 and children stay at school longer, this definition provides only a rough indication of the burden placed on workers to maintain non-workers.

16. World Population Prospects 2017 (database), United Nations Department of Economic and Social Affairs, Population Division, New York (accessed May 15, 2019), https://population.un.org/wpp/Download/Standard/Population/

/ 1.3.3 /
HEALTH SYSTEM AND ECONOMIC SHOCKS

This subsection highlights three major threats to health systems with possible spill-over effects for the economy: two threats, epidemics and antimicrobial resistance, belong to the core ambit of the health system, while the third, forced population displacement is the result of exogenous factors. Policymakers must prepare health financing to confront these and other shocks that can increase expenditures and compromise revenue mobilization, efficiency, and equity in ways that are difficult to predict. Other possible shocks to the health system include civil wars and other armed conflicts, natural disasters such as adverse weather events, and shocks originating in the economy, from slowdowns in the global economy or the economy of a major trading partner, to financial crises, and drastic fiscal and monetary policy changes.

Few hazards threaten greater loss of life, economic disruption, and costs to health systems than large-scale disease outbreaks that cross borders. To cite a historical example, the 1918 Spanish Flu is estimated to have caused at least 50 million deaths globally and to have reduced GDP in the United States alone by as much as 11 percent (Johnson and Mueller 2002). A similar future influenza pandemic could infect billions, take the lives of millions, and cut billions of dollars from global economic output—costing an estimated $500 billion in a year or 0.6 percent of global income (Fan, Jamison and Summers 2018). The 2013–16 Ebola crisis in Guinea, Liberia, and Sierra Leone claimed more than 11,000 lives and wiped out the economic gains from years of rapid economic growth in these countries. In 2015 alone, the three countries are estimated to have lost $2.8 billion in GDP as a result of the pandemic (World Bank 2016b). Pandemics have an immediate impact on government revenues, while increasing demands for health expenditures into the foreseeable future and diverting health workers and money from other health needs such as maternal and child health. The heavy financial losses resulting from pandemics also suggest that countries which invest in pandemic and disaster preparedness stand to gain benefits much greater than the original investment (World Bank 2017).

Antimicrobial resistance (AMR) also poses a significant and growing health and financial threat to countries at all income levels. AMR occurs when bacteria and parasites cannot be treated by medicines that were previously effective (Marquez 2014; Jonas et al. 2017; WHO 2017a; OECD 2018c). In high-income settings such as the United States, resistance to antibiotics is estimated to cause more than 23,000 deaths each year, while hospital-acquired infections add another 90,000 deaths (Marquez 2014). In developing countries, the rise of AMR threatens the ability to treat diseases such as respiratory and urinary tract infections, TB, and HIV. If resistance continues to progress at current rates, more than 2.4 million people could die by 2050 in Europe, North America, and Australia alone (OECD 2018c). The cost to the global economy could reach 3.8 percent of annual GDP, with a disproportionate impact on low-income countries, where it could exceed 5 percent (Adeyi et al. 2017). An estimated 28 million people would be pushed into poverty, mostly in developing countries, reducing those countries' capacities to raise revenues and increasing demands on social protection programs (Jonas et al. 2017).

As with pandemic preparedness, however, all countries can take pre-emptive actions, including the necessary changes to health financing to limit the spread of AMR and mitigate its cost and health implications. Steps countries can take include creating financing incentives to encourage prudent use of antimicrobials (in humans, livestock, and fisheries) and developing new products. In hospital and health care settings, investment in improved infection control can reduce the demand for antibiotics and the spread of disease and resistance. In addition to new treatments, investment in diagnostics and vaccines to guide the appropriate use of antibiotics can also play a role, as can improved compliance and regulation to ensure that health care workers prescribe antibiotics appropriately. In agricultural and livestock settings, improving the infrastructure around livestock management and limiting use of antimicrobials for growth promotion, as opposed to animal health, also stand to make a substantial impact. And as with pandemics, AMR is a threat that requires international collaboration.

Forced Displacement. Globally, there were more than 28.5 million refugees and asylum seekers in 2017, and the numbers have been increasing over time (UNHCR 2017, 2018). This type of forced displacement is a form of economic and social shock, which increases the need for health spending in recipient countries, not just because of the increased numbers of people who need health services but also because displaced people are more at risk of exposure to communicable diseases and psychosocial and mental distress (OECD 2018a). The costs can be substantial: for example, Jordan spent $2.1 billion on health services for Syrian refugees between the beginning of the Syrian conflict and the end of 2016 (The Jordan Times 2016). In the medium term, health systems in host countries need to adjust by fostering greater cooperation between the institutions that finance and provide short-term emergency care for displaced people and those that finance and provide longer-term services for the population as a whole (OECD 2018a).

The experience of countries such as Jordan, Lebanon, Turkey, and Uganda that have recently faced unexpected inflows of displaced people shows that the stress to domestic systems extends beyond health to education and social protection systems, as well as labor markets—particularly in informal work, given that displaced people often do not have the right to work in the formal sector, with ramifications for the economy (ILO 2019).

At the same time, the countries from which recent migration waves originate (e.g., South Sudan, Syria) are generally confronting multiple stressors, often including state fragility or conflict, which pose substantial challenges to health financing. Rising violence, changing demographics, new technologies, illicit financial flows, terrorism, and instability linked to extreme weather events further contribute to a more complex fragility landscape, and to spikes in forced displacement (Bousquet 2017).

/2/

A Roadmap for action

The preceding part of the report spelled out the economic growth, poverty reduction, and health security benefits countries can obtain from high-performance health financing for UHC, but also showed that many developing countries have not yet seized these opportunities, while emerging and escalating challenges will further strain countries' health financing in the years ahead.

Part 2 now maps an agenda for action by countries and their international partners to achieve more efficient and sustainable health financing that will accelerate progress toward UHC, and proposes how leadership from the G20 Finance Track can catalyze progress at both country and global levels.

A ROADMAP FOR ACTION

/ 2.1 /

Priorities for country action

What actions can countries prioritize as they work to develop high-performance health financing for UHC that captures more of the benefits described in Part 1? This section proposes a three-pronged approach. Countries can:

- Adapt and implement proven principles and policies to address core health-financing challenges;
- Broaden the vision of health financing to address both resilience and sustainability through a whole-of-government approach and by making health financing future-fit; and
- Strengthen health-financing leadership, governance, and organizational capacity.

/ 2.1.1 / SCALE WHAT WORKS

Countries can make substantial progress toward UHC by adapting to their own settings policies derived from widely recognized health-financing principles.[17] Here, we set forth selected principles using the Domestic Resource Use and Mobilization Plus (DRUM+) framework. In DRUM+, pooling to increase access to needed services and financial protection is added to the Domestic Resource Use and Mobilization (DRUM) model developed in prior work (Kaboré et al. 2018; World Bank 2018b).[18]

17. The principles set forth here have emerged from a research process that began with an extensive literature review on health-financing strategies, drawing on both peer-reviewed and grey literature, followed by inputs from a series of expert consultations and comments on earlier drafts of this report. The full body of literature reviewed is too extensive to reference exhaustively, but included documents from WHO, the World Bank, OECD, and UNICEF, a number of bilateral agencies including DFID and USAID, academia, civil society organizations such as OXFAM and Save the Children, foundations, and consulting groups. Three Annual UHC Health Financing Forums began the process of review, covering revenue mobilization, efficiency, and equity: https://www.worldbank.org/en/events/2017/10/20/third-annual-universal-health-coverage-financing-forum. This exercise revealed considerable convergence in views on key principles of high-performance health financing and on some, though not all, of the associated policies to implement the principles. The investigation also documented points where policymakers' actual practice at the country level generally aligns with (or diverges from) approaches broadly endorsed in theory. In addition, areas of policy controversy and knowledge and solution gaps were identified. The research is ongoing, and this report briefly discusses the current findings on each topic. Additional details are found in Annex B, and a more complete description of methods and findings is available from the authors on request.

18. The DRUM+ concept builds on a large body of previous work including the analysis of fiscal space for health (Tandon and Cashin 2010; Meheus and McIntyre 2017; Barroy et al. 2018; IMF 2016b).

The DRUM+ framework has implications for how policy measures can best be prioritized. The recommended approach is to proceed, unless low spending levels are the major cause of inefficiencies, with a focus on policies that generate tangible efficiency and equity gains to facilitate spending increases.

1. Improve efficiency and equity in the use of health resources.

This ensures that more rapid progress toward UHC can be facilitated with the available resources and can help to generate higher priority for health in government spending decisions. Areas for countries to focus on include:[19]

- **Prioritize investments in primary and community health services,** networks of frontline health workers with appropriate referral systems, and other public or private sector services or institutions that serve as "first-touch" points in the health system, for health promotion and disease prevention in addition to treatment. Primary and community health services provide the most cost-effective services to those most in need, at the most appropriate level of the service delivery system (Box 2.1).
- **Bolster public-health and health-security functions** while defining a set of guaranteed health services, taking into account efficiency and equity. This set of services gives adequate weight to health promotion and disease prevention, as well as core public-health and health-security functions, including disease surveillance, outbreak response, monitoring and evaluation, and governance.[20]

BOX 2.1

SHIFTING RESOURCES TOWARD PRIMARY AND COMMUNITY HEALTH SERVICES

Primary and community health services refer to the networks of health workers and public- or private-sector services or institutions that serve as "first-touch" points with the health system. Providing services through primary and community health services has been consistently shown to be effective, efficient, and equitable in countries at all income levels. Strong primary and community health services including prevention, continuity of care, and early detection and treatment are associated with more effective and less costly care, as well as lower rates of hospitalization, avoidable admissions, and emergency department visits (WHO 2018; Friedberg et al. 2010). This is one of the reasons why health costs tend to grow more slowly in countries with strong primary and community health services (Kringos et al. 2013).

Examples of substantial recent increases in funding for primary and community health services come from countries like Brazil, Ethiopia, South Africa, Thailand, Turkey, and Ukraine. Increased funding for primary and community health services in these countries has been accompanied by supply-side improvements to the quality and accessibility of services, through improvements of the infrastructure, worker training, management, changes to provider-payment mechanisms to encourage quality, and governance (Patel et al. 2015; Workie and Ramana 2013). At the same time, several countries have sought to increase demand for primary and community health services by reducing user fees for all or priority health services, such as for women and children (Masiye et al. 2016; Meessen et al. 2011). Other countries have provided conditional cash transfers to encourage use of selected primary and community health services (Lagarde et al. 2007).

19. While it is agreed that methods of paying for health services have an impact on efficiency, there is less agreement on what is the best method, or best mix of methods, to ensure efficiency. This is considered in the next section, which covers open questions and areas of controversy in health financing.

20. Some countries have found it useful to "ringfence" funding for some of the public health functions: for example, the Netherlands funds its vaccination program separately from other health services.

- **Strengthen public financial management (PFM),**[21] Strong PFM enables revenues to be directed more efficiently and equitably toward UHC goals through more transparent and accountable government; greater stability and reliability of health funding; and greater financial discipline (e.g., budgets are realistic and executed in a timely fashion). This is discussed more fully in section 2.1.3.

2. Increase resource mobilization from domestic sources, supplemented as appropriate by external funding.

Over time, sustainable funding for health will need to come largely from domestic sources. The focus on domestic sources, underscored by the principle of national ownership, was endorsed by all UN Member States with the 2015 Addis Ababa Financing for Development Framework, but in many developing countries will require major reform efforts to attain sustainable financing for UHC. Countries can increase domestic resource mobilization for health in several ways:

- **Develop a mix of resource-generation instruments that assures stability in funding flows and allows for subsequent pooling to cover a set of universally guaranteed health services.** This means raising resources largely from general government revenues, supplemented—where appropriate and feasible—by obligatory health insurance contributions and reducing the reliance on out-of-pocket payments.

- **Increase overall government revenue as a share of GDP,** where feasible, at least some of which can flow to health. A range of well-tested technical measures are available to do this, including more effective collection of existing taxes and charges; expansion of tax bases; and increases in the range and level of taxes and charges. Removing ineffective subsidies (e.g., on fossil fuel) that disproportionately benefit the non-poor also allows spending on health or poverty alleviation to increase (see Box 2.2).

- **Boost the share allocated to health, and to activities that improve health in other sectors, within overall government spending.** The improvements in efficiency discussed above and strengthened PFM, including budgeting and planning, help make a case for investing more in health to advance UHC.

- **Raise taxes on health-damaging products, including but not limited to tobacco.** These measures improve health, increase revenues, and are also generally more politically acceptable to the general population than other taxes—although there are also powerful interest groups that oppose them.

- **Reduce reliance on wage-based deductions or voluntary forms of insurance to bolster prepaid and pooled funding.** The former is due to slow formalization of the workforce and changing work patterns, while the latter is because the poor and low-risk people do not enroll. Today, wealthier countries are also working to diversify revenue sources in their social health insurance systems (Box 2.3).

3. Improve financial protection by reducing reliance on out-of-pocket payments for health through increased pre-payment and pooling.[22]

Ways in which countries can advance financial protection include:

- **Draw on funds from prepaid and pooled sources, with subsidies for people who cannot afford to contribute,** to ensure that financial protection for a set of guaranteed services is universally available.

21. PFM is typically defined as the set of rules and processes that govern how public resources are secured, allocated, spent, and accounted for. The traditional definition has evolved over time, and the coverage of PFM has expanded from the narrowly defined central government budget to all levels of government and the broader public sector, including state agencies, enterprises, and public-private partnerships (Cangiano, Curristine and Lazare 2013).

22. Pooling is important for sharing the financial risks of ill-health: from rich to poor and from healthy to sick

BOX 2.2

REALLOCATING FOSSIL FUEL SUBSIDIES TO FINANCE HEALTH

Fossil fuel subsidies (i) reduce the net cost of energy purchased; (ii) reduce the cost of production or delivery of energy; or (iii) increase revenues retained by energy suppliers (Kojima and Koplow 2015). They make fossil fuels more attractive than other energy sources and introduce economic, environmental, and social distortions. These subsidies represent an enormous public finance expenditure: They were estimated to total $4.7 trillion (6.3 percent of global GDP) in 2015 and were projected to reach $5.2 trillion (6.5 percent of GDP) in 2017 (Coady et al. 2019).

Fossil fuel subsidies often fail to achieve any positive social objectives—for example, subsidies aimed at helping the poor frequently fail to do so. A study of 20 developing countries found that the lowest income quintile received on average 7 percent of the overall subsidy benefit, whereas the richest quintile received almost 43 percent (Arze del Granado, Coady and Gillingham 2012). Eliminating these subsidies could lower global carbon emissions by 28 percent and deaths from fossil fuel air pollution by 46 percent, while increasing government revenues by 3.8 percent of GDP (Coady et al. 2019).

However, it can be politically challenging to reduce or eliminate fuel subsidies. Even though the bulk of the benefit accrues to richer households, energy makes up a larger share of household budgets in the poorest populations, so subsidies are relatively more important to them. Proven options for making their reduction politically acceptable are to phase them in over time, and to incorporate compensating mechanisms to mitigate the negative impacts.

The potential impact of subsidy reallocation toward public health and welfare can be substantial. Between 2013 and 2015, Indonesian government spending on energy subsidies decreased from $29.8 billion to $8.9 billion, and government health spending increased from $4.4 billion to $5.6 billion (Ministry of Energy and Mineral Resources and Ministry of Finance, Indonesia 2019). Indonesia reallocated a portion of these proceeds to help finance infrastructure development (Pradiptyo et al. 2016), while Iran chose to allocate more resources toward universal health coverage (Gupta, Dhillon and Yates 2015) and Sudan to provide free medicines for children under age five (Yates 2014).

G20 leaders committed to phasing out these subsidies in 2009, but much more can be done globally. Doing so could substantially increase the capacity of governments to spend more toward achieving UHC and other national priorities.

- **Provide a guaranteed set of health services to all people at an affordable price,** aiming toward zero or nominal out-of-pocket payments along with strong protection mechanisms for those who can least afford to pay (where co-payments are levied with insurance, they need to be low or have an effective means of protecting the poorest and most vulnerable populations). Even if the package starts small, people should know how it will expand over time.
- **Ensure that pools covering the guaranteed package are large and diverse enough** to be able to cover high health expenditures by some beneficiaries, unless risk equalization mechanisms are in place that ensure equity and financial viability.

/ 2.1.2 /
BROADEN THE VISION OF HEALTH FINANCING TO ACHIEVE RESILIENCE AND SUSTAINABILITY

As countries adapt and implement proven health-financing approaches to pressing problems in their health sectors, they can further strengthen results by consistently incorporating a big-picture perspective. First, policy makers can make health-financing policy choices from a whole-of-government perspective—one that captures how UHC financing can drive positive

outcomes in other sectors, as well as how investment in other sectors can strengthen UHC. Second, they can focus systematically on a medium-term timeframe in health financing, consistently anticipating future developments and their impact on health financing. Together, these two approaches will reinforce resilience and sustainability of financing.

Accelerate development gains through a whole-of-government approach

As highlighted in Section 1.1, the potential of a whole-of-government approach to improve health and financial protection and the positive impact on other sectors is well established. A whole-of-government approach aims to overcome

BOX 2.3

DIVERSIFICATION OF REVENUE SOURCES IN SOCIAL HEALTH INSURANCE SYSTEMS

Many upper-middle- and high-income countries that have historically relied predominantly on wage contributions to finance their health systems are diversifying funding sources in the face of aging populations and shrinking labor forces. In many OECD countries with social health insurance (SHI) systems, governmental transfers from other earmarked taxes and levies and general revenue have gained importance as funding sources (OECD 2015a). Three country examples illustrate this trend.

Increasing revenues through earmarked taxes on non-wage products and activities. Although initially France's SHI system was almost entirely funded from wage-based contributions, today these contributions account for less than half of the health system's revenues. The government has taken steps to diversify the sources of financing for the SHI to reduce reliance on payroll taxes and lower labor costs, but is keeping the notion of an earmark and applying it to other products and activities. Since 1998, most employee payroll contributions have come through the General Social Contribution (*Contribution Sociale Generalisée* or CSG), which in addition to wages is also levied on capital. The tax is now one of the main sources of statutory health insurance funding, accounting for 36 percent of SHI revenues. The shift to a broader definition of taxable income has decreased inequities in revenue generation, as wealthier individuals have higher capital income and greater social benefits at later life stages. Additional funding sources include earmarked taxes (*impôts et taxes affectés*) on enterprises, including taxes on pharmaceutical companies and company cars, and taxes on consumption or behavior (e.g., taxes on tobacco and alcohol) (Barroy et al. 2014), representing almost 13 percent of revenues for health.

Increasing revenues through general government transfers. Estonia's diversification of resources was primarily motivated by the Estonian Health Insurance Fund's (EHIF) growing deficits, mostly due to a rapidly aging population, which threatened the sustainability of the health system. In 2017, the government decided to expand the revenue base for EHIF—until then largely financed from an earmarked social payroll tax. The government established state contributions on behalf of nonworking pensioners financed from the general budget tax revenue. The additional revenue source was expected to represent initially around 11 percent of EHIF's budget, while contribution rates would be gradually increased to match those of employed people by 2022 (Habicht et al. 2018).

Increasing revenues through earmarked taxes and government transfers. Hungary significantly increased the role of general government transfers in health financing. In 2015, transfers from the government budget represented almost 70 percent of the Health Insurance Fund's expenditure, compared to only 11 percent in 1996 (Szigeti et al. 2019). In addition, in 2012, Hungary introduced an earmarked public-health tax on foods high in salt, sugar, and fat, including soft and energy drinks.

the problem of fragmentation of the public sector and services and thus enable governments to address complex challenges such as UHC, human capital development, and poverty reduction. It can also strengthen a preventive focus by tackling emerging and intensifying issues like those identified in section 1.3 before they become entrenched (Colgan, Kennedy and Nuala 2014).

From a UHC financing perspective, the promise of a whole-of-government approach is two-fold. First, it can help strengthen health-financing policies in a boundary-spanning process between ministries of health and finance, as well as other relevant ministries and agencies (e.g., the ministry of labor). Second, it has the potential to reap efficiencies through a whole-of-government approach to budgeting. Such a budgeting approach is commonly one of the central processes of a whole-of-government model and may involve a wide range of ministries and agencies, depending on the objectives being pursued. The approach fosters budget and expenditure decisions based on how each sector can contribute to one or a set of agreed national goals. This encourages ministries and agencies to focus budgeting processes on results and to reinforce coordination and collaboration with other ministries.

The rationale for adopting a whole-of-government approach is strong and sound, even though conclusive evidence that such approaches work remains limited, and multisectoral strategies have often proven difficult to implement (Colgan, Kennedy and Nuala 2014; Rasanathan et al. 2017). Countries continue to develop and experiment with the approach. One prominent recent example is New Zealand, which has moved to a Well-being Budget, with all ministries asked to make their cases based on how they can, singly and in collaboration, improve intergenerational well-being (Box 2.4). A similar approach, but focusing on a narrower goal, is the use of gender budgeting to address the problem of gender inequalities in many OECD countries.

Make health financing "future-fit"

To achieve and maintain high performance in health financing, countries need robust capacities to anticipate the future challenges they may face and create appropriate policies and management strategies before problems become critical. The capacity to analyze and adjust fiscal policies to possible financial risks is often limited in ministries of finance (IMF 2016a), and capacities and mechanisms to assess and respond to threats to health financing are commonly also not well developed. The development and testing of approaches and strategies to make health financing future-fit would benefit greatly from collective action across countries. In the following, we focus on two areas where countries do have strong, evidence-based policy options to improve the future-fitness of health financing.[23]

Leverage health-finance tools to mitigate NCD burdens: bolstering sustainability while saving lives. Section 1.3 described the impact that the growing burden of NCDs is likely to have on future health costs in many countries. One way of mitigating this is to ensure adequate funding for health promotion and disease prevention as part of healthy aging policies, as discussed earlier. Another important contribution of health financing is to reduce population risks of developing NCDs through health taxes on products that cause them. These taxes reduce consumption of health-damaging products, improve population health and individual productivity, and cut future treatment costs—making health financing more sustainable in the medium term. They can also substantially boost government revenues (Junquera-Varela et al. 2017; Marquez and Moreno-Dodson 2017; Task Force on Fiscal Policy for Health 2019). Importantly, because of their health benefits, these taxes are generally more acceptable to the population than other forms of taxation, though often opposed by powerful interest groups. Examples that have been applied in different countries include taxes on tobacco, alcohol, sugar-sweetened beverages, salt in processed food, and carbon.

Increase investments in outbreak preparedness and response. Health financing must be able to flexibly absorb and rapidly respond to shocks, a quality captured in the concept of "resilience." Infectious disease outbreaks are

23. Not all future challenges will apply to each country with the same force. Countries need to be able to assess which of the possible challenges will affect them, when, and with what intensity. Forecasting and risk-assessment capacity is therefore crucial to creating sustainable health financing. Today, the capacity to assess new challenges and identify appropriate responses varies widely across countries.

BOX 2.4

WHOLE-OF-GOVERNMENT APPROACHES TO BUDGETING

New Zealand has broken ground in adopting a comprehensive whole-of-government budgeting approach to improve efficiency and results across sectors. New Zealand set intergenerational well-being as a national priority and adopted its first Well-being Budget in 2019. Meanwhile, a number of countries have implemented whole-of-government approaches to ensure progress on a more narrowly defined priority. An example is gender budgeting, currently applied in about half of OECD countries with the goal of reducing gender disparities (Downes, Von Trapp and Nicol 2017).

In both examples, a first step is to integrate strategic priorities into the budget cycle, with a collaborative budget process that shifts the perspective of sector ministries on how they can contribute to the priority both individually and in collaboration with others. Evidence-based budgeting rules backed by legislation are generally required. Each ministry prepares a budget outlining the impact it plans to have on the national priority using agreed impact indicators, and budgets are then allocated to improve impact.

The rules for evidence-based budget decisions need to be clearly defined. For example, in New Zealand, a Living Standards Framework (LSF) was developed by the Treasury to measure impacts across a broad range of factors that affect well-being. Ministries and agencies have been required to provide well-being analysis based on this framework in support of each new budget initiative, an approach that shifted the historical focus on inputs that need to be funded to the results that would be produced. This also implies the need for impact monitoring and evaluation using a standard reporting framework. In New Zealand, the LSF provided the basis for this ex post evaluation of results.

a prime example of such shocks, which can strike any country at any time.

Following the 2013–16 Ebola outbreak in West Africa, WHO launched the Joint External Evaluation (JEE) tool, a transparent, external evaluation of a country's ability to find, stop, and prevent disease threats. The uptake of the JEE has been encouraging, and 49 low-income countries have used the JEE to assess their national capacities.[24,25]

From these JEE assessments, more than 5,000 critical gaps in capacity have been identified. However, few of these have been addressed as yet, partly because the funding has not been available.

The investments required to fill preparedness gaps against infectious threats vary significantly across countries, but recent JEE costings suggest that most would need to spend between $0.50 and $2 per person per year to get to an acceptable level of preparedness. This is less than 2 percent of current levels of health spending in these countries.[26] This requires, however, changing the mindset where pandemic preparedness is frequently seen as separate from mainstream health system development, so it is often not part of routine budgeting and planning exercises.

24. The Joint External Evaluation (JEE) assesses capacities across 19 areas of epidemic preparedness and response that are scored, first by a group of domestic experts and then by an external group of international experts. The assessment is voluntary, conducted every five years, and the results are reported by the World Health Organization.

25. The International Health Regulations (IHR) assist countries to detect, assess, and respond to all events that may constitute public health emergencies that might cross borders, including reporting outbreaks to the World Health Organization. Other notable efforts include the updating of WHO's Global Influenza Preparedness Plan; "One Health" approaches to tackle AMR across the human health, animal health, food production, and agriculture sectors; and the Global Health Security Agenda being undertaken in several countries.

26. A detailed analysis of 43 lower and middle-income countries without the foundations for emergency preparedness capacity—low-income and fragile states—showed resource needs in the range of $15-$30 per capita per year (Soucat et al. 2017).

Outbreak response requires different approaches to financing, because the required funding is so much greater. Sometimes, normal budget rules and allocations are sufficient: some countries (and subnational government units such as states) have created contingency funds through their constitutional or legal structures. Examples are India, Spain, and the United Kingdom. A second option is to create a special fund for emergencies—such as the National Disaster Funds of Mexico and India—which could be triggered by health emergencies as well as other types of disasters. A third option is borrowing, which is under the mandate of the ministry of finance.

Countries are jointly exploring forms of insurance for pandemics, similar to the Caribbean Catastrophic Risk Insurance Facility, where countries contribute a small amount every year in return for access to larger amounts of funding to respond to any future pandemics. The poorest countries, however, are unlikely to be able to raise the funding they need for either preparedness or response purely from domestic funding. Options for the global community to contribute are considered in the next section.

/ 2.1.3 / STRENGTHENING LEADERSHIP, GOVERNANCE, AND ORGANIZATIONAL CAPACITY

There is widespread consensus that failures in leadership, governance, and/or organizational capacity constrain progress in health financing in many countries (World Bank 2017). How to turn the tide remains a key area for future learning. For example, evidence exists across countries of a consistent relationship between aggregate governance measures and outcomes such as economic growth or population health status. Yet evidence is mixed regarding which components of governance in health and health financing should be improved to most effectively boost UHC outcomes (Fryatt et al. 2017; Hone et al. 2017; Piatti-Fünfkirchen and Smets 2019). Here, we focus first on the key issue of leadership. Then we examine one proven way of improving governance, through strengthened public financial management (PFM). Again, options for global collaboration are discussed in the next section.

Joint leadership of finance and health ministries

A strong partnership between ministries of finance and health is essential to attain high-performance health financing. Joint leadership between ministries of finance and health involves shared responsibility in areas such as the development of good practices in PFM for health; setting taxes on health-damaging products to improve population health while boosting revenues; identifying expenditure priorities in sectors other than health that contribute to health and financial protection; and identifying which activities in health should be funded to contribute to broader national priorities as part of a whole-of-government approach. Ministries of finance and health also need to develop a shared understanding and agreement on priorities for action within health, including efficiency improvements, medium-term spending needs and expected results, and future threats to costs and revenues. As they collaborate, ministries of finance and health will each still have to take a distinct lead in certain domains of expertise: for example, ministries of finance typically on questions of overall resource mobilization, and ministries of health on questions of purchasing care or how future health needs will influence spending.

Joint leadership between ministries of finance and health can powerfully accelerate countries' adaptation and application of known health-financing solutions ("scaling what works"), particularly in the areas where, despite broad consensus about health-financing principles and policies, progress remains slow. Often such slowdowns are due to political obstacles that joint leadership can best resolve.

Japan offers an instructive example of collaborative leadership in health financing. The country's Health Insurance Law of 1953 defined the amount of government subsidization to complement citizens' contributions. Since then, the Ministry of Finance and the Ministry of Health, Labor and Welfare have collaborated

closely to ensure the system's viability. The Ministry of Finance examines the national fiscal space, periodically revising fees and billing conditions. The Ministry of Health, Labor and Welfare maintains the country's uniform payment system, which has been instrumental in containing health expenditures. Both ministries continuously share information about the need for health services and fiscal allocations.

Success in strengthening governance: the example of PFM

Better PFM can improve public spending efficiency and reduce leakages; ensure greater reliability of health funding; and encourage greater financial discipline. Strong PFM directs public budget revenues efficiently and equitably toward UHC goals through more transparent and accountable government. Strong PFM also supports greater stability and reliability of health funding, as well as greater financial discipline, where budgets are realistic and executed in a timely fashion (WHO 2017). There is evidence that countries with greater budget transparency and less corruption allocate higher shares of the budget to health (Sarr 2015; Simson 2014; Robinson 2006; Mauro 1998).

The results of attempts to improve PFM are, of course, not always as great as expected, and reforms sometimes work in one setting but not in another. Sometimes they have a short-term impact, which is not sustained (Allen et al. 2017). These mixed results have been shown, for example, for the introduction of Medium Term Expenditure Frameworks (MTEFs) to align planning and budgets with available funds (e.g., many Sub-Saharan African countries, including Kenya and Uganda); expenditure rules limiting the growth of nominal or real expenditure over time (e.g., 11 developing countries in 2013); performance-based budgeting where budgets are linked to desired results (e.g., in 11 Asian countries); fiscal decentralization (e.g., China, Indonesia, and Iran); and improvements in budget transparency—assessing the impact on social sector allocations (e.g., Brazil, India, Mexico, South Africa, and Uganda) (Cashin et al. 2017; Goryakin et al. 2017; Brumby and Hemming 2013; Srithongrung 2018; Cordes et al. 2015).

Part of the explanation is that the quality of PFM interventions and the commitment with which they were implemented have varied. Sometimes, PFM components have been introduced without a clear assessment of what the problems are that they seek to address, emphasizing that the details of a PFM system need to be adapted to a country's specific problems and capacities (Andrews, Pritchett and Woolcock 2015). For example, more advanced reforms such as shifting from line item budgets to program/output budgets, or fiscal decentralization, need to be accompanied by strengthening the PFM foundations, including the predictability of budget releases; elimination of cash rationing and introduction of "principles of accrual" into the accounting system, which often is on a cash basis; and alignment of decision-making and implementation structures to units with the level at which cash is made available under the budget.

Where designed and implemented appropriately, however, strengthening PFM certainly has a positive impact on the capacity of health financing to achieve the desired goals (Goryakin et al. 2017).

A ROADMAP FOR ACTION

/ 2.2 /

Priorities for country and partner collaboration

Section 2.1 mapped priority actions for countries seeking to develop high-performance health financing. This section sketches an agenda for reinforced international collaboration to help countries make more rapid progress on issues they cannot solve alone. It considers two main areas of action: (1) health-financing research and development that will provide countries with additional evidence on open questions and areas of controversy, strategies to improve financing resilience and sustainability, and innovations that might allow step changes in progress towards financing UHC; and (2) a sizeable increase as well as strategic shift in DAH toward strengthening health-financing leadership, governance, and organizational capacity; improved domestic resource use and mobilization; and increased global health security.

/ 2.2.1 / DEVELOP THE HEALTH-FINANCING KNOWLEDGE BASE, STRATEGIES FOR RESILIENCE AND SUSTAINABILITY, AND POLICY STEP-CHANGES

Today, collaboration is expanding across countries and agencies on health financing. Alliances, networks, and partnerships are making important contributions to facilitate policy dialogue, technical collaboration, and global learning. Numerous international organizations and partners have contributed to the development of the WHO-led Global Action Plan (GAP) to accelerate progress toward the health-related SDGs. The GAP works to align and potentiate efforts, including through its sustainable financing accelerator. Other platforms include P4H, UHC 2030, the Joint Learning Network for UHC (JLN), various networks of budget officials (e.g., the Collaborative Africa Budget Reform Initiative [CABRI], and the OECD Joint Network of Senior Health and Budget Officials), the African Union's Africa Scorecard and Tracker on Domestic Financing for Health, as well as planned regional health-financing hubs.[27]

This section discusses three interrelated opportunities for countries and partners to build on and intensify these existing collaborations: expanding the health-financing evidence base; creating new reform approaches that can strengthen health-financing resilience and sustainability; and driving step-changes in health-financing policy. The first opportunity builds on "scaling what works," the second on nurturing resilience and sustainability through whole-of-government and "future-fitness" approaches, and the third on the need to tackle some of the most stubborn health-financing challenges. Importantly, these lines of action also offer a chance to include key institutional partners that are not part of the GAP but that can contribute decisively to health-financing solutions: for example, the IMF and OECD.

27. The collaborative mechanisms mentioned in this report are illustrative and include those that G20 leaders and other experts have recommended to the report authors. This in no way constitutes an exhaustive inventory.

Expand the evidence base on what works (and what doesn't)

Critical gaps in the evidence base for health financing hamper action and constrain results. There are many widely recognized principles of health financing, yet there is often little definitive evidence on how to implement the principles and, at times, disagreement among experts (Annex B). A case in point is the area of provider payment, contracting, and monitoring. For example, the principle to pay for value rather than volume or inputs is widely endorsed (WHO 2019[28]; Patcharanarumol et al. 2018); furthermore, the impact of individual provider payment methods on efficiency and quality is well established, including their strengths and weaknesses (Cashin et al. 2015; Phuong et al. 2015). Many countries are now moving toward blended payment methods, but it is not yet clear what mixes produce the best value for money for which types of providers and contexts. Table 2.1 identifies several key areas of inconclusive evidence within the DRUM framework. The specific question of the role of the private sector in health financing is then explored in more detail.

Among the areas of debate is the role of the private sector as a source of funding. The private sector is an important provider of health services in most countries, yet experts debate its role as a source of funding for universal access to a guaranteed package of health services at an affordable price. Data suggest that the private sector's contribution on this front has not yet been substantial. However, the Addis Ababa Financing for Development Action Agenda recognized the potential of private investment for sustainable development and the catalytic potential of international public financing, including official development assistance (ODA), to mobilize private finance in developing countries (UNDESA 2015). Today, governments, bilateral and development finance institutions, and philanthropists are increasingly exploring the use of concessional funds and other financing instruments (e.g., guarantees, insurance and risk management tools) in blended finance models to reduce risks and create attractive opportunities for private commercial investment in developing countries (Box 2.5)

28. https://www.who.int/health_financing/topics/purchasing/passive-to-strategic-purchasing/en/

BOX 2.5

SPEARHEADING BLENDED FINANCE IN THE SOCIAL SECTORS: THE GLOBAL HEALTH INVESTMENT FUND

The Global Health Investment Fund (GHIF) is an $108 million social impact investment fund that provides financing to support the development of late-stage drugs, vaccines, diagnostics, and other technologies for diseases that affect LMICs, such as malaria, cholera, pre-eclampsia, and river blindness. GHIF targets investments that have a high probability of being launched within two to three years, as well as products that can be impactful in both LMICs and high-income countries. The Fund draws on a variety of instruments and combinations thereof, such as mezzanine and convertible debt. The average investment size is approximately $10 million. Investors include the Bill and Melinda Gates Foundation, The Government of Sweden, the Children's Investment Fund Foundation, the IFC, and JP Morgan Chase.

Along with providing additionality, blended financing aims to secure development impacts that would otherwise not have materialized through commercial investment (Pereira 2015; Carter et al. 2018). Development Impact Bonds (DIBs) are the latest addition to blended financing instruments, transferring the financial and programmatic risk from the development partners to the investor. Several DIBs are now under design and implementation (Box 2.6). DIBs can demonstrate development impact that may trigger follow-on funding from government. Similarly, they may offer an opportunity to transition performance-based partner funding to governments.

Despite the flurry of activity, blended finance models still face several challenges as a reliable pathway toward UHC. To date, for instance, blended finance

EXAMPLES OF OPEN QUESTIONS IN HEALTH-FINANCING POLICY (SEE ANNEX B)

TABLE 2.1

AREA OF DRUM+	POLICIES
EFFICIENCY AND EQUITY (RESOURCE USE)	• Financing arrangements and minimum funding needs for promotion and prevention, preparedness, and public health functions. • Composition of universally available benefits packages, including the role of health technology assessment. • Active purchasing and what capacities are needed. • Provider payment methods for efficiency and quality. • Provider contracting and monitoring, including quality of care.
DOMESTIC REVENUE MOBILIZATION	• Appropriate mix of funding sources dependent on the level of system development. • Whole-of-government approaches to financing. • Earmarking of taxes and levies. • Private sector as a source of funding for a guaranteed package of services.
POOLING	• Number of pools, possible diseconomies of scale. • Co-payment systems, including mechanisms to exempt the poor and vulnerable.

remains concentrated in MICs and in the infrastructure, banking, finance, and productive sectors due to the poor investment climate in and the limited large-scale investment opportunities in the social sectors. Similarly, leverage ratios are higher in MICs, typically around or below a dollar of private financing, and more than half of the costs are borne by the public sector. Additional challenges include establishing strong regulatory and policy frameworks, maintaining the transparency and accountability of transactions, and ensuring that investments have a positive impact on equity. Meanwhile, early experiences with DIBs point to the challenges of agreeing on common impact metrics.

Countries can most efficiently fill these types of knowledge gaps in health-financing policy by working together. Gains can be further accelerated when the international community provides funding and expertise to evaluate the many health-financing experiments under way in countries at any given moment. Stronger action is needed now in three areas: (1) support to countries to routinely evaluate their own policies, aimed at open questions; (2) incentives and platforms for countries to share results widely; and (3) facilitation and frameworks to analyze the multiple attempts that have been made to tackle common problems, extracting lessons from which countries can jointly benefit.[29] As highlighted earlier, some global and regional learning platforms are already active in this space, including the JLN for UHC, budget officials networks, and others. Additional coordinating structures are being developed, for example, the African Union regional knowledge platforms. The institutional arrangements that can best meet these needs may involve reinforcing existing platforms, linking existing institutions to form stronger, more extensive networks, or some new arrangements. The needs are clear; the most appropriate solutions need to be defined.

29. To minimize repetition of mistakes, sharing should include information on approaches that failed to achieve expected results. To date, relatively few countries have regularly applied this approach. However, the G20 has modeled good practice in this area, with members candidly sharing both shortfalls and successes in financing policy design and implementation.

BOX 2.6

DEVELOPMENT IMPACT BONDS AND REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH (RMNCAH)

Globally, nine DIBs are under design or implementation with five launched more recently to boost RMNCAH results. One of them is the Utkrisht Development Impact Bond, which aims to improve the quality of care in private health facilities in Rajasthan, India, to reduce maternal and child mortality. Private capital from the UBS Optimus Foundation (the investor) covers the up-front costs of improving the quality of care in health facilities of two private health care providers, the Hindustan Latex Family Planning Promotion Trust and Population Services International. USAID and Merck for Mothers will repay the UBS Optimus Foundation their investment, if the outcomes are met, as determined by Mathematica, the independent verifier. Palladium is the overall manager for service delivery and program administration.

The program has the potential to reach up to 600,000 pregnant women and newborns with improved care during delivery. The target metric is that a facility is ready for accreditation under a joint quality standard (JQS) administered by two partners: (1) the Manyata initiative, a new national certification and quality improvement system designed to recognize private facilities that consistently deliver quality care to women; and (2) the National Accreditation Board for Hospitals (NABH) Small Health Care Organisation entry-level certification.

Improve health-financing resilience and sustainability

To build resilient, sustainable health financing, reforms need to systematically consider future threats and opportunities. For this to happen, countries must reliably forecast the impact of demographic, epidemiological, technological, social, and economic changes on performance. In turn, countries need to assess how current financing arrangements and planned reforms may exacerbate or mitigate these effects, and determine how current health financing can evolve and adapt to shocks. Currently, however, few countries at any income level routinely and comprehensively assess the resilience and sustainability of their health-financing systems. As noted earlier, country capacity to assess future risks to overall resource mobilization is also limited (IMF 2016a). Foundational work to enable countries to adopt a "big-picture" view would include the development of a common methodology across countries to support: (a) the compilation and sharing of data from health-financing resilience and sustainability assessments; and (b) policy evaluation and sharing of lessons on mitigation, response, and adaptation, as a collaboration between the ministry of finance and ministry of health.

The possible benefits from broadening the perspective of health-financing strategies are far reaching. A cross-sector and future-oriented approach promises to spark improvements in the design of health financing and other data systems. It will strengthen transition planning from DAH toward sustainable domestic health financing. At the same time, forward-looking evaluations will allow countries to better assess the macro-criticality of the sector and generate critical inputs for medium-term national fiscal frameworks. Beyond the needs of individual countries, learning on resilience and sustainability could also constitute the basis for a global alert system for problems which have potential cross-border impacts.

Generate step-changes in health-financing policy

Over the past decades, health financing has experienced major paradigm shifts but no major breakthroughs in tackling some of the most stubborn challenges. Today, the importance of health financing is widely recognized. Policy makers and thought leaders have also shown growing concern and responded to the challenge of financial protection. At the same time, recent high-profile breakthroughs in health have mostly concerned drugs and medical technologies, not health systems and health financing. Innovation in health financing is critical if countries are to drive more rapid progress toward UHC at scale.

The increasing digitization of financial flows creates opportunities to accelerate progress. This digital transformation generates vast quantities of data about provider and patient behaviors. When systems are interoperable and connected, data can be harnessed to detect fraud and corruption, enhance transparency and accountability, and improve the design of pooling and especially purchasing policies. To maximize gains, however, research and development streams need to connect across fields of knowledge. These include technology domains, but also the organizational, governance, and social dimensions that affect health financing. Such boundary-crossing approaches hold the greatest promise to generate new solutions to the most stubborn health-financing challenges.

Programs are emerging that take advantage of advancements in technology and science to tackle one of the most critical health-financing questions—whether it is possible to mobilize voluntary direct contributions to prepaid and pooled funding from people working in the informal economy. To date, contributions to voluntary private health insurance represent a small fraction of current health expenditure in developing countries. However, in some settings, programs have begun to explore new entry points (World Bank, forthcoming). These programs take advantage of the high penetration of mobile phone technology even in the poorest countries to overcome impediments to financial inclusion. The design of the mobile-based insurance products combines financial technology innovations with insights in behavioral economics to circumvent traditional demand barriers. For example, some programs are experimenting with automated deductions from unrelated financial flows (e.g., mobile phone payments, remittances) and bundling of insurance with other products and services that offer immediate benefits to consumers. Programs also aim to drastically lower operational costs, both in insurance administration and health service delivery (e.g., via mHealth and telemedicine), to offer affordable premiums. Many questions and challenges remain, most importantly, the role and integration of such programs into health systems. The flows of funds that these innovations could tap point to potentially outstanding returns on investment, for example, the roughly half trillion dollars of out-of-pocket payments or the approximately half trillion dollars of remittance flows to developing countries.

Many innovation funds already exist in biomedicine and related fields, but there is little support for research and development in health financing. Prominent innovation funds include the Global Grand Challenges—a family of initiatives fostering innovations to solve key global health and development problems—financed by a consortium of partners including several G20 countries (Brazil, Canada, India, Norway, South Africa, the United Kingdom, and the United States) and the Bill and Melinda Gates Foundation. Such funds could expand their portfolios to tackle health-financing challenges, funding for which is currently nascent. Today, health financing–related initiatives represent less than 1 percent of the grand challenges and exploratory grants, and focus primarily on demand-side incentives for utilization of health services (e.g., conditional cash transfers and vouchers). Health-financing research portfolios would help mobilize a diverse community of investigators and policy innovators to explore fresh solutions to both long-standing and emergent health-financing challenges for countries at all income levels.

/ 2.2.2 /
INCREASE THE QUANTUM AND YIELD OF DEVELOPMENT ASSISTANCE FOR HEALTH (DAH)

Another key area for international action to advance UHC will be to return to a growth path for DAH. With even the most optimistic scenarios for domestic resource mobilization (DRM) pointing to a significant UHC financing gap, robust progress toward UHC targets in LICs and LMICs by 2030 will hinge on having a strong combination of DRM and substantial increases in DAH. As domestic and external resource envelopes grow, it is imperative that external funds be increasingly targeted to cover gaps across countries and support countries on their journeys to self-reliance.

Shifts in DAH should seek to yield greater dividends in domestic health financing. While recognizing the imperative of country leadership, the Global Action Plan financing accelerator highlights several critical features of a next generation of DAH (WHO 2018). Most importantly, these include enhanced support for fiscal, public financial management, and efficiency reforms, as well as advocacy platforms. To secure the sustainability of reform efforts that scale what works, external support must focus more than in the past on the development of health-financing governance and organizational capacity. World Bank data suggest that the necessary investments will require a resource envelope equivalent to some 3 to 5 percent of current DAH in LICs and LMICs annually. Sustained over the medium term, these investments will also ensure that countries have the capacity to absorb and efficiently use higher levels of DAH. In parallel, recipient countries and donors must work together to improve aid effectiveness and facilitate better domestic resource use and mobilization.

DAH investments should also shift to capture research and development opportunities in resource use and mobilization for health. Concerted efforts to resolve key open questions and blind spots in health financing can rapidly yield benefits. The international community could support the evaluation of country strategies in these areas and the sharing of results for joint learning across countries. At the same time, existing financing mechanisms for innovations in health care and public policy suggest that a small share of the funds needed for governance and capacity development could generate a promising innovation portfolio of exploratory and translational projects. The potential returns on investment are noteworthy, as emerging solutions have the potential to impact not only health but public finance more broadly.

New international investments are also critical to advance global health security. Given the global economic, health, and security threats posed by pandemics, global investments to support country preparedness and internationally coordinated interventions to stop outbreaks at their source are warranted. Investments in primary health care can already bring substantial gains in health promotion and disease prevention, strengthening health security. Additional opportunities for the international community to leverage health financing in support of health security include:

- Support countries in harnessing health-financing solutions to durably build their preparedness and rapid-response capabilities, particularly in terms of improved surveillance, health information systems, and trained personnel;
- Promote investments that offer scale and scope efficiency for countries versus financing them alone, such as regional laboratories meeting the highest levels of bio-safety;
- Strengthen regional and global collaboration to enhance preparedness and response, by ensuring sufficient support for mechanisms such as the WHO Global Emergencies Programme; the African Centers for Disease Control; and the IDA Crisis Response Window (Box 2.7); and
- Support global and regional efforts in research and development on pandemic diseases, such as the Coalition for Epidemic Preparedness Innovations (CEPI).

Adopting a broadened vision of health financing, as proposed earlier for country action, countries and partners can craft DAH to promote a spectrum of goals that include and extend beyond health security. For example, health-programming support might encourage whole-of-government approaches across food and agriculture; water and sanitation; housing; urban

BOX 2.7

GLOBAL FINANCING SOLUTIONS FOR HEALTH SECURITY: CFE, PEF AND IDA

New global financing solutions are showing promise in mobilizing faster international response to outbreaks, but further investments are needed. **WHO's Contingency Fund for Emergencies (CFE)** now plays an important role in mobilizing technical expertise to help countries detect outbreaks early and inform the global community, while **IDA's Crisis Response Window (CRW)** provides funding to countries confronting economic crises, natural disasters of exceptional severity, or public-health emergencies. The CFE and CRW deliver critical support to countries for emergency outbreak response, but both require regular replenishment from donors. As outbreaks escalate in severity and spread, there are strong arguments for leveraging insurance to accelerate pandemic financing, including through the **Pandemic Emergency Financing Facility (PEF)**. The PEF has been established to make funds available rapidly to countries and global responders. A parametric insurance fund for IDA countries, PEF provides emergency financing across a set of the most likely pandemic disease threats, with premiums being funded by donor nations. The PEF has proven to be an invaluable tool in the response to the previous and current Ebola outbreaks in the Democratic Republic of Congo (DRC), but it is still a pilot mechanism with a small number of funders and lacking incentives for recipient countries to invest in preparedness with the benefit of reducing premiums. Efforts are under way to design a "PEF 2.0" that will address these gaps, and this is an opportunity to bring in additional funders. There is also an opportunity to extend the delivery of parametric insurance to the private sector. Broader uptake of business interruption insurance covering infectious disease risks would simultaneously increase economic resilience and create greater awareness of infectious disease risks among private sector leaders.

A critical financing gap exists for National Health Security Action Plans in the poorest countries. As of May 2019, more than 50 IDA-eligible countries have produced these action plans on the basis of their JEEs and at the urging of international partners, yet they are unable to finance these plans with domestic resources alone. New financing mechanisms are needed to incentivize and support investments in preparedness. Proposals under discussion in the IDA19 Replenishment, such as expanding the scope and envelope of IDA's CRW to go beyond emergency response and including funding for preparedness, could be a significant step forward in prioritizing preparedness that could save lives and help mitigate the need for much more costly emergency interventions.

planning (design of physical spaces); and other areas that connect infectious disease preparedness with broader conditions of population well-being.

The next generation of DAH must also harmonize, consolidate, and align funding across instruments and partners to provide a critical mass of funding for the most important activities. The next generation of DAH to improve DRUM+ starts with applying agreed principles of aid effectiveness. These include aligning DAH with national priorities and reducing fragmentation and inefficient parallel structures. Greater harmonization and alignment of DAH with national priorities will also lower capacity requirements and administrative costs. Key opportunities lie ahead to translate these principles into practice. Replenishments for the major global health-financing platforms are under way and/or slated for 2019 and 2020—including for GFF, IDA, GFATM, and Gavi. These provide near-term opportunities for development partners, including G20 members, to align and leverage DAH in ways that will advance country actions toward more sustainable, inclusive health financing for UHC.

A ROADMAP FOR ACTION

/2.3/

UHC financing resilience and sustainability: An agenda for the G20

In addition to the proposed areas for action by individual countries and their international partners, G20 Finance Ministers and Central Bank Governors can foster international collaboration to promote high-performance health financing for UHC in all countries by adopting and steering a UHC financing resilience and sustainability agenda. This agenda is fully consistent with the G20 mission of protecting economies from shocks and promoting global economic stability and growth, and every country in the world stands to benefit, regardless of income level. By enabling all countries to build greater resilience and sustainability in health financing, G20 member countries will grow the circle of effective partners to promote global health security, other global public goods, and inclusive economic growth. This will help reduce the impacts of disease outbreaks, forced displacement, and other negative cross-border spillover effects. Meanwhile, strong, sustainable health financing will help drive both quality and efficiency gains in one of the largest global industries, freeing productive resources that can further contribute to global stability and growth.

Leadership by G20 Finance Ministers and Central Bank Governors is critical, as core aspects of this agenda extend beyond the purview of health into public finance. G20 Finance Ministers and Central Bank Governors can lead by example in demonstrating how finance and health authorities can successfully collaborate to build and sustain strong health-financing systems that deliver better health services and financial protection, facilitating the sharing of experiences across countries at different stages of facing the emerging and intensifying threats to health financing.

To advance the UHC financing resilience and sustainability agenda, G20 Finance Ministers and Central Bank Governors can:

1. Convene biennial UHC financing resilience and sustainability dialogues between Ministers of Finance and Health at future G20 meetings. These meetings would identify priorities for country and global action to detect and manage health-financing threats; define research and development priorities; and foster political commitment for sustainable UHC financing. They would offer a venue for dialogue between ministries of finance and health on the forces driving health expenditures, options to improve efficiency, and revenue-raising strategies, including a new generation of DAH. They would facilitate the exchange of experiences across countries at all levels of income, many of which have faced the same problems. While the focus of the dialogues may shift from meeting to meeting, a first session in 2020 could look at the prospects of attaining sustainable UHC financing by 2030 and priorities for action. Preparatory work for the dialogues would be coordinated by the WBG working closely with WHO . The preparatory work would expand on progress reports such as the WHO-World Bank Global Monitoring Report on UHC, WHO annual reports on public spending on health, the African Union Health Financing Scorecard and Tracker, the work of budget officials' networks, and the Joint External Evaluations of health security.

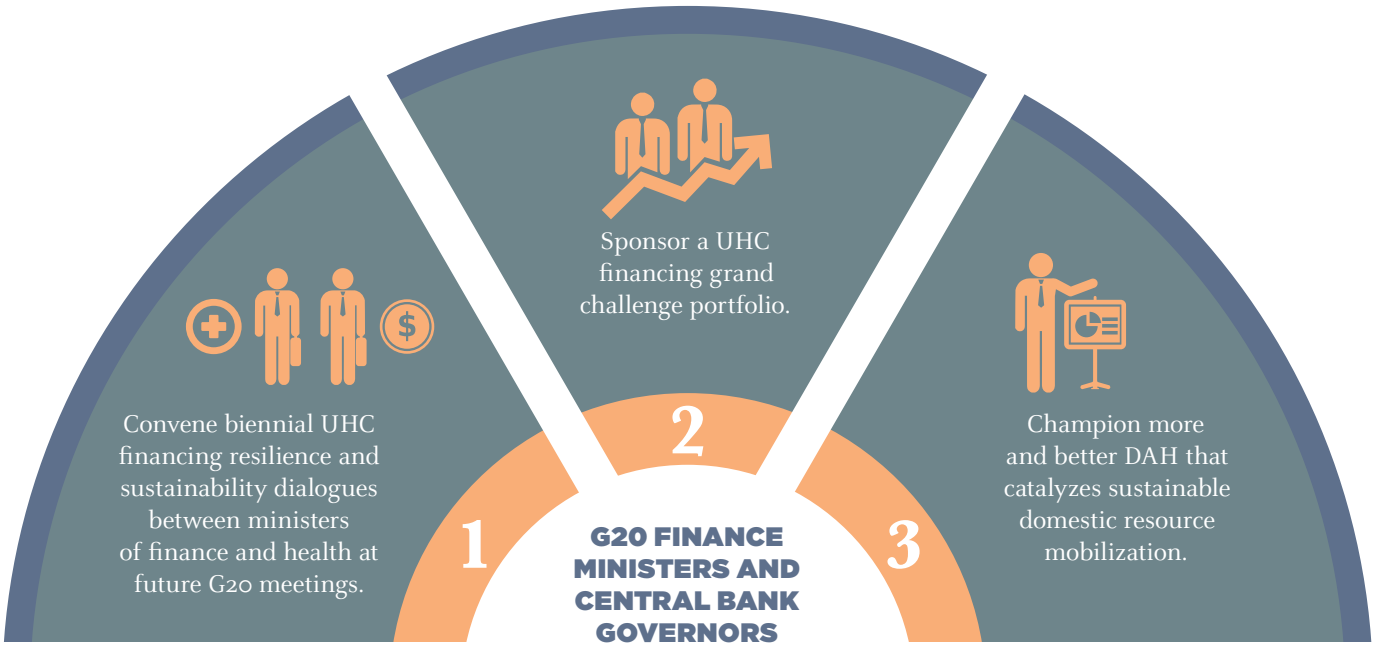
The biennial dialogues would be grounded in a UHC financial resilience and sustainability assessment. The development of the analytic approach would be coordinated by the World Bank Group working with WHO. Implementation would be facilitated by existing partnerships and networks and connect financing experts from around the world to learn and hone their skills in assessing and responding to health-financing threats and opportunities. The development of the approach and dialogues could be overseen by a UHC financing resilience and sustainability advisory panel comprised of former ministers of finance and health and global experts in health financing, health, public finance, and fiscal policy.

2. Sponsor a UHC financing grand challenge portfolio. The portfolio would target investments toward solving the health-financing challenges identified in the G20 UHC financing resilience and sustainability reviews, with a focus on those with the greatest potential for global health, financial protection, and economic impact. The portfolio could take the form of an innovation fund dedicated to developing more effective health-financing solutions, or G20 countries who are already investing in existing Grand Challenge funds could choose to direct more of those projects toward health-financing priorities.

3. Champion more and better DAH that catalyzes sustainable domestic resource mobilization to accelerate progress toward UHC by 2030. Substantial increases in DAH will be required to help low- and lower middle-income countries begin to close the financing gap and reach their UHC targets. The next generation of DAH also can and should do much more to catalyze efficient and equitable mobilization, pooling, and use of domestic resources, and to strengthen country governance and capacities in sustainable health financing, as well as in pandemic prevention and response. The replenishments in 2019 and 2020 of the major global health funding mechanisms, including the Global Fund, Gavi, and the WBG's International Development Association provide near-term opportunities to champion these shifts toward a longer term approach of more and better DAH to assist countries in accelerating progress toward UHC.

UHC FINANCING RESILIENCE AND SUSTAINABILITY:
AN AGENDA FOR THE G20

FIGURE 3



Conclusions

Advancing UHC through robust health financing will generate more rapid and sustained growth and poverty reduction in developing countries. Yet, progress to date is slower than it might be, because few developing countries have yet to fully seize the opportunity to build high-performance health financing for UHC.

The good news is that a global consensus, based on country experience, is emerging on how developing countries can most effectively construct high-performance health financing for UHC and how countries and international partners can best collaborate in tackling health-financing challenges. This convergence in strategic thinking opens an unprecedented opportunity to realize the economic gains associated with the progressive realization of UHC.

G20 Finance Ministers and Central Bank Governors can act catalytically to realize the promise of high-performance health financing for UHC in developing countries. The G20 Finance Track can spearhead the collaboration that will be necessary to accelerate progress toward high-performance health financing, providing knowledge and tools that help make health financing more resilient and sustainable. Individually and collectively, G20 Finance Ministers and Central Bank Governors can also help shape a new generation of DAH to accelerate UHC progress and bolster global health security. Through these mechanisms, G20 leaders will help advance global prosperity based on fair opportunities for all, the surest foundation for stability and peace.

ANNEX A

GAP ANALYSIS METHOD

Section 1.2.4 of this report presents 2030 estimates of the UHC financing gap in LICs and LMICs for different policy scenarios. This annex explains the underlying methods, data sources, and assumptions. Policy scenarios are generally optimistic, yet realistic, consequently, the presented estimates for the financing gap in 2030 are at the lower bound.

The analysis included 54 countries whose GDP per capita in 2030 is expected to remain below $3895—the World Bank's current GNI threshold for UMICs, and for which health expenditure, GDP, and population data have been available for the years 2005 to 2016.[30,31] The analysis used the 2018 World Bank income classification to distinguish between LICs and LMICs. Unless indicated otherwise, all numbers are presented in US dollars 2016.

The estimates are based on domestic government spending targets of $89.6 per capita for LICs and $117.6 for LMICs. Following WHO recommendations on out-of-pocket payments as a share of total health expenditure, these targets correspond to 80 percent of the Stenberg et al. (2017) cost estimates for an efficient provision of essential health services that would allow countries to meet SDG3 by 2030. The spending targets contain current and capital health expenditures. They are applied according to a country's income status in 2018.

Estimates of health expenditures in 2030 derived from projections of GDP, population, and the ratio of domestic government health expenditure (DGHE) relative to GDP. The GDP data series was constructed with historic GDP data (2005–2016) from the WHO Global Health Expenditure Database (GHED) and projections of GDP growth rates (2017–2024) from the IMF World Economic Outlook (WEO) database. For the period 2025 to 2030, the model adopts country-specific average 2019–2024 growth rates.

The population data series was constructed with historic population data (2005–2016) from the WHO GHED and projections of population growth rates (2017–2024) from the IMF WEO database. UN projections of population growth rates complemented the data series (2025 to 2030).

The series of DGHE-to-GDP ratios differentiates the policy scenarios. The data series for the different scenarios use historic data (2005–2016) from the WHO GHED database and different assumptions about future rates. As WHO's DGHE-to-GDP ratios exclude capital health expenditures, the data series was adjusted upward by 5 percent using the average share of capital expenditures in the WHO GHED database.

The first scenario assumes that changes in future levels of health expenditures are exclusively driven by changes in GDP and population. DGHE-to-GDP ratios are held constant at the 2014–2016 average. Using GDP, population, and DGHE-to-GDP ratios we projected future health expenditures, comparing these to spending targets to estimate the financing gap in 2030.

The second scenario considers not only changes to GDP and population growth, but also makes optimistic, yet realistic assumptions about a country's ability to mobilize domestic resources for health and increase the DGHE-to-GDP ratio. Such increases reflect a country's ability to raise revenue and/or prioritize health in domestic government expenditures. Country specific projection are based on the comparison of historic trends versus trends that reflect increases in the DGHE-to-GDP ratio to attain levels commensurate with the 80th percentile in the respective income group (2.1 percent in

30. Fifteen countries are projected to cross the UMIC threshold before 2030. These include Bhutan, Bolivia, Egypt, El Salvador, Georgia, India, Indonesia, Lao PDR, Mongolia, Morocco, Philippines, Sri Lanka, Tunisia, Uzbekistan, and Vietnam.

31. Data were missing for Cuba, Libya, Kosovo, North Korea, Palestine, Somalia, South Sudan, Syria, and Zimbabwe.

LICs and of 3.4 percent in LMICs). Calculations of the 80th percentile included the 15 current LMICs whose GDP per capita in 2030 has been forecasted to exceed the current UMIC threshold. The country specific projections adopt the more favorable of the two trends in the DGHE-to-GDP ratio (historic versus attaining percentile 80 levels) with annual change rates of DGHE-to-GDP capped at 0.1 percentage points. The rational for this cap is two-fold: First, countries rarely sustain annual increases in their tax-to-GDP ratio of 0.5 percentage points (e.g., Gaspar et al. 2019) and, correspondingly, annual increases in their DGHE-to-GDP ratio of 0.05 percentage points (using the average share of health in domestic government expenditure). Second, among the 54 countries, only two out of 29 LICs and five out of 25 LMICs have been able to sustain increases in their DGHE-to-GDP ratios of more than 0.1 percentage points in the past.[32]

The third scenario builds on the second and assumes additional revenues from increases in taxes on tobacco, alcohol, and sugar-sweetened beverages. Estimates have been made available by the Center for Disease Dynamics, Economics and Policy (CDDEP, 2019)—for 34 countries for tobacco, for 25 countries for alcohol, and for all 54 countries for sugar-sweetened beverages. The estimates assume tax increases resulting in a 50 percent increase in the retail price and have been produced cumulatively for the period 2018 and 2028. For countries for which tax revenue estimates have not been available from CDDEP, data rest on extrapolations taking into account average per capita tax revenue and population size. To obtain a 2030 estimate, cumulative additional tax revenue estimates have been annualized. The model makes two different assumptions about the allocation of the additional tax revenues to health. In the first scenario, additional revenues are allocated according to prevailing levels of health prioritization in domestic government expenditures; in the second scenario, 50 percent of the additional revenues are allocated to health.

The fourth supplements the third scenario with estimates of additional revenue from a complete elimination of post-tax energy subsidies (coal, petroleum, natural gas, and electricity). Country specific estimates of the additional revenue from post-tax energy subsidies in 2015 have been made available by the IMF. A post-tax energy subsidy amounts to the difference between the energy price consumers pay and the optimal price that includes supply opportunity cost, environmental externalities, and foregone value-added taxes. The IMF dataset included estimates of additional revenue for 30 pre-tax subsidies for 31 out of the 54 study countries. For countries lacking IMF estimates, estimates rest on extrapolations taking into account average per capita estimates for pre-tax subsidies, population size, and income group averages of electricity subsidies' contribution to additional revenues. Because of the large uncertainty surrounding the future size of energy subsidies—mostly due to changes in fossil fuel prices—the 2030 estimates for additional revenue reflect levels in 2015. Estimates of the additional revenue for health rest on three additional assumptions. First, additional revenue for spending on health is limited to the pre-tax component. A pre-tax subsidy amounts only to the difference between the price consumers pay and the supply opportunity cost. Second, the pre-tax component is made available for social sector spending (to compensate lower-income households for the elimination of fossil fuel subsidies, a prerequisite also for the feasibility of subsidy reform). Third, the share of health among social spending is 20 percent—in line with the cross-country average in the 54 countries (ASPIRE, World Bank).

32. The two LICs are Malawi and Tajikistan, and the five LMICs are Congo, Lesotho, Nicaragua, Eswatini (Swaziland), and Timor-Leste.

ANNEX B

SCALING WHAT WORKS: AREAS OF CONVERGENCE ON HEALTH-FINANCING POLICY IN DEVELOPING COUNTRIES

Introduction

Section 2.1 of the main report outlined the principal areas of convergence on health-financing policies that will ensure faster progress toward UHC. This annex provides more details of how the principles of Section 2.1 were derived. It also outlines some areas of controversy, and where country actions do not match agreed principles. Those parts are in italics.

This annex uses the Domestic Resource Use Mobilization Plus (DRUM+) framework as an organizer, as in the main report, starting with equity and efficiency in the use of resources, moving to resource mobilization and then to pooling for financial protection.

A. Improve efficiency and equity in resource use (purchasing)

Purchasing strategies can help to ensure efficient, equitable delivery of the set of quality services while keeping costs manageable. Efficiency and equity are determined by a set of interrelated decisions about where services are available, what services are available, and how they are paid for.

Where guaranteed services should be available

Principle 1: Prioritize primary health services (at the frontline, the first point of contact between people and the health system), getting the most cost-effective services to those most in need at the most appropriate level of the service delivery system.

- In many developing countries, primary health services—the level of first contact between people and the health system—are underfunded and of poor quality compared to other levels of care. Improving PHC services at the front line (by shifting funds where politically possible, or by giving them a higher share of additional funding) will improve both equity and efficiency. This will need to be accompanied by improvements to other inputs to front line services including health workers, medicines, etc.
- *Although there has been agreement in principle for some time, there has been little progress in developing countries. What prevents change and how to overcome obstacles need to be understood—another example of convergence in theory but not convergence in practice.*

What to purchase

Principle 2: Define a core set of services to be guaranteed to everyone.

- The composition of the set of health services should be selected to take into account cost-effectiveness, impact on financial protection, and equity.
- Ensuring efficiency and equity requires increased funding for prevention and promotion in most settings.
- Efficiency also required sufficient funding for other core public health functions, such as pandemic preparedness and response should also be assured.
- *There has been convergence in principle for some time, but little convergence in practice as the political demands for more treatment frequently outweigh the logic of more prevention. There is also some dispute about how much funding should be available for prevention and promotion, and whether it should be ringfenced to protect it from the encroachment of treatment.*

How to purchase

Principle 3: Purchasing should ensure that the guaranteed services are available with quality and at the lowest possible cost. Ideally this means paying for outcomes rather than inputs and purchasing strategically.

- *While the various ways of paying providers are known to have different effects on efficiency and quality, and general agreement that a blend of payment options is preferable to a single method, there is no agreement on what blend works best. Moreover, it is not yet clear how forms of strategic purchasing can be institutionalized in countries with limited technical capacities.*

Principle 4: Spending on ineffective or inequitable public programs (e.g., fuel subsidies that disproportionally benefit the middle class) should be repurposed, with at least some of the savings made available for health and social sectors.

- *While there is agreement in principle, it has proved politically difficult to reduce fuel subsidies.*
- *There is no agreement to what level out-of-pocket payments should be reduced and, if they are still levied on the guaranteed package, how to exempt the poor without leakages to the rich, and high administrative costs.*

B. Raise sufficient resources to move closer to UHC (revenue mobilization)

To guarantee access to a set of health services, financial resources must be sufficient to pay for these services and the necessary investment in service delivery capacity, core public health functions, and system governance. The areas of general agreement follow.

Where revenues should/are likely to come from

Principle 5: Develop a mix of resource generation instruments that assures stability in funding flows and allows for subsequent pooling to cover the universal package of health services.

- Countries should primarily raise resources from general government revenues supplemented as they consider appropriate by obligatory insurance contributions. Within this, relying on wage-based contributions to fund health does not ensure sustainability over time. This also means out-of-pocket payments should be minimized.

Principle 6: Most developing countries need to raise additional government revenue as a share of GDP.

- A range of well-tested technical measures are available to increase government revenue, including more effective collection of existing taxes and charges, expansion of tax bases, and increases in the range and level of taxes and charges.
- *Different developing countries have implemented different parts of this agenda, but many still lag behind in terms of government revenues as a share of GDP. However, in many implementation is lacking, as countries struggle to overcome the political obstacles particularly in increasing the efficiency of the public finance system.*

Principle 7: Boost the overall share of government revenues allocated to health.

- Many developing countries allocate a relatively low share of total government spending to health. Improving efficiency in health spending and showing results in a way the ministry of finance can understand is one way of increasing the share.
- *There is no agreement, however, on what share is appropriate.*

Principle 8: Raise taxes on products harmful to health—including but not limited to tobacco.

- There is agreement that these taxes improve health, raise revenue, and are more politically acceptable to the general population than other taxes.
- *There is always strong political opposition from vested interests, while where they are implemented, there is then dispute about whether they should be hypothecated for health, or for some part of health such as prevention.*

Principle 9: The equity (i.e., progressivity or regressivity) of revenue generation should always be considered, but by assessing the balance contributions to the system with transfers people receive in cash or kind.

- The equity of any individual revenue generation instrument is only one factor to consider in this calculus.
- *Some systems do not, in fact, compensate for inequity in revenue generation by increased equity in transfers, even if there is agreement in principle.*

Where major revenues for UHC are unlikely to come from in developing countries

While these are not principles, the following sources of revenue will not, by themselves, get countries sufficient funding for UHC.

- Developing countries cannot assume that they can rely on wage-based deductions to finance health in the short to medium term, particularly where informal employment is rampant and the rate of formalization is slow. Even high-income countries that have in the past relied predominantly on wage-based social health insurance contributions (employer and/or employee) are increasingly needing to widen the mix of sources of funding. This is in recognition that aging populations mean that wage-based deductions will be insufficient to cover the entire population, high wage-based deductions might reduce the rate of formalization of the labour force, and they can impose high operating costs on the private sector.
- Voluntary health insurance by itself will not attain UHC. Low-risk people opt out and the poor cannot afford to pay.
- The private commercial sector is not yet a significant source of funding for a guaranteed package of services. There have been some experiments in using DAH to leverage private sector funding in developing countries, mostly with DAH, but experience suggests the amount that can be leveraged is, at the moment, small (Attridge and Engen 2019).

C. Pool funds to efficiently share the financial risks of ill-health and allow people to use a guaranteed set of health services at an affordable cost (pooling)

The areas of policy consensus on how to pool funds so that a guaranteed set of health services is available at an affordable cost follow.

Principle 10: Entitlement to access guaranteed services from pooled funds should not be linked to employment status but should be universal.

- *Some countries still link health insurance to employment status or give different benefits to different people.*

Principle 11: Financial protection for a set of guaranteed services can only be universally available if they are backed by funds from prepaid and pooled sources with subsidies for the indigent.

- This also requires service delivery capacity and the health system inputs necessary to insure this, such as medicines and health workers.
- *In practice, the set of services officially guaranteed is frequently too large to be supported by the available funds, or the service delivery system does not have the capacity to deliver it, resulting in forms of implicit rationing.*

Principle 12: Pools covering the guaranteed package should be large enough and diverse enough to resist unpredictable high expenditures of some beneficiaries.

- Large and diverse pools can be created physically or virtually—through forms of risk equalization across pools (see below).

Principle 13: If countries already have multiple pools with different risk profiles for the guaranteed set of services, equalization mechanisms across pools are critical to ensure equity and financial viability.

- There are many formulae available to do this, though they require strong information systems.
- *There is no agreement on the relative merits of single and multiple pools. Benefits of a single pool include greater efficiency in the form of lower administration costs and no need to equalize risks across pools. Possible problems include lower responsiveness to people, diseconomies of scale in large countries, and capture of the benefits by the rich and educated where the poor have access to no or only low quality services.*
- *Many developing countries maintain multiple small pools with no or limited risk equalization.*

D. Cross-cutting issues: health-financing governance

To ensure that the above principles can be applied, many developing countries government need to strengthen their capacities to develop and support the regulatory framework for health financing, and the institutions and organizational arrangements required to do so. Much of this requires leadership of a ministry of finance in collaboration with the ministry of health. In the short run, the most important principle is:

Principle 14: Strengthen public financial management (PFM).

- Strong PFM allows revenues to be directed efficiently and equitably toward UHC goals, more accountable and transparent government with less corruption, greater reliability of funding, and greater financial discipline.

REFERENCE LIST

- Aaberge, Rolf, Kai Liu, and Yu Zhu. 2017. "Political Uncertainty and Household Savings." *Journal of Comparative Economics, Institutions and Economic Change*, 45 (1): 154–70. https://doi.org/10.1016/j.jce.2015.12.011.
- Allen, Richard, Taz Chaponda, Lesley Fisher, and Rohini Ray. 2017. "Medium-Term Budget Frameworks in Sub-Saharan African Countries." Working Paper No. 17/203. Washington, DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2017/09/11/Medium-Term-Budget-Frameworks-in-Sub-Saharan-African-Countries-45093.
- Amo-Adjei, Joshua, Kofi Aduo-Adjei, Christiana Opoku-Nyamaah, and Chimaraoke Izugbara. 2018. "Analysis of Socioeconomic Differences in the Quality of Antenatal Services in Low and Middle-Income Countries (LMICs)." PloS One 13(2): e0192513. https://doi.org/10.1371/journal.pone.0192513.
- Andrews, Matt, Lant Pritchett, and Michael Woolcock. 2015. "Doing Problem Driven Work." CDI Working Paper 307. Harvard University.
- Angel, Jacqueline L., Ronald J. Angel, Mariana López-Ortega, Luis Miguel Gutiérrez Robledo, and Robert B. Wallace. 2016. "Institutional Context of Family Eldercare in Mexico and the United States." *Journal of Cross-Cultural Gerontology* 31 (3): 327–36. https://doi.org/10.1007/s10823-016-9291-3.
- Angel-Urdinola, Diego, Abdoul Gadiry Barry, and Jamal Guennouni. 2016. *Are Minimum Wages and Payroll Taxes a Constraint to the Creation of Formal Jobs in Morocco? (English)*. Policy Research Working Paper; No. WPS 7808. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/681231472660255738/Are-minimum-wages-and-payroll-taxes-a-constraint-to-the-creation-of-formal-jobs-in-Morocco.
- Apella, Ignacio, and Gonzalo Zunino. 2018. "Nonstandard Forms of Employment in Developing Countries: A Study for a Set of Selected Countries in Latin America and the Caribbean and Europe and Central Asia." SSRN Scholarly Paper ID 3248803. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=3248803.
- Arze del Granado, Francisco Javier, David Coady, and Robert Gillingham. 2012. *The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries.* World Development 40 (11): 2234–48. https://doi.org/10.1016/j.worlddev.2012.05.005.
- Attridge, Samantha, and Lars Engen. 2019. "Blended Finance in the Poorest Countries: The Need for a Better Approach." Research reports and studies. The Overseas Development Institute (ODI). https://www.odi.org/publications/11303-blended-finance-poorest-countries-need-better-approach.
- Bai, Chong-En, and Binzhen Wu. 2014. "Health Insurance and Consumption: Evidence from China's New Cooperative Medical Scheme." *Journal of Comparative Economics, Economic Systems in the Pacific Rim Region Symposium*, 42 (2): 450–69. https://doi.org/10.1016/j.jce.2013.07.005.
- Baird, Sarah, Joan Hamory Hicks, Michael Kremer, and Edward Miguel. 2016. "Worms at Work: Long-Run Impacts of a Child Health Investment." Working Paper 21428. National Bureau of Economic Research. https://doi.org/10.3386/w21428.
- Baldacci, Emanuele, Sanjeev Gupta, and Carlos Mulas-Granados. 2010. "Restoring Debt Sustainability after Crises: Implications for the Fiscal Mix." SSRN Scholarly Paper ID 1750721. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=1750721.
- Baranov, Victoria, and Hans-Peter Kohler. 2018. "The Impact of AIDS Treatment on Savings and Human Capital Investment in Malawi." *American Economic Journal: Applied Economics* 10(1): 266–306. https://doi.org/10.1257/app.20150369.
- Barroy, Helene, Elina Dale, Susan Sparkes, and Joseph Kutzin. 2018. "Budget Matters for Health: Key Formulation and Classification Issues." Health-Financing Policy Brief 18(4). Geneva: World Health Organization. http://www.who.int/health_financing/documents/making-budgets-work-uhc/en/.

- Barroy, Hélène, Joseph Kutzin, Ajay Tandon, Christoph Kurowski, Geir Lie, Michael Borowitz, Susan Sparkes, and Elina Dale. 2018. "Assessing Fiscal Space for Health in the SDG Era: A Different Story." Health Systems & Reform. Vol.4, no.1. https://doi.org/10.1080/23288604.2017.1395503.
- Barroy, Helene, Zeynep Or, Ankit Kumar, and David Bernstein. 2014. Sustaining Universal Health Coverage in France: A Perpetual Challenge (English). Health, Nutrition, and Population (HNP) discussion paper. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/452591468038118776/Sustaining-universal-health-coverage-in-France-a-perpetual-challenge.
- Barroy, Helene, Susan Sparkes, Elina Dale, and Jacky Mathonnat. 2018. "Can Low- and Middle-Income Countries Increase Domestic Fiscal Space for Health: A Mixed-Methods Approach to Assess Possible Sources of Expansion." Health Systems and Reform 4 (3): 214–26. https://doi.org/10.1080/23288604.2018.1441620.
- Beard, John R, Alana Officer, Islene Araujo de Carvalho, Ritu Sadana, Anne Margriet Pot, Jean-Pierre Michel, and Peter Lloyd-Sherlock, et al. 2016. "The World Report on Ageing and Health: A Policy Framework for Healthy Ageing." The Lancet 387 (10033): 2145–54. https://doi.org/10.1016/S0140-6736(15)00516-4.
- Bitran, Ricardo. 2014. *Universal Health Coverage and the Challenge of Informal Employment: Lessons from Developing Countries (English).* Health, Nutrition, and Population (HNP) discussion paper 87077. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/698041468180275003/Universal-health-coverage-and-the-challenge-of-informal-employment-lessons-from-developing-countries.
- Bobba, Matteo, Luca Flabbi, and Santiago Levy. 2017. "Labor Market Search, Informality and Schooling Investments." IZA Discussion Paper 11170. Institute of Labor Economics (IZA). https://econpapers.repec.org/paper/izaizadps/dp11170.htm.
- Bousquet, Franck. 2017. "Fragility, Conflict, and Violence." Trust Fund Annual Report. World Bank. http://documents.worldbank.org/curated/en/428511521809720471/683696272_20180311008515 7/additional/124547-REVISED-PUBLIC-17045-TF-Annual-Report-web-Apr17.pdf.
- Braveman, Paula, and Laura Gottlieb. 2014. "The Social Determinants of Health: It's Time to Consider the Causes of the Causes." Public Health Reports (Washington, D.C.: 1974) 129 Suppl 2 (February): 19–31. https://doi.org/10.1177/00333549141291S206.
- Brumby, James, and Richard Hemming. 2013. "Medium-Term Expenditure Frameworks." In *The International Handbook of Public Financial Management,* edited by Richard Allen, Richard Hemming, and Barry H. Potter, 219–36. London: Palgrave Macmillan UK. https://doi.org/10.1057/9781137315304_11.
- Buchan, James, Ibadat S. Dhillon, and James Campbell. 2017. *Health Employment and Economic Growth An Evidence Base.* Geneva: World Health Organization. http://www.who.int/hrh/resources/health_employment-and-economic-growth/en/.
- Buchmueller, Thomas C., and Robert G. Valletta. 1996. "The Effects of Employer-Provided Health Insurance on Worker Mobility." ILR Review 49 (3): 439–55. https://doi.org/10.1177/001979399604900304.
- Cangiano, Marco, Teresa Curristine, and Michel Lazare. 2013. *Public Financial Management and Its Emerging Architecture.* Washington, DC: IMF. https://www.imf.org/en/Publications/Books/Issues/2016/12/31/Public-Financial-Management-and-Its-Emerging-Architecture-40035.
- Carter, Patty. 2018. "Why Subsidise the Private Sector? What Donors Are Trying to Achieve, and What Success Looks Like." Research reports and studies. The Overseas Development Institute (ODI). https://www.odi.org/publications/10064-why-subsidise-private-sector-what-donors-are-trying-achieve-and-what-success-looks.
- Cashin, Cheryl, Susan Sparkes, Hélène Barroy, Joseph Kutzin, and Sheila O'Dougherty. 2017. "Aligning Public Financial Management and Health Financing: Sustaining Progress toward Universal Health Coverage." Health Financing Working Paper 4. Geneva: World Health Organization. https://apps.who.int/iris/handle/10665/254680.

- Cashin, Cherly. 2015. *Assessing Health Provider Payment Systems: A Practical Guide for Countries Working Toward Universal Health Coverage. Joint Learning Network for Universal Health Coverage.* http://www.jointlearningnetwork.org/resources/assessing-health-provider-payment-systems-a-practical-guide-for-countries-w
- Chen, Wen, Qi Zhang, Andre M N Renzaho, Fangjing Zhou, Hui Zhang, and Li Ling. 2017. "Social Health Insurance Coverage and Financial Protection among Rural-to-Urban Internal Migrants in China: Evidence from a Nationally Representative Cross-Sectional Study." BMJ Global Health 2 (4). https://doi.org/10.1136/bmjgh-2017-000477.
- Cheung, Diana, and Ysaline Padieu. 2015. "Heterogeneity of the Effects of Health Insurance on Household Savings: Evidence from Rural China." World Development 66 (C): 84–103.
- Chuhan-Pole, Punam, Vijdan Korman, Paul Brenton, Cesar Calderon, Mariano Cortes, Natasha De Andrade Falcao, Kebede Feda, et al. 2018. *Assessing Africa's Policies and Institutions: 2017 CPIA Results for Africa (English).* Washington, DC: World Bank. http://documents.worldbank.org/curated/en/850151531856335222/Assessing-Africas-policies-and-institutions-2017-CPIA-results-for-Africa.
- Coady, David, Ian Parry, Nghia-Piotr Le, and Baoping Shang. 2019. "Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates." Working Paper 19/89. Washington, DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509.
- Colgan, Anne, Lisa Anne Kennedy, and Doherty Nuala. 2014. "A Primer on implementing whole of government approaches." Dublin: Center for Effective Services. https://www.effectiveservices.org/downloads/CES_Whole_of_Government_Approaches.pdf.
- Commission on Macroeconomics and Health and World Health Organization. 2001. "Macroeconomics and Health: Investing in Health for Economic Development : Executive Summary / Report of the Commission on Macroeconomics and Health." WHO. http://www.who.int/iris/handle/10665/42463.
- Cordes, Till, Tidiane Kinda, Priscilla S Muthoora, and Anke Weber. 2015. "Expenditure Rules : Effective Tools for Sound Fiscal Policy?" Working Paper No. 15/29. Washington, DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Expenditure-Rules-Effective-Tools-for-Sound-Fiscal-Policy-42706.
- Cotlear, Daniel, Somil Nagpal, Owen K. Smith, Ajay Tandon, and Rafael A. Cortez. 2015. *Going Universal : How 24 Developing Countries Are Implementing Universal Health Coverage Reforms from the Bottom Up.* Washington, DC: World Bank. http://documents.worldbank.org/curated/en/936881467992465464/Going-universal-how-24-developing-countries-are-implementing-universal-health-coverage-reforms-from-the-bottom-up.
- Crivelli, Ernesto, Ruud A De Mooji, and Michael Keen. 2015. "Base Erosion, Profit Shifting and Developing Countries." Working Paper No. 15/118. Washington, DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Base-Erosion-Profit-Shifting-and-Developing-Countries-42973.
- Datta, Anupama. 2017. "Old Age Homes in India: Sharing the Burden of Elderly Care with the Family." In Elderly Care in India: Societal and State Responses, edited by S. Irudaya Rajan and Gayathri Balagopal, 77–93. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-10-3439-8_5.
- Dieleman, Joseph L, and Michael Hanlon. 2014. "Measuring the Displacement and Replacement of Government Health Expenditure." Health Economics 23 (2): 129–40. https://doi.org/10.1002/hec.3016.
- Downes, Ronnie, Lisa von Trapp, and Scherie Nicol. 2017. "Gender Budgeting in OECD Countries." OECD Journal on Budgeting 16 (3): 71–107. https://doi.org/10.1787/budget-16-5jfq80dq1zbn.
- EY Tax Insights for Business Leaders. "The Latest On BEPS 7 November 2016." https://taxinsights.ey.com/archive/archive-news/the-latest-on-beps-7-november-2016.aspx.

- Fan, Victoria Y, Dean T Jamison, and Lawrence H Summers. 2018. "Pandemic Risk: How Large Are the Expected Losses?" Bulletin of the World Health Organization 96 (2): 129–34. https://doi.org/10.2471/BLT.17.199588.
- Fan, Victoria Y., and William D. Savedoff. 2014. "The Health Financing Transition: A Conceptual Framework and Empirical Evidence." Social Science & Medicine (1982) 105 (March): 112–21. https://doi.org/10.1016/j.socscimed.2014.01.014.
- Farooq, Ammar, and Adriana Kugler. 2016. "Beyond Job Lock: Impacts of Public Health Insurance on Occupational and Industrial Mobility." Working Paper 22118. National Bureau of Economic Research. https://doi.org/10.3386/w22118.
- Fenochietto, Ricardo, and Carola Pessino. 2013. "Understanding Countries' Tax Effort." SSRN Scholarly Paper ID 2372060. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=2372060.
- Flabbi, Luca, and Roberta Gatti. 2018. *A Primer on Human Capital*. Policy Research Working Paper; No. 8309. Washington, DC: The World Bank. https://openknowledge.worldbank.org/handle/10986/29219
- Fletcher, Jason M., and David E. Frisvold. 2014. "The Long Run Health Returns to College Quality." Review of Economics of the Household 12 (2): 295–325. https://doi.org/10.1007/s11150-012-9150-0.
- Friedberg, M. W., Hussey, P. S., and Schneider, E. C. 2010. "Primary care: a critical review of the evidence on quality and costs of health care." Health Affairs, 29(5), 766-772.
- Fryatt, Robert, Sara Bennett, and Agnes Soucat. 2017. "Health Sector Governance: Should We Be Investing More?" BMJ Global Health 2 (2): e000343. https://doi.org/10.1136/bmjgh-2017-000343.
- Galasso, Emanuela, and Adam Wagstaff. 2016. "The Economic Costs of Stunting and How to Reduce Them." Policy Research Note, Washington D.C: World Bank
- Galasso, Emanuela, and Adam Wagstaff. 2019. "The Aggregate Income Losses from Childhood Stunting and the Returns to a Nutrition Intervention Aimed at Reducing Stunting." Economics and Human Biology, https://doi.org/10.1016/j.ehb.2019.01.010.
- Garganta, Santiago, and Leonardo Gasparini. 2015. "The Impact of a Social Program on Labor Informality: The Case of AUH in Argentina." Journal of Development Economics 115 (C): 99–110.
- Gaspar, Victor, Laura Jaramillo, and Philippe Wingender. 2016. "Tax Capacity and Growth: Is There a Tipping Point?" Working Paper, 16/234. Washington, DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Tax-Capacity-and-Growth-Is-there-a-Tipping-Point-44436.
- Gaspar, Victor, David Amaglobeli, Mercedes Garcia-Escribano, Delphine Prady, and Mauricio Soto. 2019. "Fiscal Policy and Development: Human, Social, and Physical Investments for the SDGs." Staff Discussion Notes No. 19/03. Washington, DC: IMF. https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2019/01/18/Fiscal-Policy-and-Development-Human-Social-and-Physical-Investments-for-the-SDGs-46444.
- Gee, Jim, and Mark Button. 2015. *The Financial Cost of Healthcare Fraud: What Data from around the World Shows.* PKF Littlejohn LLP and Univesity of Portsmouth.
- Glinskaya, Elena E., and Zhanlian Feng. 2018. *Options for Aged Care in China: Building an Efficient and Sustainable Aged Care System (English).* Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/171061542660777579/Options-for-Aged-Care-in-China-Building-an-Efficient-and-Sustainable-Aged-Care-System.
- Goryakin, Yevgeniy, Paul Revill, Andrew Mirelman, Rohan Sweeney, Jessica Marie Ochalek, and Marc Eckart Suhrcke. 2017. "Public Financial Management and Health Service Delivery: A Literature Review." The Overseas Development Institute (ODI).
- Gottret, Pablo, George J. Schieber, and Hugh R. Waters. 2008. *Good Practices in Health Financing : Lessons from Reforms in Low and Middle-Income Countries.* 44644. The World Bank. http://documents.worldbank.org/curated/en/987711468315362167/Good-practices-in-health financing-lessons-from-reforms-in-low-and-middle-income-countries.

- Graves, Casey M., Annie Haakenstad, and Joseph L. Dieleman. 2015. "Tracking Development Assistance for Health to Fragile States: 2005–2011." Globalization and Health 11 (1): 12. https://doi.org/10.1186/s12992-015-0097-9.
- Gupta, Vinay, Ranu Dhillon, and Robest Yates. 2015. "Financing Universal Health Coverage by Cutting Fossil Fuel Subsidies." *The Lancet Global Health* 3 (6). https://doi.org/10.1016/S2214-109X(15)00007-8.
- Gustafsson-Wright, Emily, Izzy Boggild-Jones, Dean Segell, and Justice DFurland. 2017. "Impact Bonds in Developing Countries: Early Learnings from the Field." Brookings (blog). September 18, 2017. https://www.brookings.edu/research/impact-bonds-in-developing-countries-early-learnings-from-the-field/.
- Habicht, T., M. Reinap, K. Kasekamp, R. Sikkut, L. Aaben, and E. Ginneken Van. 2018. "Estonia: Health System Review." Health Systems in Transition 20 (1): 1–189.
- Herciu, Mihaela, and Claudia Ogrean. 2015. "Wealth, Competitiveness, and Intellectual Capital – Sources for Economic Development." Procedia Economics and Finance 27 (December): 556–66. https://doi.org/10.1016/S2212-5671(15)01033-3.
- Holzmann, Robert. 2018. "The Portability of Social Benefits across Borders." IZA World of Labor, October. https://doi.org/10.15185/izawol.452.
- Hone, Thomas, Davide Rasella, Mauricio Barreto, Rifat Atun, Azeem Majeed, and Christopher Millett. 2017. "Large Reductions in Amenable Mortality Associated with Brazil's Primary Care Expansion and Strong Health Governance." Health Affairs 36 (1): 149–58. https://doi.org/10.1377/hlthaff.2016.0966
- Hu, Bo. 2019. "Projecting Future Demand for Informal Care among Older People in China: The Road towards a Sustainable Long-Term Care System." Health Economics, Policy and Law, June. https://www.cambridge.org/core/journals/health-economics-policy-and-law.
- Huber, Caroline, Lyn Finelli, and Warren Stevens. 2018. "The Economic and Social Burden of the 2014 Ebola Outbreak in West Africa." *The Journal of Infectious Diseases* 218 (suppl_5): S698–704. https://doi.org/10.1093/infdis/jiy213.
- ILO. 2018. *Women and Men in the Informal Economy: A Statistical Picture. Third Edition*. ILO. http://www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm.
- ILO, 2019. *Access to decent work for refugees and other forcibly displaced persons.* https://www.itcilo.org/en/areas-of-expertise/labour-migration/access-to-labour-markets-for-refugees
- Imam, Patrick A., and Davina Jacobs. 2014. "Effect of Corruption on Tax Revenues in the Middle East." Working Paper No. 07/270. Washington, DC: IMF.
- IMF. 2010. "Macro-Fiscal Implications of Health Care Reform in Advanced and Emerging Economies." Policy Paper. Washington, DC: IMF. https://www.imf.org/external/np/pp/eng/2010/122810.pdf.
- ———. 2016a. "Analyzing and Managing Fiscal Risks - Best Practices." Policy Paper. Washington, DC.: IMF. https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Analyzing-and-Managing-Fiscal-Risks-Best-Practices-PP5042.
- ———. 2016b. Assessing fiscal space: an initial consistent set of considerations. IMF Staff Paper. https://www.imf.org/en/Publications/Policy-Papers/Issues/2017/01/13/pp5080-Assessing-Fiscal-Space-An-Initial-Consistent-Set-of-Considerations
- ———. 2019. *World Economic Outlook, April 2019: Growth Slowdown, Precarious Recovery.* Washington, DC: IMF. https://www.imf.org/en/Publications/WEO/Issues/2019/03/28/world-economic-outlook-april-2019.
- Institute for Health Metrics and Evaluation (IHME). *Financing Global Health 2017: Funding Universal Health Coverage and the Unfinished HIV/AIDS Agenda.* Seattle, WA: IHME, 2018.
- Jackson, Teresa L. 2009. "One Dollar in Seven: Scoping the Economics of Patient Safety A Literature Review Prepared for the Canadian Patient Safety Institute."
- Jamison, Dean T, Lawrence H Summers, George Alleyne, Kenneth J Arrow, Seth Berkley, Agnes Binagwaho, and Flavia Bustreo, et al. 2013. "Global Health 2035: A World Converging within a Generation." *The Lancet* 382 (9908): 1898–1955. https://doi.org/10.1016/S0140-6736(13)62105-4.

- Johnson, Niall P. A. S., and Juergen Mueller. 2002. "Updating the Accounts: Global Mortality of the 1918-1920 'Spanish' Influenza Pandemic." Bulletin of the History of Medicine 76 (1): 105–15.
- Johnson, Shanthi, Swati Madan, Jade Vo, and Ansa Pottkett. 2018. "A Qualitative Analysis of the Emergence of Long Term Care (Old Age Home) Sector for Seniors Care in India: Urgent Call for Quality and Care Standards." Ageing International 43 (3): 356–65. https://doi.org/10.1007/s12126-017-9302-x
- Jonas, Olga, Alec Irwin, Franck Cesar Jean Berthe, Francois G. Le Gall, and Patricio V. Marquez, et al. 2017. *Drug-Resistant Infections: A Threat to Our Economic Future (Vol. 2). Final Report (English).* Washington, DC: World Bank. http://docu- ments.worldbank.org/curated/en/323311493396993758/ final-report.
- Junquera-Varela, Raul Felix; Verhoeven, Marinus; Shukla, Gangadhar Prasad; Haven, Bernard James; Awasthi, Rajul; Moreno-Dodson, Blanca. 2017. *Strengthening domestic resource mobilization: moving from theory to practice in low- and middle-income countries (English).* Directions in development; public sector governance. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/970941498201633115/Strengthening-domestic-resource-mobilization-moving-from-theory-to-practice-in-low-and-middle-income-countries
- Kaboré, Roch Marc Christian, Erna Solberg, Melinda Gates, and Jim Yong Kim. 2018. "Financing the SDGs: Mobilising and Using Domestic Resources for Health and Human Capital." *The Lancet* 392 (10158): 1605–7. https://doi.org/10.1016/S0140-6736(18)32597-2.
- Katyal, Sonal. 2018. "Patterns of Utilisation of Material Healthcare Services In Haryana, India." Asia Pacific Journal of Health Management 13 (1): 35–49. https://doi.org/10.24083/apjhm.v13i1.29.
- Ke, Xu, Priyanka Saksena, and Alberto Holly. 2011. "The Determinants of Health Expenditure: A Country-Level Panel Data Analysis." A Working Paper of the Results for Development Institute (R4D). https://www.who.int/health_financing/documents/report_en_11_deter-he.pdf
- Kitao, Sagiri. 2018. "Policy Uncertainty and Cost of Delaying Reform: The Case of Aging Japan." Review of Economic Dynamics 27: 81–100.
- Kojima, Masami, and Doug Koplow. 2015. Fossil Fuel Subsidies: Approaches and Valuation (English). Policy Research Working Papers, no. WPS 7220. The World Bank. https://doi.org/10.1596/1813-9450-7220
- Kopecky, Karen A., and Tatyana Koreshkova. 2014. "The Impact of Medical and Nursing Home Expenses on Savings." *American Economic Journal: Macroeconomics* 6 (3): 29–72. https://doi.org/10.1257/mac.6.3.29.
- Kringos, Dionne, Wienke Boerma, Yann Bourgueil, Thomas Cartier, Toni Dedeu, Toralf Hasvold, Allen Hutchinson, et al. 2013. "The Strength of Primary Care in Europe: An International Comparative Study." Br J Gen Pract 63 (616): e742–50. https://doi.org/10.3399/bjgp13X674422.
- Kruk, Margaret E, Anna D Gage, Catherine Arsenault, Keely Jordan, Hannah H Leslie, Sanam Roder-DeWan, and Olusoji Adeyi, et al. 2018. "High-Quality Health Systems in the Sustainable Development Goals Era: Time for a Revolution." *The Lancet Global Health* 6 (11): e1196–1252. https://doi.org/10.1016/S2214-109X(18)30386-3.
- Kuan, Chung-Ming, and Chien-Liang Chen. 2013. "Effects of National Health Insurance on Precautionary Saving: New Evidence from Taiwan." Empirical Economics 44 (2): 921–43. https://doi.org/10.1007/s00181-011-0533-5.
- Kugler, Adriana, Maurice Kugler, and Luis Omar Herrera Prada. 2017. "Do Payroll Tax Breaks Stimulate Formality? Evidence from Colombia's Reform." Working Paper 23308. National Bureau of Economic Research. https://doi.org/10.3386/w23308.
- Kutzin, Joseph, Winnie Yip, and Cheryl Cashin. 2016. *Alternative Financing Strategies for Universal Health Coverage. World Scientific Handbook of Global Health Economics and Public Policy*, 267–309. World Scientific Series in Global Health Economics and Public Policy. World Scientific. https://doi.org/10.1142/9789813140493_0005.

- Lagarde, Mylene, Andy Haines, and Natasha Palmer. 2007. "Conditional Cash Transfers for Improving Uptake of Health Interventions in Low- and Middle-Income Countries: A Systematic Review." JAMA 298 (16): 1900–1910. https://doi.org/10.1001/jama.298.16.1900.
- Le, Tuan Minh, Blanca Moreno-Dodson, and Nihal Bayraktar. 2012. "Tax Capacity and Tax Effort: Extended Cross-Country Analysis from 1994 to 2009." Policy Research Working Paper; No. 6252. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/534031468332056098/Tax-capacity-and-tax-effort-extended-cross-country-analysis-from-1994-to-2009.
- Lee, Jong-Wha, and Warwick J. McKibbin. 2004. Estimating the Global Economic Costs of SARS. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK92473/.
- Lee, Ronald, and Andrew Mason. 2017. "Cost of Aging." *Finance & Development* 54 (1): 7–9.
- Lei, Peng, Zhixin Feng, and Zhuochun Wu. 2016. "The Availability and Affordability of Long-Term Care for Disabled Older People in China: The Issues Related to Inequalities in Social Security Benefits." Archives of Gerontology and Geriatrics 67 (November): 21–27. https://doi.org/10.1016/j.archger.2016.06.018.
- Leslie, Hannah H, Donna Spiegelman, Xin Zhou, and Margaret E Kruk. 2017. "Service Readiness of Health Facilities in Bangladesh, Haiti, Kenya, Malawi, Namibia, Nepal, Rwanda, Senegal, Uganda and the United Republic of Tanzania." Bulletin of the World Health Organization 95 (11): 738–48. https://doi.org/10.2471/BLT.17.191916.
- Mahal, Ajay, Anup Karan, and Michael Engelgau. 2010. *The Economic Implications of Non-Communicable Disease for India.* Health, Nutrition and Population (HNP) Discussion Paper. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/488911468041673131/The-economic-implications-of-non-communicable-disease-for-India.
- Maisonneuve, C. and J. Oliveira Martins. 2014. "The future of health and long-term care spending", OECD Journal: Economic Studies, vol. 2014/1. https://doi.org/10.1787/eco_studies-2014-5jz0v44s66nw.
- Marquez, Patricio V. 2014. "Antimicrobial Resistance: A new global public health 'ticking bomb'?" World Bank Group Blogs. July 28, 2014. https://blogs.worldbank.org/health/antimicrobial-resistance-new-global-public-health-ticking-bomb.
- Marquez, Patricio V., and Blanca Moreno-Dodson. 2017. *Tobacco Tax Reform at the Crossroads of Health and Development: A Multisectoral Perspective.* 120206. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/824771507037794706/Tobacco-tax-reform-at-the-crossroads-of-health-and-development-a-multisectoral-perspective.
- Mascagni, Giulia, Mick Moore, and Rhiannon McCluskey. 2014. "Tax Revenue Mobilization in Developing Countries: Issues and Challenges." Working Paper 3948. Institute of Development Studies, International Centre for Tax and Development. https://ideas.repec.org/p/idq/ictduk/3948.html.
- Masiye, Felix, Oliver Kaonga, and Joses M. Kirigia. 2016. "Does User Fee Removal Policy Provide Financial Protection from Catastrophic Health Care Payments? Evidence from Zambia." PloS ONE 11 (1): e0146508. https://doi.org/10.1371/journal.pone.0146508.
- Matytsin, Mikhail, Lalita M. Moorty, and Kaspar Richter. 2015. *From Demographic Dividend to Demographic Burden?: Regional Trends of Population Aging in Russia.* Working Paper 048. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/489051524142686237/From-demographic-dividend-to-demographic-burden-regional-trends-of-population-aging-in-Russia.
- Mauro, Paolo. 1998. "Corruption and the Composition of Government Expenditure". Journal of Public Economics. Vol. 69 (2): 263–79.
- Meessen, Bruno, David Hercot, Mathieu Noirhomme, Valéry Ridde, Abdelmajid Tibouti, Christine Kirunga Tashobya, and Lucy Gilson. 2011. "Removing User Fees in the Health Sector: A Review of Policy Processes in Six Sub-Saharan African Countries." Health Policy and Planning 26 Suppl 2 (November): ii16-29. https://doi.org/10.1093/heapol/czr062.

- Meheus, Filip, and Di McIntyre. 2017. "Fiscal Space for Domestic Funding of Health and Other Social Services." Health Economics, Policy, and Law 12 (2): 159–77. https://doi.org/10.1017/S1744133116000438.
- Meng, Qingyue, Hai Fang, Xiaoyun Liu, Beibei Yuan, and Jin Xu. 2015. "Consolidating the Social Health Insurance Schemes in China: Towards an Equitable and Efficient Health System." *The Lancet* 386 (10002): 1484–92. https://doi.org/10.1016/S0140-6736(15)00342-6.
- Milcent, Carine. 2018. "Health Insurance in China." In Healthcare Reform in China: From Violence To Digital Healthcare, edited by Carine Milcent, 125–52. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-69736-9_6.
- Ministry of Energy and Mineral Resources and Ministry of Finance, Republic of Indonesia. 2019. "Indonesia's Effort to Phase out Its Fossil Fuel Subsidies." A self report on the G-20 peer review of inefficient fossil fuel subsidies that encourage wasteful consumption in Indonesia. https://www.oecd.org/site/tadffss/publication/Indonesia%20G20%20Self-Report%20IFFS.pdf.
- Moreira, Liliane. 2018. "Health Literacy for People-Centred Care: Where Do OECD Countries Stand?" OECD Health Working Papers, No. 107. Paris: OECD. https://www.oecd-ilibrary.org/social-issues-migration-health/health-literacy-for-people-centred-care_d8494d3a-en.
- Moreno-Serra, Rodrigo, and Adam Wagstaff. 2010. "System-Wide Impacts of Hospital Payment Reforms: Evidence from Central and Eastern Europe and Central Asia." *Journal of Health Economics* 29 (4): 585–602. https://doi.org/10.1016/j.jhealeco.2010.05.007.
- Morrissey, Oliver, Christian Von Haldenwang, Armin Von Schiller, Maksym Ivanyna, and Ingo Bordon. 2016. "Tax Revenue Performance and Vulnerability in Developing Countries." *The Journal of Development Studies* 52 (12): 1689–1703. https://doi.org/10.1080/00220388.2016.1153071.
- Narayan, Deepa, Raj Patel, Kai Schafft, Anne Rademacher, Sarah Koch-Schult. 2000. *Voices of the poor: can anyone hear us? (English)*. New York: Oxford University Press for the World Bank. http://documents.worldbank.org/curated/en/131441468779067441/Voices-of-the-poor-can-anyone-hear-us
- Narayan, Deepa; Chambers, Robert; Shah, Meera K.; Petesch, Patti. 2000. *Voices of the poor : crying out for change (English)*. Washington DC ; World Bank. http://documents.worldbank.org/curated/en/501121468325204794/Voices-of-the-poor-crying-out-for-change
- OECD. 1999. "Implementing the OECD Jobs Strategy: Assessing Performance and Policy." The OECD Jobs Strategy. Paris: OECD Publishing. https://doi.org/10.1787/9789264173682-en.
- ———. 2013. "Public Spending on Health and Long-Term Care: A New Set of Projections." OECD Economic Policy Papers No.06. Paris: OECD Publishing. https://www.oecd.org/eco/growth/Health%20FINAL.pdf.
- ———. 2015a. Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives. Paris: OECD Publishing.
- ———. 2015b. *OECD Employment Outlook 2015*. Paris: OECD Publishing. https://doi.org/10.1787/empl_outlook-2015-en.
- ———. 2016a. Focus on Health Spending: Expenditure by Disease, Age, and Gender. Paris: OECD Publishing https://www.oecd.org/health/Expenditure-by-disease-age-and-gender-FOCUS-April2016.pdf.
- ———. 2016b. *OECD Employment Outlook 2016*. Paris: OECD Publishing. https://read.oecd-ilibrary.org/employment/oecd-employment-outlook-2016_empl_outlook-2016-en.
- ———. 2017a. *Health at a Glance 2017: OECD Indicators*. Paris: OECD Publishing. https://www.oecd-ilibrary.org/docserver/health_glance-2017-72-en.pdf?expires=1558055255&id=id&accname=guest&checksum=135A1CFB520CA7F0AC8F547022455952.
- ———. 2017b. *Tackling Wasteful Spending on Health*. Paris: OECD Publishing. https://doi.org/10.1787/9789264266414-en.
- ———. 2017c. *Pensions at a Glance 2017: OECD and G20 Indicators*. Paris: OECD Publishing. https://www.oecd-ilibrary.org/finance-and-investment/oecd-pensions-at-a-glance_19991363;jsessionid=191l20ljnu8eq.x-oecd-live-02#_ga=2.110320965.1115774777.1559056857-1997471515.1548346395

- ———. 2018a. "How Resilient Were OECD Health Care Systems during the Refugee Crisis?" Migration Policy Debates No.17. Paris: OECD Publishing. http://www.oecd.org/migration/Migration-Policy-Debates-Nov2018-How-resilient-were-OECD-health-care-systems-during-the-refugee-crisis.pdf.
- ———. 2018b. *Job Creation and Local Economic Development 2018: Preparing for the Future of Work.* Paris: OECD Publishing. https://www.oecd.org/newsroom/job-automation-risks-vary-widely-across-different-regions-within-countries.htm.
- ———. 2018c. "Stemming the Superbug Tide: Just a Few Dollars More." OECD Health Policy Studies. Paris: OECD.
- ———. 2019. "Preliminary Estimates of Primary Care Spending under SHA 2011 Framework." Paris: OECD Publishing. https://www.oecd.org/health/health-systems/Preliminary-Estimates-of-Primary-Care-Spending-under-SHA-2011-Framework.pdf.
- Ogrean, Claudia, and Mihaela Herciu. 2015. "Arguments for CSR-Based Sustainable Competitiveness of Multinationals in Emerging Markets (Part II)." Studies in Business and Economics 10 (1): 92–102.
- O'Hare, Bernadette. 2015. "Weak Health Systems and Ebola." *The Lancet Global Health* 3 (2): e71–72. https://doi.org/10.1016/S2214-109X(14)70369-9.
- Oshio, Takashi, and Ayako Honda. 2019. "Universal Health Coverage: Lessons from Japan." Working Paper.
- Oxley, Howard. 2009. "Policies for Healthy Ageing: An Overview." OECD Health Working Papers, No. 42. Paris: OECD Publishing. https://doi.org/10.1787/226757488706.
- Pallegedara, Asankha. 2018. "Impacts of Chronic Non-Communicable Diseases on Households' out-of-pocket Healthcare Expenditures in Sri Lanka." International Journal of Health Economics and Management 18 (3): 301–19. https://doi.org/10.1007/s10754-018-9235-2.
- Patcharanarumol, Walaiporn, Warisa Panichkriangkrai, Angkana Sommanuttaweechai, Kara Hanson, Yaowaluk Wanwong, and Viroj Tangcharoensathien. 2018. "Strategic Purchasing and Health System Efficiency: A Comparison of Two Financing Schemes in Thailand." PLOS ONE 13 (4): e0195179. https://doi.org/10.1371/journal.pone.0195179.
- Patel, Vikram, Rachana Parikh, Sunil Nandraj, Priya Balasubramaniam, Kavita Narayan, Vinod K Paul, A K Shiva Kumar, Mirai Chatterjee, and K Srinath Reddy. 2015. "Assuring Health Coverage for All in India." The Lancet 386 (10011): 2422–35. https://doi.org/10.1016/S0140-6736(15)00955-1.
- Pereira, Javier. 2015. "Leveraging Aid: A Literature Review on the Additionality of Using ODA to Leverage Private Investments" London: UK Aid Network.
- Phuong, Nguyen Khanh, Tran Thi Mai Oanh, Hoang Thi Phuong, Tran Van Tien, and Cheryl Cashin. 2015. "Assessment of Systems for Paying Health Care Providers in Vietnam: Implications for Equity, Efficiency and Expanding Effective Health Coverage." Global Public Health 10 (sup1): S80–94. https://doi.org/10.1080/17441692.2014.986154
- Piatti-Funfkirchen, Moritz, and Lodewijk Smets. 2019. "Public Financial Management, Health Financing and Under-Five Mortality: A Comparative Empirical Analysis." 9491. IDB Publications (Working Papers). Inter-American Development Bank. https://ideas.repec.org/p/idb/brikps/9491.html.
- Pradiptyo, Rimawa, Akbar Susamto, Abraham Wirotomo, Alvin Adisasmita, and Christopher Beaton. 2016. Financing Development with Fossil Fuel Subsidies: The Reallocation of Indonesia's Gasoline and Diesel Subsidies in 2015. International Institute for Sustainable Development.
- Rafter, Natasha, Anne Hickey, Ronan M. Conroy, Sarah Condell, Paul O'Connor, David Vaughan, Gillian Walsh, and David J. Williams. 2017. "The Irish National Adverse Events Study (INAES): The Frequency and Nature of Adverse Events in Irish Hospitals—a Retrospective Record Review Study." BMJ Quality & Safety 26(2): 111–19. https://doi.org/10.1136/bmjqs-2015-004828.

- Rao, Krishna D., and Ashley Sheffel. 2018. "Quality of Clinical Care and Bypassing of Primary Health Centers in India." Social Science & Medicine 207 (June): 80–88. https://doi.org/10.1016/j.socscimed.2018.04.040.
- Rao, Ursula. 2019. Re-Spatializing Social Security in India. Spaces of Security: Ethnographies of Securityscapes, Surveillance, and Control. New York: NYU Press.
- Richter, L. M., S. Mathews, J. Kagura, and E. Nonterah. 2018. "A Longitudinal Perspective on Violence in the Lives of South African Children from the Birth to Twenty Plus Cohort Study in Johannesburg-Soweto." South African Medical Journal 108 (3): 181-186–186. https://doi.org/10.7196/SAMJ.2018.v108i3.12661
- Rasanathan, Kumanan, Sara Bennett, Vincent Atkins, Robert Beschel, Gabriel Carrasquilla, Jodi Charles, Rajib Dasgupta, et al. 2017. "Governing Multisectoral Action for Health in Low- and Middle-Income Countries." PLOS Medicine 14 (4): e1002285. https://doi.org/10.1371/journal.pmed.1002285.
- Rivers, Deborah. 2018. "A Grounded Theory of Millennials Job-Hopping." Walden Dissertations and Doctoral Studies, January. https://scholarworks.waldenu.edu/dissertations/5936.
- Robinson, Mark. 2006. "Budget Analysis and Policy Advocacy: The Role of Non-Governmental Public Action." IDS Working Paper 279. Institute of Development Studies. https://opendocs.ids.ac.uk/opendocs/handle/123456789/4043.
- Roth, Gregory A., Catherine Johnson, Amanuel Abajobir, Foad Abd-Allah, Semaw Ferede Abera, Gebre Abyu, and Muktar Ahmed, et al. 2017. "Global, Regional, and National Burden of Cardiovascular Diseases for 10 Causes, 1990 to 2015." *Journal of the American College of Cardiology* 70 (1): 1–25. https://doi.org/10.1016/j.jacc.2017.04.052.
- Røttingen, John-Arne, Sadie Regmi, Mari Eide, Alison J Young, Roderik F Viergever, Christine Årdal, Javier Guzman, Danny Edwards, Stephen A Matlin, and Robert F Terry. 2013. "Mapping of Available Health Research and Development Data: What's There, What's Missing, and What Role Is There for a Global Observatory?" *The Lancet* 382 (9900): 1286–1307. https://doi.org/10.1016/S0140-6736(13)61046-6.
- Sarr, Babacar. 2015. "Credibility and Reliability of Government Budgets: Does Fiscal Transparency Matter?" Working Paper No. 5. International Budget Partnership.
- Saksena, Priyanka, Justine Hsu, and David B. Evans. 2014. "Financial Risk Protection and Universal Health Coverage: Evidence and Measurement Challenges." PLoS Medicine 11 (9). https://doi.org/10.1371/journal.pmed.1001701.
- Shekar, Meera, Jakub Kakietek, Julia Dayton Eberwein, and Dylan Walters. 2017. *An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting.* Directions in development; Human development. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1010-7.
- Simson, Rebecca. 2014. "Transparency for Development: Examining the Relationship Between Budget Transparency, MDG Expenditure, and Results." International Budget Partnership.
- Smith, Sheila, Joseph P. Newhouse, and Mark S. Freeland. 2009. "Income, Insurance, and Technology: Why Does Health Spending Outpace Economic Growth?" Health Affairs (Project Hope) 28 (5): 1276–84. https://doi.org/10.1377/hlthaff.28.5.1276.
- Sorenson, Corinna, Michael Drummond, and Beena Bhuiyan Khan. 2013. "Medical Technology as a Key Driver of Rising Health Expenditure: Disentangling the Relationship." ClinicoEconomics and Outcomes Research: CEOR 5: 223–34. https://doi.org/10.2147/CEOR.S39634.
- Soucat, Agnès, Elina Dale, Inke Mathauer, and Joseph Kutzin. 2017. "Pay-for-Performance Debate: Not Seeing the Forest for the Trees." Health Systems & Reform 3 (2): 74–79. https://doi.org/10.1080/23288604.2017.1302902.

- Srithongrung, Arwiphawee. 2018. "Capital Budgeting and Management Practices: Smoothing Out Rough Spots in Government Outlays." SSRN Scholarly Paper ID 3132806. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=3132806.
- Stenberg, Karin, Odd Hanssen, Tessa Tan-Torres Edejer, Melanie Bertram, Callum Brindley, Andreia Meshreky, and James E. Rosen, et al. 2017. "Financing Transformative Health Systems towards Achievement of the Health Sustainable Development Goals: A Model for Projected Resource Needs in 67 Low-Income and Middle-Income Countries." *The Lancet Global Health* 5 (9): e875–87. https://doi.org/10.1016/S2214-109X(17)30263-2.
- Szigeti, Szabolcs, Péter Gaál, Tamas Evetovits, and Joseph Kutzin. 2019. *Tax-Funded Social Health Insurance: An Analysis of Revenue Sources, Hungary.* Bulletin of the World Health Organization 97 (5): 335–48. https://doi.org/10.2471/BLT.18.218982.
- Tandon, Ajay, Jewelwayne Salcedo Cain, Christoph Kurowski, and Iryna Postolovska. 2018. *Intertemporal Dynamics of Public Financing for Universal Health Coverage: Accounting for Fiscal Space Across Countries (English).* HNP Discussion Paper. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/639541545281356938/Intertemporal-Dynamics-of-Public-Financing-for-Universal-Health-Coverage-Accounting-for-Fiscal-Space-Across-Countries.
- Tandon, Ajay, and Cheryl Cashin. 2010. Assessing Public Expenditure on Health from a Fiscal Space Perspective. Health, Nutrition and Population (HNP) discussion paper. Washington, DC: The World Bank. http://documents.worldbank.org/curated/en/333671468330890417/Assessing-public-expenditure-on-health-from-a-fiscal-space-perspective.
- Task Force on Fiscal Policy for Health. 2019. "Health Taxes to Save Lives: Employing Effective Excise Taxes on Tobacco, Alcohol, and Sugary Beverages." New York: Bloomberg Philanthropies.
- The Jordan Times. 2016. "Public Healthcare Services to Syrian Refugees Costing Jordan JD271m Annually," December 19, 2016. http://www.jordantimes.com/news/local/public-healthcare-services-syrian-refugees-costing-jordan-jd271m-annually%E2%80%99.
- Thirumurthy, Harsha, Joshua Graff Zivin, and Markus Goldstein. 2008. "The Economic Impact of AIDS Treatment: Labor Supply in Western Kenya." *The Journal of Human Resources* 43 (3): 511–52.
- Thomas, D., Frankenberg, E., Friedman, J., Habicht, J., Jones, N., and McKelvey, C., et al. 2004. "Causal Effect of Health on Labor Market Outcomes: Evidence from a Random Assignment Iron Supplementation Intervention." UCLA: California Center for Population Research. Retrieved from https://escholarship.org/uc/item/1h66k92r.
- Tu, Jiong. 2019. "Health Insurance Regime as Differentiation and Discipline." In Health Care Transformation in Contemporary China: Moral Experience in a Socialist Neoliberal Polity, edited by Jiong Tu, 85–109. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-13-0788-1_4.
- UNCTAD. 2009. *Transnational Corporations, Agricultural Production and Development.* World Investment Report 2009. New York, NY: United Nations.
- United Nations. 2012. "Human Security 'More than an Abstract Concept'—for Hungry Family, It's Food on the Table, for Refugee, It's Shelter from Conflict, General Assembly Told | Meetings Coverage and Press Releases." New York, NY: The United Nations. https://www.un.org/press/en/2012/ga11246.doc.htm.
- United Nations, Department of Economic and Social Affairs, Population Division. 2015. "World Population Prospects: The 2015 Revision, Key Findings and Advance Tables." Working Paper No. ESA/P/WP.241.
- United Nations Department of Economic and Social Affairs (UNDESA). 2015. "Financing Sustainable Development and Developing Sustainable Finance: A DESA Briefing Note On The Addis Ababa Action Agenda." UNDESA. https://www.un.org/esa/ffd/ffd3/wp-content/uploads/sites/2/2015/07/DESA-Briefing-Note-Addis-Action-Agenda.pdf.
- UNHCR. 2017. *Global Trends: Forced Displacement 2016.* Geneva: United Nations High Commissioner for Refugees. https://www.unhcr.org/5943e8a34.pdf.

- UNHCR. 2018. *Global Trends: Forced Displacement in 2017.* Geneva: United Nations High Commissioner for Refugees. https://www.unhcr.org/5b27be547.pdf.
- Van de Maele, Nathalia, David B. Evans, and Tessa Tan-Torres. 2013. Development Assistance for Health in Africa: Are We Telling the Right Story? Bulletin of the World Health Organization. Geneva: World Health Organization. "https://doi.org/entity/bulletin/volumes/91/7/12-115410/en/index.html" https://doi.org//entity/bulletin/volumes/91/7/12-115410/en/index.html.
- Van de Maele, Nathalie, Ke Xu, Agnes Soucat, Lisa Fleisher, Maria Aranguren, and Hong Wang. 2019. "Measuring Primary Healthcare Expenditure in Low-Income and Lower Middle-Income Countries." BMJ Global Health 4.
- Wagstaff, Adam. 2010. "Social Health Insurance Reexamined." Health Economics 19 (5): 503–17. https://doi.org/10.1002/hec.1492.
- Wagstaff, Adam, Gabriela Flores, Marc-François Smitz, Justine Hsu, Kateryna Chepynoga, and Patrick Eozenou. 2018. "Progress on Impoverishing Health Spending in 122 Countries: A Retrospective Observational Study." *The Lancet Global Health* 6 (2): e180–92. https://doi.org/10.1016/S2214-109X(17)30486-2.
- Wagstaff, Adam, and Rodrigo Moreno-Serra. 2009. "Europe and Central Asia's Great Post-Communist Social Health Insurance Experiment: Aggregate Impacts on Health Sector Outcomes." *Journal of Health Economics* 28 (2): 322–40. https://doi.org/10.1016/j.jhealeco.2008.10.011.
- WHO. 2010. *The World Health Report: Financing for Universal Coverage.* Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/44371/9789241564021_eng.pdf?sequence=1.
- ———. 2015. *World Report on Ageing and Health 2015.* Geneva: World Health Organization. http://www.who.int/ageing/events/world-report-2015-launch/en/.
- ———. 2016a. *High-Level Commission on Health Employment and Economic Growth.* Geneva: World Health Organization. http://www.who.int/hrh/com-heeg/en/.
- ———. 2016b. "Public Financing for Health in Africa: From Abuja to the SDGs." Tech.Report/16.2. Geneva: World Health Organization. http://www.who.int/health_financing/documents/public-financing-africa/en/.
- ———. 2017a. "Implementation of the Global Action Plan on Antimicrobial Resistance." WHO GAP AMR Newsletter No.32. Geneva: World Health Organization. https://www.who.int/antimicrobial-resistance/news/WHO-GAP-AMR-Newsletter-No-32-Nov-2017.pdf.
- ———. 2017b. *World Health Statistics 2017: Monitoring Health for the SDGs.* Sustainable Development Goals. Geneva: World Health Organization. http://www.who.int/gho/publications/world_health_statistics/2017/en/.
- ———. 2018. "Towards a Global Action Plan for Healthy Lives and Well-Being for All: Uniting to Accelerate Progress towards the Health-Related SDGs." Technical documents. Geneva: World Health Organization. https://www.who.int/sdg/global-action-plan/Global_Action_Plan_Phase_I.pdf.
- WHO and World Bank. 2017. *Tracking Universal Health Coverage: 2017 Global Monitoring Report.* http://www.who.int/healthinfo/universal_health_coverage/report/2017/en/.
- Workie, Netsanet W., and Chala Tesfaye Chekagn Ramana. 2013. Ethiopia—The Health Extension Program in Ethiopia. Universal Health Coverage (UNICO) studies series; no. 10. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-0815-9.
- World Bank. 1993. *World Development Report 1993: Investing in Health.* New York: Oxford University Press. https://openknowledge.worldbank.org/handle/10986/5976
- World Bank. 2016a. "Raising Funds for Health." Background paper to the First UHC Health Financing Forum. Washington, DC: World Bank. http://pubdocs.worldbank.org/en/103621460561160053/DRM-policy-note-041216-clean.pdf.
- ———. 2016b. "West Africa Ebola Crisis: Impact Update." Washington, DC: World Bank. http://www.worldbank.org/en/topic/macroeconomics/publication/2014-2015-west-africa-ebola-crisis-impact-update.

- ———.2016c. *World Development Report 2016: Digital Dividends.* Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1.
- ———. 2017. *World Development Report 2017: Governance and the Law.* Washington, DC: World Bank. doi:10.1596/978-1-4648-0950-7
- ———. 2018a. "Equity on the Path to UHC: Deliberate Decisions for Fair Financing." Background Report for the 3rd Annual UHC Financing Forum. Washington, DC: The World Bank. http://pubdocs.worldbank.org/en/588321524060370166/BGP-v-8-20180418-0930-FINAL.pdf.
- ———. 2018b. "Beating the DRUM in Lower-Income Countries: Domestic Resource Use and Mobilization for SDG3" Background Paper. Washington, DC: The World Bank.
- ———.2018c. *Business Unusual: Accelerating Progress towards Universal Health Coverage (English).* Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/655991523641983290/Business-unusual-accelerating-progress-towards-universal-health-coverage.
- ———. 2018d. *World Development Report 2018: Learning to Realize Education's Promise.* Washington, DC: World Bank.
- ———. 2019a. "The Difficult Path toward Formalization: Implications for Financing Universal Health Coverage in Developing Countries". Discussion Note for G20. Washington DC: World Bank
- ———.2019b. *Global Economic Prospects, January 2019: Darkening Skies.* Washington, DC: World Bank.
- ———.2019c. *World Development Report 2019: The Changing Nature of Work.* Washington, DC: World Bank.
- ———.Forthcoming. Mobile-technology driven innovations in financial protection for health. Washington, DC: World Bank.
- Yates, Robert. 2014. "Recycling Fuel Subsidies as Health Subsidies." Bulletin of the World Health Organization 92 (8): 547-547A. https://doi.org/10.2471/BLT.14.143495.
- Yeung, Wei-Jun Jean, and Leng Leng Thang. 2018. "Long-Term Care for Older Adults in ASEAN Plus Three: The Roles of Family, Community, and the State in Addressing Unmet Eldercare Needs." *Journal of Aging and Health* 30 (10): 1499–1515. https://doi.org/10.1177/0898264318796345.
- Zhu, Haiyan. 2015. "Unmet Needs in Long-Term Care and Their Associated Factors among the Oldest Old in China." BMC Geriatrics 15: 46. https://doi.org/10.1186/s12877-015-0045-9.

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