The World Health Report



HEALTH SYSTEMS FINANCING

The path to universal coverage



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Message from the Director-General

I commissioned this world health report in response to a need, expressed by rich and poor countries alike, for practical guidance on ways to finance health care. The objective was to transform the evidence, gathered from studies in a diversity of settings, into a menu of options for raising sufficient resources and removing financial barriers to access, especially for the poor. As indicated by the subtitle, the emphasis is firmly placed on moving towards universal coverage, a goal currently at the centre of debates about health service provision.

The need for guidance in this area has become all the more pressing at a time characterized by both economic downturn and rising health-care costs, as populations age, chronic diseases increase, and new and more expensive treatments

become available. As this report rightly notes, growing public demand for access to high-quality, affordable care further increases the political pressure to make wise policy choices.

At a time when money is tight, my advice to countries is this: before looking for places to cut spending on health care, look first for opportunities to improve efficiency. All health systems, everywhere, could make better use of resources, whether through better procurement practices, broader use of generic products, better incentives for providers, or streamlined financing and administrative procedures.

This report estimates that from 20% to 40% of all health spending is currently wasted through inefficiency, and points to 10 specific areas where better policies and practices could increase the impact of expenditures, sometimes dramatically. Investing these

resources more wisely can help countries move much closer to universal coverage without increasing spending.

Concerning the path to universal coverage, the report identifies continued reliance on direct payments, including user fees, as by far the greatest obstacle to progress. Abundant evidence shows that raising funds through required prepayment is the most efficient and equitable base for increasing population coverage. In effect,

such mechanisms mean that the rich subsidize the poor, and the healthy subsidize the sick. Experience shows this approach works best when prepayment comes from a large number of people, with subsequent pooling of funds to cover everyone's health-care costs.

No one in need of health care, whether curative or preventive, should risk financial ruin as a result.

As the evidence shows, countries do need stable and sufficient funds for health, but national wealth is not a prerequisite for moving closer to universal coverage. Countries with similar levels of health expenditure achieve strikingly different health outcomes from their investments. Policy decisions help explain much of this difference.

At the same time, no single mix of policy options will work well in every setting. As the report cautions, any effective strategy for health financing needs to be home-grown. Health systems are complex adaptive systems, and their different components can interact in unexpected ways. By covering failures and setbacks as well as successes, the report helps countries anticipate unwelcome surprises and avoid them. Trade-offs are inevitable, and decisions will need to strike the right balance between the proportion of the population covered, the range of services included, and the costs to be covered.

Yet despite these and other warnings, the overarching message is one of optimism. All countries, at all stages of development, can take immediate steps to move towards universal coverage and to maintain their achievements. Countries that adopt the right policies can achieve vastly improved service coverage and protection against financial risk for any given level of expenditure. It is my sincere wish that the practical experiences and advice set out in this report will guide policy-makers in the right direction. Striving for universal coverage is an admirable goal, and a feasible one – everywhere.

Dr Margaret Chan Director-General

World Health Organization

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Executive summary

Why universal coverage?

Promoting and protecting health is essential to human welfare and sustained economic and social development. This was recognized more than 30 years ago by the Alma-Ata Declaration signatories, who noted that Health for All would contribute both to a better quality of life and also to global peace and security.

Not surprisingly, people also rate health one of their highest priorities, in most countries behind only economic concerns, such as unemployment, low wages and a high cost of living (1, 2). As a result, health frequently becomes a political issue as governments try to meet peoples' expectations.

There are many ways to promote and sustain health. Some lie outside the confines of the health sector. The "circumstances in which people grow, live, work, and age" strongly influence how people live and die (3). Education, housing, food and employment all impact on health. Redressing inequalities in these will reduce inequalities in health.

But timely access to health services^a – a mix of promotion, prevention, treatment and rehabilitation – is also critical. This cannot be achieved, except for a small minority of the population, without a well-functioning health financing system. It determines whether people can afford to use health services when they need them. It determines if the services exist.

Recognizing this, Member States of the World Health Organization (WHO) committed in 2005 to develop their health financing systems so that all people have access to services and do not suffer financial hardship paying for them (4). This goal was defined as universal coverage, sometimes called universal health coverage.

In striving for this goal, governments face three fundamental questions:

- 1. How is such a health system to be financed?
- 2. How can they protect people from the financial consequences of ill-health and paying for health services?
- 3. How can they encourage the optimum use of available resources?

They must also ensure coverage is equitable and establish reliable means to monitor and evaluate progress.

In this report, WHO outlines how countries can modify their financing systems to move more quickly towards universal coverage and to sustain those achievements. The report synthesizes new research and lessons learnt from experience into a set of possible actions that countries at all stages of development can consider and adapt to their own needs. It suggests ways the international community can support efforts in low-income countries to achieve universal coverage.

As the world grapples with economic slowdown, globalization of diseases as well as economies, and growing demands for chronic care that are linked partly to ageing populations, the need for universal health coverage, and a strategy for financing it, has never been greater.

Where are we now?

The World Health Assembly resolution 58.33 from 2005 says everyone should be able to access health services and not be subject to financial hardship in doing so. On both counts, the world is still a long way from universal coverage.

On the service coverage side, the proportion of births attended by a skilled health worker can be as low as 10% in some countries, for example, while it is close to 100% for countries with the lowest rates of maternal mortality. Within countries, similar variations exist. Rich women generally obtain similar levels of coverage, wherever they live, but the poor miss out. Women in the richest 20% of the population are up to 20 times more likely to have a birth attended by a skilled health worker than a poor woman.

Closing this coverage gap between rich and poor in 49 low-income countries would save the lives of more than 700 000 women between now and 2015 (5). In the same vein, rich children live longer than poor ones; closing the coverage gap for a range of services for children under the age of five, particularly routine immunization, would save more than 16 million lives.

But income is not the only factor influencing service coverage. In many settings, migrants, ethnic minorities and indigenous people use services less than other population groups, even though their needs may be greater.

The other side of the coin is that when people do use services, they often incur high, sometimes catastrophic costs in paying for their care.

In some countries, up to 11% of the population suffers this type of severe financial hardship each year, and up to 5% is forced into poverty. Globally, about 150 million people suffer financial catastrophe annually while 100 million are pushed below the poverty line.

The other financial penalty imposed on the ill (and often their carers) is lost income. In most countries, relatives can provide some form of financial support, however small, to family members during periods of illness. More formal financial transfers to protect those too ill to work are less common. Only one in five people in the world has broad-based social security protection that also includes cover for lost wages in the event of illness, and more than half the world's population lacks any type of formal social protection, according to the International Labour Organization (ILO). Only 5–10% of people are covered in sub-Saharan Africa and southern Asia, while in middle-income countries, coverage rates range from 20% to 60%.

Health financing is an important part of broader efforts to ensure social protection in health. As such, WHO is joint lead agency with the ILO in the United Nations initiative to help countries develop a comprehensive Social Protection Floor, which includes the type of financial risk protection discussed in this report and the broader aspects of income replacement and social support in the event of illness (6).

How do we fix this?

Three fundamental, interrelated problems restrict countries from moving closer to universal coverage. The first is the availability of resources. No country, no matter how rich, has been able to ensure that everyone has immediate access to every technology and intervention that may improve their health or prolong their lives.

At the other end of the scale, in the poorest countries, few services are available to all.

The second barrier to universal coverage is an overreliance on direct payments at the time people need care. These include over-the-counter payments for medicines and fees for consultations and procedures. Even if people have some form of health insurance, they may need to contribute in the form of co-payments, co-insurance or deductibles.

The obligation to pay directly for services at the moment of need – whether that payment is made on a formal or informal (under the table) basis – prevents millions of people receiving health care when they need it. For those who do seek treatment, it can result in severe financial hardship, even impoverishment.

The third impediment to a more rapid movement towards universal coverage is the inefficient and inequitable use of resources. At a conservative estimate, 20–40% of health resources are being wasted. Reducing this waste would greatly improve the ability of health systems to provide quality services and improve health. Improved efficiency often makes it easier for the ministry of health to make a case for obtaining additional funding from the ministry of finance.

The path to universal coverage, then, is relatively simple – at least on paper. Countries must raise sufficient funds, reduce the reliance on direct payments to finance services, and improve efficiency and equity. These aspects are discussed in the next sections.

Many low- and middle-income countries have shown over the past decade that moving closer to universal coverage is not the prerogative of high-income countries. For example, Brazil, Chile, China, Mexico, Rwanda and Thailand have recently made great strides in addressing all three problems described above. Gabon has introduced innovative ways to raise funds for health, including a levy on mobile phone use; Cambodia has introduced a health equity fund that covers the health costs of the poor and Lebanon has improved the efficiency and quality of its primary care network.

Meanwhile, it is clear that every country can do more in at least one of the three key areas. Even high-income countries now realize they must continually reassess how they move forward in the face of rising costs and expectations. Germany, for example, has recognized its ageing population means wage and salary earners have declined as a proportion of the total population, making it more difficult to fund its social health insurance system from the traditional sources of wage-based insurance contributions. As a result, the government has injected additional funds from general revenues into the system.

Raising sufficient resources for health

Although domestic financial support for universal coverage will be crucial to its sustainability, it is unrealistic to expect most low-income countries to achieve universal coverage without help in the short term. The international community will need to financially support domestic efforts in the poorest countries to rapidly expand access to services.

For this to happen, it is important to know the likely cost. Recent estimates of the money needed to reach the health Millennium Development Goals (MDGs) and to ensure access to critical interventions, including for noncommunicable diseases in 49 low-income countries, suggest that, on average (unweighted), these countries will need to spend a little more than US\$ 60 per capita by 2015, considerably more than the US\$ 32 they are currently spending. This 2015 figure includes the cost of expanding the health system so that they can deliver the specified mix of interventions.

The first step to universal coverage, therefore, is to ensure that the poorest countries have these funds and that funding increases consistently over the coming years to enable the necessary scale-up.

But even countries currently spending more than the estimated minimum required cannot relax. Achieving the health MDGs and ensuring access to critical interventions focusing on noncommunicable diseases – the interventions included in the cost estimates reported here – is just the beginning. As the system improves, demands for more services, greater quality and/or higher levels of financial risk protection will inevitably follow. High-income countries are continually seeking funds to satisfy growing demands and expectations from their populations and to pay for rapidly expanding technologies and options for improving health.

All countries have scope to raise more money for health domestically, provided governments and the people commit to doing so. There are three broad ways to do this, plus a fourth option for increasing development aid and making it work better for health.

- 1. Increase the efficiency of revenue collection. Even in some high-income countries, tax avoidance and inefficient tax and insurance premium collection can be serious problems. The practical difficulties in collecting tax and health insurance contributions, particularly in countries with a large informal sector, are well documented. Improving the efficiency of revenue collection will increase the funds that can be used to provide services or buy them on behalf of the population. Indonesia has totally revamped its tax system with substantial benefits for overall government spending, and spending on health in particular.
- 2. **Reprioritize government budgets.** Governments sometimes give health a relatively low priority when allocating their budgets. For example, few African countries reach the target, agreed to by their heads of state in the 2001 Abuja Declaration, to spend 15% of their government budget on health; 19 of the countries in the region who signed the declaration allocate less now than they did in 2001. The United Republic of Tanzania, however, allots 18.4% to health and Liberia 16.6% (figures that include the contributions of external partners channelled through government, which are difficult to isolate). Taken as a group, the 49 low-income coun-



tries could raise an additional US\$ 15 billion per year for health from domestic sources by increasing health's share of total government spending to 15%.

- Innovative financing. Attention has until now focused largely on help-3. ing rich countries raise more funds for health in poor settings. The highlevel Taskforce on Innovative International Financing for Health Systems included increasing taxes on air tickets, foreign exchange transactions and tobacco in its list of ways to raise an additional US\$ 10 billion annually for global health. High-, middle- and low-income countries should all consider some of these mechanisms for domestic fundraising. A levy on foreign exchange transactions could raise substantial sums in some countries. India, for example, has a significant foreign exchange market, with daily turnover of US\$ 34 billion. A currency transaction levy of 0.005% on this volume of trade could yield about US\$ 370 million per year if India felt this path was appropriate. Other options include diaspora bonds (sold to expatriates) and solidarity levies on a range of products and services, such as mobile phone calls. Every tax has some type of distortionary effect on an economy and will be opposed by those with vested interests. Governments will need to implement those that best suit their economies and are likely to have political support. On the other hand, taxes on products that are harmful to health have the dual benefit of improving the health of the population through reduced consumption while raising more funds. A 50% increase in tobacco excise taxes would generate US\$ 1.42 billion in additional funds in 22 lowincome countries for which data are available. If all of this were allocated to health, it would allow government health spending to increase by more than 25% in several countries, and at the extreme, by 50%. Raising taxes on alcohol to 40% of the retail price could have an even bigger impact. Estimates for 12 low-income countries where data are available show that consumption levels would fall by more than 10%, while tax revenues would more than triple to a level amounting to 38% of total health spending in those countries. The potential to increase taxation on tobacco and alcohol exists in many countries. Even if only a portion of the proceeds were allocated to health, access to services would be greatly enhanced. Some countries are also considering taxes on other harmful products, such as sugary drinks and foods high in salt or transfats (7, 8).
- 4. Development assistance for health. While all countries, rich or poor, could do more to increase health funding or diversify their funding sources, only eight of the 49 low-income countries described earlier have any chance of generating from domestic sources alone the funds required to achieve the MDGs by 2015. Global solidarity is required. The funding shortfall faced by these low-income countries highlights the need for high-income countries to honour their commitments on official development assistance (ODA), and to back it up with greater effort to improve aid effectiveness. While innovative funding can supplement traditional ODA, if countries were to immediately keep their current international pledges, external funding for health in low-income countries would more than double overnight and the estimated shortfall in funds to reach the MDGs would be virtually eliminated.

Removing financial risks and barriers to access

While having sufficient funding is important, it will be impossible to get close to universal coverage if people suffer financial hardship or are deterred from using services because they have to pay on the spot. When this happens, the sick bear all of the financial risks associated with paying for care. They must decide if they can afford to receive care, and often this means choosing between paying for health services and paying for other essentials, such as food or children's education.

Where fees are charged, everyone pays the same price regardless of their economic status. There is no formal expression of solidarity between the sick and the healthy, or between the rich and the poor. Such systems make it impossible to spread costs over the life-cycle: paying contributions when one is young and healthy and drawing on them in the event of illness later in life. Consequently, the risk of financial catastrophe and impoverishment is high, and achieving universal coverage impossible.

Almost all countries impose some form of direct payment, sometimes called cost sharing, although the poorer the country, the higher the proportion of total expenditure that is financed in this way. The most extreme examples are found in 33 mostly low-income countries, where direct out-of-pocket payments represented more than 50% of total health expenditures in 2007.

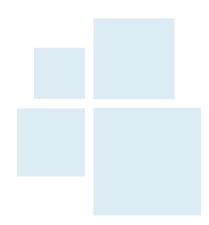
The only way to reduce reliance on direct payments is for governments to encourage the risk-pooling, prepayment approach, the path chosen by most of the countries that have come closest to universal coverage. When a population has access to prepayment and pooling mechanisms, the goal of universal health coverage becomes more realistic. These are based on payments made in advance of an illness, pooled in some way and used to fund health services for everyone who is covered – treatment and rehabilitation for the sick and disabled, and prevention and promotion for everyone.

It is only when direct payments fall to 15–20% of total health expenditures that the incidence of financial catastrophe and impoverishment falls to negligible levels. It is a tough target, one that richer countries can aspire to, but other countries may wish to set more modest short-term goals. For example, the countries in the WHO South-East Asia and Western Pacific Regions recently set themselves a target of between 30% and 40%.

The funds can come from a variety of sources – income and wage-based taxes, broader-based value-added taxes or excise taxes on tobacco and alcohol, and/or insurance premiums. The source matters less than the policies developed to administer prepayment systems. Should these contributions be compulsory? Who should pay, how much and when? What should happen to people who cannot afford to contribute financially? Decisions also need to be taken on pooling. Should funds be kept as part of consolidated government revenues, or in one or more health insurance funds, be they social, private, community or micro funds?

Country experience reveals three broad lessons to be considered when formulating such policies.

First, in every country a proportion of the population is too poor to contribute via income taxes or insurance premiums. They will need to



be subsidized from pooled funds, generally government revenues. Such assistance can take the form of direct access to government-financed services or through subsidies on their insurance premiums. Those countries whose entire populations have access to a set of services usually have relatively high levels of pooled funds – in the order of 5–6% of gross domestic product (GDP).

Second, contributions need to be compulsory, otherwise the rich and healthy will opt out and there will be insufficient funding to cover the needs of the poor and sick. While voluntary insurance schemes can raise some funds in the absence of widespread prepayment and pooling, and also help to familiarize people with the benefits of insurance, they have a limited ability to cover a range of services for those too poor to pay premiums. Longer-term plans for expanding prepayment and incorporating community and microinsurance into the broader pool are important.

Third, pools that protect the health needs of a small number of people are not viable in the long run. A few episodes of expensive illness will wipe them out. Multiple pools, each with their own administrations and information systems, are also inefficient and make it difficult to achieve equity. Usually, one of the pools will provide high benefits to relatively wealthy people, who will not want to cross-subsidize the costs of poorer, less healthy people.

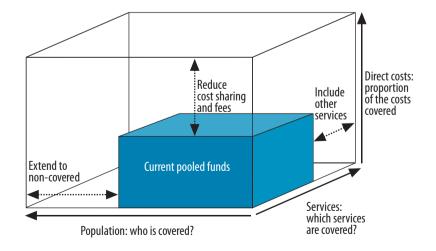
Cross-subsidization is possible where there are multiple funds, but this requires political will and technical and administrative capacities. In the Netherlands and Switzerland, for example, funds are transferred between insurance schemes that enrol people with few health needs (and who incur lower costs) to those enrolling high-risk people who require more services.

Even where funding is largely prepaid and pooled, there will need to be

tradeoffs between the proportions of the population to be covered, the range of services to be made available and the proportion of the total costs to be met (Fig. 1). The box here labelled "current pooled funds" depicts the current situation in a hypothetical country, where about half the population is covered for about half of the possible services, but where less than half the cost of these services is met from pooled funds. To get closer to universal coverage, the country would need to extend coverage to more people, offer more services, and/or pay a greater part of the cost.

In countries with longstanding social health protection mechanisms such as those in Europe, or Japan, the current pooled funds box fills most of the space. But none of the high-income countries

Fig. 1. Three dimensions to consider when moving towards universal coverage



Source: Adapted from (9, 10).

that are commonly said to have achieved universal coverage actually covers 100% of the population for 100% of the services available and for 100% of the cost – and with no waiting lists. Each country fills the box in its own way, trading off the proportion of services and the proportion of the costs to be met from pooled funds.

Nevertheless, the entire population in all these countries has the right to use a set of services (prevention, promotion, treatment and rehabilitation). Virtually everyone is protected from severe financial risks thanks to funding mechanisms based on prepayment and pooling. The fundamentals are the same even if the specifics differ, shaped by the interplay of expectations between the population and the health providers, the political environment and the availability of funds.

Countries will take differing paths towards universal coverage, depending on where and how they start, and they will make different choices as they proceed along the three axes outlined in Fig. 1. For example, where all but the elite are excluded from health services, moving quickly towards a system that covers everyone, rich or poor, may be a priority, even if the list of services and the proportion of costs covered by pooled funds is relatively small. Meanwhile, in a broad-based system, with just a few pockets of exclusion, the country may initially take a targeted approach, identifying those that are excluded and taking steps to ensure they are covered. In such cases, they can cover more services to the poor and/or cover a higher proportion of the costs.

Ultimately, universal coverage requires a commitment to covering 100% of the population, and plans to this end need to be developed from the outset even if the objective will not be achieved immediately.

Other barriers to accessing health services

Removing the financial barriers implicit in direct-payment systems will help poorer people obtain care, but it will not guarantee it. Recent studies on why people do not complete treatment for chronic diseases show that transport costs and lost income can be even more prohibitive than the charges imposed for the service. Moreover, if services are not available at all or not available close by, people cannot use them even if they are free of charge.

Many countries are exploring ways to overcome these barriers. Conditional cash transfers, where people receive money if they do certain things to improve their health (usually linked to prevention), have increased the use of services in some cases. Other options include vouchers and refunds to cover transport costs, and microcredit schemes that allow members of poor households (often the women) the chance to earn money, which can be used in a variety of ways, including seeking or obtaining health services.

Promoting efficiency and eliminating waste

Raising sufficient money for health is imperative, but just having the money will not ensure universal coverage. Nor will removing financial barriers to access through prepayment and pooling. The final requirement is to ensure resources are used efficiently.

Opportunities to achieve more with the same resources exist in all countries. Expensive medicines are often used when cheaper, equally effective options are available. In many settings, antibiotics and injections are overused, there is poor storage and wastage, and wide variations in the prices procurement agencies negotiate with suppliers. Reducing unnecessary expenditure on medicines and using them more appropriately, and improving quality control, could save countries up to 5% of their health expenditure.

Medicines account for three of the most common causes of inefficiency outlined in this report. Solutions for the other six can be grouped under the following headings:

- Get the most out of technologies and health services
- Motivate health workers
- Improve hospital efficiency
- Get care right the first time by reducing medical errors
- Eliminate waste and corruption
- Critically assess what services are needed.

Conservatively speaking, about 20–40% of resources spent on health are wasted, resources that could be redirected towards achieving universal coverage.

All countries, no matter what their income level, can take steps to reduce inefficiency, something that requires an initial assessment of the nature and causes of local inefficiencies drawing on the analysis in this report. Inefficiency can sometimes be due to insufficient, rather than too much, spending on health. For example, low salaries result in health workers supplementing their income by working a second job concurrently, reducing output for their primary employment. It is then necessary to assess the costs and likely impact of the possible solutions.

Incentives for greater efficiency can be built into the way service providers are paid. Fee-for-service payment encourages over-servicing for those who can afford to pay or whose costs are met from pooled funds (e.g. taxes and insurance), and underservicing for those who cannot pay.

Many alternatives have been tried. All have advantages and disadvantages. Where fee-for-service is the norm, governments and insurance companies have had to introduce controls to reduce overservicing. These controls can be costly to implement, requiring additional human capacity and infrastructure to measure and monitor the use (and possible overuse) of services.

In other settings, fee-for-service payments have been replaced by capitation at the primary-care level, or by some form of case-based payment, such as diagnostic-related groups at the hospital level. Capitation involves payment of a fixed sum per person enrolled with a provider or facility in each time period, regardless of the services provided. Case-base payment is for a fixed sum per case, again regardless of the intensity or duration of hospital treatment.

Both reduce incentives for over-servicing. However, it has been argued diagnostic-related groups (i.e. payment of a standard rate for a procedure, regardless of how long patients stay in hospital) may encourage hospitals

to discharge patients early, then to re-admit rapidly, thereby incurring two payments instead of one.

Paying service providers is a complex, ever-changing process and some countries have developed a mixed payment system, believing it is more efficient than a single payment mode.

It is possible to find more efficient approaches to purchasing services, often described as strategic purchasing. The traditional system in which providers are reimbursed for their services (and national governments allocate budgets to various levels of administration based largely on the funding they received the previous year) has been termed passive purchasing. More active purchasing can improve quality and efficiency by asking explicit questions about the population's health needs: what interventions and services best meet these needs and expectations given the available resources? What is the appropriate mix of promotion, prevention, treatment and rehabilitation? How and from whom should these interventions and services be purchased and provided?

Strategic purchasing is more than making a simple choice between passive and active purchasing. Countries will decide where they can operate based on their ability to collect, monitor and interpret the necessary information, and to encourage and enforce standards of quality and efficiency. Passive purchasing creates inefficiency. The closer countries can move towards active purchasing, the more efficient the system is likely to be.

Inequalities in coverage

Governments have a responsibility to ensure that all providers, public and private, operate appropriately and attend to patients' needs cost effectively and efficiently. They also must ensure that a range of population-based services focusing on prevention and promotion is available, services such as mass communication programmes designed to reduce tobacco consumption, or to encourage mothers to take their children to be immunized.

They are also responsible for ensuring that everyone can obtain the services they need and that all are protected from the financial risks associated with using them. This can conflict with the drive towards efficiency, for the most efficient way of using resources is not always the most equitable. For example, it is usually more efficient to locate services in populated areas, but reaching the rural poor will require locating services closer to them.

Governments must also be aware that free public services may be captured by the rich, who use them more than the poor, even though their need may be less. In some countries, only the richest people have access to an adequate level of services, while in others, only the poorest are excluded. Some groups of people slip through the gaps in most systems, and patterns of exclusion from services vary. Particular attention must be paid to the difficulties women and ethnic and migrant groups face in accessing services, and to the special problems experienced by indigenous populations.

An agenda for action

No country starts from scratch in the way it finances health care. All have some form of system in place, and must build on it according to their values, constraints and opportunities. This process should be informed by national and international experience.

All countries can do more to raise funds for health or to diversify their sources of funding, to reduce the reliance on direct payments by promoting prepayment and pooling, and to use funds more efficiently and equitably, provided the political will exists.

Health can be a trailblazer in increasing efficiency and equity. Decision-makers in health can do a great deal to reduce leakage, for example, notably in procurement. They can also take steps, including regulation and legislation, to improve service delivery and the overall efficiency of the system – steps that other sectors could then follow.

Simply choosing from a menu of options, or importing what has worked in other settings, will not be sufficient. Health financing strategy needs to be home-grown, pushing towards universal coverage out of existing terrain. It is imperative, therefore, that countries develop their capacities to analyse and understand the strengths and weaknesses of the system in place so that they can adapt health financing policies accordingly, implement them, and monitor and modify them over time.

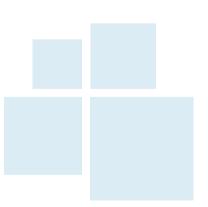
Facilitating and supporting change

The lessons described above focus on the technical challenges of health financing reform. But the technical aspect is only one component of policy development and implementation; a variety of accompanying actions that facilitate reflection and change are necessary.

These actions are captured in the health financing decision process represented in Fig. 2. It is intended as a guide rather than a blueprint, and it should be noted that while the processes we envisage are represented as conceptually discrete, they overlap and evolve on an ongoing basis.

The seven actions described here apply not only to low- and middle-income countries. High-income countries that have achieved elevated levels of financial risk protection and coverage also need to continuously self-assess to ensure the financing system achieves its objectives in the face of ever-changing diagnostic and treatment practices and technologies, increasing demands and fiscal constraints.

Devising and implementing health finance strategy is a process of continuous adaptation, rather than linear progress towards some notional perfection. It must start with a clear statement of the principles and ideals driving the financing system – an understanding of what universal health coverage means in the particular country. This prepares the ground for the situation analysis (action 2). Action 3 identifies the financial envelope and how this is likely to change over time. It includes consideration of how much people are paying out of pocket and how much is spent in the nongovernmental sector. Action 4 considers the potential constraints on



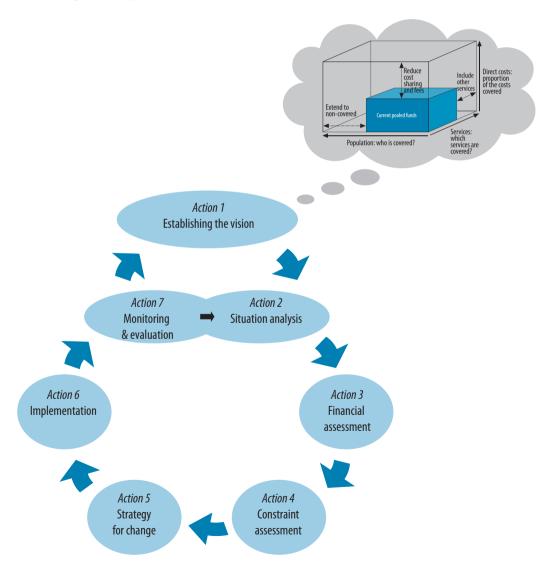


developing and implementing plans to move closer to universal coverage, while actions 5 and 6 cover the formulation and implementation of detailed strategies.

The cycle, as we envisage it, is completed (action 7) when a country reviews its progress towards its stated goals (action 1), allowing its strategies to be re-evaluated and new plans made to redress any problems. It is a process based on continual learning, the practical realities of the system feeding constant re-evaluation and adjustment.

Health financing systems must adapt, and not just because there is always room for improvement, but because the countries they serve also change: disease patterns evolve, resources ebb and flow, institutions develop or decline.

Fig. 2. The health financing decision process



Practical steps for external partners

As noted above, many of the poorest countries will be unable for many years to finance a system of universal coverage – even one with a modest set of health services – from their own domestic resources. To allow the poorest countries to scale up more rapidly, external partners will need to increase contributions to meet their previously agreed international commitments. This act alone would close almost all the financing gap identified for 49 low-income countries earlier, and save more than 3 million additional lives before 2015.

Traditional ODA can be supplemented by innovative sources of funding. As the high-level taskforce suggested, some of the innovative ways to raise funds discussed earlier could also be applied at the international level. Some are already being implemented, as evidenced by the Millennium Foundation's MassiveGood campaign. Many innovative financing mechanisms do not require international consensus. If each high-income country introduced just one of the options that have been discussed, it could raise serious levels of additional funding to support a more rapid movement towards universal coverage in the countries most in need.

External partners could also help to strengthen the financing systems in recipient countries. Donors currently use multiple funding channels that add considerably to the transaction costs at both the country and international level. Harmonizing systems would put an end to the many auditing, monitoring and evaluation mechanisms competing with domestic systems for accountants, auditors, and actuaries. It would also free health ministry and other government staff to spend more time extending health coverage.

The international community has made progress by adopting the Paris Declaration on Aid Effectiveness and the subsequent Accra Agenda for Action. The International Health Partnership and related initiatives seek to implement the principles laid out in the declaration and the agenda. However, much remains to be done. Viet Nam reports that in 2009 there were more than 400 donor missions to review health projects or the health sector. Rwanda has to report annually on 890 health indicators to various donors, 595 relating to HIV and malaria alone while new global initiatives with secretariats are being created.

A message of hope

The first key message of this world health report is that there is no magic bullet to achieving universal access. Nevertheless, a wide range of experiences from around the world suggests that countries can move forward faster than they have done in the past or take actions to protect the gains that have been made. It is possible to raise additional funds and to diversify funding sources. It is possible to move away from direct payments towards prepayment and pooling (or to ensure that efforts to contain the growth of expenditures do not, in fact, extend the reliance on direct payments) and to become more efficient and equitable in the use of resources.

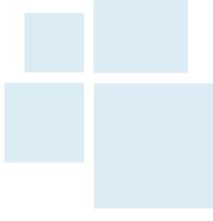
The principles are well established. Lessons have been learned from the countries that have put these principles into practice. Now is the time to take those lessons and build on them, for there is scope for every country to do something to speed up or sustain progress towards universal coverage.

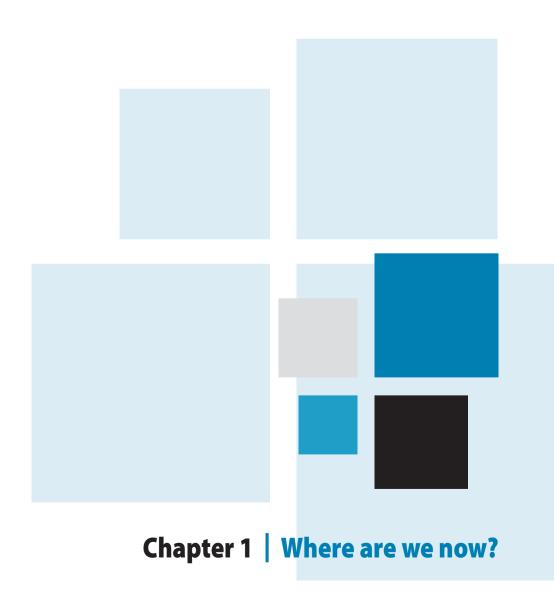
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End notes

a In this report, the term "health services" is used to include promotion, prevention, treatment and rehabilitation. It includes services aimed at individuals (e.g. childhood immunization or treatment for tuberculosis) and services aimed at populations (e.g. mass media anti-smoking campaigns).





Key messages

- Improving health is critical to human welfare and essential to sustained economic and social development. Reaching the "highest attainable standard of health," as stated in the WHO Constitution, requires a new or continued drive towards universal coverage in many countries, and strong actions to protect the gains that have been achieved in others.
- To achieve universal health coverage, countries need financing systems that enable people to use all types of health services promotion, prevention, treatment and rehabilitation without incurring financial hardship.
- Today, millions of people cannot use health services because they have to pay for them at the time they receive them. And many of those who do use services suffer financial hardship, or are even impoverished, because they have to pay.
- Moving away from direct payments at the time services are received to prepayment is an important step to averting the financial hardship associated with paying for health services. Pooling the resulting funds increases access to needed services, and spreads the financial risks of ill health across the population.
- Pooled funds will never be able to cover 100% of the population for 100% of the costs and 100% of needed services. Countries will still have to make hard choices about how best to use these funds.
- Globally, we are a long way from achieving universal health coverage. But countries at all income levels have recently made important progress towards that goal by raising more funds for health, pooling them more effectively to spread financial risks, and becoming more efficient.

1



Where are we now?

The accident happened on 7 October 2006. Narin Pintalakarn came off his motorcycle going into a bend. He struck a tree, his unprotected head taking the full force of the impact. Passing motorists found him some time later and took him to a nearby hospital. Doctors diagnosed severe head injury and referred him to the trauma centre, 65 km away, where the diagnosis was confirmed. A scan showed subdural haematoma with subfalcine and uncal herniation. Pintalakarn's skull had fractured in several places. His brain had bulged and shifted, and was still bleeding; the doctors decided to operate. He was wheeled into an emergency department where a surgeon removed part of his skull to relieve pressure. A blood clot was also removed. Five hours later, the patient was put on a respirator and taken to the intensive care unit where he stayed for 21 days. Thirtynine days after being admitted to hospital, he had recovered sufficiently to be discharged.

What is remarkable about this story is not what it says about the power of modern medicine to repair a broken body; it is remarkable because the episode took place not in a country belonging to the Organisation for Economic Co-operation and Development (OECD), where annual per capita expenditure on health averages close to US\$ 4000, but in Thailand, a country that spends US\$ 136 per capita, just 3.7% of its gross domestic product (GDP) (1). Nor did the patient belong to the ruling elite, the type of person who – as this report shall show – tends to get good treatment wherever they live. Pintalakarn was a casual labourer, earning only US\$ 5 a day.

"Thai legislation demands that all injured patients be taken care of with standard procedure no matter what their status," says Dr Witaya Chadbunchachai, the surgeon who carried out the craniotomy on Pintalakarn at the Khon Kaen Regional Hospital in the country's north-eastern province. According to Chadbunchachai, medical staff do not consider who is going to pay for treatment, however expensive it might be, because in Thailand, everyone's health-care costs are covered.

At a time when many countries, including major economic powers such as China and the United States of America, are reviewing the way they meet the health-care needs of their populations, universal health coverage – what is it, how much does it cost and how is it to be paid for? – dominates discussions on health service provision. In this world health report, we examine the issue from the financing perspective, and suggest ways in which all countries, rich and poor, can improve access to good quality health services without people experiencing financial hardship because they must pay for care (Box 1.1).

The three critical areas of health financing are:

- 1. raise sufficient money for health;
- 2. remove financial barriers to access and reduce financial risks of illness;
- 3. make better use of the available resources (Box 1.1 provides details).

Box 1.1. What a health financing system does: a technical explanation

Health financing is much more than a matter of raising money for health. It is also a matter of who is asked to pay, when they pay, and how the money raised is spent.

Revenue collection is what most people associate with health financing: the way money is raised to pay health system costs. Money is typically received from households, organizations or companies, and sometimes from contributors outside the country (called "external sources"). Resources can be collected through general or specific taxation; compulsory or voluntary health insurance contributions; direct out-of-pocket payments, such as user fees; and donations.

Pooling is the accumulation and management of financial resources to ensure that the financial risk of having to pay for health care is borne by all members of the pool and not by the individuals who fall ill. The main purpose of pooling is to spread the financial risk associated with the need to use health services. If funds are to be pooled, they have to be *prepaid*, before the illness occurs – through taxes and/or insurance, for example. Most health financing systems include an element of pooling funded by prepayment, combined with direct payments from individuals to service providers, sometimes called *cost-sharing*.

Purchasing is the process of paying for health services. There are three main ways to do this. One is for government to provide budgets directly to its own health service providers (integration of purchasing and provision) using general government revenues and, sometimes, insurance contributions. The second is for an institutionally separate purchasing agency (e.g. a health insurance fund or government authority) to purchase services on behalf of a population (a purchaser-provider split). The third is for individuals to pay a provider directly for services. Many countries use a combination.

Within these broad areas, health service providers can be paid in many different ways, discussed more fully in Chapter 4. Purchasing also includes deciding which services should be financed, including the mix between prevention, promotion, treatment and rehabilitation. This is addressed further in Chapter 2.

Labels can be misleading. Each country makes different choices about how to raise revenues, how to pool them and how to purchase services. The fact that several countries decide to raise part of the revenue for health from compulsory health insurance premiums does not mean that they all pool the funds in the same way. Some countries have a single pool – e.g. a national health insurance fund – while others have multiple, sometimes competing pools managed by private insurance companies. Even when countries have similar pooling systems, their choices about how to provide or purchase services vary considerably. Two systems based largely on health insurance may operate differently in how they pool funds and use them to ensure that people can access services; the same applies to two systems that are described as tax-based. This is why the traditional categorization of financing systems into tax-based and social health insurance – or Beveridge versus Bismarck – is no longer useful for policy-making.

It is much more important to consider the choices to be made at each step along the path, from raising revenues, to pooling them, to spending them. These are the choices that determine whether a financing system is going to be effective, efficient and equitable, choices that are described in the subsequent chapters.

People at the centre. In all of this technical work, it is important to remember that people are at the centre. On the one hand, they provide the funds required to pay for services. On the other, the only reason for raising these funds is to improve people's health and welfare. Health financing is a means to an end, not an end in itself.

Health services cost money. One way or another, doctors and nurses, medicines and hospitals have to be paid for. Today, global annual expenditure on health is about US\$ 5.3 trillion (1). With the burden of communicable diseases remaining stubbornly high in some parts of the world, and the prevalence of noncommunicable diseases heart disease, cancers and chronic conditions such as obesity - increasing everywhere, health costs can only continue to rise. This trend will be exacerbated by the more sophisticated medicines and procedures being developed to treat them.

It would seem logical, therefore, that richer countries are better able to provide affordable health services. Indeed, the countries that have come closest to achieving universal coverage do generally have more to spend on health. OECD countries, for example, represent only 18% of the global population but account for 86% of the world's health spending; few OECD countries spend less than US\$ 2900 per person each year.

But it is not always the case that lower-income countries have less coverage. Thailand is a striking example of a country that has vastly improved service coverage and protection against the financial risks of ill health despite spending much less on health than higherincome countries. It has done this by changing the way it raises funds for health and moving away from direct payments, such as user fees (Box 1.2). This is perhaps the most crucial element of developing financing systems for universal coverage; many countries still rely too heavily on direct payments from individuals to health service providers to fund their health systems.

Direct payments

Direct payments have serious repercussions for health. Making people pay at the point of delivery discourages them from using (particularly services health promotion and prevention), and encourages them to postpone health checks. This means they do not receive treatment early, when the prospects for cure are greatest. It has been estimated that a high proportion of the world's 1.3 billion poor have no access to health services simply because they cannot afford to pay at the time they need them (2). They risk being pushed into poverty, or further into poverty, because they are too ill to work.

Direct payments also hurt household finances. Many people

who do seek treatment, and have to pay for it at the point of delivery, suffer severe financial difficulties as a consequence (3–6). Estimates of the number of people who suffer financial catastrophe (defined as paying more than 40% of household income directly on health care after basic needs have been met) are available for 89 countries, covering nearly 90% of the world's population (7). In some countries, up to 11% of people suffer this type of severe financial hardship each year and up to 5% are forced into poverty because they must pay for health services at the time they receive them. Recent studies show that these out-of-pocket health payments pushed 100 000 households in both Kenya and Senegal below the poverty line in a single year. About 290 000 experienced the same fate in South Africa (8).

Financial catastrophe occurs in countries at all income levels, but is greatest in those that rely the most on direct payments to raise funds for health (9). Worldwide, about 150 million people a year face catastrophic health-care costs because of direct payments such as user fees, while 100 million are driven below the poverty line (7).

Catastrophic health spending is not necessarily caused by high-cost medical procedures or one single expensive event. For many households, relatively small payments can also result in financial catastrophe (10). A steady drip of medical bills can force people with chronic disease or disabilities, for example, into poverty (11–13).

Not only do out-of-pocket payments deter people from using health services and cause financial stress, they also cause inefficiency and inequity in the way resources are used. They encourage overuse by people who can pay and underuse by those who cannot (Box 1.3).

Box 1.2. What are direct payments?

In health, charges or fees are commonly levied for consultations with health professionals, medical or investigative procedures, medicines and other supplies, and for laboratory tests.

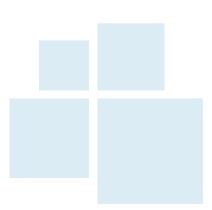
Depending on the country, they are levied by government, nongovernmental organizations, faith-based and private health facilities.

They are sometimes officially sanctioned charges and sometimes unofficial or so-called "under-the-table" payments. Sometimes both co-exist.

Even where these charges are covered by insurance, patients are generally required to share the costs, typically in the form of co-insurance, co-payments and/or deductibles – payments the insured person has to make directly out of pocket at the time they use services because these costs are not covered by the insurance plan.

Deductibles are the amount of expenses that must be paid out of pocket before an insurer will cover any expenses at all. Co-insurance reflects the proportion of subsequent costs that must be met out of pocket by the person who is covered, while co-payments are set as a fixed amount the beneficiary must pay for each service.

We use the term *direct payments* to capture all these elements. However, because the term *out-of-pocket payments* is often used to capture the same ideas, we use the two terms interchangeably.



Pooled funds

Progress towards universal coverage depends on raising adequate funds from a sufficiently large pool of individuals, supplemented where necessary with donor support and general government revenues, and spending these funds on the services a population needs. The more people who share the financial risk in this way, the lower the financial risk to which any one individual is exposed. In general, the bigger the pool, the better able it is to cope with financial risks. Using the same reasoning, pools with only a few participants are likely to experience what actuaries term "extreme fluctuations in utilization and claims" (16).

For a pool to exist, money must be put into it, which is why a system of prepayment is required. Prepayment simply means that people pay before they are sick, then draw on the pooled funds when they fall ill. There are different ways of organizing prepayment for the people who can afford to pay (see Chapter 3) but in all countries there will be people who are unable to contribute financially. The countries that have come closest to achieving universal health coverage use tax revenue to cover the health needs to these people, ensuring that everyone can access services when they need them.

Countries are at different points on the path to universal coverage and at different stages of developing financing systems. Rwanda, for example, has a tax system that is still developing, and three robust health insurance organizations (Box 1.4). It may decide to build larger pools by merging the individual funds at a later date.

External assistance

In lower-income countries, where prepayment structures may be underdeveloped or inefficient and where health needs are massive, there are many obstacles to raising sufficient funds through prepayment and pooling. It is essential, therefore, that international donors lend their support. Investing in the development of prepayment and pooling, as opposed to simply funding projects or programmes through separate channels, is one of the best ways donors can help countries move away from user fees and improve access to health care and financial risk protection (21, 22).

Box 1.3. Financing for universal health coverage

Financing systems need to be specifically designed to:

- provide all people with access to needed health services (including prevention, promotion, treatment and rehabilitation) of sufficient quality to be effective;
- ensure that the use of these services does not expose the user to financial hardship (14).

In 2005, the World Health Assembly unanimously adopted a resolution urging countries to develop their health financing systems to achieve these two goals, defined then as achieving universal coverage (15). The more that countries rely on direct payments, such as user-fees, to fund their health systems, the more difficult is it to meet these two objectives.

Over the past five years, many bilateral agencies have begun to help countries develop their health financing systems, with a view to achieving universal coverage. These agencies have also started to determine how their external financial assistance can support, rather than hinder this process. This is reflected in the adoption of the Paris Declaration on Aid Effectiveness and the subsequent Accra Action Agenda. The International Health Partnership and related initiatives

seek to implement these principles into practice in the health sector, with the aim to mobilize donor countries and other development partners around a single, country-led national health strategy (23, 24).

On the path to universal coverage

Many countries are reforming the way they finance health care as they move towards universal coverage, among them two of the most important global economies, China and the United States of America.

In April 2009, the Chinese government announced plans to provide "safe, effective, convenient and affordable" health services to all urban and rural residents by 2020 (25). If fully implemented, the reform will end market-based mechanisms for health that were introduced in 1978. Prior to then, the government had offered basic but essentially free health-care services to the entire population, but the new market-based approach resulted in a major increase in direct payments – from little more than 20% of all health spending in 1980 to 60% in 2000 – leaving many people facing catastrophic health-care costs. The new approach also meant that hospitals had to survive on patient fees, which put pressure on doctors to prescribe medicines and treatment based on their revenue-generating potential rather than their clinical efficacy.

The government took steps to address these issues. The New Cooperative Medical Schemes, initiated in 2003 to meet the needs of rural populations,

and the Urban Residents Basic Medical Insurance scheme, piloted in 79 cities in 2007, are at the heart of the latest reforms. The government aims to reduce dependence on direct payments and increase the proportion of the population covered by formal insurance from 15% in 2003 to 90% by 2011, and to expand access to services and financial risk protection over time (26).

The recent health financing reforms in the United States will extend insurance coverage to a projected 32 million previously uninsured people by 2019 (27). Numerous strategies will be used to achieve this goal. Private insurers will no longer be able to reject applicants based on health status, for example, and low-income individuals and families will have their premiums subsidized (28).

Many low- to middle-income countries have also made significant progress developing their financing systems towards universal coverage.

Box 1.4. Sharing the risk of sickness: mutual health insurance in Rwanda

The Rwandan government reports that 91% of the country's population belongs to one of three principal health insurance schemes (17). The first, the Rwandaise assurance maladie, is a compulsory social health insurance scheme for government employees that is also open to private-sector employees on a voluntary basis. The second, the Military Medical Insurance scheme, covers the needs of all military personnel. The third, and most important for population coverage, is the cluster of Assurances maladies communautaires – mutual insurance schemes whose members predominantly live in rural settings and work in the informal sector. These mutual insurance schemes have expanded rapidly over the past 10 years, and now cover more than 80% of the population. About 50% of mutual insurance scheme funding comes from member premiums, the other half being subsidized by the government through a mix of general tax revenues and donor support (18).

The insurance schemes do not cover all health costs: households still have to pay a proportion of their costs out of pocket and the range of services available is clearly not as extensive as in richer countries. Nevertheless, they have had a marked impact. Per capita spending on health went up from US\$ 11 in 1999 to US\$ 37 in 2007; the increasing proportion of the population covered by some form of health insurance has translated into increased uptake of health services, and, most important of all, to improvements in health outcomes measured, for example, by declines in child mortality (19).

At an early stage of its development, challenges still exist. These include: making contributions more affordable for the poorest; increasing the range of services offered and the proportion of total costs covered; and improving financial management. Rwanda is also working to harmonize the different financing mechanisms, partly through the development of a national legal framework governing social health insurance (20).

These include well-known examples, such as Chile (29), Colombia (6), Cuba (30), Rwanda (20), Sri Lanka (31) and Thailand (32), but also Brazil (33), Costa Rica (34), Ghana (35), Kyrgyzstan (36), Mongolia (37) and the Republic of Moldova (38). At the same time, Gabon (39), the Lao People's Democratic Republic (40), Mali (41), the Philippines (42), Tunisia (43) and Viet Nam (44) have expanded various forms of prepayment and pooling to increase financial risk protection, particularly for the poor.

At the other end of the income scale, 27 OECD countries cover all their citizens with a set of interventions from pooled funds, while two others – Mexico, with its *Seguro Popular* voluntary health insurance scheme, and Turkey, with its Health Transformation Programme – are moving towards it (45–47).

Each of these countries has moved towards universal coverage in different ways and at different speeds. Sometimes their systems have evolved over long periods, often in the face of opposition; sometimes the path has been shorter and quicker (21, 48).

The Republic of Korea, for example, started its journey in the early 1960s. Early investment focused on building infrastructure, but the programme expanded significantly in 1977 with vigorous high-level political support (49). Steady expansion of employer-based health-care schemes followed, starting with companies employing more than 500 staff, moving down the corporate chain to companies employing just 16, and more recently to those with only one full-time employee. Civil servants and teachers were brought into the scheme in 1981 and played a key role in raising awareness in the rest of the population. This, in turn, helped put universal coverage at the heart of the political agenda in 1988, when enrolment in social welfare programmes was a core issue in the presidential campaign. In 1989, coverage was extended to the remaining population – the indigent, the self-employed and rural residents (50). Since then, the system has sought to expand both the range of services offered and the proportion of the costs covered by the insurance system.

Sustaining existing achievements

Moving more rapidly towards universal coverage is one challenge, but sustaining gains already made can be equally difficult. Several countries have adapted their financing systems in the face of changing circumstances. Ghana, for example, began after independence in 1957 to provide medical care to its population free at the point of service through government-funded facilities. It abandoned this system in the early 1980s in the face of severe resource constraints, before introducing a form of national insurance more recently (Box 1.5).

Chile, too, has gone through different phases. After running a state-funded national health service for 30 years, it opted in 2000 for a mixed public/private approach to health insurance, guaranteeing universal access to quality treatment for a set of explicitly defined conditions. The number of conditions has expanded over time and the poor have been the major beneficiaries (29).

All countries face increasing demands for better services, disease threats and a growing list of often expensive technologies and medicines to maintain or improve health. Costs continually rise faster than national income, putting pressure on governments to restrain costs.

Universal coverage: the two prongs

Many countries, at varying stages of economic development, have shown it is possible to make substantial progress towards universal coverage. Nevertheless, the world as a whole still has a long way to go. To learn where we stand today, we must focus on the two key elements of universal health coverage described earlier: financial access to crucial health services; and the extent of financial risk protection provided to the people who use them (Box 1.3).

As mentioned earlier, an estimated 150 million people globally suffer financial catastrophe each year and 100 million are pushed into poverty because of direct payments for health services. This indicates a widespread lack of financial risk protection – a deficiency that affects low-income countries most, but is by no means limited to them. In six of the OECD countries, more than 1% of the population, or almost four million people, suffers catastrophic spending, while the incidence exceeds five per 1000 people in another five (7).

Furthermore, medical debt is the principal cause of personal bankruptcy in the USA. Harvard researchers in 2008 concluded that illness or medical bills had contributed to 62% of bankruptcies the previous year (52). Many of these people had some form of health insurance, but the benefits offered were insufficient to protect them against high out-of-pocket expenses. This development is not linked to the recent economic recession; medical bills were already the cause of 50% of bankruptcies in the USA in 2001.

On a global scale, medical bankruptcies are not yet a major concern, either because financial access to care is adequate or because formal credit is out of the reach of most of the population (53, 54). However, if direct payments remain high and access to credit increases, this is likely to become a problem.

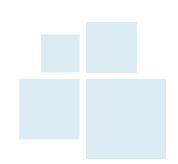
The reduction in the incidence of financial hardship associated with direct payments is a key indicator of progress towards universal coverage. However, country studies sometimes indicate little financial catastrophe or impoverishment of this nature among the most poor, because they simply cannot afford to use health services (55, 56). The extent to which people are able to use needed services is, therefore, also an important indicator of the health of the financing system.

Box 1.5. Ghana: different phases of health financing reforms

After independence in 1957, Ghana provided medical care to its population through a network of primary-care facilities. The system was financed through general taxation and received a degree of external donor support. No fees were charged for services. In the 1980s, faced with worsening economic conditions, the country liberalized its health sector as part of broader structural reforms. Liberalization led to an explosion in the number of private health-care providers, which, combined with the introduction of fees to cover part of the costs of government facilities, led to a sharp drop in the use of health services, particularly among the poor. Those people who did seek treatment paid out of their own pocket often risked financial ruin as a result (51).

More recently, out-of-pocket payment has started to decrease as a proportion of total health expenditure as the country tries to reverse these developments. The process began with exemptions from user fees for diseases such as leprosy and tuberculosis, and for immunization and antenatal care. Ghana also waives fees for people with extremely low incomes. A National Health Insurance Scheme was introduced in 2004 and by June 2009, 67.5% of the population had registered (*35*). During the 2005–2008 period, national outpatient-care visits increased by 50%, from about 12 million to 18 million, while inpatient-care admissions increased by 6.3%, from 0.8 million to about 0.85 million.

For the time being, each of the district mutual health insurance schemes that comprise the national scheme effectively constitutes a separate risk pool. Fragmentation is thus a continuing problem, as is sustainability, but Ghana is committed to redressing the move away from universal coverage over the past few decades.



Data on financial access to health services are scarce, but there is information on coverage for some key interventions. This provides clues on the extent to which financial barriers prevent people from using services. For example, immunizing children under one year of age with the diphtheriatetanus-pertussis vaccine (DTP3) saves many of their lives, while having skilled health personnel attend births is crucial to saving the lives of both new-borns and mothers. Information on the proportion of children fully immunized with DTP3 and the proportion of births attended by skilled health personnel is widely reported.

Fig. 1.1 shows reported coverage for both of these interventions, with each data point representing a country, ordered from lowest to highest on the horizontal axis. Many countries achieve, or almost achieve, 100% coverage for both interventions, though there is considerable variation across countries. At one extreme, in 16 countries, fewer than 40% of women deliver babies in the presence of a skilled health worker capable of saving their lives in the event of a complication. In seven countries, DTP3 immunization coverage is lower than 40%. This suggests that inequalities in coverage are substantial across countries and greater for services that require more infrastructure and skilled workers (such as childbirth) than for other interventions (such as vaccinations) (57).

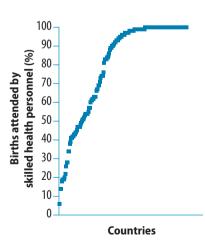
Inequalities in coverage (and health outcomes) also exist within countries. Demographic and Health Surveys reveal substantial differences between income groups in many lower-income countries. Again, bigger discrepancies occur in access to skilled health workers during child delivery than in childhood immunization. With few exceptions, the richest people in even low-income countries enjoy access to services similar to that available in high-income countries. The poor, however, are

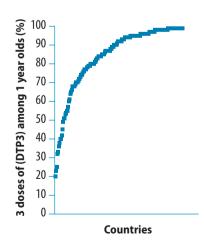
almost always more deprived than the rich, though the extent varies. In some settings, coverage of DTP3 among the poor can be as low as 10% of that for the rich (58).

The use of health services also varies substantially across and within countries (59, 60). Data from the 52 countries included in the World Health Survey, spanning all income levels, showed that usage during a four-week period before the survey ranged from less than 10% of the population to more than 30% (58). In some settings, the rich reported using these services more than twice as much as the poor, despite the fact the poor need them much more.

While the data cited give an indication of coverage, they offer no insight into the quality of care. What

Fig. 1.1. Coverage of births attended by skilled health personnel and diphtheria-tetanus-pertussis (DTP3) vaccination by country, latest available yeara





^a Ordered from lowest to highest coverage. Source: (19).

evidence does exist suggests that the inequalities are even more pronounced in the standard of service provided. In other words, poor people in poor countries are not only largely excluded from these services, but when they do receive care, it is likely to be of a lower quality than that provided to richer people (61).

These broad indications offer a sobering picture, one in which millions of people, predominantly poor, cannot use the services they need, while millions more face severe financial difficulty as a result of paying for health services. Clearly, the reasons for low and unequal coverage do not all lie in the financing system, but we argue in this report that coverage could be considerably higher if there were additional funds, less reliance on direct payments to raise funds and more efficiency – all financing issues.

Several countries increase financial risk protection beyond that afforded by the health financing system by providing an element of financial security when people cannot work for health reasons – because they are sick or have had a baby. The International Labour Organization (ILO) collates information on the right to paid sick leave in the event of illness as well as on the right to paid maternity leave. In 2007, 145 countries provided the right to paid sick leave, although the duration of leave and income compensation differed markedly. Only 20% of those countries replaced 100% of the lost income, with the majority offering 50–75%. Most countries allow a month or more of paid sick leave each year for severe illness, but more than 40 limit payments to less than a month (62).

Most industrialized countries offer the right to paid maternity leave for formal sector employees, but the duration of leave and the nature of the payments also vary substantially. And even though there is a theoretical right to paid maternity leave, few low- and middle-income countries report any financial support for eligible women (Box 1.6).

Financial protection against work incapacity due to illness or pregnancy is generally available only to formal-sector workers. Typically in low-income countries, more than 50% of the working-age population works in the informal sector without access to income replacement at these times (63).

Although this report focuses on financial risk protection linked to the need to pay for health services, this is an important part of broader efforts to ensure social protection in health. As such, WHO is a joint sponsor with the ILO and an active participant in the United Nations initiative to help countries develop comprehensive Social Protection Floors. These include the type of financial risk protection discussed

Box 1.6. Financial risk protection and income replacement: maternity leave

The core element of maternity protection, which guarantees women a period of rest when a child is born (along with the means to support herself and her family and a guarantee of being able to resume work afterwards) is the cash benefit that substitutes the regular income of the mother during a defined period of pregnancy and after childbirth. The cash benefits do not usually replace prior income, but are nonetheless an important social protection measure without which pregnancy and childbirth could pose financial hardships for many families. Maternity leave and the income replacement system that comes with it can also have indirect health consequences; without these measures, women may feel compelled to return to work too quickly after childbirth, before it is medically advisable to do so.

Most industrialized countries allocate considerable resources for maternity leave. In 2007, Norway spent more than any other, allocating US\$ 31 000 per baby, per year, for a total US\$ 1.8 billion. In contrast most low- and middle-income countries report zero spending on maternal leave, despite the fact that several have enacted legislation guaranteeing it. This may be due to laws going unenforced but may also be explained by the fact that in some countries, maternity leave does not come with any income replacement element.

Source: International Labour Organization.

in this report and the broader aspects of income replacement and social support in the event of illness (64).

Making the right choices

There is no single way to develop a financing system to achieve universal coverage. All countries must make choices and trade-offs, particularly in the way that pooled funds are used. It is a constant challenge to balance priorities: funds often remain scarce, yet people demand more and the technologies for improving health are constantly expanding. Such conflicts force policy-makers to make trade-offs in three core areas (Fig. 1.2): the proportion of the population to be covered; the range of services to be made available; and the proportion of the total costs to be met.

The box here labelled "current pooled funds" depicts the situation in a hypothetical country where about half the population is covered for about half the possible services, but where less than half of the cost of these services is met from pooled funds. To get closer to universal coverage, the country would need to extend coverage to more people, offer more services and/or pay a greater part of the cost from pooled funds.

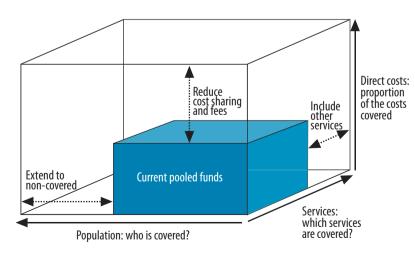
In European countries with long-established social health protection, this "current pooled funds" box fills almost the entire space. But in none of the high-income countries that are commonly said to have achieved universal coverage is 100% of the population covered for 100% of the services that could be made available and for 100% of the cost, with no waiting lists. Each country fills the box in its own way, trading off services and the costs met from pooled funds. Waiting times for services may vary greatly from one country to another, some expensive services might not be provided and citizens may contribute

a different proportion of the costs in the form of direct payments.

Nevertheless, everyone in these countries has access to a set of services (prevention, promotion, treatment and rehabilitation) and nearly everyone is protected from severe financial risks thanks to prepayment and pooling of funds. The fundamentals are the same even if the specifics differ, shaped by the expectations of the population and the health providers, the political environment and the availability of funds.

Countries will travel different paths towards universal coverage, depending on where and how they start, and make different choices along the three axes outlined in Fig. 1.2. For example, in settings where all but the elite are currently

Fig. 1.2. Three dimensions to consider when moving towards universal coverage



Source: adapted from (21, 65).

excluded from health services, moving quickly towards a system that covers everyone, rich or poor, may be a priority, even if the list of services and proportion of costs covered by pooled funds will be relatively small (21, 66). Meanwhile, in a broad-based system, with just a few pockets of exclusion, the country may initially opt for a targeted approach, identifying those that are excluded and taking steps to ensure they are covered. In such cases, they can cover more services to the poor and/or cover a higher proportion of the costs.

Many countries setting out on the path to universal coverage begin by targeting groups employed in the so-called formal sector because these groups are more easily identified. But there are downsides to this targeted approach: it can lead to two-tier systems and make conditions worse for those left uncovered; and by achieving partial success, it can slow the impetus for more fundamental reform.

These issues will be taken up in more detail in Chapter 3.

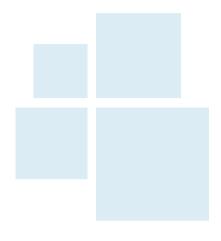
Moving forward

WHO's Constitution describes the fundamental right of every human being to enjoy "the highest attainable standard of health". Universal coverage is the best way to attain that right. It is fundamental to the principle of Health for All set out more than 30 years ago in the Declaration of Alma-Ata. The declaration recognized that promoting and protecting health were also essential to sustained economic and social development, contributing to a better quality of life, social security and peace. The principle of universal coverage was reaffirmed in *The world health report 2008* on primary health care and the subsequent World Health Assembly resolution (67), and it was espoused by the 2008 Commission on Social Determinants of Health and the subsequent World Health Assembly resolution on that topic (68).

This report reiterates these long-standing beliefs, beliefs that have deepened as countries struggle with their health financing systems. While addressing technical issues related specifically to financing health systems, the report puts fairness and humanity at the heart of the matter. The focus is practical, and optimistic: all countries, at all stages of development, can take steps to move faster towards universal coverage and to maintain their achievements.

In preparing a path towards universal coverage, there are three points to remember.

- 1. Health systems are "complex adaptive systems" in which relationships are not predictable and components interact in unexpected ways. Participants in the system need to learn and adapt constantly, often in the face of resistance to change (69). Even though we offer various routes to universal coverage, countries will need to expect the unexpected.
- 2. Planning a course towards universal coverage requires countries to first take stock of their current situation. Is there sufficient political and community commitment to achieving and maintaining universal health coverage? This question will mean different things in different contexts but will draw out the prevailing attitudes to social solidarity and self-reliance. A degree of social solidarity is required to develop universal



health coverage, given that any effective system of financial protection for the whole population relies on the readiness of the rich to subsidize the poor, and the healthy to subsidize the sick. Recent research suggests that most, if not all, societies do have a concept of social solidarity when it comes to access to health services and health-care costs, although the nature and extent of these feelings varies across settings (70). Put another way, every society has a notion of social justice that puts a limit on how much inequality is acceptable (71).

3. Policy-makers then need to decide what proportion of costs will come from pooled funds in the longer run, and how to balance the inevitable tradeoffs in their use – tradeoffs between the proportion of the population, services and costs that can be covered. For those countries focused on maintaining their hard-won gains, continual monitoring and adaptation will be crucial in the face of rapidly developing technologies and changing age structures and disease patterns.

The next three chapters outline practical ways to:

- raise more funds for health where necessary, or maintain funding in the face of competing needs and demands;
- provide or maintain an adequate level of financial risk protection so that people who need services are not deterred from seeking them, and are not subject to catastrophic expenditures or impoverishment for doing so;
- improve efficiency and equity in the way funds are used, effectively
 ensuring that the available funds go further towards reaching the goal of
 universal health coverage.

The final chapter outlines practical steps that all countries and international partners can take to raise sufficient funds, achieve optimal pooling and efficiently use the available resources on the path to universal coverage.

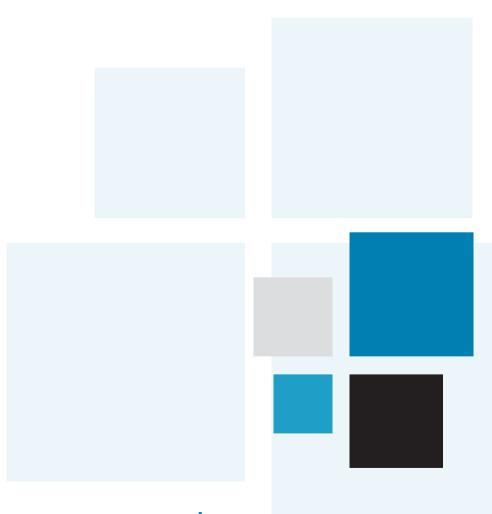
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Chapter 2 | More money for health

Key messages

- No country has yet been able to guarantee everyone immediate access to all the services that might maintain or improve their health. They all face resource constraints of one type or another, although these are most critical in low-income countries.
- Every country could raise additional domestic funds for health or diversify their funding sources if they wished to.
- Options include governments giving higher priority to health in their budget allocations, collecting taxes or insurance contributions more efficiently and raising additional funds through various types of innovative financing.
- Taxes on harmful products such as tobacco and alcohol are one such option. They reduce consumption, improve health and increase the resources governments can spend on health.
- Even with these innovations, increased donor flows will be necessary for most of the poorest countries for a considerable period of time. Donor countries can also raise more funds to channel to poorer countries in innovative ways, but they should also do more to meet their stated international commitments for official development assistance (ODA) and to provide more predictable and long-term aid flows.

2



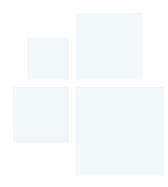
More money for health

Raising resources for health

In 2009, the British National Institute for Health and Clinical Excellence announced that the National Health Service could not offer some expensive medicines for the treatment of renal cancer because they were not cost effective (1). The cuts provoked some public anger (2) but were defended by the institute as being part of difficult but necessary moves to ration resources and set priorities (3). The fact is new medicines and diagnostic and curative technologies become available much faster than new financial resources.

All countries, rich and poor, struggle to raise the funds required to pay for the health services their populations need or demand (which is sometimes a different matter). No country, no matter how rich, is able to provide its entire population with every technology or intervention that may improve health or prolong life. But while rich countries' health systems may face budget limitations – often exacerbated by the dual pressures of ageing populations and shrinking workforces – spending on health remains relatively high. The United States of America and Norway both spend more than US\$ 7000 per capita a year; Switzerland more than US\$ 6000. Countries from the Organisation for Economic Co-operation and Development (OECD) as a group spend on average about US\$ 3600. At the other end of the income scale, some countries struggle to ensure access to even the most basic services: 31 of WHO's Member States spend less than US\$ 35 per person per year and four spend less than US\$ 10, even when the contributions of external partners are included (4).

But there is scope in all countries to extend financial risk protection and access to health services in a more equitable manner. Rwanda, with per capita national income of about US\$ 400, offers a set of basic services to its citizens through a system of health insurances at a cost of just US\$ 37 per capita (4). While Rwanda benefits from the financial support of the international donor community, the government also commits 19.5% of its total annual spending to health (4). There are 182 WHO Member States with levels of per capita gross domestic product (GDP) that are comparable with or superior to (in some cases, vastly superior) Rwanda's, and yet many are further away from universal health coverage (4). This needs to change. With few exceptions, countries have no reason to delay improving access to quality health services, while at the same time increasing financial risk protection. This will cost money, and governments need to start thinking about how much is required and where it will come from.



But what does universal coverage cost?

Universal coverage is not a one-size-fits-all concept; nor does coverage for all people necessarily mean coverage for everything. As described in Chapter 1, moving towards universal coverage means working out how best to expand or maintain coverage in three critical dimensions: who is covered from pooled funds; what services are covered; and how much of the cost is covered. Within that broad framework, policy-makers must decide how funds are to be raised and administered.

Thailand offers prescription medicines, ambulatory care, hospitalization, disease prevention and health promotion free of charge to patients, along with more expensive medical services such as radiotherapy and chemotherapy for cancer treatment, surgical operations and critical care for accidents and emergencies. It manages to do all this for just US\$ 136 per capita – less than the average health expenditure for lower-middle-income countries, which stands at US\$ 153 (4). But Thailand does not cover everything. Until recently it drew the line at renal replacement therapy for end-stage renal disease, for example (Box 2.1). Other countries will draw the line elsewhere.

To know how far you can expand coverage in any of the three dimensions, you must have an idea of what services cost. In 2001 the Commission on Macroeconomics and Health estimated that basic services could be made available for about US\$ 34 per person (6), close to what Rwanda is spending now. However, the calculations did not include the full cost of anti-retrovirals

Box 2.1. Thailand redraws the line in health-care coverage

When, in 2002, Thailand introduced its universal coverage scheme, which was then called the 30 bhat scheme, it offered comprehensive health care that included not just basics, but services such as radiotherapy, surgery and critical care for accidents and emergencies. It did not, however, cover renal-replacement therapy. "There was a concern that [renal-replacement therapy] could burden the system as major health risks leading to kidney diseases, such as diabetes and hypertension, were still not well controlled," says Dr Prateep Dhanakijcharoen, deputy secretary general of the National Health Security Office that administers the scheme. Renal replacement therapy is expensive; haemodialysis costs about 400 000 baht (US\$ 12 000) per patient, per year in Thailand, four times higher than the 100 000-baht per quality-adjusted life year threshold set by the security office's benefit package subcommittee for medicines and treatments within the scheme.

That said, Dhanakijcharoen believes the scheme should have covered kidney disease from the outset. This view is shared by Dr Viroj Tangcharoensathien, director of the International Health Policy Programme at the Ministry of Public Health. For Tangcharoensathien, it was simply a matter of fairness: "There are three health-care schemes in Thailand," he says. "Only the scheme did not include renal-replacement therapy. Meanwhile, half of those people in the scheme are in the poorest quintile of the Thai economy." His sense of injustice was shared by other people, such as Subil Noksakul, a 60-year-old patient who spent his life-savings on renal replacement therapy over a period of 19 years. "I once managed to save seven million baht," he says, "but my savings are now all gone." In 2006 Noksakul founded the Thai Kidney Club, which has raised kidney patients' awareness of their rights and put pressure on the National Health Security Office to provide treatment. Finally, in October 2008, the then public health minister, Mongkol Na Songkhla, included renal-replacement therapy in the scheme.

or treatment for noncommunicable diseases; nor did they fully take into account investments that might be needed to strengthen a health system so that coverage might be extended to isolated areas.

A more recent estimate of the cost of providing key health services, which was produced by WHO for the high-level Taskforce Innovative International Financing for Health Systems, suggests that the 49 low-income countries surveyed would need to spend just less than US\$ 44 per capita on average (unweighted) in 2009, rising to a little more than US\$ 60 per capita by 2015 (7). This estimate includes the cost of expanding health systems so that they can deliver all of the specified mix of interventions. It includes interventions targeting noncommunicable diseases and those for the conditions that are the focus of the health-related

Source: Excerpt from (5).

Millennium Development Goals (MDGs). These figures, however, are simply an (unweighted) average across the 49 countries at the two points in time. Actual needs will vary by country: five of the countries in that study will need to spend more than US\$ 80 per capita in 2015, while six will need to spend less than US\$ 40°a.

This does not mean that the 31 countries spending less than US\$ 35 per person on health should abandon efforts to raise resources to move closer to universal health coverage. But they will need to tailor their expansion according to their resources. It also means that although it is within their capacity to raise additional funds domestically – as we show in the next two sections – for the immediate future they will also require external help. Even with relatively high levels of domestic growth, and national budgets that prioritize health, only eight of the 49 countries have any chance of financing the required level of services from domestic resources in 2015 (7).

Many richer countries will also need to raise additional funds to meet constantly evolving health demands, driven partly by ageing populations and the new medicines, procedures and technologies being developed to serve them. A key aspect of this complex issue is the diminishing workingage population in some countries. Dwindling contributions from income taxes or wage-based health insurance deductions (payroll taxes) will force policy-makers to consider alternative sources of funding.

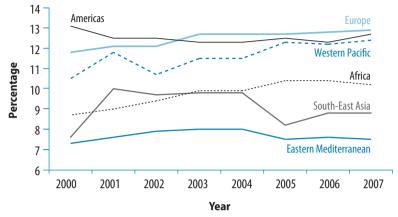
Broadly speaking, there are three ways to raise additional funds or diversify sources of funding: the first is to make health a higher priority in existing spending, particularly in a government's budget; the second is to find new or diversified sources of domestic funding; and the third is to increase external financial support. We review these options in turn, the first two being important for countries at all stages of development, rich or poor. The chapter concludes by considering development assistance for health for low- and middle-income countries.

Ensuring a fair share of total government spending on health

Even in countries where external assistance is important, its contribution is generally much less than the money for health collected domestically. In the low-income countries, for example, the average (unweighted) contribution from external sources in 2007 was a little less than 25% of total health expenditure, the rest coming from domestic sources (4). It is critical, therefore, to sustain and, where necessary, increase domestic resources for health, even in the poorest countries (8). This is just as important in higher-income settings.

Governments finance health improvements both directly, through investments in the health sector, and indirectly, through spending on social determinants – by reducing poverty or improving female education levels, for example. Although it captures only the direct component, the proportion of overall spending allocated to the health sector provides important insights into the value that governments place on health, something that varies greatly between countries. Fig. 2.1 shows the average share of government spending

Fig. 2.1. Government expenditure on health as a percentage of total government expenditures by WHO region, 2000–2007^a



^a These are unweighted averages. Government health expenditure includes health spending by all government ministries and all levels of government. It also includes spending from compulsory social health insurance contributions.
Source: (4).

on health by WHO region for the period from 2000 to 2007, the last year for which figures are available. The figures include contributions from external partners channelled through government budgets in both the numerator and denominator because few countries report them separately.

Governments in the Americas, the European and Western Pacific Regions, on average, allocate more to health than the other regions. African countries as a group are increasing their commitment to health as are those in the European and Western Pacific Regions. In South-East Asia, the relative priority given to health fell in 2004–2005, but is increasing again, while governments in the WHO Eastern

Mediterranean Region have reduced the share allocated to health since 2003.

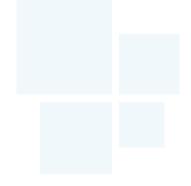
Some of the variation across regions can be explained by differences in country wealth. Generally, health accounts for a higher proportion of total government spending as countries get richer. Chile is a good example, having increased its share of government spending on health from 11% in 1996 to 16% a decade later during a period of strong economic growth (9).

But a country's relative wealth is not the only factor at play. Substantial variations across countries with similar income levels indicate different levels of government commitment to health. This can be illustrated in many ways, but here we cite the WHO Regional Office for Europe, which has countries at all income levels. In Fig. 2.2, the vertical axis shows the proportion of total government spending allocated to health, and the bars on the horizontal axis represent countries in that region, ordered from lowest to highest levels of GDP per capita.

Budget allocations to health in the WHO European Region vary from a low 4% of total government spending to almost 20%. Importantly, even though the priority given to health in overall government budgets generally increases with national income, some governments choose to allocate a high proportion of their total spending to health despite relatively low levels of national income; others that are relatively rich allocate lower proportions to health.

This pattern can also be seen globally. Although government commitments to health tend to increase with higher levels of national income, some low-income countries allocate higher proportions of total government spending to health than their high-income counterparts; 22 low-income countries across the world allocated more than 10% to health in 2007 while, on the other hand, 11 high-income countries allocated less than 10%.

While the African Region does not post the lowest result in Fig. 2.1, the relatively low level of domestic investment in health in some of its countries



is cause for concern because it is in sub-Saharan Africa that the slowest progress has been made towards the MDGs (10, 11). In 2007, only three African countries - Liberia, Rwanda and the United Republic of Tanzania - had followed through on the 2001 Abuja Declaration, in which African leaders pledged to "set a target of allocating at least 15% of their annual budgets to the improvement of the health sector" (12). Disappointingly, 19 African countries in 2007 allocated a lower proportion of their total government budgets to health than they did before Abuja (4).

Governments have, therefore, the option to re-examine budget priorities with health in mind. Although funding needs vary with differences in costs, population age

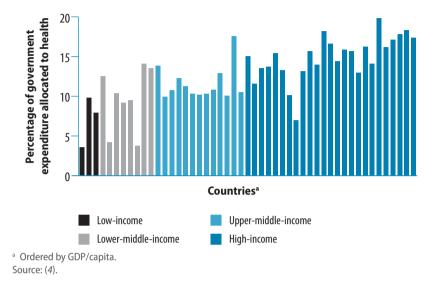
structures and patterns of disease, many governments of rich and poor countries could allocate much more to health from available resources. The gains could be substantial. Taken as a group, the low-income countries could raise (at least) an additional US\$ 15 billion dollars per year for health from domestic sources by increasing the share of health in total government spending (net of external aid inflows) to 15%. For the same countries, the increased funding for the period 2009–2015 would be about US\$ 87 billion (7).

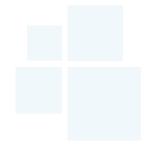
There are several reasons countries do not prioritize health in their budgets, some fiscal, some political, some perhaps linked to the perception in ministries of finance that ministries of health are not efficient. In addition, the budget priority governments give to health reflects the degree to which those in power care, or are made to care, about the health of their people. Dealing with universal health coverage also means dealing with the poor and the marginalized, people who are often politically disenfranchised and lack representation.

This is why making health a key political issue is so important and why civil society, joined by eminent champions of universal coverage, can help persuade politicians to move health financing for universal coverage to the top of the political agenda (13). Improving efficiency and accountability may also convince ministries of finance, and increasingly donors, that more funding will be well used (we will return to this in Chapter 4).

Learning the language of economists and the type of arguments that convince them of the need for additional funding can also help ministries of health negotiate with a ministry of finance. It also helps them understand the complexities of changes in the way health is funded and then to take the opportunities that arise. For example, it is important that ministries of health

Fig. 2.2. The share of total government expenditure allocated to health in the WHO European Region, 2007





keep track of negotiations between donors and ministries of finance relating to debt relief and general budget support (14–16). They need not only to understand these processes but also be able to discuss and negotiate with the minister of finance for a share of available funds.

Diversifying domestic sources of revenue

There are two main ways to increase domestic funding for health: one is to allocate more of the existing financial resources to health, as discussed in the previous section; the other is to find new methods to raise funds or to diversify the sources.

Collecting taxes and insurance contributions more efficiently would effectively raise additional funds. Improving revenue collection is something that all countries might need to consider, though this may be problematic for many lower-income countries with large informal sectors (17). This does not mean, however, that it cannot be done. Though a complex and often daunting task, there have been improvements in tax collection in several settings, including countries where there is a large informal sector, Indonesia being a notable example (Box 2.2).

The type of reform undertaken by Indonesia requires investment and a level of technology and infrastructure beyond the scope of some countries. It also requires improving tax collection from corporations, not just individuals. This can again be problematic in low-income countries that host extractive industries. Low compliance by just a few large potential taxpayers can lead to considerable revenue loss.

Increasing globalization and the location of corporate assets offshore – often in tax havens –raises the potential for lost tax revenue, either through unintended legal loopholes or through the illegal use of hidden accounts by individuals. All OECD countries now accept Article 26 of the OECD

Box 2.2. Indonesia increases tax revenues by encouraging compliance

Even before the 1997–1998 Asian crisis, non-oil tax collection in Indonesia was on the decline, reaching a low of 9.6% of GDP in 2000. The tax policy regime was complicated and tax administration weak. At the end of 2001, the Directorate General of Taxation (DGT) decided to simplify the tax system and its administration. The aim was to encourage voluntary compliance, whereby taxpayers would self-assess, then pay the tax on income declared. Voluntary compliance typically makes up 90% of total tax revenue for a country and represents a line of least resistance for governments seeking to enhance tax yields. In contrast, enforced collection tends to be arduous, labour and capital intensive, and yields relatively little return.

The DGT drafted tax laws and regulations that were clear, accessible and consistently applied, and adopted a policy of zero-tolerance towards corruption. The DGT also introduced procedures to resolve disputes quickly, cheaply and impartially, and encouraged transparency by making all actions taken by the tax administration subject to public scrutiny. Performance and efficiency were improved partly by digitizing a previously paper-based process. Positive results followed, with the tax yield rising from 9.9% to 11% of non-oil GDP in the four years after implementation. The additional tax revenues meant that overall government spending could be increased; health spending rose faster than other.

model tax convention, covering the exchange of information, and more than 360 tax information exchange agreements have been signed (19). It is hoped that global corporations and the financial institutions that service them will be more transparent in their dealings in the future, and that the countries hosting them will get a fairer share of tax receipts, some of which, hopefully, will go into paying for health.

But tax compliance can also be fostered when citizens believe they are getting a good deal from governments. A 2009 study concluded that while the threat of detection and punishment was a key factor in compliance, perceptions of

Source: (18).

the quality of governance were also important (20). Compliance was notably higher in Botswana, where government services were perceived to be good, and lower in some neighbouring countries where the quality of government services was perceived to be lower.

In the short-term, low-income countries with large informal economies will tend to focus on taxes that are relatively easy to collect, such as those on formal-sector employees and corporations, import or export duties of various types and value added tax (VAT) (21). Ghana, for example, meets 70–75% of funding needs for its National Health Insurance Scheme with general tax funding, notably through a 2.5% national health insurance levy on VAT, which stands at 12.5%. The rest of the funding comes from other public funds and development partners, while premiums, the traditional revenue source for insurance, account for only 3% of total income. The VAT-based National Health Insurance Scheme has been able to support an increase in total health expenditure through domestically generated pooled funds. At the same time it has lessened the system's dependence on direct payments such as user fees as a source of finance (22).

Chile, an upper-middle-income country, in 2003 also introduced a 1% increase in VAT to fund health. Even richer countries are being forced to diversify their sources of financing, away from the traditional forms of income tax and wage-based insurance deductions. An ageing population means a lower proportion of people in work and wage-based contributions no longer cover the full costs of health care. Germany, for example, has recently started to inject money from general tax revenues into the social health insurance system through a new central fund called the *Gesundheitsfond*. The French national health insurance scheme has been partly funded for 30 years by the *Contribution sociale généralisée*, which includes taxes levied on real estate and capital gains in addition to more traditional forms of revenue such as income taxes (23).

Exploring sources of domestic financing for health

The international community has taken several important steps since 2000 to raise additional funding to improve health in poor countries. They are outlined briefly here because they offer ideas for countries to raise domestic funds as well.

One of the earliest steps was the air-ticket levy used to fund Unitaid, a global drug-purchase facility for HIV/AIDS, tuberculosis and malaria (24, 25). It has provided almost US\$ 1 billion to date, which, when combined with more traditional development assistance, has allowed Unitaid to finance projects in 93 countries, totalling US\$ 1.3 billion since 2006 (26). At the same time, the buying power of Unitaid has resulted in significant falls in the prices of certain products, increasing the quantities that are available to improve health. More recently, the Millennium Foundation on Innovative Financing for Health launched a voluntary solidarity levy under the name MassiveGood, whereby individuals can complement Unitaid funding through voluntary contributions when they buy travel and tourism products (27, 28).

The sale of bonds guaranteed by donor countries and issued on international capital markets is estimated to have raised more than US\$2 billion since 2006 (29). These funds are channelled to the International Financing Facility for Vaccines, linked to the GAVI Alliance. The governments of eight countries have pledged the funds necessary to repay these bonds when they mature, although whether this mechanism results in additional resources being raised for global health depends critically on whether the repayments are considered a part of the planned future aid disbursements or are additional to them. At the minimum, however, they allow aid to be disbursed immediately, not deferred.

More recently, the high-level Taskforce on Innovative International Financing for Health Systems reviewed a wider range of options for supplementing traditional bilateral funding for aid (30). The taskforce concluded that a currency transaction levy had the potential to raise the greatest amount of money globally: an annual sum in excess of US\$ 33 billion, but recommended several additional options as well (30, 31).

These developments have helped pinpoint new sources of funds and maintained the momentum for increased international solidarity in health financing. However, discussions on innovative financing have so far ignored the needs of countries to find new sources of domestic funds for their own use: low- and middle-income countries that simply need to raise more and high-income countries that need to innovate in the face of changing health needs, demands and work patterns.

To help this discussion, a list of options for countries seeking to increase or diversify domestic sources of funding is provided in Table 2.1, drawing on the work cited above. Not all the options will be applicable in all settings, and the income-generating potential of those that are will also vary by country, though we do make some suggestions about the likely level of funding that could be raised at the country level. For example, even though the currency transactions levy proposed by the high-level taskforce has the potential to raise large sums of money, the financial transactions and products that it would be based on are concentrated in higher-income countries. Indeed, 10 high-income countries account for 85% of the traditional foreign exchange trade (35). Trading volumes are light in most low- and middle-income countries, so this specific levy may not apply to most of them. There are some exceptions: India has a significant foreign exchange market, with daily turnover of US\$ 34 billion (35). A currency transaction levy of 0.005% on this volume of trade might yield India about US\$ 370 million per year if it chose to implement it.

So-called solidarity taxes on specific goods and services are another promising option, offering a proven capacity to generate income, relatively low administration costs and sustainability. With political support, they can be implemented quickly. The mandatory solidarity levy on airline tickets, for example, might require 2–12 months for implementation (30).

Introducing mechanisms that involve taxes can be politically sensitive and will invariably be resisted by particular interest groups. A tax on foreign exchange transactions, for example, may be perceived as a brake on the banking sector or as a disincentive to exporters/importers. When Gabon introduced a tax on money transfers in 2009 to raise funds to subsidize health care for low-income groups, some people protested that it constituted