### **HEALTH FINANCING GUIDANCE Nº 1**

# Health financing country diagnostic: a foundation for national strategy development

Diane McIntyre Joseph Kutzin



HEALTH SYSTEMS GOVERNANCE & FINANCING



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PURPOSE AND OVERVIEW OF PAPER

The purpose of this paper is to provide guidance to undertake a situation analysis of a country's health financing system and assess the existing system relative to the goal of universal health coverage (UHC). In turn, the purpose of the situation analysis is to inform the development of a health financing reform strategy (for which a separate set of guidance notes are available). Such a situation analysis will provide detailed insights into where the existing system is performing well or poorly, a diagnosis of the reasons why, and the challenges the country faces in moving towards universal coverage. A good situation analysis thus provides the "starting point" for a national health financing reform strategy.

Health systems' analysis is not an exact science in the sense that it is not a case of calculating an indicator and comparing that to a target that is set in stone. Instead, the analysis rests on describing elements of the existing system and critically assessing this on the basis of a clear understanding of health financing policy, the objectives associated with UHC, and relevant comparisons with and lessons from other countries. The paper attempts to provide guidance on how this can be done by highlighting the key issues that should be considered and some of the specific questions that should be addressed. It is not intended to provide a strict chapter-by-chapter outline for a system assessment, but instead to foster and guide a systematic approach to the analysis of the health financing system.

The paper begins with a brief discussion of core concepts and terminology in health financing for UHC, including the goals and objectives that are specifically linked to health financing.

# HEALTH FINANCING FOR UNIVERSAL HEALTH COVERAGE: KEY CONCEPTS AND TERMINOLOGY

Universal health coverage can be defined as providing financial protection from the costs of using health services for all people of a country as well as enabling them to obtain the health services that they need, where these services should be of sufficient quality to be effective (1). This definition embodies three specific policy goals (see Figure 1):

- Equity in the use of health services;
- · Quality of care; and
- · Financial protection.

While no country in the world can fully achieve all of these three "UHC goals", each seeks to make progress on them; hence, "moving towards UHC" is relevant to all and can be used to orient the direction in which reforms are intended to move the system.

**Health financing UHC** intermediate **UHC** goals arrangements objectives **Equity** in resource Utilization distribution Need Revenue Quality raising Benefits **Pooling Efficiency Purchasing** Universal financial Transparency protection and accountability

Figure 1. Goals and objectives of UHC that the health financing system can influence (2)

In understanding these goals, equity in the use of services refers to reducing the gap that exists between the need for a health service and the actual use of that service. There must be awareness by individuals of their need for health services as well an ability to use the required services.

In broad terms, quality refers to the extent to which health services achieve desired health outcomes or improve health status. Generally, quality services are based on evidence of what interventions are most effective and are provided in a technically competent way. Quality health care also requires professional and empathic inter-personal engagements between providers and patients.

Financial protection refers to funding health services in a way that protects individuals and households from "financial ruin", or adverse effects on their economic livelihood, as a consequence of paying for health care. Such adverse consequences are typically, but necessarily only, due to out-of-pocket spending (OOPS). Equity in finance is strongly related to the goal of financial protection, but is conceptually distinct. Equity in finance refers to the distribution of the burden of financing the health system across different socio-economic groups. To be considered equitable, the burden of health financing should be distributed according to individuals' ability-to-pay.

Figure 1 outlines the links between health financing arrangements and UHC goals as well as intermediate objectives that have plausible links to these goals. For example, efficiency improvements can promote financial protection and equitable utilization of health services. Efficiency refers to producing as many health services, of good quality, as possible with the available resources. It implies that resources should not be wasted, but instead that we should pursue the lowest cost combination of service inputs (e.g. health workers, drugs etc.) to provide effective and good quality services. It also means that services should be provided at the lowest possible level of the health system (i.e. if a patient can be effectively treated at the primary care level, they should not be treated at a central hospital).

Similarly, ensuring that available resources are distributed equitably can promote achievement of UHC goals. Equity here requires that resources be distributed in line with needs for health services, and can be considered across various dimensions as relevant, e.g. between socioeconomic groups or geographic areas.

Transparency facilitates progressing towards UHC in that it increases individuals' awareness of their health rights or entitlements and empowers them to exercise these rights. Accountability refers to the ways in which there can be public scrutiny of the extent to which the health system delivers what is promised or achieves its goals, and in the use of public funds.

Figure 1 also highlights the key functions that all health financing systems perform:

- Revenue raising (sources of funds, structure of payments or contribution methods for funding health services and collection arrangements);
- Pooling (the arrangements for accumulating prepaid revenues for health on behalf of some or all of the population and whether these are combined in one or more fund pools);
   and
- Purchasing (the means used to allocate the prepaid resources from the pool to the providers for service benefits). Closely linked to purchasing are decisions on benefit

<sup>1</sup> Of course, these goals and intermediate objectives are influenced by more than health financing arrangements, most notably other parts of the health system and extra-sectoral factors. Critical interactions of health financing with these are addressed in later parts of the guide.

design and rationing. Benefits may be usefully thought of as the health service entitlements of the population as well as the obligations they must fulfil to obtain them, or put another way, services that the purchaser(s) will pay for (fully or partially) from pooled funds. Rationing mechanisms are the "flip side" of benefits: services not paid fully from pooled funds require out-of-pocket payments to obtain them, or other mechanisms such as a waiting period required before people can obtain specific services.

The analysis of how the organization and operations of these financing functions and policies combine to influence progress on the three UHC goals, often via the intermediate objectives (i.e. transparency and accountability, efficiency, and equity in the distribution and use of resources), forms the core of the assessment (as described in later sections of this document). For example, many countries are concerned with addressing explicit inequities that may exist between their different financing mechanisms, as reflected in different benefit entitlements or different levels of funding per capita between different schemes. In such contexts, "moving towards universal coverage" may involve a specific agenda to reduce these inequalities.

The core aim of this document is to provide guidance for countries to analyse how the organization and implementation of their health financing arrangements contributes to under-performance of the health system relative to UHC goals and intermediate objectives, given contextual constraints. As contextual factors influence what has been achieved and what can be implemented in relation to health financing, these are considered in the next section, before considering health expenditure patterns and their implications. Thereafter, an overview is provided of how to assess health financing arrangements and system achievement relative to UHC goals and objectives. The final section focuses on the critical analysis of health financing arrangements in terms of their influence on performance relative to UHC goals.

# 3

# KEY CONTEXTUAL FACTORS THAT INFLUENCE HEALTH FINANCING POLICY AND ATTAINMENT OF POLICY GOALS

It goes without saying that context matters, but recognition of this reality is not sufficient. For purposes of this guide, a "contextual factor" is something that is outside the direct control or influence of health sector decision makers, but that has an important influence on the extent to which UHC goals are attained, what health financing reforms can be implemented, or both. Given the relevance to health financing, the main focus of this section is on understanding fiscal context. In addition, the structure of public administration and decision-making, and the rules governing public financial management, are also noted.

#### **Fiscal context**

The fiscal capacity of a country refers to the government's ability and willingness to mobilize public revenues, which in turn allows it to spend money on public services and programs, including health. The greater the fiscal capacity of a country, the greater the potential for public spending on health. This is important for UHC goals because greater public spending on health is associated with lower dependence on OOPS for funding health services, implying fewer financial barriers to the use of services and lower risk of financial protection problems.

However, fiscal capacity does not fully explain the level of government health spending; policy priorities reflected in the share of public spending allocated to health is also a key determinant. These issues are addressed in later sections.

Box 1 discusses the key fiscal indicators to consider: Government expenditure to GDP ratio; government revenue to GDP ratio; budget deficit; and government debt to GDP ratio.<sup>2</sup> It is useful to consider trends in these indicators over time and to compare this data to other relevant countries (e.g. from your region, or countries with similar levels of income) to provide insights into the extent to which your situation differs from what might be considered "typical". Figure 2 provides an overview of these indicators for different categories of countries.

In recent years, there has been a growing focus on the "fiscal space" for government spending on health services. Fiscal space refers to whether government is able to devote more resources to the health sector without prejudicing the sustainability of its financial position (5). In other words, does government have (or will it reasonably expect to have) the revenues needed to increase health spending?

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<sup>&</sup>lt;sup>2</sup> Important data on fiscal indicators can be accessed from the International Monetary Fund's Government Finance Statistics and Public Sector Debt Statistics (<a href="http://www.imf.org/external/data.htm">http://www.imf.org/external/data.htm</a>), and most importantly, IMF reports on your country (<a href="http://www.imf.org/external/country/index.htm">http://www.imf.org/external/country/index.htm</a>).

#### Box 1. Important aspects of fiscal context to explore

#### What is the "fiscal envelope" (i.e. the overall level of government spending)?

 Government spending to GDP ratio: This shows the current size of the public sector in the economy. It can be compared to other countries to determine whether current spending levels could be considered to be relatively low or high. A suggested "rule of thumb" is that a total government spending to GDP ratio of:

<15% reflects very low fiscal capacity

15%-20% is low

20%-25% is low to medium

25%-35% is medium

35%-45% is medium to high

>45% is very high

#### Is there scope for increasing government revenue (including sector specific means)?

Tax to GDP ratio: This provides an indication of government's current tax capacity.
The same "rule of thumb" guidelines presented above for government spending to
GDP can be used for assessing whether tax to GDP is low or high. Combined with
analyses by the national financial authorities (e.g. Ministry of Finance) or international
financial institutions (IMF, World Bank), the current situation as well as expected
outlook for the near future can be assessed.

#### Is government spending in line with its revenue and longer term capacity to spend?

- Government budget deficit: If government expenditure exceeds revenue and a budget deficit therefore exists, it is difficult to increase government expenditure on health or other sectors.
- Government debt: If government has been operating a deficit budget over an extended period of time, it will have accumulated debt. The need to pay off this debt and the interest on it will limit government's ability to increase spending on the health or other sectors. The government debt to GDP ratio is, therefore, an important indicator to consider. The IMF recommends that a "prudent" debt to GDP ratio is 60% for highincome or developed countries and 40% for low- and middle-income or developing countries, though the rationale for this precise figure is unclear (3). For developing countries, the IMF stated that "... it bears emphasizing that a debt ratio above 40% of GDP by no means implies a crisis - indeed ... there is an 80% probability of not having a crisis (even when the debt ratio exceeds 40% of GDP)" (4). So, these levels should be regarded as conservative and as long-run debt to GDP targets, i.e. it is seen as acceptable to have far higher debt to GDP levels in the short term (e.g. during an economic downturn when government may wish to sustain its expenditure levels). However, it is advisable to err on the side of caution if most of the debt is external. Interestingly, Figure 2 indicates that while countries classified as emerging markets or low-income on average have adhered to these IMF guidelines, debt to GDP levels in "advanced economies" far exceeds the IMF "prudent" levels (nearly 110% of GDP in 2012).

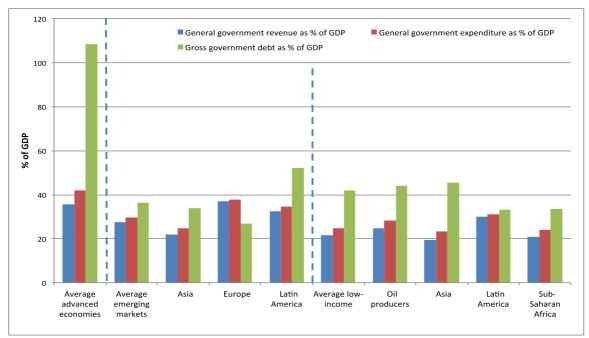


Figure 2. Government revenue, expenditure and debt as percentage of GDP (2012)

Source: IMF Fiscal Monitor data.

A starting point in considering this question is to look at government's intentions, documented in a medium term expenditure framework (MTEF) report that many countries now produce. This is a useful source of information on projected levels of public revenues and expenditures and typically also includes sector-specific spending projections.

Recent and projected trends in real GDP growth (i.e. after accounting for inflation) should also explored; even if the government revenue to GDP remains unchanged, high real GDP growth will translate into higher government revenue in absolute terms.

If government revenue to GDP ratios are relatively low (see Box 1), the feasibility of increasing government revenue to improve "fiscal space" could be briefly considered. Annex A provides more details on how such an assessment could be undertaken.

Understanding fiscal context, and particularly having a realistic portrayal of likely scenarios for overall future levels of public expenditure, is an essential part of a health financing situation analysis. A "fair" assessment of a country's situation relative to UHC goals and comparison with other countries should take the fiscal situation into account, given that it is largely outside the scope of health policy to influence it. Similarly, understanding the fiscal context is essential for understanding the viability of various reform options, particularly those involving new or increased mechanisms of contributions for health.

#### The structure of public administration

The way that government is organized is also an important contextual factor that influences both the attainment of UHC goals and the feasibility of different reform options. Most important here is the political-administrative structure, particularly the extent of decentralization within government and the decision-making responsibilities held at different levels. For example, if there is a federal structure whereby states or provinces have considerable decision-making authority, the extent to which public spending on health is prioritized will be heavily influenced by decisions made at this level. This is often found to be associated with inequalities in levels of public spending on health per capita across regions within a country. It may also mean that the battle to secure a "fair share" of resources may need to be waged at national and sub-national levels of government.

Related to this, decentralized public administration can be a source of fragmentation in pooling arrangements if government rules do not allow for redistribution across geographic boundaries. It is essential to understand the extent to which government is allowed to compensate or equalize funding across these boundaries, whether for overall levels of public finance or within the health sector specifically. The government's rules with regard to this directly affect the extent to which pooling arrangements for health revenues can be reformed within the core public sector financial management system.

#### **Public sector financial management**

The rules that govern processes of public sector budget formation, distribution, financial control, and expenditure reporting are also an important contextual factor. These rules – often referred to as Public Finance Management (PFM) – can have important implications for both the objectives of the health system as well as the ability to implement certain reforms.

It is particularly important to gain a good understanding of budget formation processes. For example, what are the roles, responsibilities and relative power of different actors in the budget decision-making process? What is the extent to which spending limits or guideline allocations to individual sectors are rigidly enforced (which influences the extent to which the health or other sectors can motivate for a greater share of the government budget)? Are there any other constraints on sector specific budget development?

While expenditure control measures are important in avoiding unexpected over-expenditure, they can in fact contribute to inefficiencies. For example, if the public financial management system places rigid constraints on spending according to line-item budgets, this can limit the extent to which the combination of inputs can be changed to improve efficiency in delivery of services.

Another closely related financial management issue is the extent of decision-making autonomy of health sector managers. For example, to what extent are public hospital managers able to make decisions about the number and mix of health professionals to employ? Decision-making autonomy at facility level is critical if incentives are provided to promote efficiency; such incentives are of no value if managers are not able to make decisions that would allow them to respond to these incentives.

Yet another issue that is relevant is the fate of resources 'released' through efficiency savings. There will be little incentive for public sector managers to improve efficiency if savings have to be fully returned to the Ministry of Finance. If at least some of these resources can be retained for use within the Ministry of Health and/or health facility, there is a far greater likelihood of efficiency gains being pursued.

Thus, an understanding of how these PFM rules influence the operations of the public sector, including the management and use of public funds in the health system, is essential for a full analysis of health financing arrangements.

# OVERVIEW OF HEALTH EXPENDITURE

An important starting point for assessing the health financing system is to consider levels, trends, and the composition of health system spending. This provides initial insights into how the country is doing relative to UHC goals and objectives.

Table 1 presents an overview of indicators relating to how much money is being spent on health services and the mix of funding sources (the latter are considered in more detail in the later section on revenue collection), and provides some suggestions on how each indicator can be critically assessed. All of these indicators can be obtained from the WHO's Global Health Expenditure Database that uses National Health Accounts (NHA) categories<sup>3</sup> (<a href="http://apps.who.int/nha/database">http://apps.who.int/nha/database</a>). The advantage of this database is that it provides information using consistent methods for all countries, which allows for comparison of expenditure patterns between your own country and neighbouring countries or countries at a similar level of economic development. This database also allows for an analysis of trends in health expenditure from 1995 to the most recent year for which data are available. However, more accurate, more recent, and certainly more detailed data should also be available from national reports, such as a country's own NHA or health financing and expenditure study.

In assessing these indicators, it is important to bear in mind that there is general agreement that mandatory prepayment (or government) funding is critical for moving towards UHC and that OOPS should be minimized to promote financial protection (1).

Table 1. NHA indicators on health expenditure and sources of finance

Indicator	Key considerations
1. Total expenditure on health as % of GDP (THE%GDP)	This indicates the level of health system expenditure within a country relative to that country's level of economic development. Higher-income countries tend to spend a greater share of their GDP on health than do lower-income countries.
2. General government expenditure on health as % of GDP (GGHE%GDP)	This indicator reflects the combination of the fiscal capacity of the government and its commitment to health relative to other uses of public spending (indicator 4 below). It is an important determinant of the dependence of the health system on out-of-pocket spending.

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<sup>&</sup>lt;sup>3</sup> Note that the indicators used in the database and reflected in Table 1 are derived from the original System of Health Accounts (SHA) categories (10). The categories have been revised in SHA 2011 (8), and the GHED is being revised to reflect the newer classification. This will change the terminology somewhat, but the basic logic of what is contained in Table 1 will remain.

<sup>&</sup>lt;sup>4</sup> One option on this site is to produce a "health system financing profile" (<a href="http://apps.who.int/nha/database/Country">http://apps.who.int/nha/database/Country</a> Profile/Index/en) for any country, which allows for a rapid depiction of recent trends in health spending and how the patterns compare with a relevant set of countries from the same or other regions.

Indicator	Key considerations
3. Per capita government expenditure on health, US\$ adjusted for purchasing power ("purchasing power parity" (PPP) or \$ International)	This provides insight into the level of government spending on health. As with GGHE%GDP (indicator 2, above), it is a strong predictor of the extent to which the health system depends on OOPS, but assessed as a level rather than a percent. The percentage measure captures public expenditures relative to nationally-driven prices and costs, such as salaries, whereas the absolute measure reflects more the level of spending relative to the price/cost of internationally driven inputs, such as (in many countries) medicines.
4. General government expenditure on health as % of total general government expenditure (GGHE%GGE)	This is an indicator of the priority that government gives to funding health relative to other public expenditures. Both GGHE and GGE include the revenues raised and expenditures made from compulsory social health insurance contributions. One target that has been recommended by African heads of state is that 15% of total government expenditure should be devoted to the health sector (called the Abuja Target). (6).
5. General government expenditure on health as % of total health expenditure (GGHE%THE)	General government expenditure on health includes both central and local government tax-funded health spending, payroll tax-funded mandatory health insurance, and external revenues (loans and grants) flowing through government accounts in the category of general government expenditure on health. Expenditures from these sources comprise mandatory prepayment for the health system.
6. Private expenditure on health as % of total health expenditure (PHE%THE)	This indicates the share of health expenditure that is financed through private sources, either as OOPS or voluntary insurance (such as private commercial or community-based insurance schemes).
7. External resources for health as % of total health expenditure (EXT%THE)	This highlights the extent of dependence on external funding. It is useful to assess whether this dependence has been increasing or decreasing over time.
8. Out-of-pocket expenditure as % of total expenditure on health (OOPS%THE)	This indicator is of critical importance in assessing the extent of financial protection within a country. If out-of-pocket expenditure is a high percentage of total health expenditure, this will generally suggest limited financial protection. Hence, reducing the share of total health spending from OOPS is a priority in many countries. <sup>5</sup>
9. Private prepaid plans as % of total expenditure on health (VHI%THE)	This shows the extent to which there are voluntary prepayment schemes within the country. In principle (if the data are accurately reported), these include expenditures by voluntary commercial and not-for-profit private health insurance, voluntary community-based health insurance, and voluntary prepayment schemes run by government. Voluntary prepayment schemes generally comprise less than 10% of total health expenditure (it exceeds this level in only 14 countries in the world).

<sup>&</sup>lt;sup>5</sup> A cross-country analysis has suggested that once OOPS are reduced to below 15% of total health spending in a country, very few households experience catastrophic expenditures (7).

Given the importance of public spending on health, it is worthwhile understanding the determinants of such spending in more detail. This simple equation is very useful for this purpose:

$$\frac{GGHE}{GDP} = \frac{GGE}{GDP} * \frac{GGHE}{GGE}$$

where

GGHE = general government health expenditure, and

GGE = general government expenditure

This shows that government spending on health as a percent of GDP<sup>6</sup> is the product of:

- overall public spending (GGE) as a share of GDP, which as indicated previously is an indicator of the current fiscal capacity of the government and is a contextual factor over which the health sector has limited influence; multiplied by
- the priority given to health in public sector resource allocation (GGHE/GGE), which is a
  policy choice that every government makes and around which the health sector can
  advocate.

Figure 3 shows that the health sector is receiving a relatively low priority in many countries of WHO's Africa Region when compared to the average share of GGHE/GGE globally as well as to the Abuja target of 15%.

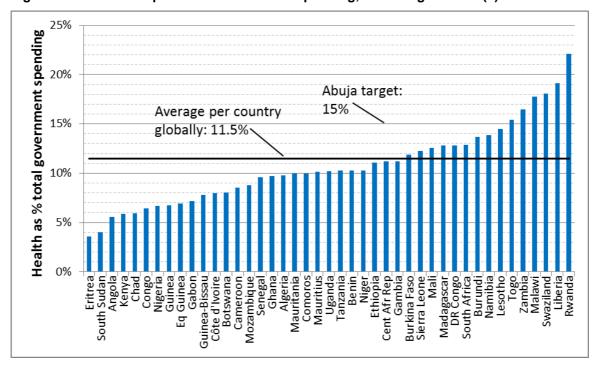


Figure 3. Government prioritization of health spending, Africa region 2012 (9)

Figure excludes countries with population less than 600 000.

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<sup>&</sup>lt;sup>6</sup> It is important to note that in the calculation of GGHE and GGE, compulsory social insurance contributions (and expenditures from these) are included as part of government, in line with public finance logic that recognizes such contributions as a form of direct taxation (8).

# REVIEW OF HEALTH FINANCING ARRANGEMENTS

A solid descriptive overview of the health financing system is required as a basis for identifying areas of the health financing system that may be *causing* underperformance of the system relative to the UHC goals and intermediate objectives. Each health financing function can contribute in some way to achieving the goals and intermediate objectives of UHC, both independently and in combination with the other functions. For example, the revenue raising function is particularly important in promoting the UHC goal of financial protection, particularly when pooling is organized in such a way as to maximize the redistributive capacity of prepaid funds. And while pooling arrangements set the potential for what can be redistributed, the extent to which this is realized in practice depends on the purchasing function, which drives expenditures and incentives that in turn have important implications for the intermediate objectives of efficiency and equity in resource distribution.

#### Revenue raising mechanisms

The previous section provides preliminary insights into the distribution of financing across different sources. It is important to consider in more detail the way in which revenue is raised and how health system funding contributions are structured, as these have important implications for being able to move to universal financial protection and for promoting equity in health financing.

Revenue raising mechanisms for the health system typically include the following (see Chapter 8 of the System of Health Accounts for more detail (10)):

- a) Compulsory or mandatory prepayment, comprised of:
  - i. General revenues of (central and local) government, sourced by some combination of:
    - Taxes levied directly on individuals and firms, such as personal income tax and tax on corporate income or profits (direct taxes);
    - Taxes levied on consumption or trade, such as value added tax (VAT) and customs duties (indirect taxes); and
    - Revenues from government-owned enterprises or assets (which may be relevant in countries where a substantial amount of revenue comes from natural resources such as oil, gas or minerals).
  - ii. Earmarked revenues of central/local governments, such as taxes on tobacco or alcohol in cases where some or all of the revenues raised are specifically earmarked for the health system.
  - iii. Social health insurance contributions, also called "payroll taxes", which are a type of direct, earmarked tax, and which are commonly used as a source of funds for mandatory/social health insurance.

- b) Voluntary prepayment, typically health insurance schemes that may be run by communities or for-profit or non-profit entities (and sometimes by governments).
- c) Household out-of-pocket spending.
- d) Foreign sources, such as development assistance.

Box 2 suggests questions that should be explored in developing this overview of revenue raising and summarizes the relevance of these issues. The emphasis here is placed on domestic revenue raising. For those countries in which external funds play an important role, however, this must be part of the analysis.

#### Box 2. Key issues in relation to different types of revenue sources

- To what extent are prepayment mechanisms used in raising domestic revenue?
   Prepayment revenue raising mechanisms are more effective than OOPS for serving the objectives of financial protection and avoiding financial barriers to health service access (1, 11). The sum of Indicators 5 and 9 in Table 1 is the percentage of total health expenditure in a country that is funded through prepayment mechanisms.
- Which of the different domestic financing mechanisms are compulsory and which are voluntary, and what is the mix? By compulsory (or "mandatory"), we mean payments that are required by law, such as for individuals to pay personal income tax or consumers to pay VAT on certain goods and services or to make contributions to a mandatory health insurance scheme. While voluntary health insurance (VHI) can play a role in providing financial protection as a complement to a compulsory system, no country in the world has reached universal population coverage based mainly on voluntary prepayment. Hence, the path towards UHC involves a predominant role for compulsory prepayment mechanisms. Indicator 5 in Table 1 is the share of compulsory prepayment in total health expenditure, including expenditure from both tax funding and any compulsory health insurance or "social security" schemes.
- Apart from social health insurance payroll taxes, are there any taxes levied specifically for the health sector / any tax revenue that is specifically earmarked for or dedicated to the health sector? Examples of such taxes are:
  - A 2.5% levy on most goods and services in Ghana, as part of VAT, which is used to generate revenue specifically for the National Health Insurance (NHI) in Ghana (VAT is 15% in Ghana: 10% is for general government revenue; 2.5% is for the education sector and 2.5% is an NHI levy).
  - ♦ A 3% levy on top of existing personal and company income taxes in Zimbabwe to fund HIV interventions (12).
- What is the structure of payments in the different revenue raising mechanisms? This provides insights into whether each mechanism is likely to be progressive, proportional or regressive (see Box 6). The following issues should be considered in terms of each revenue raising mechanism:
  - Personal income taxes have a progressive structure (i.e. the tax rate increases as income levels increase) in most countries. For your country, however, you should confirm this by reviewing the income tax rates for each income category.
  - Indirect taxes are usually a fixed rate (such as VAT of 15% on most goods and services) or a flat amount (such as \$3 per packet of cigarettes) the structure of these taxes should be reviewed, paying particular attention to which goods and services are exempted from VAT (are these the goods and services that are a major share of spending by poorer groups?)

- Specified (earmarked) contributions for health insurance, whether voluntary or compulsory, are most often structured as either flat amounts (e.g. \$150 per person per month), particularly in the case of voluntary insurance schemes, or as a fixed rate (e.g. 7% of salary), particularly in the case of compulsory insurance schemes. While a flat amount is likely to be regressive (because everyone pays the same level, regardless of their income) and a fixed rate proportional, the actual distributional consequences depend on who is paying. In countries in which both voluntary and compulsory health insurance covers people in the formal sector or those with higher incomes, payments may be progressive when considered across the entire population. This is because only the richer groups are contributing. If only the richer groups are benefiting, however, the implications are likely to be inequities in service use, and the net consequences for equity needs to account for both issues.
- Out-of-pocket payments are often charged as a flat amount, and therefore tend to impose a regressive burden. However, it is important to determine whether there is a sliding scale (where the flat amount is greater for higher-income groups), whether any vulnerable groups are exempted, and (most importantly), the extent to which any such exemption policies are implemented effectively or not.
- What is the overall composition of health spending from these different sources? While assessing each source individually is important, what matters most is the net impact of the combination of sources. Having specific data on the relative share of these different sources of overall health spending, or even just a rough idea, can help explain the extent to which the financing system is equitable and how this has changed over time.
- How efficient is the revenue raising mechanism, particularly in terms of the costs of collecting such revenue? This is particularly relevant to health-specific revenue raising mechanisms. For example, if payroll taxes for health are collected by a separate social health insurance organization rather than by the national tax authority, revenue collection and administration costs may be higher than necessary. User fees at public health facilities and other out-of-pocket payments have been found to be a particularly inefficient way of collecting revenue, given the high collections costs relative to the levels of revenue they generate (13).

The assessments suggested above provide an important background to the later analysis of financial risk protection and equity in financing and for ultimately critically assessing the existing system of revenue raising and identifying key challenges.

#### **Fund pooling arrangements**

The aim of pooling is to maximize the redistributive capacity of prepaid funds. Three important characteristics of pools greatly influence how well they enable this redistribution:

- **Size** the larger the pool, the greater the capacity to provide cross-subsidies to support those with the greatest health service needs.
- Diversity cross-subsidizing "from the healthy to the sick" is facilitated when the pool is comprised of individuals with a mix of health risks. In turn, this may be reflected in a mix of people with different socio-economic characteristics.
- Compulsory vs voluntary participation when participation in a pooling arrangement is voluntary, sicker people tend to join, while healthier people do not. This problem of adverse selection destabilizes fund pools over time, requiring increased premiums or exclusions to maintain financial balance for voluntary schemes. Compulsory or automatic inclusion of populations in pools is much more effective.

**Fragmentation** is the main way that pooling problems manifest themselves, particularly with regard to size and diversity criteria. Fragmentation means that there are barriers to redistribution of available prepaid funds. Where this exists (and it usually does), there is lower potential for cross-subsidies to flow across the health system. There can be cross-subsidies within each pool (scheme), but often no cross-subsidies across the pools. Thus, assessing fragmentation in your country's pooling arrangements is an essential element of the diagnostic, including the precise form that it takes, causes, and consequences for policy objectives. In turn, this can provide the basis for a reform agenda to improve pooling arrangements. Box 3 outlines some questions that will assist in collecting information needed to critically assess fund pooling.

#### Box 3. Key questions in relation to fund pooling

- What is the market structure of pooling arrangements? In particular, what is the mix of mandatory and voluntary prepayment pools as opposed to OOPS where there is effectively no pooling of funds? Where there are a number of different health insurance schemes undertaking the pooling function, do they serve different groups (e.g. people working in a specific industry) or do they compete for members?
- What are the reasons for fragmentation of fund pools? Is it because there is a different pool for each source of funds (e.g. a separation of general tax funds allocated to the health sector and funds from payroll taxes for a social health insurance scheme)? Is it due to decentralization within the government health system (e.g. having a separate pool of funds for each province or state)? Is it related to an emphasis on funding via voluntary prepayment schemes rather than mandatory prepayment mechanisms?
- What is the size and composition of each pool? This should include:
  - What percentage of the population does each pool cover?
  - What is the socio-economic composition of each pool? Are formal sector employees and their dependents covered by separate pool(s) to those outside the formal employment sector? Are higher-income groups concentrated in some pools and middle- and lower-income groups in other pools?
  - What is the demographic composition of each pool? Do any of the pools have a concentration of groups that may have a greater need for health services, such as very young children, women of childbearing age and the elderly?
- Is there evidence of adverse selection (i.e. the tendency for higher-risk individuals to take
  out health insurance compared with those with lower risk of ill-health) or risk selection (i.e.
  action of insurers to exclude higher risk persons) in any of the pools? Insights can be
  provided by comparing the demographic composition of each pool to the demographic
  composition of the overall population, and similarly in terms of burden of ill-health if such
  information is available.
- Is there any interaction between the different fund pools? In particular, is there a mechanism for creating cross-subsidies across the different pools? This does not only apply to insurance schemes, but may also exist in the form of some type of resource allocation/equalization mechanism (ideally "needs-based", linked at least to population size) used to distribute resources across pools managed by decentralized health administrations?

Addressing the above questions will provide a useful background for the later assessment of equity in service use according to need.

#### **Purchasing**

The third health financing function is purchasing, which refers to the transfer of pooled funds to health service providers. To analyse the purchasing function in a country, specific issues that require consideration include:

- **Benefit entitlement** policies what services are to be purchased from pooled funds, and the means by which these entitlements will be rationed (discussed in a separate section below, given their importance).
- Provider payment mechanisms used to pay providers and the incentives created as a result.
- **Organizational structure and governance** of the purchaser(s) what is the institutional nature of the purchaser and what mechanisms are in place to ensure good governance.

Put another way, the issues that have to be addressed are answers to the questions of what (services), how (are providers paid), and who (is/are the purchaser/s). Key to the analysis, and involving each of these questions, is the extent to which purchasing can be considered "strategic". We consider benefit design issues first and then review issues related to provider payment and institutional configuration.

#### Policies for benefit design and rationing (including patient co-payments/user fees)

It is useful to consider benefit entitlements in relation to the "coverage cube" illustrated in Figure 4. The cube highlights that one should consider which sections of the population have some form of coverage, which services are covered for which population groups and what proportion of the costs of which health services are covered for which population groups. Analysis of policy choices that countries have made with respect to coverage need to consider these three dimensions jointly rather than as separate decisions.

Direct costs: What Reduce cost proportion Include of costs sharing other are services covered? **Current pooled funds** Extend to non-Services: covered What is covered?

Figure 4. Different dimensions of coverage (1)

Population: who is covered?

In general, most members of the population have some form of entitlement to benefit from health services (e.g. may be entitled to use tax-funded services, although they may not have full cost coverage for these services if they are expected to pay a fee). However, some groups may not be entitled to benefit from any services (e.g. undocumented immigrants).

It is helpful to describe the range of services that different population groups are entitled to and those they are not entitled to and under what conditions. Service benefit specifications may take the form of a positive list (where the services covered are very precisely itemized), a negative list (which specifies services that are excluded from coverage, with an entitlement to all other services) or there may not be an explicit indication of which services will or will not be covered.

You should also consider the extent to which the cost of different types of services is covered for different population groups. Patients may not be expected to pay anything at the time of using a health service (i.e. service costs may be fully covered from a prepayment funding pool), or may be expected to share some of the costs of particular services at the time of use (often called a user fee or co-payment).

Choices made on what is covered for whom, and how much of the costs of these services for the covered population, are simultaneously choices on what is not covered. This is why rationing – whether through patient cost sharing or the exclusion of certain services or populations from coverage – is the "flip side" of the benefit package. This reflects the reality that no system can provide everything for everyone. Thus, it is important to not only describe "the package" but also to analyse your country's rationing policies and how these are implemented in practice.

Finally, it is also useful to describe the processes in place, if any, to make changes to benefits over time. This is important not only for considering how to extend coverage but also how to manage expenditures over time. Countries have sometimes gotten into trouble by promising an expansion of benefits without clarity on whether the resources would be provided to enable the promise to be transformed into reality (14). A mismatch typically results, which may manifest as either non-availability of the promised services, a need to pay informally for services that were meant to be without charge, or accumulating deficits at the level of providers or purchasers. If a country has no explicit mechanism to manage such changes (e.g. a requirement to undertake an assessment of budgetary impact for any proposed expansion of benefits), there are likely to be problems of expenditure control for the health system.

Box 4 outlines some questions that will assist in assessing benefit entitlement policies relative to the goals and objectives of UHC in your country.

#### Box 4. Key issues in relation to benefit entitlements and rationing

- If there is a single funding pool from which services are purchased for the entire population, is everyone entitled to the same range of service benefits? Are there any differences in the service providers to which there is access (e.g. even if the whole population is covered through a "national health insurance", those who make payroll tax contributions may have a wider choice of providers than those who are covered through general revenue funds)? Are there any differences in cost coverage (e.g. are there user fees or co-payments but from which certain groups are exempted)?
- If there are multiple pools and purchasers, what determines the entitlement to benefit from each of these funds, e.g. is benefit entitlement based on contribution status (i.e. only those who directly contribute to that pool can benefit from it), or on specific criteria (e.g. households below a certain income level) or possibly on the basis of residence (e.g. residents of a specific state or province)? What service and cost coverage is there (which services, which providers, PHC gatekeeping or not, co-payments or user fees, etc.) for each group?

- How are services that are not included in the benefit entitlements funded? Are they paid for on an out-of-pocket basis or do people generally have voluntary insurance for these services?
- Are there explicit rationing mechanisms or other factors that limit the services actually used? For example, is there gatekeeping at the primary health care level to limit access to higher levels of care? Are there constraints on certain services (e.g. limited number of dialysis machines) or do patients have to wait to get services (e.g. queues at facilities, waiting lists for specific types of surgery)? Are the services to which people are entitled delivered and available in practice (e.g. are sufficient skilled staff and essential medicines available in facilities this is explored more in later sections)?
- Who is responsible for decisions on any changes to promised benefits? Is there a specific process in place to support this, such as requirements for an assessment of either/both the cost-effectiveness and budgetary impact of the proposed change?

#### Is purchasing strategic? Payment methods and institutional issues

Specifying benefit entitlements is not sufficient for promoting universal access to and use of needed services as well as financial protection (through cost coverage); it is essential to support such a promise with provider payment mechanisms and/or other forms of accountability. Such a linkage is a form of strategic purchasing,<sup>7</sup> meaning that there is a link between payment and information on either/both what providers are doing and the health needs of the populations they serve. The 2000 World Health Report (31) distinguished between passive and strategic purchasing as follows:

"Passive purchasing implies following a predetermined budget or simply paying bills when presented. Strategic purchasing involves a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom." (p.97)

All health systems, regardless of the labels attached to them, perform the purchasing function, whether this is in the form of hierarchical line-item budgets or open-ended fee-for-service reimbursement. As part of the diagnosis of your country's health financing arrangements, it is essential to analyse how providers are paid, as the incentives generated through these mechanisms can have a powerful influence on their efficiency and productivity (15, 16).<sup>8</sup>

As part of the analysis, it is important to identify all the agencies that purchase health services in the country. These might include, for example, a Ministry of Health, local governments, a social health insurance fund, private insurance agencies, community-based health insurers, or others. Importantly, it may be a combination, and where different purchasers are paying the same provider unit (e.g. a hospital or health centre), they may use different payment methods. The incentives arising from such mixed mechanisms are important to understand, as they may, for example, induce providers to pay greater attention to certain types of patients as compared to others.

The institutional/legal framework for both purchasers and providers also conditions the incentive environment, and analysis may determine that changes are needed to enable reforms to move forward. This includes such issues as whether existing rules grant purchasers sufficient flexibility to pay for services and not just for inputs, and also whether they have the right to contract and pay

<sup>&</sup>lt;sup>7</sup> A useful resource, "What is strategic purchasing for health" can be found at: http://resyst.lshtm.ac.uk/sites/resyst.lshtm.ac.uk/files/docs/reseources/Purchasing%20brief.pdf

<sup>&</sup>lt;sup>8</sup> A resource guide for assessing provider payment systems can be found at: http://www.jointlearningnetwork.org/resources/assessing-health-provider-payment-systems-a-practical-guide-for-countries-m

non-state providers using public funds. Finally, a critical issue that needs to be considered is the nature of any accountability mechanisms for purchasing agencies. To whom are they accountable, and do they report publicly on the use of their funds?

Similarly, a key issue for providers (particularly in the public sector) is whether they have the autonomy to manage their internal financial resources or are held to rigid line item categories. To a large extent, the existence (or absence) of such provider autonomy is a marker of whether or not a country has a "purchaser-provider split" in practice. Unless public sector managers responsible for service delivery have legally delegated decision-making authority, they will not be able to respond to the incentives created through the purchasing arrangements, and cannot be held fully accountable for their performance. But as with purchasers, it is important to assess the specifics of what providers are held accountable — on what do they have to report, and how is their performance assessed? Thus, to assess the purchasing function in a country, it is essential to look both at the purchaser(s) and the providers.

Box 5 provides a range of questions that will help to explore purchasing arrangements, including considering the structure of health service provision, and to assess the extent to which strategic or active (rather than passive) purchasing occurs.

#### Box 5. Key issues in relation to strategic purchasing

- What is the nature of the purchasing organization(s)? Is it a government department or ministry, a quasi-public agency or a private organization, and if private, is it for-profit or not-for-profit, or is there a mixture of these purchasing organizations? Is there a purchaser-provider split or does the "purchaser" also provide all services (in which case there is less scope for strategic purchasing)?
- What is the market structure of providers? Is there a competitive environment (e.g. for primary health care in urban areas) or is the purchaser faced with monopolies (e.g. a single group owning all private hospitals in an area)? Within the public health provision sector, what is the extent of management autonomy (and hence the ability for providers to respond to changing incentive structures)?
- Are services automatically purchased from all service providers or is there a process of selection or accreditation of providers? If providers are selected or accredited by a purchaser, what factors are taken into account (e.g. range of services, service quality, provider location relative to communities in need)?
- Is there a contract or service agreement between purchaser(s) and providers (e.g. specifying expectations on the range and quality of services to be provided, requiring providers to adhere to a formulary/essential drug list and standard treatment guidelines, specifying information to be submitted to the purchaser, etc.)
- What provider payment mechanisms are used? Is the purchasing organization constrained in terms of the mechanisms it may use for paying providers (e.g. by public financial management rules)? Do the payment mechanisms provide coherent incentives to promote efficient delivery of quality services?
- Is the purchaser(s) able to influence payment rates? This is influenced by the market structure of health care providers and the number and size of purchasers (the fewer and the larger the purchasing organization(s) in terms of population size served, the greater the relative power of purchaser(s) in price negotiations). If there are multiple purchasers, is there evidence of:
  - Price setting by providers?
  - Cost-shifting (e.g. if primary care services are covered by one purchaser and higher level services by another purchaser, there may be efforts to up- or down-refer patients to shift costs onto the other purchaser)?

- Is there fragmentation across purchasing organizations such that there are multiple funding flows to particular providers that could limit the extent to which strategies used by one purchaser is able to influence the providers' behaviour?
- Describe the information system(s) used to support provider payment. Are these electronic
  or on paper, at both provider and purchaser levels? If there are multiple purchasing
  organizations, does each have its own information system, or do they share a common
  system? What are the consequences of this situation at the level of providers and overall
  system management?
- Does the purchasing organization routinely review provider performance, particularly in terms of quality of care, and is it able to effectively act on poor performance?
- Does the purchaser(s) have effective mechanisms to identify fraud and to ensure that expenditure does not exceed available resources (e.g. through auditing provider claims/service provision statements)?
- Are there mechanisms to hold the purchasing organization accountable for using the funds
  efficiently and for ensuring that those in need are able to access the health services
  required and that these services are of high quality? Is there regular public reporting in
  relation to specified performance indicators? (See Savedoff and Gottret for a detailed
  overview of purchaser governance issues (17)).

# HOW ARE WE DOING? ANALYZING UHC GOALS AND INTERMEDIATE OBJECTIVES

This section focuses on how to critically analyse the extent to which your health financing system is attaining UHC goals (universal financial protection, equity in service use relative to need, and quality) and intermediate objectives (equity in resource distribution, efficiency and transparency/accountability), and in particular, to enable you to reach plausible conclusions as to the likely reasons **why** the system is under-performing.

It is important to note that this analysis should be conducted at the system level and not in relation to individual parts of the system (e.g. specific insurance "schemes"). While these different parts contribute to the overall system, the primary concern from a UHC perspective is how the overall system is performing. Moreover, a scheme can make its members better off at the expense of those who are not part of the scheme; much depends on its interaction with the wider system (2).

Similarly, it is not appropriate to reach conclusions about the overall performance of the system based on any one goal or indicator because there may be trade-offs between these goals that require careful consideration. For example, the financing of voluntary health insurance is likely to be progressive in those countries where only richer persons buy it, but this is also likely to impact adversely on equity in the use of services relative to need across the entire population.

#### Financial protection and equity in finance

As indicated earlier, financial protection for all is a key UHC goal. A closely related, yet distinct, issue is how equitably health services are financed. There are a number of analytic methods that enable a detailed analysis of financial protection and equity in financing. Both the World Bank (19), (20)<sup>9</sup> and WHO (21)<sup>10</sup> have developed manuals, software and related tools to produce measures of these objectives, which require detailed analysis of household survey datasets. Because time, resources or data may not always allow you to undertake such calculations specifically for the diagnostic, here we provide guidance on how to gain insights into the extent of financial protection and equity in finance in the absence of more detailed analyses.

Two of the indicators that are most widely used to assess financial protection are:

• The proportion of households that incur catastrophic spending on health services. Household OOPS are regarded as catastrophic if, as a result of these, households must "... sacrifice other basic needs such as food and education with serious consequences for the household or individuals within it" (22). An indicator of when a household experiences a "catastrophic event" is estimated by calculating its health spending as a percentage of

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<sup>&</sup>lt;sup>9</sup> The World Bank's "ADePT" software platform, which can be accessed at: <a href="http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTADEPT/0">http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTADEPT/0</a>, menuPK:7108381~pagePK:64168176~piPK:64168140~theSitePK:7108360,00.html

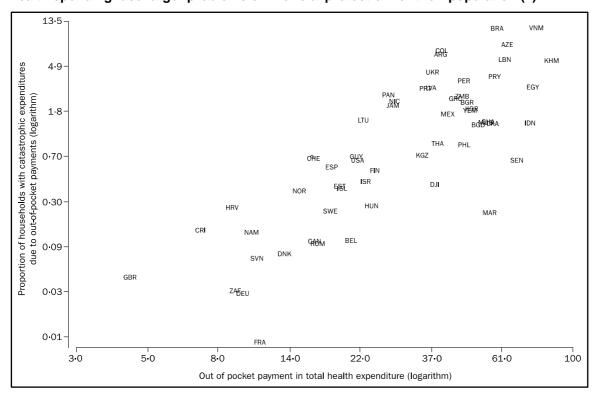
<sup>&</sup>lt;sup>10</sup> Information on WHO's "Financial Protection in Health Calculation Tool", including a link to request login details for using it, can be found at <a href="http://www.who.int/health\_financing/tools/financial-protection/en/">http://www.who.int/health\_financing/tools/financial-protection/en/</a>.

its capacity to pay (which may be proxied by its total income, total consumption expenditure, or an estimate of its non-subsistence expenditure, such as its spending beyond basic food items) and comparing this to a specific threshold. The choice of threshold is arbitrary, and multiple thresholds should be used for country-level analysis. For international comparisons, two commonly used thresholds are:

- Out-of-pocket expenditure on health care that is 25% or more of total household expenditure may be considered catastrophic;
- Out-of-pocket expenditure on health care that is 40% or more of non-food household expenditure could be considered catastrophic (7).
- The number of households that are impoverished as a result of health care expenditure. While catastrophic spending estimates are sometimes criticized for being based on what could be considered arbitrary reference points, this indicator is a "harder" measure as it considers whether or not spending on health care pushes a household below the poverty line. Strictly speaking, this measure does not account for those already in poverty, but the data may be analysed to not only include those pushed into poverty but also those further impoverished by OOPS.

For countries that have estimates of OOPS but have not yet calculated specific measures of financial protection from available household surveys, Figure 5 provides some insights into the implications of various levels of OOPS for the extent of catastrophic health spending (and also see (7,23,24) for some country results). Simply put, the larger the proportion of OOPS in a country's total health expenditure (an indicator in Table 1), the higher the proportion of households that incur catastrophic expenditure. Even without a more detailed analysis of survey data to explore the magnitude and distribution of catastrophic or impoverishing expenditures, if a high share (e.g. perhaps more than 20%, certainly more than 30-40%) of total health spending comes in the form of OOPS, it is likely that financial protection is a problem in your country.

Figure 5. Evidence suggesting that systems that depend more on OOPS as a source of health spending face larger problems of financial protection for their population (7)



There is no internationally accepted definition of what constitutes "high" levels of catastrophic and impoverishing health expenditure, in part because measured rates depend on the thresholds and poverty lines that are used, and also because there is no rate of financial hardship that can be considered as "acceptable". To interpret data at national level, it is very useful to have information for at least two points in time. This allows the analyst to determine whether these measures of financial protection are improving or deteriorating. But even with such information, changes over time in these measures do not lead to a clear interpretation as to whether or not national health financing arrangements are improving. The reason is that lower levels of catastrophic and impoverishing expenditures may also reflect a reduction in health service utilization related to affordability problems. Indeed, to the extent that people do not seek care because they cannot afford to pay, it will mean that more do not pay for services and hence the system will appear to offer better financial protection. For example, in an analysis of household survey data from 37 countries, 30% of the population did not spend anything on health, ranging from 41% in the poorest quintile to 22% in the richest. A plausible interpretation of this is that the poor were more dissuaded from seeking care than the rich (25). If there are survey data in your country that also have health service utilization questions, it may be more policy-relevant to construct estimates of out-of-pocket (and catastrophic and impoverishing) payments for those who did seek care. With estimates of both service use and financial protection over two time periods, interpretation can be facilitated with the guidance of Table 2.

Table 2. Interpretation of changes over time in levels of out-of-pocket spending and health service utilization

		Service utilization		
		Decreases	Increases	
pocket	Decreases	Hard to interpret (lower financial burden but lower service use)	Positive change (increased service use with lower financial burden)	
Out-of-pock spending	Increases	Undesirable result (lower service use and higher financial burden)	Hard to interpret (increased service use but higher financial burden)	

The table is divided into four quadrants that show a combination of changes in service use and the dependence of a system on OOPS. Usually, the desired result is a combination of increased service use and decreased OOPS (assuming utilization is perceived to be too low). Conversely, it is clearly undesirable for utilization to decline while patient financial burden increases. In the two other scenarios, the consequences of the change are not immediately apparent – either an increase in service use but also an increase in OOPS, or a decline in both use and OOPS. Such equivocal patterns of change are common and require a deeper analysis to determine whether the system is on a good trajectory and what further changes might be needed. It is important to note that these aggregate patterns mask potential equity concerns, and thus if the data allow, interpretation should be applied not only to national averages but also to changes within and across income groups (e.g. by quintile).

Equity in health finance<sup>11</sup> is assessed by considering how progressive each financing mechanism is (see Box 6 for definitions of the different ways in which health financing burden can be distributed). This is generally done through calculating what is termed a Kakwani Index. The

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<sup>&</sup>lt;sup>11</sup> Equity in financing has to do with how revenues are raised, not with how the money is spent. This latter issue – also highly relevant to the performance of health financing arrangements – is addressed below in the section on equity in health service use and the distribution of system resources.

Kakwani Index compares the distribution of health payments across households, ordered according to their socio-economic status from poorest to richest, with the distribution of households' income or total expenditure (see (19, 26) for more information on how to calculate and interpret this index). The Kakwani Index for individual financing mechanisms can be combined to assess how progressive the overall health financing system is.

## Box 6. Definitions of different financing incidence (ways in which the burden of health financing may be distributed)

**Progressive financing:** a financing mechanism whereby higher-income groups contribute a higher percentage of their income to health payments than do lower-income groups (represented by a positive Kakwani Index and the larger the Kakwani Index, the more progressive the financing mechanism is).

**Proportional financing:** a financing mechanism, whereby everyone contributes the same percentage of income to funding the health system, irrespective of income level (represented by a Kakwani Index of zero).

**Regressive financing:** a financing mechanism whereby lower-income groups contribute a higher percentage of their income to health payments than higher-income groups (represented by a negative Kakwani Index and the higher the negative number is, the more regressive the financing mechanism is).

The relative progressivity of health financing is strongly influenced by the sources of revenue and the structure of funding contributions. As these sources and contribution structures vary from one country to another, so does the relative progressivity of financing across countries. It is, therefore, important to assess the distribution of the health system financing burden in your own country, preferably through calculation of Kakwani indices.

If the actual incidence of health system financing (through Kakwani Indices) is not known, it is advisable to at least undertake a broad assessment of equity in financing in your country. The first step is to determine the percentage share of total health expenditure funded by each financing mechanism. This can be calculated from Table 1 or more recent and accurate information may be available from an NHA report. One can then construct a table (see Table 3) summarizing the likely progressivity (or regressivity) of each mechanism by reviewing results from other countries (see Annex B, Figure B2), combined with careful consideration of the payment structure for each financing mechanism in your country as summarized above in Box 2.

Table 3. Illustrative assessment of equity in financing in the absence of country-specific Kakwani Indices (for hypothetical low-income country)

Financing mechanism	Percentage share	Likely progressivity	Considerations
Public/government revenue sources			
Direct taxes     (personal income     and corporate taxes)	12%	++	Personal income tax rates have very progressive structure and this tax only paid by a small % of the population
2. Indirect taxes	28%	+	Range of goods and services consumed by the poor exempted from VAT; high % of population live in rural areas and purchase locally grown food
3. General government tax revenues (1 + 2)	40%	+	As indirect taxes are greatest share, likely to be progressive rather than very progressive
4. Payroll taxes for mandatory health insurance (also a form of direct tax)	8%	++	Only covers some formal sector workers, so higher income groups bear the burden (less progressive if contribution levels have a cap, implying lower rates for higher paid workers)
Private/voluntary reve	nue sources		
5. Commercial voluntary health insurance	3%	++	Only the richest have this insurance
6. Community- based health insurance	4%	-	Covers poorer groups; everyone pays same amount irrespective of socio-economic status
7. Out-of-pocket payments	45%		Fees not differentiated according to socio-economic status; very few exemptions granted
Overall financing (3+4+5+6+7)	100%	?	Because almost half of funding comes from regressive sources, could be regressive overall but depends on degree of progressivity of other sources.

*Key:* ++ = very progressive; + = progressive; - = regressive; -- = very regressive

If your analysis shows that revenue raising arrangements are inequitable, it is important to determine the causes of this and scope for altering this through reforms. Because the tax capacity of a country is an important determinant of both the level of funding and the overall progressivity of revenue raising, it is often the case that the main scope for action lies with national finance authorities rather than the health sector per se. But health policy analysts have an important role to play in diagnosing the sources of inequities to better enable the Health Ministry to engage effectively with the Finance Ministry on these issues. And of course, the national health authorities have a very strong role to play in ensuring that the distribution of health spending is pro-poor. In broad terms, the more unequal the distribution of income is within a country, <sup>12</sup> the greater the emphasis that needs to be placed on identifying the potential financing reforms that can help the health system compensate.

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<sup>&</sup>lt;sup>12</sup> The Gini Coefficient indicates inequality in income distribution; the index ranges from 0 where income is equally distributed across the population to 100 which reflects absolute inequality. Data can be accessed at: <a href="http://hdr.undp.org/en/content/income-gini-coefficient">http://hdr.undp.org/en/content/income-gini-coefficient</a>

#### Equity in service use and in the distribution of resources

UHC means, in part, that people are able to use the health services that they need. Differences in use relative to need across socio-economic groups are the most common manifestation of inequity in use, and hence a primary target for reforms oriented towards UHC.

A key challenge in assessing this UHC goal is the difficulty of determining the distribution of need for health services, overall and for specific types of services, across socio-economic groups.

Where household surveys exist that allow for the calculation of health service utilization rates, analytic tools are available to assess equity in use of services (see (19, 27) for more details on these tools and recent country studies). Typically, these analyses are presented as either the percentage share of health service utilization by each socio-economic group, or may be expressed as more complex measures such as a concentration index.

Even without comprehensive data on need, it is known that the burden of ill-health is greatest on poorer socio-economic groups in most countries (due to the social determinants of health), and fertility rates tend to be higher among lower socio-economic groups. Thus, a reasonable assumption is that the distribution of service use should be pro-poor if it is to be considered equitable (see Box 7).

## Box 7. Definitions of different utilization incidence (ways in which the benefits of health service utilization may be distributed)

**Pro-rich utilization:** health service utilization is greater amongst the rich than the poor; the concentration index will be positive.

**Pro-poor utilization:** health service utilization is greater amongst the poor than the rich; the concentration index will be negative.

Some countries may not have an existing analysis of the distribution of service use across socio-economic groups, and may not even have a household survey that collects accurate information on health service use. In such cases, it may be necessary to rely on routine health information systems and undertake an analysis of utilization rates across geographic areas (e.g. districts or provinces/regions/states). These utilization rates could also be compared with proxy indicators of need (such as population size and demographic composition of the population) or relative deprivation if these exist (e.g. per capita income, poverty rates, etc.) across each geographic area. Mortality and some morbidity data are frequently available at district or region/province level, as are data on the number of births in each geographic area. This would allow one to assess variations in service use per capita, and perhaps assess this in relation to relative poverty or income levels, and by so doing, identify whether or not inequities are likely to exist.

The analysis of equity in service use should be supplemented by an analysis of the intermediate objective of equity in the distribution of resources (financial, physical infrastructure, human resources, equipment, drugs and other medical supplies). For example, clinic, hospital bed and health personnel to population ratios could be calculated for each geographic area, as could per capita public spending levels (see (28) for a comparative analysis of service use, resource availability and need across districts). While it may be difficult to access data on the private health service provision sector, it is important to try to include information on both the public and private sectors to obtain a comprehensive system-wide assessment.

Ultimately, it is the distribution of financial resources that influences the distribution of human resources, equipment, medicines and other supplies. Importantly, this is something that is amenable to policy action. As a minimum, the goal would be to equalize per capita public health

budgets across provinces or regions and districts. It is important to assess whether or not the equitable allocation of public sector resources is being promoted, such as by using a needs-based resource allocation formula for distributing the health budget across areas. Such formulae not only take into account the size of the population in each geographic area, but also other indicators of need such as demographic composition (given that very young children, the elderly and women of child-bearing age have a greater need for health services).

Where there is fragmentation in risk pooling and across purchasing organizations, an extremely helpful measure of differences in resource distribution is to compare per capita spending across these "schemes". For example, one could compare per capita spending between those covered by mandatory health insurance and the rest of the population, or between different insurance schemes and those dependent on public funding. These comparisons should not only focus on total spending per capita, but also on public spending per capita; the latter measure allows you to assess the distribution of limited government revenue across different "schemes" (or risk-pools and purchasing organizations). Figure 6 illustrates the distribution of public subsidies to schemes covering different socio-economic groups in Thailand in the early 1990s (i.e. before the reforms introduced in the early 2000s to move towards UHC).

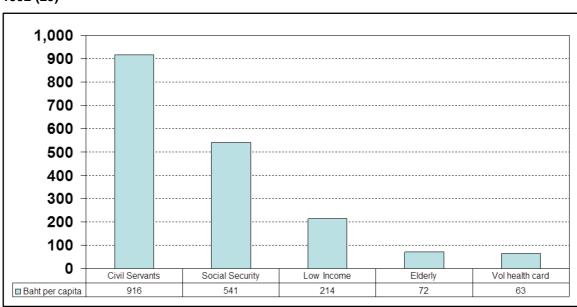


Figure 6. Inequity in public spending on health across insurance schemes in Thailand, 1992 (29)

Once again, this is amenable to policy intervention. It requires that government explicitly commit to allocating public funds across schemes on an equal per capita basis.

#### **Health service quality**

As highlighted in Figure 1, improving health service quality is a core goal of UHC; the services to which there is a universal entitlement should be of sufficient quality to be effective.

It is frequently difficult to find accurate and routinely available information on quality of care. However, some of the indicators suggested for assessing efficiency (see later) also have relevance for the assessment of quality of care. A range of indicators related to quality of care is outlined below. In many cases, the data for calculating these indicators may not be available, but by critically considering the issues underlying the indicators, insights can be gained about service quality issues. It is not intended that a comprehensive assessment be undertaken, but rather to try to identify the main problems that may exist in relation to quality of care.

Input-related indicators of relevance to quality of care include:

- Availability of staff and staff workload indicators (to determine the number of patients that clinical staff are expected to see on a daily basis and what this implies in terms of average consultation time);
- Availability of functional equipment (which influences a service's ability to appropriately diagnose and treat patients effectively); and
- Routine availability of the full range of essential drugs in health facilities (which again influences the ability to effectively treat patients).

Process indicators of quality of care particularly relate to the extent to which treatment is appropriate for a patients' diagnosis. In the absence of undertaking detailed reviews of patient folders to make this assessment, it is important to know whether there are standard treatment guidelines for the most common illnesses and to get a sense of the extent to which clinicians adhere to the guidelines. Depending on information availability, there could also be an assessment of the rational use of drugs, such as the percentage of patient encounters where an antibiotic is prescribed. <sup>13</sup>

Outcome-related indicators of quality of care could include:

- Percentage cure rates for diseases such as tuberculosis or reduction in CD4 count for those on anti-retroviral treatment;
- Percentage of patients with various chronic illnesses which are appropriately controlled (e.g. stable blood glucose levels for those with diabetes and stable blood-pressure for those with hypertension);
- · Post-surgical infection rates; and
- Hospital mortality rates.

While the above indicators relate to clinical quality of care, it is also important to consider patient perceptions of quality of care. Sometimes household surveys contain information on patient satisfaction with services, or the health system may undertake facility-level patient satisfaction surveys or have a patient complaints mechanism that could provide insights in this regard.

Finally, even where very little of the above information is available, it is important to critically consider whether there is any evidence of poor quality of care. It is also important to consider the incentive environment, particularly the provider payment mechanisms (see earlier section on purchasing) and management context, and the likely implications for the provision of high quality services.

#### **Health system efficiency**

your country's health system. Given that financial and other resources, such as health professionals, available for health services are limited in any country, efficient use of these limited resources is critical in moving towards universal coverage. If each service provided uses the least possible amount of resources, without compromising quality, a wider range of services can be provided for a greater number of people and with greater cost coverage.

The aim of this section of the analysis is to identify the leading manifestations of inefficiency in

<sup>&</sup>lt;sup>13</sup> For additional indicators of the rational use of drugs, see: <a href="http://archives.who.int/PRDUC2004/RDUCD/INRUD\_2000\_CDROM/Manuals/How%20to%20Investigate%2">http://archives.who.int/PRDUC2004/RDUCD/INRUD\_2000\_CDROM/Manuals/How%20to%20Investigate%2</a> <a href="http://archives.pdf">DDrug%20Use.pdf</a>

The World Health Report 2010 identified 10 leading sources of inefficiency (1), and more recent studies highlight country experience in trying to address these. <sup>14</sup> Box 8 suggests some questions that may assist in assessing these possible sources of inefficiency in your country context.

### Box 8. Suggested questions for assessing inefficiency in the use of key health service resources

#### i. Medicines: underuse of generics and higher than necessary prices for medicines

- Is there an essential drug list (a limited list of mainly generic drugs) and standard treatment guidelines that are used in public sector health facilities? Do health professionals in facilities restrict their dispensing to this essential drug list and do they adhere to the standard treatment guidelines? Are retail pharmacists permitted to substitute a prescribed medicine with a generic?
- Is there a strong procurement system so that drugs and other supplies can be purchased at the lowest possible price (e.g. is there a national tendering process, do you have regulations that allow for the parallel importation of drugs which are available at lower cost internationally than domestically)?

#### ii. Medicines: use of substandard and counterfeit medicines

 Are there appropriate and effectively enforced regulations to ensure medicine quality? Is there a problem of substandard or counterfeit medicines (i.e. are patients being treated with ineffective medicines)?

#### iii. Medicines: inappropriate and ineffective use

Are medicines appropriately used (which requires consideration of prescribing patterns)?
 Are the functions of prescribing and dispensing medicines separated / undertaken by different health care providers? (Indicators of rational use of medicines are referred to in the section on service quality)

# iv. Health care products and services: overuse or supply of equipment, investigations and procedures

 Is there a relatively high number of CT, MRI and PET scanners per million population (can be a particular problem in the private sector)? Is there a relatively high utilization rate of such diagnostic technology? (These indicators in your country can be compared with OECD & BRICS countries:

http://stats.oecd.org/index.aspx?DataSetCode=HEALTH\_STAT). What is the caesarean section rate (WHO suggests that a rate of 10%-15% is appropriate)?

#### v. Health workers: inappropriate or costly staff mix, and unmotivated workers

• Do you have an appropriate mix of staff skills in your health facilities (e.g. is the ratio of nurses to doctors appropriate for the services that are provided and similarly for other categories of health worker)? Are there services or tasks that could be performed by, or "task-shifted" to a less expensive category of health worker (e.g. doctors dispensing drugs which could be dispensed by a pharmacist assistant)?

<sup>&</sup>lt;sup>14</sup> A set of 10 case studies and synthesis report on reforms to address inefficiencies can be accessed at: <a href="http://www.who.int/health\_financing/documents/health-system-efficiency/en/">http://www.who.int/health\_financing/documents/health-system-efficiency/en/</a>.

<sup>&</sup>lt;sup>15</sup> It is possible to compare drug prices within your own country with the price in other countries on the Health Action International website: <a href="http://www.haiweb.org/medicineprices/">http://www.haiweb.org/medicineprices/</a>. This organization has supported studies on medicine prices, availability and affordability in a large number of countries.

 Are there high rates of absenteeism (e.g. frequent sick leave or being absent without leave) among health staff? Are there other indications that staff motivation and productivity may be low?

#### vi. Health care services: inappropriate hospital admissions and length of stay

• Is there evidence of inappropriate hospital admissions (e.g. for surgery which could have been done on an outpatient/day surgery basis or other admissions that could equally effectively be dealt with on an outpatient basis)? Is there a relatively high rate of hospital admissions/ discharges? What is the average length of stay (ALOS) in hospitals and is this in line with expectations given the disease profile in your country? Again, comparisons can be made with rates in OECD and BRICS countries.

#### vii. Health care services: inappropriate hospital size (low use of infrastructure)

• Is there excess capacity in some areas (e.g. where there are bed occupancy levels well below 80% - 90%)?

#### viii. Health care services: medical errors and suboptimal quality of care

• Are there frequent reports or medical errors to the relevant health professions council? Is there evidence of poor infection control (e.g. high rates of post-operative septicemia)?

#### ix. Health system leakages: waste, corruption and fraud

- Is there a problem of "leakage" of supplies in your system (e.g. drugs or other supplies being stolen either from the medicine depot or from facilities)?
- Could there be a problem of "ghost workers" (i.e. staff salaries are being paid to people who
  do not actually work in the health facilities) in your system and if so, is this likely to be
  widespread or not?

#### x. Health interventions: inefficient mix/inappropriate level of strategies

What is the distribution of ambulatory visits and inpatient admissions across different levels
of care/categories of health facilities? While it is not possible to specify an "optimal"
distribution across levels of care, the greatest share of outpatient visits should occur at
primary health care facilities and the percentage share should decrease considerably as
the level of care increases. The same pattern should be evident for inpatient services.

A common source of efficiency problems arising from health financing arrangements is passive purchasing (see previous section). This may arise at the extremes – either very rigid line budgets (often found in the public sector) that limit the ability of facility managers to address problems quickly, or unmanaged fee-for-service reimbursement (often found as a mechanism for paying private providers) in which providers are simply paid for whatever services they report. The former can lead to under-provision or long delays in service availability, while the latter can result in unnecessary "supplier-induced demand" (i.e. where more services are provided than may be clinically necessary simply because the provider is paid for whatever is supplied). Indicators such as high levels of dispensing of branded rather than generic medicines, high levels of diagnostic tests, particularly the most expensive and high-technology tests, and high caesarean section rates are strongly suggestive of this phenomenon. Thus, as with UHC more generally, it is essential to analyse inefficiencies across the health system, including the private sector, and to not restrict the analysis to government-funded or provided health services.

#### **Transparency and accountability**

Finally, it is important to assess the extent to which health system entitlements and decisions are transparent to the population and the existence of mechanisms for government and citizens to hold health system managers to account.

Transparency in relation to the goal of universal coverage relates primarily to ensuring that entitlements and obligations are well understood by everyone (e.g. the population, health service providers and the full range of health system organizations). For example, it must be clear who has to pay how much and in what way (e.g. whether or not payment of any fees at the point of service is required), and what services people are entitled to and how these services should be accessed (e.g. through a primary health care gate-keeper and following the appropriate referral route; only using accredited facilities).

Objective data on transparency are not part of routine information systems and would require patient exit interview or household survey data. If such data are not available, it is necessary to rely on anecdotal or "common knowledge" information, such as whether or not informal "underthe-table" payments are widespread (30). It is worth considering what actions, if any, have been taken to promote transparency through making people aware of their entitlements (e.g. dissemination of information through different forms of media and prominently displaying information at health facilities) and a judgment on the extent to which these efforts were adequate to fully inform the general public. If there are concerns about transparency, it may be worthwhile undertaking specific research.

It is also necessary to assess whether there are explicit mechanisms that can be used to hold the full range of health financing institutions and individual managers accountable. Accountability requires regular public reporting on a range of key performance indicators (e.g. in the form of an annual report).16 It also requires that there are mechanisms for government to take action on poor performance. Public reporting also allows for civil society organizations to demand accountability and ensure that government indeed takes action to address poor performance. There may also be more direct mechanisms for communities and individuals to demand accountability, including complaints' mechanisms or the existence of an independent ombudsman. The effectiveness of these mechanisms should be assessed. It is not sufficient for mechanisms to exist for raising deficiencies in accessing entitlements; instead, there must be evidence that problems reported are actually acted on. It is also important to document and review the effectiveness of mechanisms for public reporting.

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<sup>&</sup>lt;sup>16</sup> An excellent example of public accountability for performance is the annual report of the Estonian Health Insurance Fund (<a href="http://www.haigekassa.ee/eng/ehif/annual">http://www.haigekassa.ee/eng/ehif/annual</a>).

## OVERALL ASSESSMENT: PRIORITIES FOR HEALTH FINANCING REFORM

Having looked at each of the health financing functions and measures of performance on UHC goals and intermediate objectives, it is important to draw together this information for an integrated assessment of the health financing system. In particular, it is essential to try and get at *causality*, even while recognizing that the data and methods for doing so are likely to be imperfect. Nevertheless, in order to provide a basis for a reform strategy, this assessment should seek to reach at least *plausible* conclusions about the likely causes of under-performance on these objectives. A strategy based on this analysis should seek to address those causes.

A helpful way to begin this process is to create a chart that summarizes key issues in relation to the different functions (as illustrated in Figure 7). This provides a snapshot of the health financing system and visually highlights key issues.

Figure 7. A function summary chart for Egypt (1994/95) (31)

Revenue raising	General taxation			Donors	Social insurance		Out-of-pocket
Pooling	- Ministry of health		governmental	Social insurance		No pooling	
Purchasing			other gove			Individual purchasing	
Provision	Ministry of health	Ministry of	health	other govt.	Social	Private	providers

Figure 7 indicates that, in Egypt in the mid-1990s, a key challenge was the relatively high proportion of revenue in the form of OOPS, suggesting insufficient financial protection. Another key challenge was that most of the revenues for the health system were not pooled, which dramatically limited the potential for income and risk cross-subsidies in the system. There was also fragmentation across the pools that did exist, with some of the general tax funds being allocated to the Ministry of Health while the rest were allocated to other government departments. There was also a separation between tax-funded pools and the social insurance (which only covered a specific group of people), which constrained the potential for redistribution across social groups and was likely associated with inequities that favoured those covered by social

insurance. Thus, this summary presentation of the organization of health financing functions offers insights that suggest possible hypotheses as to how it impacts on progress towards UHC goals. The analyst can then go deeper by using data can be used to construct indicators of the UHC goals and intermediate objectives, focusing in particular on potential problems arising from high dependence on OOPS and how the segmentation of the system by insurance status might also impact negatively on progress towards UHC.

Another analytic tool that could be used is a "flow of funds map" (see Figure 8). This traces how funds flow through the system, from the point at which they are collected through specific funding pools and purchasing organizations to different health service providers. As shown in the figure, this can incorporate the specific resource allocation and provider payment methods used, as well as to depict the receipt of multiple funding flows by providers. Taken together, such a mapping can be used to improve understanding of the incentives that influence equity in resource distribution and efficiency in service provider behaviour.

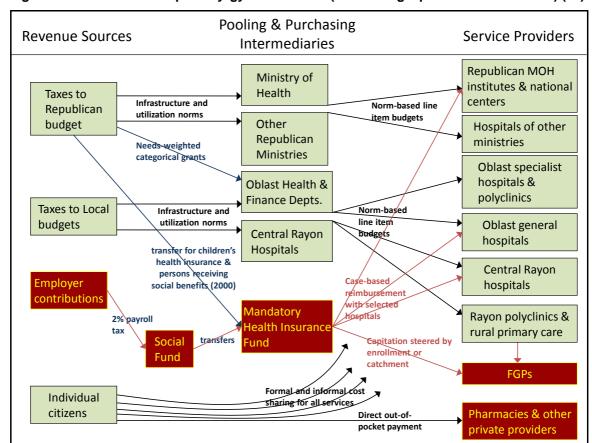


Figure 8. Flow of funds map for Kyrgyzstan in 2000 (before single purchaser introduced) (32)

*Notes*: "Republican" refers to central or national level of government, "oblast" is equivalent to state or province, and "rayon" is equivalent to district. "FGP" refers to Family Group Practices, a primary care unit.

The integrated assessment across health financing functions must then be combined with information from later sections to enable a comprehensive assessment of the existing health system relative to the UHC goals. In particular, we should know (a) how the system is organized and functioning; (b) how the system is doing in terms of policy objectives associated with UHC; and (c) the key contextual factors that condition what can be attained and what can be implemented. Given this knowledge, the overall assessment involves drawing conclusions about the ways in which the existing system is *causing* shortcomings in terms of the policy objectives. Hence, this assessment should identify the priority challenges/problems in the existing system that need to be addressed to make progress towards universal coverage.

The way in which the above analyses can be drawn together to assess the extent to which the existing health system does or does not achieve UHC goals, and what is facilitating or creating an obstacle to achieving them, is summarized in Box 9.

## Box 9. Drawing together earlier analyses to assess health system status relative to universal coverage goals: things to look for

#### Assessing universal financial protection

- The most direct indicators of financial protection are: the extent of *catastrophic health* expenditure and *impoverishment* due to health spending (bearing in mind that one should also consider overall service utilization levels to ensure that low catastrophic and impoverishment truly reflects good financial protection rather than affordability barriers being so severe that many simply do not use needed services).
- Out-of-pocket payments as a share of total health expenditure provides important, yet less direct, insights into likely levels of financial protection: the greater the share of OOPS, the lower the likely levels of financial protection and vice versa.
- Conversely, the greater the share of *mandatory prepayment* funding in total health expenditure, the greater the likely levels of financial protection.
- Other elements of the preceding analyses of relevance to financial protection include:
  - Equity in health financing: the more progressive the health financing mechanisms are, the greater the potential for financial protection as those with the least ability-to-pay bear the lowest burden of funding the health system. This in turn is related to the detailed analysis of *revenue raising*, considering the relative share of total health revenues attributable to different funding mechanisms.
  - The *fiscal, labour force and demographic context* influence the extent to which progressive prepayment mechanisms can comprise the largest share of total health expenditure.
  - Pooling arrangements also have an important influence. Larger and more diverse pools offer the greatest potential to spread risk and hence improve the potential for financial protection from any given level of prepaid funding. Fragmentation is an obstacle to this, and diagnosing the specific ways in which pooling is fragmented in any country can provide the basis for a reform strategy to address this challenge.
  - The *purchasing* function and benefit entitlements also indirectly influence financial protection if the purchasing of services from mandatory prepayment funding pools is not effective in meeting health service needs, the population will need to purchase alternative health services and pay for this on an out-of-pocket basis. And while all systems must ration access to service benefits in some way, systems that rely heavily on explicit out-of-pocket payments at the point of use (co-payments, user fees) may induce a high financial burden on those who need care. Thus, analysis of existing policies on benefit design and patient cost-sharing may help identify where they may be scope for reform to lower this potential burden.
  - It is necessary to use resources efficiently if resources are used efficiently, it is possible for systems to obtain a greater degree of progress towards all UHC goals from a given level of expenditure. Indeed, to the extent that systems are inefficient, one common consequence is that systems depend more on OOPS that they otherwise would, with a greater burden for the poor. Therefore, identifying and getting at the root causes of system inefficiencies is essential to sustain progress towards UHC. Common causes of inefficiency that arise from health financing arrangements can be found by diagnosing the provider payment incentives and exploring how fragmentation might lead to unnecessary duplications and overlaps.

Transparency, accountability and governance – these issues influence the extent to
which everyone understands their entitlements and obligations, and to which health
financing institutions can be held to account for ensuring financial protection.
Problems along these dimensions may manifest in different ways. For example,
informal payments are a common indicator of poor transparency.

#### Assessing universal access to needed health services of sufficient quality to be effective

- The analysis of equity in health service utilization relative to need is the main indicator for assessment of the existing health system's status in relation to this universal coverage goal.
   A simple summary indicator that can be used as a proxy for progress to this goal is public spending per capita across different "schemes" or geographic areas.
- Mandatory prepayment funding mechanisms as a percentage share of total health expenditure influences the potential magnitude of risk cross-subsidies that can support redistribution of resources and services in relation to need. The greater the share of mandatory prepayment mechanisms, the greater the potential for these resources to be used for the benefit of the entire population.
- Pooling arrangements are critical for influencing the extent to which prepaid health revenues can be redistributed so that those with a need for health care are able to access and use appropriate services. As with financial protection, size and diversity (as well as mandatory or automatic participation) are critical attributes that reflect how well pooling arrangements enable redistribution, while fragmentation is an obstacle to each of these.
- The *purchasing* function and *benefit entitlements* also have a strong influence on access to needed health services. In particular, the match between *benefit entitlements* and health services needs for those bearing the greatest burden of ill-health is pertinent. In addition, whether or not there is *active or strategic purchasing*, including the nature of *provider payment mechanisms*, is critical in ensuring *efficient* provision of high *quality* services, which in turn influences the extent to which health services meet the needs of the population. Analysis of existing arrangements can help to identify shortcomings and provide the basis for a reform agenda.
- The full range of factors that affects public revenue levels (including the revenue raising function and the *fiscal context*) should also be considered. The greater the resources available, and the more *efficiently* they are used, the more likely it is that health service needs can be met. Close engagement with national finance authorities (typically a finance ministry) is essential for both the diagnosis and identification of reform strategies.
- The *political-administrative* and *financial management contexts* have important implications for the equitable and efficient use of existing financial resources to meet the health service needs of the population. This needs to be well understood in the diagnostic work to determine if there is some scope for reform, or else to develop health financing strategies that can "work around" these challenges.
- Transparency, accountability and governance influence the extent to which health financing
  institutions can be held to account for ensuring access to needed health services of good
  quality.

A key emphasis in this integrative analysis should be on identifying areas of fragmentation in the system or where there is misalignment of instruments across the different functions. Some examples of how instruments can be misaligned across financing functions or with desired policy objectives include:

• Fragmentation of pooling according to revenue source – although revenue can be raised through many different mechanisms, these mechanisms do not need to dictate how funds

are pooled, and certainly do not need to result in fragmented pooling. In many countries, however, different revenue streams flow to distinct pools, and are typically further linked to different (and unequal) benefit entitlements, as where there are different schemes for different population groups (illustrated by Figure 6, Thailand, above). This reflects a pooling structure that contributes to inequities. Given the importance of promoting cross-subsidies to achieving UHC goals, identifying fragmentation in pooling as a cause of underperformance can lead to this challenge being prioritized in a health financing reform strategy.

- Misalignment of revenue raising and purchasing functions in order to drive efficiency gains and link provider payment to promised benefits, purchasers need a stable and predictable inflow of funds so that in turn they can pay providers in line with what was agreed. Thus, the analysis needs to consider if one cause of poor performance by purchasers is unpredictability in its revenue inflows. If so, steps to address this need to be part of the health financing strategy.
- Alignment between purchasing and benefit entitlements all too often, countries create "paper" entitlements by defining a benefit package before provider payment mechanisms are in place to support this promise. Informal payments or non-availability of services is often the result. The analysis needs to explore the links between purchasing and benefits and determine whether this needs to be addressed in the health financing strategy.

The synthesis of the analyses from earlier sections along the lines suggested in Box 9 should be used as the basis of identifying:

- The main causes of inadequate financial protection in the existing health system; and
- The main contributory factors to inadequate and/or inequitable access to quality health services on the basis of need.

This will in turn provide the basis for determining the priority challenges that need to be addressed in the existing health financing system in order to make progress towards the goals embedded in the definition of UHC.

Finally, priority should be given to addressing challenges that are most amenable to *health policy* action. For example, although addressing low levels of public funding may be important, increasing total government revenue is largely outside of the health sector's sphere of influence. Nevertheless, health policy makers can advocate in relation to fiscal policy issues. More importantly, by taking action (through appropriate health financing reforms in pooling, purchasing and benefit design) to address lack of transparency and accountability, inefficiencies, inequitable resource distribution, poor quality of care and to ensure that utilization in line with health needs and the population has financial protection, the health sector is likely to receive more favourable consideration from Ministries of Finance in the allocation of government revenue. It is therefore essential that the health financing diagnostic identify and prioritize those factors that are amenable to policy action by health sector decision-makers.

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### **ANNEX A: IMPROVING FISCAL CAPACITY**

Interpreting the fiscal context of your country is addressed in the first section of Part 3 of this guide. In this Annex we provide additional information that can be useful for exploring opportunities to improve domestic government resource mobilization overall, as well as specifically for the health sector.

Increasing overall government expenditure, and domestic government revenue to fund such expenditure, expands the potential to increase domestic government expenditure on health. The health sector has had limited success in securing a greater share of total government expenditure in many countries. Part of the reason for this is that if the overall government budget is not increasing, increasing real spending on health means decreasing spending on other sectors. Given that many other sectors, particularly other social sectors such as education, are important contributors to the social determinants of health, it is difficult to argue effectively for an increased government expenditure share for the health sector in this fiscal context. It is far more feasible to argue for an increased percentage share of total government expenditure for the health sector where overall government expenditure is increasing in real terms; increased real health expenditure does not have to occur at the expense of spending on other sectors. And even if the health sector's percentage share does not increase, an increase in fiscal capacity will automatically translate into increased government spending on health.

Although the health sector alone can exert little influence over its country's fiscal context, there is growing global recognition of the need for countries to increase their fiscal capacity, particularly in the context of the recently accepted Sustainable Development Goals (SDGs). The Addis Ababa Action Agenda arising from the Third International Conference on Financing for Development held in July 2015 stated: "We recognize that significant additional domestic public resources, supplemented by international assistance as appropriate, will be critical to realizing sustainable development and achieving the sustainable development goals" (33). The growing international focus on increasing domestic fiscal capacity provides a conducive environment to advocate for improving government revenue generation where the current revenue to GDP is relatively low.

While higher income countries tend, on average, to mobilize greater government revenue as a share of their GDP than poorer countries (see Figure 2), there is considerable variation across countries with some low-income countries generating as much government revenue as a share of their GDP as high-income countries (34). Thus, countries at all levels of economic development can explore ways of increasing government revenue.

The first issue to consider is whether it is possible to improve efficiency in revenue collection and tax compliance without changing tax rates. A number of African countries have been able to generate substantial additional revenue through such measures (35, 36). Although this often requires considerable efforts to transform the revenue collection agency, the long-term benefits make the investment worthwhile.

It is also important to consider whether there is scope to suggest increased tax rates by comparing tax rates in your country (particularly rates for personal and corporate income taxes as well as for taxes on goods and services, such as VAT or GST) with those of other countries of similar income and labour force characteristics. This should be accompanied by considering the structure of the labour market and employment levels, which influences the type of taxes that could generate additional government revenue most effectively. Given the relatively large share

of employment in the informal sector in lower income countries, they rely predominantly on indirect taxes (taxes levied on goods, such as value added tax) rather than taxes levied directly on individual or corporate income or earnings. This does not mean that the focus should only be on these indirect taxes; if personal and corporate tax rates are relatively low, increasing them should also be considered given that these taxes are far more progressive than indirect taxes.

Additional sources of revenue could also be considered, including payroll taxes for social health insurance. However, in contexts where most of the population is not working in the formal sector, the scope for raising revenues from this mechanism is quite limited. There is also a range of innovative financing mechanisms that various low- and middle-income countries are introducing (for more information see (34, 37, 38)).

Finally, for those countries that generate substantial public revenues from non-tax sources (e.g. public enterprises, natural resources), it is essential to not limit the analysis to revenues from "taxes" alone. It may be feasible to generate more funding from changing the terms under which natural resources are extracted (e.g. through extraction by a state-owned company or through securing appropriate royalties from private companies that extract the natural resources).

Many of these efforts to increase domestic government revenue require international action. For example, there is growing evidence on the loss of considerable potential revenue through practices such as transfer pricing and other methods used by multi-national corporations to avoid corporate tax payments in low- and middle-income countries. In this context, it is important to note that the Addis Ababa Action Agenda on financing sustainable development included the following commitment: "We will redouble efforts to substantially reduce illicit financial flows by 2030, with a view to eventually eliminating them, including by combating tax evasion and corruption through strengthened national regulation and increased international cooperation. We will also reduce opportunities for tax avoidance and consider inserting anti-abuse clauses in all tax treaties. We will enhance disclosure practices and transparency in both source and destination countries, including by seeking to ensure transparency in all financial transactions between Governments and companies to relevant tax authorities. We will make sure that all companies, including multinationals, pay taxes to the Governments of countries where economic activity occurs and value is created, in accordance with national and international laws and policies."

While there is growing support and considerable scope for increasing domestic government revenue in low- and middle-income countries, it is also important for the health sector to strengthen its ability to advocate effectively for a fair share of government funds. Recent research has indicated that even when government revenue increases dramatically, the health sector may not benefit as much as other sectors (35). Finance ministries frequently argue that the health sector will not be allocated additional funds until health officials provide proof that existing resources are being used efficiently. Therefore, a key area that health ministries should focus on is to improve their ability to demonstrate that they are using existing public funds effectively. While improvements in health outcomes (such as reduced mortality) take time to achieve, it is possible to improve information on health service needs, the costs of providing various health services, improvements in health service outputs (e.g. utilization of different services) as well as provide information to finance ministries on steps taken to ensure efficient provision of services (e.g. ensuring the availability of quality primary health care services and ensuring that patients follow referral routes; implementation of essential drug lists and standard treatment guidelines).

The above discussion focuses on mechanisms for increasing domestic government revenue. The reason for this focus is that it is not feasible to increase government spending on health through debt financing on a long-term basis. However, it is important to note that many countries allow their debt levels to increase during times of low economic growth in order to be able to maintain real government expenditure (i.e. to protect current spending levels on key social services).

# ANNEX B: FURTHER INFORMATION ON HEALTH FINANCING FUNCTIONS AND THEIR RELATIONSHIP WITH UHC GOALS AND INTERMEDIATE OBJECTIVES

#### Revenue raising, financial protection and equity in financing

As noted in the main text, mandatory prepayment financing is critical for moving towards UHC. Figure B1 highlights that mandatory prepayment financing is by far the dominant financing mechanism in countries that have made good progress to universal coverage, accounting for 70% or more of total health expenditure in almost all cases.

Figure B1. Financing mechanisms in OECD and some middle-income countries with universal population entitlements, 2012 (9)

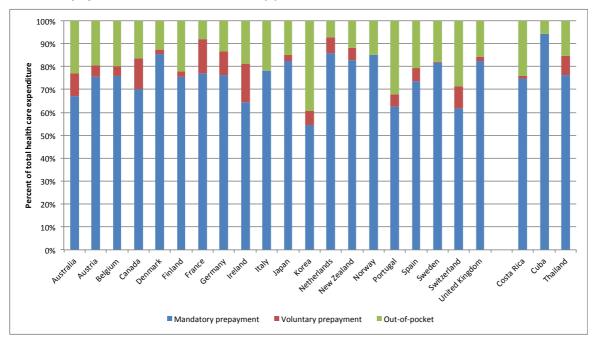
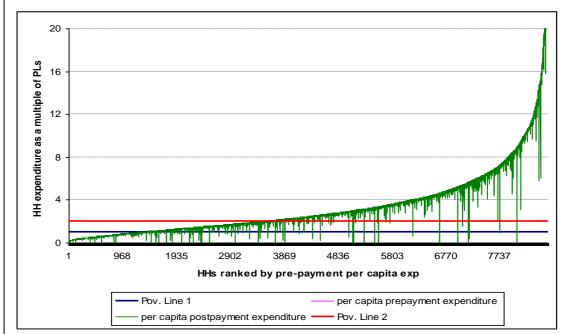


Figure B1 also indicates that most countries have some form of voluntary prepayment, but this is very limited and has a clearly defined role relative to the mandatory funding system. As noted by the 2010 World Health Report, "It is impossible to achieve universal coverage through insurance schemes when enrolment is voluntary" (1). In most countries with universal population entitlements to health services, OOPS is a relatively low share of total health expenditure (10%-20%). As indicated in the main text, a key concern with OOPS as a financing mechanism is their potentially catastrophic and impoverishing effects, and because they deter the use of health services, particularly for the poorest. Box B1 illustrates the impoverishment effects of OOPS in Ghana (see also (39) for other country results on impoverishment).

#### Box B1. Impoverishment from payments for health care in Ghana (2005/06) (40)

The figure below shows how households can be pulled below the poverty line by paying for health care out-of-pocket. The vertical, "dripping" lines show the magnitude of payments for health care made by individual households. It clearly indicates that many households that had expenditure (or income) levels above the poverty line are pulled into poverty when they incurred health expenditure. While this experience is concentrated among those already close to the poverty line, it can occur for even relatively high-income households. It is also important to note that households that are already below the poverty line make relatively low health care payments, mainly because they simply cannot afford to pay. The figure clearly shows the severity of the financial consequences of paying for health care in addition to the number of households who fell below the line, and the deepening of poverty for poor households who are not able to avoid health payments.



Notes to figure: Households are ordered from lowest- to highest- income (illustrated by the upward-sloping curve). Two poverty lines are presented here – Pov. Line 1 represents per capita household expenditure of \$1.25 per day and Pov. Line 2 represents per capita spending of \$2.50 per day.

In evaluating both current revenue raising mechanisms potential future changes in these mechanisms, a key consideration is not only protecting households from catastrophic and impoverishing health expenditure but also promoting equity in financing. Figure B2 illustrates that the relative progressivity of health financing varies considerably across countries. Although the data for OECD countries are somewhat outdated (late 1980s and early 1990s), it shows that high-income countries often have slightly progressive or regressive overall health financing systems. This pattern is also shown in more recent analyses of high-income countries in Asia (e.g. Japan and the Republic of Korea, which were both mildly regressive). The two exceptions were Switzerland and the USA (both of which have since reformed their financing system); in both countries, private voluntary prepayment financing was dominant at this time. Research in low-and middle-income countries in Asia and Africa (using data from the early to mid-2000s) show a generally progressive overall financing incidence, but with considerable variation in the level of progressivity.

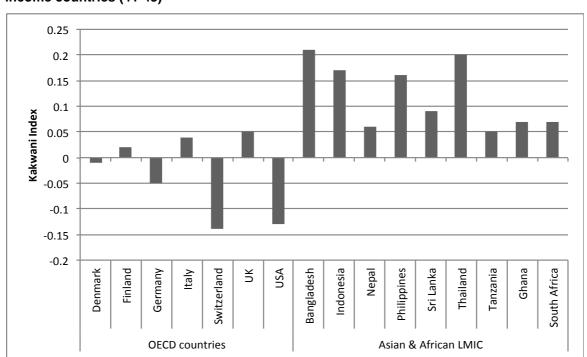


Figure B2. Kakwani Indices for selected OECD and Asian and African low- and middle-income countries (41-43)

The variation in Kakwani Indices across countries reflects the differences in the countries' mix of mandatory prepayment, voluntary prepayment and out-of-pocket financing mechanisms as well as the country specific structure of contributions in each of these financing mechanisms. Box B2 provides an overview of the relative progressivity of different financing mechanisms from studies that have been conducted in OECD countries and some low- and middle-income countries.

#### Box B2. Summary of key findings from previous studies on equity in financing (44)

#### General government revenues

- Direct taxes have been found to be progressive in all studies that have been conducted.
- Indirect taxes are often regressive, particularly in high-income countries and many middle-income countries. However, they have been found to be slightly progressive in a number of lower-income countries in Africa and Asia. While the relative progressivity or regressivity of indirect taxes like VAT depends to some extent on the extent to which goods and services consumed by poorer groups are VAT-exempt, there is a relationship with the level of economic development in a country. In low-income countries where a large proportion of the population live in rural areas and engage in subsistence agriculture or purchase limited fresh produce in local, informal markets, the poor make very few VAT payments, which often translates into VAT being progressive.
- Overall tax revenue (direct and indirect taxes combined) is usually progressive, but it
  depends on how progressive (or regressive) direct and indirect taxes are, and the relative
  share of these different types of taxes.

#### Mandatory health insurance (MHI) contributions (payroll taxes)

- This is a form of direct tax.
- Typically structured as proportional (a fixed percent of earnings), though where there is a
  contribution "ceiling" or maximum payroll deduction, it becomes regressive within the group
  of contributors as persons with high salaries end up paying a smaller proportion of their

earnings than do those whose contributions are below the ceiling. At the overall system level, it can be progressive because the poorer part of the population is not salaried and hence doesn't contribute. However, it is usually less progressive than general tax, given that income tax rates are progressively structured, whereas mandatory health insurance contributions are usually a fixed percentage of salaries.

• The greater the proportion of the population making MHI contributions, the less progressive MHI will be, and sometimes will even be regressive. This is because both high- and lower-income people are contributing, but they are all contributing the same percentage rate.

#### Voluntary health insurance

- Commercial voluntary insurance schemes are often progressive, particularly where a relatively small section of the population (generally the highest income groups) belongs to these schemes. There is a regressive effect where government makes the contributions for voluntary health insurance tax-deductible because higher income people benefit more. It is regressive where a large share of health expenditure is funded by these schemes (as in the USA). However, even when contributions to these schemes are highly progressive, they generally have a negative effect on equity in service utilization.
- There is very little evidence on another form of voluntary insurance that exists in low- (and some middle-) income countries, namely community-based health insurance (CBHI). A recent study (41) has found that this form of financing can be very regressive (possibly even more regressive than OOPS). This is because the poorest groups belong to these schemes, and usually everyone has to pay the same flat amount.

#### Out-of-pocket payments

- Almost always regressive and usually one of the most regressive financing mechanisms.
- Have been found to be progressive in a few countries, but this is due to the poorest not being able to afford these fees and so are not using health services at all.

In evaluating possible changes to the revenue raising system, whether in an effort to increase funding for the health sector or to change the way in which revenue is generated to promote greater financial protection, equity, efficiency or sustainability, the following issues should be borne in mind.

Equity in health financing can be promoted by focusing on increasing progressive taxes, such as personal income taxes. However, increased revenue generation from such taxes may be limited if there is a small formal employment sector, high unemployment levels and if personal income tax rates are already high. The extent to which the labour force is formalized is also important if a country wishes to generate revenue through employment-based payroll taxes for mandatory health insurance, although this is a less progressive source than personal income taxes. While it is relatively straightforward to collect mandatory health insurance contributions through payroll taxes on formal sector workers, it is very difficult and can be costly to try to secure such contributions from those working in the informal sector.

It may be feasible to generate considerable revenue from indirect taxes such as VAT. These taxes are able to capture revenue from the whole population, including those working in the informal sector, and as indicated in Box B2, can be a progressive source of revenue in low-income countries (41). However, they are the least progressive source of tax revenue. A key issue that influences the potential to generate indirect tax revenue is the distribution between different types of activities in the informal sector. Revenue generation will be restricted if subsistence agriculture is the major economic activity for those outside the formal employment sector, but may be greater if informal sector activities relate more to activities that allow for the

generation of income such as retail (e.g. informal general stores or food vendors), small-scale manufacturing (e.g. furniture making), construction, transport (e.g. mini-bus taxis), communication (e.g. internet and mobile phone services) and service (e.g. hairdressing, motor vehicle repairs) activities. Another factor that should be considered is that indirect taxes may not be a reliable and stable financing source as they are dependent on the consumption of particular goods and services.

Another consideration is whether efforts should be made to increase general revenue and argue for a fair share of this revenue for the health sector or to argue for these additional taxes to be dedicated to the health sector. The main consideration here is that these dedicated taxes reflect an explicit government decision to ensure a revenue stream for the health system, and tend to be quite a reliable 17 revenue source; they are not subject to political decisions about prioritization of different sectors. However, to understand their impact on overall public funding for the health system requires looking at all sources (dedicated taxes and social insurance contributions, as well as general revenue transfers); it is possible that increasing dedicated revenues can be offset by a decline in allocations to the health sector from general revenue.

A final issue to consider when considering alternative mandatory prepayment mechanisms for health services is the stewardship context for revenue raising. Governance, including transparency and accountability issues, of revenue collection organizations can impact on the amount of revenue generated. For example, if governance of the tax authority is perceived to be weak and if there is little public confidence that tax funds will be efficiently and appropriately used, tax compliance may be low. Similarly, if insurance companies are generally mistrusted in your country, people may be reluctant to join health insurance schemes.

#### Fund pooling to promote equity in resource distribution and service use

The main rationale for pooling of prepayment funds is that health care costs are unpredictable: individuals do not generally know when they are going to fall ill, what health services they will require or what this will cost. Although it is difficult to predict an individual's future health service needs and costs, it is possible to draw on epidemiological and actuarial data to estimate the probable future health service needs of a large group of people. This is at the core of risk-pooling. At any one point in time, healthy members of the pool are helping to pay for the services of those who are ill. Those who are healthy and those who are ill will change over time. The risk of falling ill and incurring unexpected, high health costs is thus shared among those in the pool. Thus, pooling of funds for health services allows for risk cross-subsidies, whereby the healthy crosssubsidize the health service needs of the ill.

The pooling function has particularly important implications for the intermediate objective of equity in resource distribution, and ultimately for the goal of service utilization on the basis of need for care. The extent and nature of fragmentation in pooling is critical in this respect. If there are a large number of separate pools with a small percentage of the population covered by each pool, there will be difficulties in ensuring equitable access to health services on the basis of need. Such difficulties are more likely where pools are fragmented along socio-economic lines. As lower socio-economic groups tend to bear a greater burden of ill-health than other groups, fragmentation into separate pools for different socio-economic groups limits the potential for risk cross-subsidies. Similarly, considerable differences in the demographic composition of pools (e.g. large numbers of elderly persons in some pools) also limits risk cross-subsidies.

<sup>&</sup>lt;sup>17</sup> This reliability is important not only for the level of funding, but also as an enabling condition for an effective purchasing function. Stability and predictability of revenues (from whatever source) enable the purchasing agency and providers to have confidence that the amounts agreed in contracts will actually be paid.

The nature of pools, particularly whether participation in them is mandatory or voluntary, and their market structure such as whether or not they compete with each other, are other important aspects of fund pooling arrangements. Adverse selection within a voluntary insurance environment can result in these scheme pools containing mainly high-risk members, requiring ever increasing premiums, which can ultimately translate into "de-insurance" of the population and, hence, reduced financial protection. Where there is active competition between voluntary schemes, there may be greater risk selection, which would deny many, particularly those with the greatest need for health services, the opportunity for financial protection through these schemes.

Competition between different insurance schemes is often regarded as a means of promoting efficiency. However, the need to devote considerable resources to marketing activities to attract members may translate into administrative inefficiencies, whereby a higher share of pooled funds are devoted to administrative costs rather than to paying for the health services needed by scheme members. The efficiency objective is also adversely affected where pooling is very fragmented as economies of scale are limited.

While many of these challenges are particularly prevalent in voluntary insurance schemes, they may also arise in "mandatory" prepayment schemes. For example, where everyone is required to have health insurance cover but may choose which scheme to join, high marketing costs may be incurred and risk selection can occur. In some mandatory schemes that are meant to cover the entire population (as in Ghana), even though legislation makes membership of a contributory scheme mandatory, it is difficult to enforce payment of contributions for those outside the formal sector, which can translate into adverse selection.

However, different strategies for managing these challenges may be available according to whether the prepayment mechanism is voluntary or mandatory. Attempting to address the consequences of issues such as adverse selection and risk selection in the voluntary insurance environment relies heavily on government regulation, which may not be effective if there is poor enforcement capacity. Within a mandatory insurance environment, it is more feasible to use strategies such as a formal risk-equalization mechanism. This generally involves creating an organization that pools all health insurance funds and allocates these funds to individual health insurers according to the number and risk-profile of people in each fund. This is the approach adopted in countries such as Germany and the Netherlands, which have mandatory insurance systems with choice between insurance schemes. Risk-equalization mechanisms improve equity in the distribution of resources and use of services through linking resources in each scheme's pool to the health service needs of its members. However, implementing risk-equalization requires considerable information and other capacity.

These issues are linked to the alignment of the revenue collection and pooling functions. In the voluntary insurance environment, collection and pooling functions are undertaken by the same organization (i.e. each scheme) and contributions by individuals (or their employer in some cases) determine the "allocations" to that funding pool. In the mandatory insurance environment with competing schemes, contributions to each scheme do not necessarily determine the size of each scheme's funding pool, as funds may be reallocated through a risk-equalization mechanism.

Possibly one of the most important ways in which there can be a misalignment between the revenue collection and pooling functions relates to allowing certain individuals to "opt out" of contributing to a specific pool of funds. For example, Chile in the early 1980s introduced a reform that allowed high-income individuals to opt out of contributing to the national health insurance fund. While they were required to have some form of health insurance, they could contribute to a private insurance scheme of their choice. This reduced risk (as well as income) cross-subsidies in the overall health system in Chile.

Most of this discussion on pooling has focused on insurance schemes. However, some of the issues raised also apply to government revenue pools. In particular, a needs-based resource allocation formula may be used to distribute government revenue between decentralized health administrations, in much the same way that risk-equalization mechanisms can be used to allocate resources between insurance schemes.

In summary, it is important to explore the extent of fragmentation of risk pools and assess whether such fragmentation poses a serious problem within your health system or not. If most health expenditure is attributable to a single large pool, and there are a number of smaller fragmented pools that only account for a small share of health expenditure (e.g. where there are several voluntary insurance schemes providing supplementary cover in the context of universal entitlements to relatively comprehensive services funded from a single mandatory prepayment pool), such fragmentation does not pose a serious constraint to promoting cross-subsidies in the overall health system. In contrast, fragmentation poses more serious problems where a sizeable share of total health expenditure is attributable to fragmented pools, and where there is no riskequalization mechanism between these pools. For example, the existence of nearly 100 separate private voluntary insurance schemes in South Africa, which cover only 16% of the population yet account for about 44% of total health expenditure, represents a substantial challenge to promoting cross-subsidies, achieving access to needed services and promoting financial protection. There may similarly be a problem where there are two or three large pools accounting for most of health expenditure, but where each pool has a very different socio-economic profile and demographic composition (e.g. a separate social health insurance pool for formal sector workers and a tax-funded pool for the rest of the population).

Where such pooling problems exist, it is helpful to explore whether it is feasible to create linkages between separate pools, such as through a risk-equalization process, or whether it is possible to integrate pools. For example, it may be possible to pool funds from different revenue sources (e.g. funds from general revenue allocations and dedicated social health insurance payroll taxes) to create a single pool. Another example is that of Korea, which previously had hundreds of different insurance scheme pools as part of its mandatory insurance system, but abolished these schemes and created a single national health insurance pool in 2000. Where a risk-equalization process is being considered, the information and actuarial capacity requirements for effective risk-equalization should not be underestimated.

## Benefit entitlements and strategic purchasing to promote equitable use of quality services

The UHC goal of utilization of services according to need and the intermediary objective of equity in resource distribution are strongly influenced by benefit entitlements, with a key aspect being whether or not different socio-economic groups have different benefit entitlements. To avoid this, it is important to ensure that there is good alignment between the pooling function and benefit entitlements (e.g. to ensure that pools are not fragmented along socio-economic lines, or where this is the case, that benefit entitlements across pools are comparable and a mechanism is put in place to risk-equalize the distribution of funds across pools). Regulations may be required where there are multiple purchasers. For example, it may be necessary to specify a uniform set of service benefits that all purchasers must cover or to set limits on the extent of co-payments.

Financial protection is also affected by benefit entitlements, particularly where user fees or copayments are required in order to exercise these entitlements. It is also influenced by the range of services to which people are entitled, and whether or not these services address the greatest health needs of the population.

Creating benefit entitlements are of no value if these benefits are not delivered or accessed. Therefore, there must be good alignment between revenue raising and the resources required to fully deliver on promised entitlements. There must also be transparency around benefit

entitlements to ensure that the population is aware of and fully understands their benefit entitlements, both in terms of the services they may access and whether or not any direct payments are required. Similarly the population must be aware of any obligations on them in accessing these services, such as presenting at a primary care provider and following the specified referral route.

Other aspects of purchasing are also critical in ensuring that available funds are translated into the availability of quality services to which the population is entitled.

A range of different institutions may assume the purchasing function in different contexts, and there may be multiple or single purchaser arrangements. The Ministry of Health is the main purchaser of health services in many countries, but the purchaser could be a semi-autonomous or autonomous public entity such as a mandatory insurance fund. A key issue in relation to purchasing by the Ministry of Health or a mandatory health insurance or other (semi-) autonomous public organization is whether or not they are also responsible for service provision, and if so, whether providers have been granted some form of management authority and a purchaser-provider split created. Unless public sector managers responsible for service delivery have legally delegated decision-making authority, they will not be able to respond to the incentives created through the purchasing arrangements, and cannot be held fully accountable for their performance. Separating purchasing and provision functions is important to encourage active purchasing, but requires considerable information and management capacity.

The nature of the organizational structure for purchasing is also important in terms of being able to promote active purchasing and efficiency and quality in service provision. For example, a single purchaser can use its monopsony power to benefit from economies of scale, to control the incentive structure for providers and to contain price increases. Competing multiple purchasers may allow for more choice and be more responsive to the groups they serve, but there may be less potential for cost-containment and administrative costs can be very high. In addition, the power of purchaser(s) relative to other key actors, particularly (e.g. private hospitals, medical associations, pharmaceutical manufacturers), will have major implications for the extent to which UHC goals and objectives can be realized.

Possibly most importantly is the extent to which the purchaser(s) undertakes strategic or active purchasing actions (rather than being a passive purchaser). These actions include:

- The purchaser drawing on information about the health care needs of the population for which it is responsible and aligning the availability of services to these needs.
- Contracting with selected providers who agree to comply with utilization controls, are willing to accept specified payment mechanisms and rates, and to provide information for monitoring purposes.
- The purchaser using its financial power to influence the behaviour of providers to be efficient and deliver quality services, particularly through linking provider payment to information on their performance and carefully monitoring provider performance and taking action when performance is poor (45).

The mechanisms used to pay providers are critical for incentivizing efficient provision of quality health services. There are a range of payment mechanisms for individual providers (e.g. salary, capitation and fee-for-service) and for facilities (e.g. budgets, fee-for-service, per diem and case-based payments) and each has its advantages and disadvantages (see (12) for more details). Some mechanisms may provide an incentive to under-service patients (such as capitation), while others provide an incentive for over-servicing (particularly fee-for-service); some do not provide an incentive to provide good quality care (e.g. salaries); and some promote efficiency of service delivery (e.g. capitation and case-based payments). Usually, a mix of different provider payment

mechanisms is used within each country; sometimes different payment mechanisms are used by different purchasers and sometimes a combination of different payment mechanisms are used by a single purchaser to create an appropriate balance of incentives for providers.

Public financial management rules and regulations are often the greatest constraint to changing provider payment mechanisms for public sector services. Budgeting is the dominant form of paying public sector health facilities, yet budgets do not necessarily provide incentives for efficient use of resources. It is important to understand how budgets are developed, particularly whether it is simply on a historical basis with an inflationary adjustment or whether the facility or district is able to develop and effectively motivate for the budget it requires to appropriately address the health service needs of its catchment population. It is also necessary to understand whether budgets are tightly specified on a line item basis or provided as a global budget; global budgets allow greater flexibility in the use of funds across different health service inputs and could promote greater efficiency. The scope for linking budgets to performance, and reporting requirements to allow for monitoring of performance, within the public financial management context should also be considered. If the current mechanisms for paying public sector facilities are not providing appropriate incentives for the efficient delivery of quality services, it is important to explore whether there is scope for flexibility within the prevailing public financial management context, and if not, whether it is preferable to establish a separate, quasi-public purchasing agency.

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