Health service financing for universal coverage in east and southern Africa

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Table of contents

Executive summary ...........................................................................................................ii
1. Introduction .........................................................................................................................1
2. Universal coverage goals and related concepts .................................................................1
3. Revenue collection ..........................................................................................................2
   3.1 Overview of alternative revenue collection mechanisms ............................................2
   3.2 Out-of-pocket payments ...............................................................................................4
   3.3 Voluntary health insurance .........................................................................................5
   3.4 Mandatory health insurance ......................................................................................8
   3.5 Government revenue, including taxation ..................................................................10
4. Pooling ..............................................................................................................................14
5. Purchasing ........................................................................................................................15
6. Service delivery and management ..................................................................................17
7. Conclusions ......................................................................................................................17
References ............................................................................................................................18


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Executive summary

Universal coverage (UC) relates to creating an entitlement for everyone to be protected against the costs of health services and to assuring access to needed health services of sufficient quality to be effective. From EQUINET’s perspective, we believe that an explicit value base should be applied to interpreting the goal of UC, particularly the values of universality and social solidarity. From a universality perspective, we interpret UC to mean that everyone should have the same entitlements in relation to financial protection and access to needed health services (i.e. that the entitlement is to the same range and quality of health services). Social solidarity requires that there are both income cross-subsidies (from the rich to the poor) so that payments towards financing health services are based on the ability to pay, and risk cross-subsidies (from the healthy to the ill) to ensure that everyone is able to access health services based on need and not ability to pay. Thus, equity in the health system is integral to moving towards UC.

This paper considers elements of the design of health systems and how these relate to moving towards UC in the context of Africa. It focuses particularly on health financing issues (revenue collection, pooling and purchasing), but also raises health service delivery and management issues.

In relation to revenue collection, the global consensus is that in order to pursue universal coverage, it is critical to reduce reliance on out-of-pocket payments as a means of funding health services. While a growing number of countries are removing user fees from public sector health facilities, experience has shown that this must be planned carefully and accompanied by increased pre-payment funding, particularly domestic funding.

The 2010 World Health Report (World Health Organisation, 2010) unequivocally states that it is not feasible to achieve UC through voluntary enrolment in health insurance schemes. Voluntary health insurance should be seen as having a specific and limited role in the financing of health services, generally as complementary or supplementary to universal entitlements funded through mandatory pre-payment financing mechanisms. In contexts where government is not fulfilling its responsibility for funding health services, community-based health insurance schemes may be a temporary second-best option for providing some financial protection.

The key focus in moving towards universal coverage should be on mandatory pre-payment mechanisms. Many African countries emphasise introducing mandatory health insurance (MHI) schemes, but caution should be exercised. While MHI contributions are often placed in a separate pool to benefit contributors only (which creates a tiered and inequitable system and hence is not in line with the value base of ensuring that all have the same service benefit entitlements), increased income and company taxes can be used for the benefit of the entire population. Introducing MHI contributions for those outside the formal employment sector should receive more critical assessment than there has been to date, especially as such contributions are strongly regressive and generate little revenue. If there is political insistence on generating funding from those outside the formal employment sector, indirect taxes are a more equitable and efficient mechanism of achieving this goal. However, in the context of large income inequalities in many east and southern African (ESA) countries, efforts to improve the collection of taxes, particularly from high net-worth individuals and multinational corporations, may be more appropriate. The common assumption of limited fiscal space for increased government spending on the health sector should be challenged and the fiscal space envelop pushed.
In relation to pooling, international consensus is that it is critical to minimise fragmentation in funding pools, particularly if the goal is to achieve universal coverage. It is necessary to have an integrated funding pool to achieve cross-subsidies. If there are separate funding pools for different groups, cross-subsidies are limited and it is often difficult to merge pools at a later stage. If countries pursue the option of a mandatory health insurance scheme to generate additional revenue for health services, these funds should be pooled with funds from government revenue to ensure that a two-tier system is not created and that all receive the same service benefits.

At present, little research has been undertaken on the purchasing function of health service financing. Purchasing involves determining service benefit entitlements (what services are purchased with the pooled funds and how people will be able to access these services) and how service providers will be paid. Increasing attention should be paid in ESA countries to promoting more active purchasing, which requires identifying the health service needs of the population, aligning services to these needs, paying providers in a way that creates incentives for the efficient provision of quality services, monitoring the performance of providers and taking action against poor performance. Active purchasing is critical for ensuring that available funds translate into effective health services accessible to all.

Reforms in the health financing system, whether in relation to revenue collection, pooling and/or purchasing, are of no value if services are not available or of adequate quality to be effective. Clearly, moving towards universal coverage requires improvements in service delivery and management. In particular, emphasis should be on improving services at the primary health service level, which are effective in reaching the poor and which are able to address most of the health service needs of the population in ESA countries. Improving primary health services offers the greatest potential for increasing population coverage affordably. In addition, it is important to broaden the decision-space of managers at facility and district level, thus enabling them to be more responsive to patients and staff needs and to the incentives created through active purchasing. Decentralisation of management responsibility should be accompanied by development of governance structures that allow for accountability to the local community.

ESA countries have some way to go in moving toward UC. This review of health service financing using the explicit value base of universality and social solidarity highlights that, in relation to revenue generation, far more emphasis should be placed on government revenue funding for health services in ESA countries. While mandatory health insurance schemes can also contribute to generating additional revenue for health services, these funds should be pooled with funds from government revenue. Although there is limited evidence in relation to purchasing in ESA countries, introducing active purchasing of services, as well as addressing service delivery and management challenges, will be essential if universal access to services of appropriate quality is to be achieved.
1. Introduction

Universal coverage (UC) is currently top of the global health policy agenda. The focus on universal coverage (often referred to as universal health coverage or UHC) began receiving prominence when the 2005 World Health Assembly adopted a resolution on “sustainable health financing and universal coverage” (World Health Organisation, 2005). Since then, more and more publications have been written on the issue of universal coverage and the 2010 World Health Report was entirely devoted to UC (World Health Organisation, 2010). UC is now being seriously considered as the health sector goal in the next round of global development goals to replace the millennium development goals (MDGs) after 2015 (see for example discussions reported at the website “The World we Want 2015” at: http://www.worldwewant2015.org/).

This paper explores what universal coverage means, and reviews what this implies for African health systems, particularly in relation to health service financing but also service delivery.

2. Universal coverage goals and related concepts

The definition of universal coverage proposed in the 2010 World Health Report (World Health Organisation, 2010), which has been widely accepted, is that UC relates to creating an entitlement for all to:

- Financial protection from the costs of health services; and
- Access to needed services, of sufficient quality to be effective.

Unpacking the first component of UC, the emphasis is on ensuring that no one’s household livelihood is threatened or impoverished through having to pay for health services. There is uncertainty about when one may fall ill and need to use a health service and about what the costs of these services may be. Considerable evidence shows that when households have to pay out of pocket for health services, they may not use services at all or will only be able to use inadequate services, or may use a service but be dragged into poverty as a consequence. This is not limited to low-income households; even households that are relatively ‘well-off’ could incur very high health service expenditures (e.g. for major surgery or for intensive treatment for cancer). Even where spending on health services does not drag a household below the poverty line, it may require members to reduce spending on basic items (such as food), selling assets and/or borrowing money to cope with health service costs. Thus, one of the key goals of UC is to provide protection for all households against these adverse financial consequences.

The second component of UC relates to ensuring that everyone is able to access the necessary health services (whether preventive, promotive, curative or rehabilitative). Not only do the appropriate services need to be available, they must be of sufficient quality for health service needs to be addressed effectively.

It is important to go beyond this definition of universal coverage to explore the value base that underlies the UC concept. In the absence of an explicit value base, the goal of universal coverage can be interpreted in diverse ways. At EQUINET, we would argue that the values of universality and social solidarity, both of which are strongly related to viewing health as a human right, should underpin the interpretation of UC.
Universality in relation to the right to access health services and having financial protection from the costs of services not only implies that it applies to everyone, but also that all should have the same entitlements (to the same range and quality of health services). The goal is to provide access to as comprehensive a range of service benefits as possible over time. While the richest will always seek to purchase more health services, these differentials should be at the margin. Thus, differentials in access to health services and in financial protection between different groups should be minimised over time.

Social solidarity refers to common responsibilities and interests within society. Within the context of a health system, it particularly relates to the need for cross-subsidies in the overall health system. This includes both income cross-subsidies (from the rich to the poor, whereby individuals contribute to financing health services on the basis of their ability to pay) and risk cross-subsidies (from the healthy to the ill, whereby individuals benefit from health services on the basis of their need for services).

At its core, social solidarity is about equity. Income cross-subsidies are required so that payments towards health service financing are in line with one’s ability to pay. Risk cross-subsidies ensure that use of health services is in line with individuals’ need for health services. Equity is integral to efforts to move towards UC; achieving universal financial protection and access to health services is dependent on these cross-subsidies in the overall health system.

While these are the goals of UC and the values that underlie UC, countries should be empowered to assess critically their existing health system relative to the goal of UC, as well as to evaluate reform options that would enable them to move towards UC. It is one thing to recognise that a country does not have UC (through noting gaps in financial risk protection and poor access to services), but quite another to be able to assess what kinds of health system changes can move a country towards UC.

This paper does not focus on how to measure UC, but instead considers elements of the design of health systems and how these relate to moving towards UC, particularly in the context of Africa. Its focus is on health financing issues, but it also raises health service delivery and management issues.

While quite a bit of attention has been paid to health financing issues in the past decade or more, and potentially insufficient attention to the access element of UC, much of this attention has been devoted to the issue of revenue collection rather than other health financing functions. Revenue collection is concerned with how to raise funding and from what sources. There are two other health financing functions: pooling, which refers to accumulating funds on behalf of a population that can be used to pay for health services; and purchasing, whereby pooled funds are used to purchase services from providers and to pay providers so that available resources are used equitably and efficiently and translate into good quality services (Kutzin, 2001). Each of these financing functions is considered in the next three sections, followed by brief comments on service delivery and management issues.

3. Revenue collection

3.1 Overview of alternative revenue collection mechanisms

Various mechanisms for funding health services exist. Figure 1 presents the author’s own categorisation of the different ways of funding health services using domestic (or national) resources. Many countries in Africa remain heavily reliant on donor funding. The focus here is on domestic funding given that donor funding can be unreliable and that African
countries will ultimately have to increase domestic funding for health services. It is particularly important that domestic funds are generated in an equitable way that provides financial risk protection for the resident population.

Figure 1: Categorisation of domestic, health funding mechanisms

There are two main categories of health financing mechanisms:
- Out-of-pocket payments, which means that a person using a health service pays the provider directly (out of his or her own pocket, e.g. paying a user fee at a public health facility or paying cash to a private doctor for a consultation or for drugs at a pharmacy); and
- Pre-payment funding, which refers to paying towards the costs of health services before needing to use a health service (e.g. through paying tax or contributing to a health insurance scheme), and then health service providers are paid from these pre-payment funds when the need to use a service arises.

Pre-payment mechanisms can be further categorised into mandatory and voluntary pre-payments. The distinction between these categories is whether there is a legal compulsion to make these pre-payments. For example, each country has laws that require individuals and companies to pay various taxes and some countries have legislated that some or all residents must contribute to a mandatory health insurance (usually called social or national health insurance). In contrast, in the case of voluntary health insurance schemes, there is no legal requirement to become a member of or contribute to these schemes (even though some employers may require their staff to join such schemes). Some African countries (e.g. South Africa, Namibia and Zimbabwe) have voluntary insurance that focuses mainly on formal sector workers and is offered by private entities including commercial companies. A growing number of African countries have what are often termed community-based insurance schemes that provide a mechanism for pre-payment funding for those outside the formal employment sector (e.g. subsistence farmers, informal traders). Because there is state involvement in creating a legislated payment requirement in the case of mandatory pre-payments, they are often regarded as
public financing mechanisms whereas voluntary schemes are regarded as private financing mechanisms.

Which of these different funding mechanisms are best suited to moving towards universal coverage? Although each country has a different mix of health financing mechanisms, and there is no single ‘ideal’ way of funding health services, there is growing consensus in relation to the direction in which we should move to progress to UC.

### 3.2 Out-of-pocket payments

The first area of consensus is that out-of-pocket payments are the least desirable way of funding health services. Out-of-pocket payments place the full burden of paying for health services on the individual who needs to use a health service at the time of need; it does not allow for any income or risk cross-subsidies. It constitutes a major barrier to health services, particularly for poor households (Lagarde and Palmer, 2011; Yates, 2009; Médecins Sans Frontières, 2008). The World Health Organisation (WHO) (2010) estimates that 100 million people are pushed below the poverty line each year due to out-of-pocket payments for health services.

The WHO has clearly indicated that pre-payment funding mechanisms should be prioritised and reliance on out-of-pocket payments should be minimised (World Health Organisation, 2005 and 2010). At present, out-of-pocket payments remain a large share of health financing in many African countries.

Many African countries have introduced fee removal policies, either for specific services (most frequently child and maternal services) or all services. These policies have had mixed outcomes; while in all countries, service utilisation has increased as financial barriers to health services have been reduced (Lagarde and Palmer, 2011; Deininger and Mpuga, 2004), in some cases there have been unintended adverse consequences (Gilson and McIntyre, 2005; McPake et al., 2011). In particular, as the utilisation of services increases, if additional resources are not made available, there can be widespread drug stock-outs in facilities and dramatic increases in staff workload, contributing to declining staff morale (Burnham et al., 2004; Gilson and McIntyre, 2005; Nimpagaritse and Bertone, 2011). This can reduce quality of services within public sector facilities, which may mean that patients have no alternative but to seek services from private providers on an out-of-pocket basis (Nabyonga Orem et al., 2011); in effect, there is no improvement in financial protection as people still have to rely on making out-of-pocket payments.

A growing body of evidence shows that these adverse consequences can be avoided through careful implementation (Nimpagaritse and Bertone, 2011; Gilson and McIntyre, 2005; McPake et al., 2011; Witter et al., 2011; Meesen et al., 2011). In particular:

- allow sufficient time for adequate planning for implementation;
- improve communication with facility managers and frontline health workers;
- estimate likely increases in utilisation and the human resources and drugs necessary to cope with these increases distributed to facilities; and
- generate increased revenue from pre-payment funding mechanisms to ensure that quality of care does not suffer and to sustain the health services at their higher utilisation levels in the long term.

A key issue, therefore, is that to reduce reliance on out-of-pocket payments there must be a parallel process of increasing funding from pre-payment mechanisms. In low-income countries with weak economic growth, this is likely to necessitate increased and sustained external funding, at least in the short to medium term. The next sections consider the
alternative *domestic* pre-payment funding mechanisms, which all ESA countries should be making efforts to increase.

3.3 **Voluntary health insurance**

There is now a global focus on maximising pre-payment funding for health services, but with particular emphasis on mandatory pre-payment funding mechanisms. The World Health Report states in unequivocal terms that “It is impossible to achieve universal coverage through insurance schemes when enrolment is voluntary” (World Health Organisation, 2010). There are several reasons for this. First, voluntary health insurance schemes are not able to cover services for those who are too poor to pay insurance premiums. This is a major concern in Africa with high poverty levels. Second, if pre-payment is not mandatory, the rich and healthy will choose not to contribute to funding for services needed by the poor and the sick (i.e. it is only possible to achieve strong cross-subsidies through mandatory pre-payment mechanisms). Third, voluntary insurance is frequently fragmented into many small schemes, which creates efficiency and sustainability problems.

As can be seen from *Figure 2*, mandatory pre-payment funding is well over 60% (and often over 70%) of all health service expenditure in countries that have health systems that are regarded as universal.

**Figure 2: Domestic revenue sources for funding universal health systems, 2009**

![Image of Figure 2](image_url)


This figure presents data for the original set of Organisation of Economic Development (OECD) countries and for a few middle-income countries that are widely regarded as having universal coverage. The USA, which currently has sizeable voluntary insurance and only uses mandatory pre-payment to cover the poorest and the elderly, is the only country part of the original set of OECD countries that does not have universal coverage.
This confirms the assessment of the 2010 WHO World Health Report that core funding for universal coverage should take the form of mandatory pre-payment; only countries that have a high percentage of their funding from such revenue sources have achieved universal coverage.

This does not mean that voluntary health insurance has no role. Figure 2 also shows that most countries do have some voluntary health insurance, albeit generally comprising a small share of total health service expenditure. Based on the WHO’s National Health Accounts database, only 14 countries in the world have voluntary health insurance that exceeds 10% of total health service expenditure. This means that voluntary insurance has a specific role to play in funding health services. Where there is universal coverage, voluntary insurance is generally described as either ‘complementary’ or ‘supplementary’, or is negligible (Thomson et al., 2012). Complementary voluntary insurance may either cover services not included in the universal entitlements (e.g. in Canada, medicines dispensed on an ambulatory basis are not covered) or to cover co-payments required for certain services (e.g. in France, services to which there is a universal entitlement are subject to a co-payment, which many people take out insurance to cover). Supplementary voluntary insurance can be used to purchase services in the private sector where there are waiting lists for services to which there is a universal entitlement, i.e. to secure faster access to services (e.g. in the United Kingdom) (Thomson et al., 2012). Thus, international experience shows that voluntary health insurance is generally a limited share of total health service expenditure, particularly in countries with universal coverage, and that such insurance serves a specific purpose. The only countries that have high levels of voluntary health insurance are those without universal coverage. For example, the WHO’s National Health Accounts database indicates that only two countries in the world, the USA and South Africa, have voluntary health insurance comprising more than 30% of total health service expenditure.

Historically, the dominant type of voluntary health insurance has focused on covering formal sector workers and has been offered by private entities (often commercial companies). Another form of voluntary health insurance that has become increasingly popular in low- and middle-income countries is that of community-based health insurance (CBHI) schemes. Sometimes NGOs (such as mission hospitals) or the government have initiated CBHI schemes for the local community. These schemes explicitly target those outside the formal employment sector, initially rural communities comprised mainly of subsistence farmers, but later initiated in urban areas for informal sector workers in some countries. The purpose of these schemes was to offer an alternative to having to pay user fees at the time of using health services, i.e. to offer some form of financial protection for vulnerable households.

There is considerable debate about the role of CBHI schemes. On the one hand, where mandatory pre-payment funding is limited, and households are faced with making out-of-pocket payments that may prevent them from being able to use health services when needed, CBHI schemes may be the only mechanism for promoting access to health services. On the other hand, CBHI schemes face a number of challenges (Bennett, 2004; Bennett et al., 1998; Ranson, 2002; Ekman, 2004; Jakab and Krishnan, 2004; Criel and Waelkens, 2003). These include:

- CBHI schemes have achieved limited population coverage; usually the poorest are not covered by CBHI schemes because they are not able to afford the contributions and so cannot benefit from the financial protection the schemes offer;
- CBHI schemes tend to charge a flat contribution to all members, making it a regressive way of funding health services (i.e. contributions are a greater percentage of household incomes for the poorest members than for relatively better-off scheme members);
CBHI schemes often only cover a limited number of primary level services and so do not provide financial protection against the costs of inpatient and specialist services, where the potential for catastrophic expenditure is great; CBHI schemes generate limited revenue as contribution rates need to be low to be affordable to poor communities but the costs of collecting these contributions can be quite high; and Because membership of CBHI schemes are voluntary, they are subject to what is known as ‘adverse selection’, where those at higher risk of ill health are more likely to become members, which can threaten the sustainability of the scheme.

The experience of CBHI schemes confirms the WHO’s assessment that voluntary health insurance will not move a country towards universal coverage, although it may temporarily assist vulnerable households until mandatory pre-payment funding increases considerably and user fees are removed. A potential danger of voluntary CBHI schemes is that their existence can allow governments to abrogate their responsibility to promote mandatory pre-payment funding mechanisms.

In recent years, however, some countries have used CBHI schemes as a way of introducing mandatory health insurance for all citizens. Ghana, for example, made it compulsory for all citizens to join a health insurance scheme. Contributions from formal sector workers to the social security agency (called SSNIT) are deducted from their payroll; those outside the formal employment sector (and a small number of formal sector employees who do not belong to SSNIT) are expected to contribute to their district mutual health insurance scheme office (Agyepong and Adjei, 2008; Akazili et al., 2012). Similarly, Rwanda has made it compulsory for everyone to join a local mutual health insurance scheme (Logie et al., 2008).

In both countries, not everyone can afford to contribute to the mutual schemes and government is making efforts to identify the poor and to exempt them from contributing. However, as with exemption mechanisms for user fees (Bitrán and Giedion, 2003; Gilson et al., 1995), there are considerable challenges in identifying the poor and subsidising their contributions to ensure they benefit from the mandatory insurance scheme (i.e. if they do not have a membership card, they are still expected to pay user fees at health facilities).

In both Ghana and Rwanda, revenue from contributions by those outside the formal sector is low (e.g. only 5% of the funding for the NHI in Ghana is generated from these contributions (Akazili et al., 2012)). In reality, tax revenues and donor funding primarily fund their mandatory health insurance schemes (Logie et al., 2008) (e.g. in Ghana, more than 70% of the funding for the NHI comes from a levy on VAT (Akazili et al., 2012)). Thus, even where previous voluntary health insurance schemes are incorporated into a mandatory health insurance scheme, substantial tax funding is required to extend scheme coverage to the majority of the population.

The key challenge for African countries is that while mandatory pre-payment funding is required to move towards universal coverage (as highlighted in Figure 2), Figure 3 indicates that in many ESA countries a large share of domestically funded health service expenditure is funded either through out-of-pocket payments (e.g. in Democratic Republic of Congo (DRC), Kenya, Mauritius and Uganda) and/or voluntary health insurance (particularly South Africa and Namibia).

While some countries are doing quite well in emphasising mandatory pre-payment funding (so have low levels of out-of-pocket payments and voluntary pre-payment schemes), they are heavily dependent on donor funding. This applies to Malawi, Mozambique and Tanzania, where donor funding accounts for more than half of all
health service expenditure. The key issue in these countries is how to maintain this positive emphasis on mandatory pre-payment mechanisms in domestic health financing when donor funding inevitably declines. Angola stands out as the ESA country demonstrating a strong commitment to domestic mandatory pre-payment funding of health services (where donor funds account for less than 3% of total health expenditure). This also applies to Botswana, but to a lesser extent given that nearly 20% of total health expenditure in this country is donor funded. Some ESA countries are performing extremely poorly in terms of domestic pre-payment funding, particularly Uganda, where donor funding exceeds 20% of total health expenditure and more than 50% of total health expenditure is funded from out-of-pocket payments. Mauritius and Kenya also demonstrate limited commitment to domestic, mandatory pre-payment funding of health services.

Figure 3: Out-of-pocket payments and voluntary pre-payment schemes in ESA countries, 2009

Source: Analysis of data from WHO National Health Accounts dataset. Note: Zimbabwe is not reflected in the graph as no NHA data are available.

The next two sections consider in some detail the two mandatory pre-payment funding options: mandatory health insurance and government revenue.

3.4 Mandatory health insurance

As indicated above, the revenue collection challenge in the African context largely relates to increasing domestic, mandatory pre-payment funding for health services. Thus, the main choice facing African governments is whether to increase funding from government revenue for the health sector or whether to pursue mandatory health insurance. Although all countries provide some funding for health services through direct taxation, to date the focus has been almost exclusively on pursuing mandatory health insurance (e.g. the first Pan African Health Congress on Universal Coverage held in November 2011 had as its theme: “Creating a movement for equitable health insurance in Africa”). It is not entirely clear why there is this emphasis, but it may be partly due to government assuming that it is not feasible to increase health service funding from government revenue because of the relatively small number of formal sector employees who pay personal income tax. The next section considers this assumption of limited potential to increase tax and other forms of government revenue.
For countries choosing to introduce mandatory health insurance (MHI), a key decision is whether MHI will be restricted to formal sector employees or will attempt to cover everyone. Many countries around the world have initiated their MHI by covering only formal sector workers, with MHI contributions being made by both the employees and employers (Carrin and James, 2004). This has been the experience of a number of high-income countries as well as middle-income countries in Latin America. It is also the approach adopted by some African countries. For example, Kenya introduced a National Hospital Insurance Fund to cover formal sector workers in 1966 and Tanzania introduced a National Health Insurance scheme to cover civil servants / government employees in 2001 and later introduced another mandatory scheme to cover formal sector employees of private firms.

The rationale for introducing a MHI for formal sector employees is that it can generate substantial additional revenue for the health sector. Although this revenue will only benefit those who contribute to and are members of the MHI scheme, it will also benefit those who are dependent on tax-funded services as fewer people will be using these services and, therefore, the limited tax funds can be used to provide better services for those who are not MHI members.

Often, however, introduction of MHI results in reduced tax resources being available for publicly funded services. This is because the single largest group of formal sector employees in African countries is usually civil servants, and in some cases (e.g. Tanzania), the MHI focuses exclusively on civil servants. Government generally spends far more general tax resources per civil servant, in the form of employer contributions to MHI, than they would have spent per capita on tax-funded services (Kutzin, 1995). This raises serious equity questions: Is it equitable to devote considerable tax resources to funding better health services for an already privileged group (i.e. those that have jobs and more financial resources than the rest of the population). The other problem with only covering formal sector employees is that it frequently entrenches a two-tier system. While most countries see the introduction of a MHI for formal sector workers as a first step and intend to extend it to others over time, it may entrench a two-tier health system and may become an obstacle to extending coverage. This has been the experience of some Latin American countries (and other countries such as Thailand), where those who are covered by MHI oppose extension to other groups as they are concerned that their benefits may be reduced and do not want to cross-subsidise benefits for poorer groups (Ensor, 2001).

An alternative approach to MHI that some African countries are pursuing (such as Ghana and Rwanda) is to introduce a system that covers the entire population from the outset. Contributions for formal sector workers are deducted from their salaries and employers are usually also expected to contribute. For those outside the formal sector, individuals are expected to register and pay an annual contribution at their local health insurance office and/or teams of people go from door to door to collect contributions. Although there is legislation requiring every person to become a member of the MHI, as there is no mechanism for deducting contributions from the ‘incomes’ of those outside the formal sector, it is difficult to enforce MHI membership among this group. Rwanda has been more successful at covering a high percentage of its informal sector than Ghana has, because premiums are lower in Rwanda and the government has used donor funds (from the Global Fund) to pay the premiums of the poorest 40% of the population.

Even though such a MHI is intended to cover the entire population, only those who contribute to the MHI actually benefit from the scheme. This means that those who cannot afford to contribute either are excluded or that government finds a way to identify the poor and pays their contributions (or sometimes from donor funds). The experience
with implementing exemptions from user fees (Bitrán and Giedion, 2003; Gilson et al., 1995) highlights how difficult it is to identify those requiring MHI contribution exemptions.

Another challenge is that the MHI contribution needs to be relatively low to ensure that it is affordable to most of those outside formal employment: thus, it tends to generate relatively little revenue. For example, in Ghana contributions generate only 5% of total NHIF revenue from this group (Akazili et al., 2012). In addition, it is relatively expensive to collect these contributions, particularly if it involves collectors going from door to door. The net revenue (i.e. the revenue from the contributions less the costs of collecting these contributions) may be low. The question must be posed as to whether, in reality, it is efficient to attempt to collect MHI contributions from those outside the formal sector.

Furthermore, the contribution for those outside the formal sector is generally a flat amount (e.g. $1 per person). This is to make it administratively easy to collect. In some instances, such as Ghana, a sliding scale is recommended (i.e. where there are three or four different contribution amounts according to income level). However, it is virtually impossible to determine accurately the income of those outside the formal sector and, in most cases, a single flat amount is charged to everyone in this group. This makes this funding mechanism regressive (i.e. the contribution as a percentage of household income is far greater for poorer than higher income groups). A recent study found that this form of financing is more regressive than any other health financing mechanism, including out-of-pocket payments (Mills et al., 2012).

There are serious challenges to covering those outside the formal employment sector via contributory MHI schemes. A key issue for policy makers appears to be the perceived need to generate some revenue from this group given the large informal sector in many African countries. If this is the main rationale, it is important to consider whether there are other, more efficient and equitable, mechanisms of generating revenue from the informal sector that can be devoted to funding health services, such as indirect taxes. This is considered further in the next section.

3.5 Government revenue, including taxation

As indicated previously, there is often an almost automatic assumption that there is no ‘fiscal space’ to increase funding of health services from government revenue. It is important to examine this assumption.

*Figure 4* presents government revenue, government expenditure and government debt as a percentage of GDP in those ESA countries for which data are available and compares this with the averages for the IMF categories of countries (advanced economies, emerging markets and low-income countries).

Government revenues range from about 12% of GDP in Madagascar to 33% in the DRC, while government expenditure ranges from less than 13% of GDP in Madagascar to 33% in Mozambique. These ranges are considerably lower than the levels in advanced economies for government revenue (36%) and expenditure (44%). Government debt levels are considerably lower in ESA countries, ranging from less than 26% of GDP in Zambia to 64% in Madagascar, than the average for advanced economies of over 100%.

Government revenue and expenditure in low-income countries are only slightly lower (and government debt slightly higher) than in emerging markets, but these measures are considerably lower in both these categories of countries than in advanced economies. The impact of the global economic crisis is evident when looking at recent trends. Government revenue in advanced economies has declined somewhat since 2006 (from 37.7% in 2006 of GDP to 36.2% in 2010) while government expenditure has increased

10
from 39.1% of GDP in 2006 to 44% in 2010. Government debt has increased quite dramatically in this group of countries, from 77.2% of GDP in 2006 to 101.4% in 2010. Emerging markets and low-income countries have shown similar trends. Thus, the current global international crisis does not substantially affect the relative levels of these indicators across the different categories of countries.

**Figure 4: Fiscal indicators for ESA countries compared with averages for different categories of country, 2010**

![Figure 4: Fiscal indicators for ESA countries compared with averages for different categories of country, 2010](image)

Source: International Monetary Fund, 2012.

*Figure 4* shows that in general government revenue and expenditure as a percentage of GDP in ESAs is considerably lower than in advanced economies, particularly in Zambia, Uganda and Madagascar. The political situation in Madagascar has severely affected government revenue and expenditure, which are far lower in 2010 than in 2006, and debt levels have increased rapidly.

There is an empirical relationship between a country’s level of economic development and levels of government revenue and expenditure, with higher government revenue and expenditure in higher-income countries. However, there is considerable variation in government revenue and expenditure levels across different countries with some lower-income countries (e.g. DRC and Mozambique) achieving levels that are more comparable to high-income countries. Given that all of these measures are expressed relative to GDP and that some lower-income countries are able to attain higher levels of revenue and expenditure, the question remains as to whether there is scope for increasing the fiscal space within the so-called emerging markets and low-income countries.

In considering fiscal space for government spending on health services, it is also important to consider the extent of prioritisation of the health sector in terms of government spending. *Figure 5* indicates that most ESA countries (for which data are available on government spending excluding donor funds) are devoting less than 10% of total government expenditure to the health sector. Mozambique and Tanzania are prioritising the health sector to a greater extent than other ESA countries are. However,
no ESA countries for which data are available have achieved the Abuja target, which is a commitment made by African heads of state to devoting 15% of government funds to the health sector (OAU, 2001).

**Figure 5: Government prioritisation of the health sector in ESA countries, 2005 and 2007**

![Graph showing government prioritisation of health sector](image)

**Source:** Data provided directly by WHO on request (spending from government funding sources excluding donor funding not yet posted on WHO NHA website).

The above data strongly suggest that government is not adequately exploring funding of health services. What options are available to African governments in terms of increasing funding of health services from tax and related government revenue (e.g. some countries generate revenue from royalties on natural resources such as gold, copper and oil, and not only from taxes)?

The first option, and one that should be explored before considering increasing tax rates, is to improve the collection of tax revenue. A number of countries (most notably Kenya and South Africa) have taken steps to do this and have managed to dramatically increase tax revenue above previous levels. The kinds of strategies used by the South African Revenue Services (SARS) include:

- An amnesty on prosecution for unpaid taxes was offered to everyone who registered (whether for personal income tax, company tax or VAT etc.) and paid taxes in future;
- The process for submitting tax returns was simplified (including introducing e-filing) and local tax office staff were trained in client-oriented services and to provide assistance in completing tax forms etc.;
- Information systems were dramatically improved; and
- A zero-tolerance approach to corruption was implemented effectively.

Many low- and middle-income countries are trying to address the loss of potential government revenue. For example, high net-worth individuals (including corrupt politicians) and multinational organisations shift resources to other countries, not only depriving government of tax revenue but also the country of investment capital. The Tax Justice Network (2008) recently reported ‘capital flight’ of more than $600 billion between 1970 and 2004 from 40 African countries. Also, countries with large deposits of natural resources should benefit from the extraction and sale of these resources.
In addition to improving revenue collection, countries that have relatively low tax to GDP ratios could consider increasing tax rates. Direct taxes on personal and company income may be considered, particularly in countries with high levels of income inequality. As shown in Figure 6, most ESA countries have a Gini Index far exceeding 40 (the higher the index, the more unequal the distribution of income). Angola, Botswana, Namibia and South Africa have the highest levels of income inequality.

Figure 6: Income inequalities in ESA countries, 2007

![Income Inequality Chart]


Where the distribution of income is very skewed, an argument could be made for placing the burden of tax payments on those who receive most of the income, which is generally those who are personal income tax payers. Increased personal income tax rates may be particularly appropriate if these rates are currently low. The maximum marginal tax rate (i.e. charged to the highest income individuals) ranges from 25% in Botswana to 50% in the DRC. Most ESA countries have a maximum marginal personal income tax rate of about 30% (Kenya, Tanzania, Uganda and Zambia are at 30%, with Mozambique at 32% and Swaziland at 33%), while Namibia and South Africa have higher rates of 37% and 40%, respectively. Most high-income countries have maximum marginal tax rates of 40% to 50%, while some exceed 60% (e.g. Denmark) (EconStats, 2012).

The decision to increase company income or profit taxes is less clear-cut. This is because company tax may be shifted onto consumers rather than be borne by the company owners or shareholders. Where there is limited real competition between companies, the company can set any price it chooses for its product; thus, it can pass on increased tax charges to those who buy these products in the form of higher prices. Thus, caution should be exercised when considering increases in company tax.

The potential for generating additional funding from indirect taxes (such as VAT and import duties) should also be considered, particularly in countries with lower levels of income inequalities and where generating revenue from the informal sector is seen as important. Everyone pays direct taxes, not only those who work in the formal employment sector, i.e. there is a broad base for these taxes. More importantly, VAT and some other indirect taxes are progressive in many low-income countries (Mills et al.,
The reason is that in many low-income countries a relatively large rural population are engaged in subsistence agriculture or purchase fresh produce in local markets and do not purchase many items subject to VAT. An increase in VAT can generate considerable revenue in these countries. For example, in Ghana, VAT was increased from 12.5% to 15% with the additional 2.5% being a NHI levy. This NHI levy contributes over 70% of all revenue for the NHI. If indirect taxes are considered as a mechanism for increasing tax revenue to fund health services, the following issues should be taken into account:

- Determine whether that particular tax is progressive or regressive, and the emphasis should be placed on progressive taxes to promote equity in health service funding. Certain indirect taxes can be regressive (e.g. excise duties on kerosene); this occurs where poorer groups have relatively high use of these items.
- If increased VAT is being considered, ensure that goods and services purchased by the poor (e.g. basic food items) are not subject to VAT.

A growing number of low- and middle-income countries, including African countries, are also exploring ‘innovative financing mechanisms’ to supplement funding for health services. These are generally new taxes or ones that may not have been used traditionally for funding health services. For example, a health tax may be imposed on particularly profitable companies (such as cell phone companies in Gabon, mining companies in Australia and pharmaceutical companies in Pakistan) and on various forms of financial transactions (as on remittances in Gabon and on investment income in Zambia). A tax on financial transactions in Brazil generates about $20 billion a year for that country (The Economist, 2007). Some countries also argue for revenue from excise on tobacco and alcohol products to be devoted to funding the health sector. These excise taxes are, however, already part of general tax revenue; if they are dedicated to the health sector, general revenue could decline. Specific increases in these excise taxes could be introduced and dedicated to health. Some countries are exploring implementation of new excise taxes on other unhealthy products, such as food and beverages with high sugar content.

4. Pooling

The issue of pooling of funds is closely related to the discussion of the relative advantages and disadvantages of mandatory health insurance and government revenue. It is critical to minimise fragmentation in funding pools, particularly if the goal is to achieve universal coverage. Integrated funding pools achieve cross-subsidies, whereas separate funding pools for different groups limit cross-subsidies and are often difficult to merge at a later stage.

For example, if there is one large MHI pool covering those in formal employment and another pool of tax funds to cover the rest of the population, higher income and generally more healthy individuals are in the MHI pool while the tax funding pool serves those with the greatest burden of ill-health. Fragmentation of funding pools undermines risk cross-subsidies and constrains income cross-subsidies. While there may be progressive tax funding (i.e. there are some income cross-subsidies as higher income groups are paying a higher percentage of their income in taxes than lower income groups are), the highest income groups are contributing additional funds to the MHI pool. However, these funds cannot be used for services for poorer groups (i.e. there are no income cross-subsidies across all health service fund pools). This can be avoided if MHI contributions and funding from government revenue are put in a common pool, as is being done in a growing number of countries. This would mean that service benefits would be identical.
for everyone and would be an entitlement rather than tied to whether or not one makes a MHI contribution. This begs the question of whether to impose MHI contributions or to increase income taxes and introduce a payroll tax for employers. In this situation, the distinction between MHI contributions and increased taxes on formal sector employees and employers becomes somewhat theoretical.

Fragmentation tends to be even greater in the case of voluntary health insurance. For example, South Africa has more than 100 individual medical schemes comprising a total membership of just over eight million people. There is similar fragmentation in the case of community-based health insurance schemes (e.g. in Tanzania, each district has a separate Community Health Fund for the rural populations as well as TIKA funds for different groups of informal sector workers in urban areas) (Mtei et al., 2012). This level of fragmentation not only severely limits cross-subsidies, it creates major sustainability challenges as each risk pool is quite small. It is possible to create an integrated pool where there are many individual insurance schemes through a risk-equalisation mechanism. A risk-equalisation fund (REF) redistributes contribution revenue across individual schemes according to the risk profile of each scheme’s members (i.e. schemes with more high risk members receive transfers from the REF whereas schemes with low-risk membership make payments to the REF). However, only a limited number of high-income countries have such mechanisms and they are costly and information intensive. Most low- and middle-income countries simply do not have the capacity to implement effective risk-equalisation mechanisms.

From an equity (and efficiency) perspective, it is preferable to minimise the number of fund pools, particularly for mandatory pre-payment funds, with a single pool allowing for the greatest income and risk cross-subsidies.

5. Purchasing

While the financing function most frequently focused on is that of revenue collection, the purchasing function is critical for achieving universal coverage. The purchasing function determines how available resources are used and whether or not funds translate into effective health services that are available to all. Often, a strong relationship exists between pooling and purchasing in that the organisation that pools funds is usually also responsible for purchasing services.

Purchasing involves determining service benefit entitlements (what services are purchased with the pooled funds and how people will access these services) and to pay service providers (Kutzin, 2001). Internationally, attention is increasingly being paid to whether a purchaser is passive, in the sense that it simply transfer funds to providers, or is active in identifying the health service needs of the population, aligning services to these needs, paying providers in a way that creates incentives for the efficient provision of quality services, monitoring the performance of providers and taking action against poor performance.

Almost no consideration has been given to how to promote active, or strategic, purchasing in ESA countries. In most cases, government funds are transferred passively to public (and sometimes mission) health facilities through line-item budgets, which provide limited incentives for efficient provision of quality health services. Insufficient attention is paid to ensuring that health services are in line with the needs of local communities and the monitoring of provider performance is weak. Private
insurance schemes also tend to be passive purchasers in that they often pay providers on a fee-for-service basis according to bills submitted to them.

Apart from efforts in some countries to allocate resources between geographic areas using needs-based formulae, just about the only purchasing-related intervention introduced in some ESA countries in recent years is what is termed ‘pay-for-performance’ (P4P). P4P refers to making payments to providers for specific services on the basis of achieving predetermined performance targets; it is sometimes called results-based financing (RBF) or performance-based financing (PBF) (Honda, 2012). P4P has been used to achieve the MDGs by providing incentives for provision of more and better quality child and maternal health services or for specific diseases such as tuberculosis. While P4P is an attempt to incentivise improvements in service delivery, a number of systematic reviews have found little evidence that P4P mechanisms are achieving the desired impact (Oxman and Fretheim, 2009; Eldridge and Palmer, 2009; Witter et al., 2012; Lagarde et al., 2010). Importantly, a number of unintended consequences, adverse effects on quality of care for the services not subject to P4P have occurred (i.e. providers focus far more on services for which they will receive P4P payments to the detriment of all other services) (Lagarde et al., 2010). Other problems include false reporting to inflate performance claims.

To achieve overall improvements in health services, and not simply a few specific interventions, more comprehensive purchasing reforms need to be introduced. It is unlikely that ESA countries will be able to make substantial progress towards universal coverage without pursuing active or strategic purchasing: ensuring equitable and efficient delivery of quality health services that meet the needs of communities depends on active purchasing. This may require institutional change; for example, government departments or ministries are often constrained in their ability to change the way in which providers are paid (i.e. to move away from line-item budgeting). For this reason, a number of low- and middle-income countries (LMICs) are establishing semi-autonomous public entities that can take on active purchasing functions.

For example, South Africa is proposing to pursue a universal health system by introducing a National Health Insurance Fund (NHIF). While some are confused by the reform being termed a NHI, which they assume to mean that it will be a mandatory health insurance scheme, it will in fact be funded through increased tax funds; a key element of the reform is to establish a NHIF as a semi-autonomous purchasing organisation.

This is the route taken by some LMICs in central and eastern Europe. New institutions were created outside the Ministry of Health along with the introduction of new dedicated taxes to take on an active purchasing role in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kyrgyzstan, Lithuania, Macedonia, Moldova, Poland, Romania, the Russian Federation, Serbia and Montenegro, Slovakia and Slovenia (Kutzin et al., 2010). The experience of these countries provides useful insights into how to ensure good governance and accountability of these purchasing institutions.

While improved purchasing is critical for pursuing universal coverage, little research has been undertaken on this issue within ESA countries. This is an important area for future research.
6. Service delivery and management

Reforms in the health financing system, whether in relation to revenue collection, pooling and/or purchasing, are of no value if services are not available or of adequate quality to be effective. Clearly, moving towards universal coverage requires improvements in service delivery and management.

It is beyond the scope of this paper to discuss this issue in any detail, but two issues are particularly important in relation to the goal of universal coverage. First, facility-level management requires improvement. Not only should management capacity be improved, greater decision-making responsibility should gradually be granted to hospital and district level managers. At present, managers in public sector facilities can make few management decisions, which limits the extent to which they can be responsive to patients and staff needs as well as the ability to hold them accountable. Decentralisation of management responsibility should be accompanied by the development of governance structures that allow for accountability to the local community.

Second, emphasis should be placed on improving services at the primary health service level. Although there should be appropriate referral mechanisms for specialist and inpatient services, primary level services are able to address most of the preventive, promotive, curative and rehabilitative service needs of the population in ESA countries. Importantly, research shows that services at this level of the health system are reaching the poor (Ataguba and McIntyre, 2012; Mtei et al., 2012). Thus, improving primary health services offers the greatest potential for not only increasing population coverage, but also service coverage in that a wide range of services can be provided at affordable cost at this level. While the focus in this paper has been on health systems, the importance of other social determinants of health should not be forgotten. It is also at the primary service level that progress can be made in addressing some of these social determinants through community and inter-sectoral action.

7. Conclusions

This paper has explored the implications of the goal of universal coverage for health financing in ESA countries. Consideration of health financing for universal coverage is framed within an explicit value base, whereby everyone should have access to the same benefit entitlements and the health system should be based on social solidarity.

The review of health financing using this value base highlights that in relation to revenue generation, far more emphasis should be on government revenue funding for health services in ESA countries. While mandatory health insurance schemes can also generate additional revenue for health services, these funds should be pooled with funds from government revenue to ensure that a two-tier system is not created and that all receive the same service benefits. Although there is limited evidence in relation to purchasing in ESA countries, introducing active purchasing of services, as well as addressing service delivery and management challenges, will be essential if universal access to services of appropriate quality is to be achieved.
References


**Equity in health** implies addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, these typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region. EQUINET is primarily concerned with equity motivated interventions that seek to allocate resources preferentially to those with the worst health status (vertical equity). EQUINET seeks to understand and influence the redistribution of social and economic resources for equity-oriented interventions, EQUINET also seeks to understand and inform the power and ability people (and social groups) have to make choices over health inputs and their capacity to use these choices towards health.

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