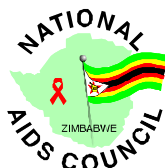
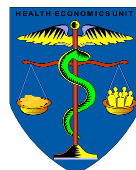
Key issues in equitable health care financing in East and Southern Africa

Di McIntyre[1], Veloshnee Govender[1], Esther Buregyeya[2], Derek Chitama[3], Edward Kataika[4], Eunice Kyomugisha[2], Rosette Kyomuhangi[5], Thomas Mbeeli[6], Amon Mpofu[7], Susan Nzenze[1], Aliyi Walimbwa[8], Bona Chitah[9]



1. Health Economics Unit, University of Cape Town, South Africa; 2. Makerere University School of Public Health, Uganda; 3. Department of Economics, Open University of Tanzania; 4. Ministry of Health, Malawi; 5. Human Capital Development Consult, Uganda; 6. Ministry of Health, Namibia; 7. National AIDS Council, Zimbabwe; 8. Ministry of Health, Uganda; 9. Department of Economics, University of Zambia



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Executive summary

This report provides an overview of the status of health care financing in seven East and Southern African (ESA) countries (Malawi, Namibia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe), illustrates recent developments and proposed changes to health care financing in the region. It draws on a series of country case-studies undertaken with EQUINET funding and a collaborative cross-country analysis undertaken at an EQUINET workshop. These health care financing issues are all considered through an equity lens. EQUINET has indicated previously its support for health care financing systems that promote universal coverage, that is systems which seek to ensure that **all** citizens have access to **adequate** health care at an **affordable** cost and which improve both income and risk cross-subsidies in the overall health system. This stems from our understanding of equity, which requires that people should contribute to the funding of health services according to their **ability to pay** and benefit from health services according to their **need** for care.

The analysis is conducted using a framework that focuses on the key functions or components of a health care financing system, namely revenue collection, pooling of funds and purchasing. The key findings of this review include:

i. Revenue collection

- There remains a heavy dependency on donor funding in some countries (e.g. 60% of health care funding in Malawi is from donor sources).
- Debt relief initiatives such as HIPC are translating into increased government funding for health care in some countries (e.g. Uganda), but in other countries, the health sector has not benefited much from the reduced debt servicing burden.
- There is a heavy health care financing burden on individual households in many ESA countries due to high levels of out-of-pocket payments (e.g. a third of all funding in Uganda and Zambia and nearly half in Tanzania) and a relatively heavy emphasis in the tax system on VAT, both of which are generally regressive (i.e. the poor pay a higher percentage of their income than the rich).
- Efforts to protect the poor from out-of-pocket payments through user fee exemptions are not effective in any of the countries reviewed. Instead, countries that have abolished fees on some or all public sector health services, most recently Zambia, have seen dramatic utilisation increases particularly for the poorest. More importantly, where fee removal has been accompanied by increased donor **and** government health care funding (as in Zambia), quality of care has not deteriorated. Where increased donor and government funding has not been sustained (as in Uganda), quality of care is perceived to be poor in public sector facilities, resulting in high out-of-pocket payments to private providers.
- Some countries have sought innovative ways of increasing domestic resources for health care. In particular, Zimbabwe has introduced a dedicated tax of 3% on all personal and company income, called an AIDS levy.
- Health insurance is growing in popularity in many African countries, particularly community-based health insurance which has placed the financing burden on relatively poor rural communities and those living in informal urban areas.

ii. Pooling of funds

- There is very poor fund pooling in almost all countries under review, which severely limits the potential for income and risk cross-subsidies.
- In particular, the benefits of fund pooling are not available to countries which rely heavily on out-of-pocket payments.

- Community-based health insurance (CBHI) is highly fragmented with hundreds of very small risk pools, with associated sustainability problems.
- Private voluntary health insurance is also very fragmented, especially in countries like South Africa with over 130 private schemes which only cover the wealthiest.
- Even countries that have embarked on social health insurance have fragmented their funding pools. For example, two separate social health insurance schemes have been established in Tanzania – one for civil servants and one for those formal sector workers in private firms who contribute to the national social security fund.
- At present, none of the countries under review have introduced risk equalisation mechanisms to create an effectively integrated funding pool.

iii. Purchasing

- Benefit packages vary widely across different financing mechanisms, with CBHI tending to cover high-frequency low-cost services, private voluntary insurance tending to cover low-frequency high-cost services and tax funding covering a comprehensive package but with implicit rationing of services due to resource constraints.
- A key challenge is how to ensure that citizens can access the health service benefits to which they are entitled.
- Fee-for-service is the predominant provider payment mechanism for private providers, with all the associated problems in relation to more services being provided than are 'medically required' and rapidly spiralling health care expenditure levels.

Key recommendations for future advocacy and research arising from this review include:

- The impact of more recent modes of donor funding, such as that by the Global Fund for AIDS, Tuberculosis and Malaria, which require applications for specific rounds of funding on a repeated basis, on overall health sector funding and service delivery requires careful consideration.
- The factors that facilitate and obstruct the translation of debt relief into increased government funding for health care should be explored.
- It is necessary to quantify the burden of health care funding placed on different households in each country in order to consider ways of promoting equitable health care financing on an evidence-informed basis.
- Advocacy is required to reduce reliance on out-of-pocket payments, both through removing user fees for public sector services and reducing direct payments to private providers (particularly through striving to make the public health sector the provider of choice through increased government funding of these services).
- The tax system is the primary mechanism for income and risk cross-subsidisation in health care funding in all countries under review. Equitable health insurance options must be explored alongside mechanisms for integrating insurance funds with tax funds, in order to maximise the potential for cross-subsidies in the overall health system.

While there are a wide range of issues that require further research and advocacy, none are as important for achieving equitable health care financing as the need to:

- eliminate, or at least reduce, out-of-pocket payments;
- increase the funding of health services from tax revenue (given that this is the most progressive financing mechanism and the primary mechanism for cross-subsidies at present); and
- introduce mechanisms to integrate all forms of pre-payment (i.e. tax funding and health insurance).

1. Background

In 2005, EQUINET initiated a new program of research on equitable mobilisation of health care resources by undertaking a review of published research to gain insights into the status of health care financing within Africa (McIntyre et al, 2005). This was followed by a call for proposals to undertake small-scale country level research on recent health care financing developments. Five grants were awarded for research in Malawi (Muula and Kataika, 2008), Uganda (Zikusooka and Kyomuhangi, 2007; Kyomugisha et al, 2008), Zambia (Masiye et al, 2008) and Zimbabwe (Mpofu and Nyahoda, 2008).

This report draws together some of the key findings from this program of research, including discussions at a workshop of the EQUINET 'Fair Financing Theme' team held in September 2007. This workshop not only reviewed preliminary results from the country case studies but also undertook a collaborative comparative analysis of the current status of health care financing in a number of East and Southern African (ESA) countries (Malawi, Namibia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe). This approach is in line with growing international recognition of the importance of learning from experience documented in case studies and in tapping into the knowledge of individuals actively engaged in health systems research, management and policy-making. Given that this report draws extensively on the personal knowledge and experience of the workshop participants, limited references are provided.

The report first outlines some key principles that have guided the EQUINET 'Fair Financing Theme' work. It then outlines the framework within which the analysis of health care financing in the region was undertaken. This framework is then used to analyse in some detail health care financing in the region, drawing on the experiences of seven east and southern African countries. Key findings from the country case studies are presented in boxes at relevant places in the report. Finally, it concludes with key issues to focus on in future research and advocacy around health care financing in Southern and East African countries.

2. Key principles guiding the 'Fair Financing Theme' work

In line with the resolution adopted at the 2005 World Health Assembly, EQUINET supports health care financing that promotes universal coverage (WHO, 2005). Universal coverage has been defined in WHO publications as **all** citizens having access to **adequate** health care at an **affordable** cost (Carrin and James, 2004). This definition highlights the importance of ensuring that every person within a country should have financial protection from the costs of accessing health care (i.e. the definition is clear on the **breadth** of coverage that countries should strive for). It also indicates that the **depth** of coverage, i.e. the services to which people should have access, should be determined in relation to what is affordable within the context of individual countries' resources. However, the WHO definition can be interpreted in different ways in relation to what constitutes 'adequate health care'. In, particular, it may be interpreted as requiring a bare minimum of health care for some (usually the poor) while others can access an extensive package of care, i.e. that a health system with large differentials in the quantity and quality of health to which different groups have access would be regarded as acceptable.

Thus, EQUINET prefers to expand this definition to include an explicit requirement that health care financing should improve cross-subsidies in the overall health system. There are two types of cross-subsidies that should be promoted, namely income cross-subsidies (from the rich to the poor) and risk cross-subsidies (from the healthy to the ill). This stems from our understanding of equity, which requires that people should contribute to the funding of health services according to their **ability to pay** and benefit from health services according to their **need** for care. We would argue that, in the African context of high poverty levels and the

inability of many households to afford even relatively small payments towards health care, combined with substantial inequities in the distribution of income across households, 'ability to pay' should be interpreted as a strong preference for progressive financing mechanisms (i.e. that the rich should contribute a higher **proportion** of their income than the poor). Such an approach is also important with respect to preventing further impoverishment of vulnerable households due to health care costs.

This interpretation of universal coverage and equity in financing implies that pre-payment mechanisms (i.e. payments made by individuals via taxes or health insurance contributions before they need to use a health service) should predominate. The converse of this is that out-of-pocket payments (i.e. payments made by an individual patient directly to a health care provider) should be reduced as far as possible. Finally, it implies that there should be limited fragmentation in the financing of health services, as it is not possible to promote cross-subsidies if there are large numbers of separate financing mechanisms and risk pools.

3. Framework for analysis

A framework that is increasingly being used for the evaluation of health care financing options, and which provides the structure for the analysis presented here, identifies the key functions or components of a health care financing system, which are revenue collection, pooling of funds and purchasing (Kutzin, 2001; WHO, 2000).

Revenue collection refers to:
- who health care funding contributions are collected from (e.g. whether funds are secured from external and/or domestic sources and the extent to which contributions are spread between firms or employers and individuals or households);
- the structure of these contributions (e.g. whether pre-payment is involved or not and the relative progressivity of the contributions – where progressivity refers to the extent to which the rich contribute more than the poor); and
- who collects these contributions (i.e. the type of collecting organisation, especially whether it is a government, parastatal or private organisation and if the latter, whether it is for-profit or not).

The function of **pooling of funds** addresses the unpredictability of illness, particularly at the individual level, and the inability of many individuals to be able to mobilise enough resources to cover health care costs without forewarning, and hence the need to spread these risks over as broad a group as possible and over time. This is the core of the concept of risk-pooling; individuals contribute on a regular basis to a pooled fund so that when they fall ill, the pool will cover their costs. The key issues that are of importance with respect to the fund pooling function are:
- the size of the population and which groups are covered by the financing mechanism; and
- the allocation mechanisms for distributing pooled resources.

The **purchasing** function refers to transferring pooled resources to health service providers in a way that ensures that appropriate services are available when and where they are needed by the population. While the term 'transfer' implies quite a passive approach, there is growing awareness that the organisation transferring funds should be an active purchaser of services for the beneficiaries of these pooled resources. The key issues of importance in the purchasing function of health care financing are:
- the choice of benefit package to which beneficiaries would be entitled, including the type of service and the type of provider as well as the route by which different services should be accessed; and

- provider payment mechanisms, or the precise way in which resources are transferred from purchasers to providers.

The rest of this report presents and contrasts the situation in the seven East and Southern African countries in relation to each of these functions, to identify key health care financing issues within the region. An overview of the health system in each country using this framework is presented in *Appendix A*.

4. Revenue collection

4.1 Source of funds

Funds for the health sector come from a number of possible sources. It is important to consider the proportion coming from domestic and external sources (indicating the degree of dependency upon donors), and at a domestic level, the distribution between households and employers or firms.

4.1.1 External sources

The extent of donor dependency varies between the countries reviewed here, ranging from as high as 60% of total health care funding in Malawi and 43% in Zambia to as low as 1% in South Africa. For Namibia, Tanzania, Uganda and Zimbabwe, donor support is estimated at 17%, 23%, 27% and 13% respectively. Countries with comparatively higher levels of economic development and Gross Domestic Product (GDP) per capita (e.g. South Africa and Namibia) are less reliant on external funds compared to those with a lower GDP per capita (e.g. Malawi, Zambia, Tanzania and Uganda).

Donor funds are often contingent on stable and friendly relations between the donor and recipient countries. It is not unusual that if relations deteriorate, donor funds are either reduced or blocked altogether. Donor funding can be used as an instrument for influencing the priorities and actions of the recipient. In lower- and middle-income countries (LMICs), there is often substantial dependency on donor funds and in those instances where donor funding exceeds domestic funds, there are concerns over issues of reliability and long term sustainability of resources for the health sector.

Zimbabwe is an 'outlier' among the countries reviewed here in that it has a relatively low GDP per capita, yet donor funding constitutes only 13% of total health care resources. Indeed, Zimbabwe is a good example of donors expressing displeasure at the political situation in a recipient country through withdrawal of funding. However, it should be noted that a number of donors have continued to provide funding to Zimbabwe (and other countries in similar situations of political isolation), but direct resources in a way which bypasses national ministries (e.g. by directly funding NGOs). This means that the scale of donor funding is often understated as it is not flowing via 'official' channels and cannot be easily quantified. Such an approach may also have the unintended consequence of a proliferation of NGOs which, while they may provide critical services during a period of international isolation, may not be sustainable once donors revert to direct government-to-government funding. This has certainly been the experience of post-apartheid South Africa.

In recent years, the nature of donor funding has also changed in response to international developments and pressures relating to debt relief, particularly for countries whose debt servicing eclipses their allocation to social sectors. The Heavily Indebted Poor Countries (HIPC) Initiative is one such scheme, and for many of these countries (e.g. Malawi), this has meant that loans have been replaced by grants and debt has been substantially reduced. Increased social sector spending has been among the conditionalities of debt relief. In Uganda for instance this has translated into support for primary health care, water and

sanitation, road infrastructure and agriculture development. The HIPC funds were seen as having been an important additional source of financing for the health sector. In Tanzania, the education sector benefited in terms of infrastructure (e.g. building new primary schools and renovating and building additional classrooms in existing schools). It appears that under HIPC, the health sector has not benefited equally in all countries and it is important to understand not only the underlying reasons for these differences, but more importantly, the actions that the health sector needs to take to gain more from such initiatives.

Internationally, organisations such as the Global Fund for Aids, Tuberculosis and Malaria (GFATM) have begun to play an increasingly prominent role in health care financing and given their governance structure and mandate, it may be argued that they are less influenced by the political relations between donor and recipient countries. Therefore, for countries receiving funds from the Global Fund and similar organisations this might be a positive development from the perspective of stability of donor funding. However, given their focus on high priority diseases, it can reinforce vertical programmes and move away from more integrated modes of financing. A number of countries (e.g. Namibia and Zimbabwe) also find GFATM funding 'lumpy'. These countries received a very large initial round of funds which they experienced difficulty in absorbing rapidly, and then missed out on the next rounds of funding. By the time the first round of funding had been utilised fully, they had to wait to apply for a future round of funding. In effect, the country has to establish services that can absorb these funds, but cannot sustain these services if there is a gap between utilising the first round of funding and securing a further round of funding.

Because of poor reliability and other challenges associated with donor funding, it is becoming ever more apparent that ways need to be found to achieve ever growing reliance upon domestic funding. This is a challenge, particularly for low-income countries, and calls for countries to explore innovative domestic funding mechanisms. Zimbabwe is a striking example where, in spite of poor economic conditions, an AIDS levy has been introduced to bolster funding for priority health services (see *Box 1*).

Box 1: The AIDS levy in Zimbabwe

Zimbabwe currently faces a range of crises, two of which are:

- the HIV/AIDS pandemic, with about 1.6 million people out of a population of 12 million living with HIV/AIDS, which creates a huge demand for health services; and
- political and profound macro-economic instability (with inflation rates in the thousands of percent and a plummeting level of economic activities) which compromises the government's ability to fund these services.

Donor funding to Zimbabwe has declined very rapidly over the past few years. This, combined with rapidly declining government resources available for funding health care has led to the inability to fund urgently needed AIDS treatment interventions. As a result, an AIDS levy of 3% of all personal and company income was introduced in 2000. The revenue from this levy is placed in the National AIDS Trust Fund (NATF) and is administered by the National AIDS Council (NAC).

This AIDS levy is an innovative and potentially important mechanism for generating domestic resources for addressing the HIV/AIDS pandemic. However, the low level of economic activity in Zimbabwe translates into the AIDS levy providing very limited funds. In addition, the levy revenue is currently not being efficiently or equitably used. Most of the revenue is being used to fund the NAC Head Office, with very little being used for providing patient care at district level. In addition, funds are not being allocated equitably according to the relative need for AIDS funding in provinces. The most extreme case is Matabeleland South province, which has the highest HIV prevalence but received the second-lowest allocation from the NATF. There is scope for improving efficiency and equity in the use of the NATF resources within the current context and when there is an improvement in the

political and economic situation in Zimbabwe, the AIDS levy will undoubtedly prove to be an important mechanism for funding urgently needed health services for those living with AIDS.

Source: Mpofu and Nyahoda, 2008.

4.1.2 Domestic sources

In many of the countries under review, a relatively heavy burden for domestic funding of health care services is borne by households. This is evidenced by both a heavy reliance on out-of-pocket payments for health care and a large share of the tax burden falling on households. *Table 1* presents an overview of the magnitude of out-of-pocket (OOP) payments as a percentage of total health care funding in each of the countries under review. In four of the countries, out-of-pocket payments constitutes a sizeable share of total health care funding, accounting for a quarter of all funding in Zimbabwe, a third in Uganda and Zambia and nearly a half of funding in Tanzania. In these countries, the direct burden of health care funding on households is evident. In South Africa and Namibia, although the share of out-of-pocket payments is relatively small, households are still bearing a substantial share of the health care financing burden as they are primarily responsible for the large contributions to private health insurance organisations in these two countries[1]. Nevertheless, Namibia is a good example of a country that is devoting considerable government resources to health care, has a good distribution of public sector primary health care services and has been able to provide good financial protection for its population. The case of Malawi is relatively unique in that there is a low share of out-of-pocket payments given that no user fees are charged at public sector facilities and that government and particularly donor funding accounts for nearly three-quarters of all health care funding. In this instance, donor funding is protecting households in Malawi from bearing too great a burden of health care financing.

Table 1: OOP payments as a percentage of total health care funding, 2004

Country	OOP as % of total health care funding
Malawi	8.9
Namibia	5.6
South Africa	10.3
Tanzania	46.9
Uganda	34.5
Zambia	32.3
Zimbabwe	26.2

Source: WHO, 2007.

As health services are also funded from tax revenue, the share of the tax burden on households is also important to consider. In a number of the countries under review, half or more of the tax burden falls heavily on households. For example, in Namibia, 24% of total tax revenue is attributable to personal income tax and 26% to VAT, whereas only 13% is attributable to company taxes, while in South Africa, 30% is attributable to personal income tax, 28% to VAT and only 23% to company tax. VAT in particular frequently accounts for a relatively high share of total tax revenue (e.g. 32% of total tax revenue in Zimbabwe). Tanzania is relatively unique in that 45% of its tax revenue is attributable to international trade taxes, but nevertheless, personal income tax and VAT account for 30% of tax revenue and company tax for less than 10%. When combined with the heavy reliance on out-of-

[1] Even though private health insurance contributions are ‘shared’ between employers and employees, the cost to the employer is frequently offset through lower salary payments to employees. This is particularly so in South Africa where many employers have integrated ‘cost to company’ packages (i.e. the total package level is set and all pension, health insurance and cash salary are paid from this package) (McIntyre and McLeod, 2009/ forthcoming). Thus, the employee effectively bears the full burden of these contributions.

pocket payments in Tanzania, it can still be stated that households bear a heavy share of the domestic health care funding burden.

The relative tax burden on households is a direct result of government policy. In many LMICs, governments are wary of increasing company tax rates as this will not only be a disincentive for foreign direct investment, but in a global economy, can lead to companies shifting their operations to more tax-friendly nations. Moreover, LMIC's economies tend to be highly labour intensive and disinvestment can contribute to unemployment.

While governments are faced with difficult decisions in relation to the distribution of the burden of tax and other health care financing mechanisms between households and companies, too little explicit attention is paid to this issue at present. An important area for future research is to quantify the burden of health care financing on households and to engage with policy-makers on this issue.

In each of the country cases, it is evident that government does attempt to reduce the burden on vulnerable households either through waivers (i.e. where user fees are not levied for specific services – such as immunisations or antenatal care, or demographic groups – such as very young children and pregnant women) or exemptions (i.e. where the poor do not have to pay fees). Those countries that do charge user fees at public sector facilities all have waivers in place (generally for young children under five or six years, for pregnant women, sometimes for the elderly, and for a limited number of communicable diseases). In general, there are also exemptions for the poor. Often however, there is a yawning gap between the waiver and exemption policy and implementation realities. This particularly occurs in relation to exemptions; while it is relatively easy to identify the intended beneficiaries of waivers, the same cannot be said for exemptions. The onus is frequently placed on the poor to prove that they are entitled to an exemption and appropriate documentation, or rather the lack thereof, is often the single biggest barrier to accessing exemptions. The exemption process itself may add to the barriers to health care access; applying to have oneself declared poor may be humiliating and may alienate people from health services.

Given the difficulty in accurately targeting exemptions to the intended beneficiaries, some countries have adopted more extensive or even universal free care policies. As indicated previously, Malawi has no user fees at public sector facilities, which translates into households bearing a relatively low burden of health care financing, but this has only been possible due to the substantial donor funding received by this country. South African introduced universal free primary care services in 1996, while Uganda abolished fees at all public sector facilities (except 'private wards') in 2001. Most recently, Zambia abolished fees at primary care facilities and district hospitals in all rural districts (56 of the 72 districts) in 2006. While there have been many positive effects of such broadly defined exemption policies (see *Box 2* for an overview of the impacts of the Zambian user fee removal), households will not be protected from bearing a heavy burden of domestic health care financing if user fee removal is not supported by increased government funding of services and improvements in the quality of health services (e.g. that essential drugs are routinely available). This is particularly evident in Uganda, where free public sector services are often perceived to be of poor quality and there is a lack of availability of basic drugs and other supplies, forcing even the poorest to seek out services in the private sector (even if a public sector provider is consulted, drugs frequently have to be purchased in the private sector – this is also the case in Zimbabwe). For this reason, the level of out-of-pocket payments remains high in Uganda despite the removal of all user fees.

Box 2: The impact of removing user fees in rural districts in Zambia

User fees were introduced in all public sector facilities in Zambia in 1993 in an effort to generate additional resources and linked to the introduction of a 'structural adjustment program'. Amid growing concern about the effect of user fees in deterring access to health services in a country with

widespread poverty, the government of Zambia removed all user fees for primary care and district hospital services in rural districts in 2006.

A recent study of the impact of this fee removal policy found that while there was little change in health service utilisation in urban districts (where fees remained in place) and for children under five years (who were never charged fees), utilisation by the rural population aged five or more increased by about 50%. More importantly, health service utilisation increases were greater in districts with the highest poverty levels, suggesting that the poorest benefited most from fee removal. Moreover, patient perceptions are that the quality of care has not declined since user fees were removed.

To date, the experience of fee removal in Zambia has been very positive. This is likely to be due to the careful planning for fee removal undertaken in Zambia. Planners predicted that utilisation would increase by at least 40% when fees were removed, and estimated the additional staff, drugs and equipment that would be required to cope with this increased utilisation. They then translated this into an estimate of the required budget increase. Donors, especially the British DfID, provided substantial funding for this increased budget requirement. What is particularly important is that the Zambian government itself made available additional resources to the health sector to support the user fee removal policy. In addition, a monitoring program was put in place from the outset to assess changes in utilisation, staff workload, adequacy of drug supplies and other aspects of quality of care. There was also extensive communication with frontline health care workers and with the community, explaining the rationale for the policy and the process of implementation. The experience of planning for the implementation of this policy in Zambia provides useful insights into how user fees can be removed successfully.

Source: Masiye et al, 2008.

4.2 Contribution mechanisms

Contribution mechanisms can either the take the form of out-of-pocket payments (OOP), where the individual makes a direct payment to the provider at the point of service, or a prepayment mechanism which occurs through the pooling of funds in advance of needing to use a health service. Clearly, prepayment, which is based on insurance principles and can facilitate income and risk cross-subsidies, would be preferable to OOP which imposes a heavy financial burden on individual households, particularly poor ones.

4.2.1 Out-of-pocket payments

As a range of issues relating to out-of-pocket payments have been dealt with in earlier sections, this section purely focuses on issues relating to how out-of-pocket payments are structured.

User fees at public sector facilities

In most countries under review that charge user fees, fees are primarily differentiated on the basis of the level of care; higher fees are charged at referral hospitals than at district hospitals, which in turn have higher fees than at primary care facilities. In many cases, there is a single flat rate fee which is not differentiated according to income (other than efforts to exempt the poorest). The charging of flat rate fees irrespective of a patient's socio-economic status, are a particularly regressive form of health care financing.

Some countries do attempt to differentiate fees on an income basis. For example, Nambia differentiates between 'public' and 'private' patients, with the latter paying a slightly higher fee. The definition of who should be classified as a private patient is not clear, and so the fees that patients pay depend on the discretion of the admitting clerk. In reality though, billing systems are almost non-existent which means that fee accounts are not sent out and limited fee revenue is collected.

South Africa has an even greater degree of fee differentiation in its Uniform Patient Fee Schedule (UPFS) for hospitals. The UPFS aims to ensure that all patients treated at public hospitals are uniformly billed for the health services that they receive, but with differentiation on the basis of their ability to pay. Patients are classified into two main groups; full paying patients and subsidised patients. Full paying patients are those with private health insurance cover and/or an income above a particular level. Subsidised patients are categorised into two income levels, with very limited fees for the lowest income group. There are similar problems with the implementation of the UPFS as encountered in Namibia, particularly in relation to verifying the financial status of individual patients. Besides it being a costly system to administer, there are concerns over the potential cost burden on low-income patients. For this reason, policy makers are currently considering only levying fees for patients who are covered by private health insurance (called medical schemes in South Africa).

Private sector provider fees

Very little information is available on how private providers structure their fees. Mission facilities and NGOs frequently differentiate fees according to income level and exempt the poor. Even private for-profit providers, particularly general practitioners and traditional healers, are known to have informal fee differentiation practices. However, this is left to the discretion of providers and none of the countries under review formally regulates the fees charged by private providers.

This is an area of concern, given the experience of countries with a substantial private for-profit sector, such as South Africa, that have seen rapid increases in the fees charged by private health care providers in recent years. There is the potential for a vicious cycle to emerge when health professionals leave the public sector to seek better remuneration in the private sector. As there is a limited population that can afford private sector services, private providers can simply escalate their fees in order to achieve their desired remuneration levels (McIntyre et al, 2007). This is particularly so where the public sector is regarded as providing poor quality of care.

4.2.2 Pre-payment Mechanisms

Tax

Tax revenue, generated from income tax on companies and individuals and indirect taxes upon goods and services (VAT, GST, excise and import duties), is an important source of health care funding in all countries. Personal income taxes are progressively structured in all the countries under review, with the poorest being exempted from income tax and the tax rate increasing across income groups.

However, VAT is often a major contributor to total tax revenue and the countries under review have VAT rates ranging from 14% in South Africa and 15% in Namibia to 17.5% in Zimbabwe and Zambia, 18% in Uganda and 20% in Tanzania. VAT is frequently a regressive tax (i.e. the poor spend a greater percentage of their income on VAT than the rich) unless the poorest groups survive largely on subsistence agriculture and purchases through informal markets.

Dedicated taxes for health care funding are not common. The only country with such a tax is Zimbabwe, which has imposed an AIDS levy of 3% on all personal and company income (see *Box 1*).

Insurance

There are different forms of insurance which can include:

- mandatory health insurance (also known as social or national health insurance) which is where the law requires certain population groups or the entire population to have health insurance coverage;
- private voluntary health insurance, where there is no legal requirement for membership and which, in African countries, is often the preserve of higher income groups employed in large firms; and
- community-based health insurance (CBHI), which are established in localised communities, often in rural areas, as an alternative to having to pay user fees at the time of using a health service.

Among the countries reviewed here, only Tanzania has embarked upon mandatory insurance, although a number of other countries (particularly South Africa and Uganda, but also Namibia and Zimbabwe) are seriously considering this option. Tanzania has two mandatory insurance schemes, one for civil servants (the National Health Insurance Fund – NHIF) and one for those private sector employees who are covered by the National Social Security Fund (NSSF) via this Fund's Social Health Insurance Benefit (NSSF-SHIB). In both cases, a flat percentage of a person's salary is contributed to the scheme. In the case of the NHIF, the employee and employer each contribute 3% of the value of salaries. Private sector employees and employers each contribute 10% of salaries for the full NSSF benefit package, which includes pensions, health insurance and other benefits. It should be noted that levying a fixed percentage of salaries can actually be a regressive form of funding as high income groups are likely to have other sources of income (e.g. interest on investments) which are not subject to this payroll tax (i.e. tax on salaries). Effectively, lower income groups end up paying a higher percentage of their total income to mandatory health insurance than high income groups.

Private voluntary health insurance is more common in Southern Africa (particularly South Africa, Namibia and Zimbabwe) compared to East Africa. All countries do have some private voluntary health insurance, and in all cases, flat contributions are charged according to the benefit package chosen rather than according to income levels, except in a small number of 'closed schemes' (i.e. schemes that are only open to employees of a specific company). It is unclear whether the contribution structure for private health insurance schemes in ESA countries is ultimately progressive or regressive. However, it is likely that poorer households are more likely to opt for more basic and, hence, cheaper packages. Forcing individuals to 'pay for what they get' (i.e. linking contributions to benefit packages) reduces the potential for income and risk cross-subsidies.

CBHI schemes, which predominantly draw their membership from the rural and informal urban populations, are more common in Uganda, Zambia and Tanzania than the other countries under review. Given that CBHI schemes generally emerge from community initiative, with the exception of Tanzania where the rural 'Community Health Funds' (CHFs) were introduced under the guidance of the World Bank, they are quite organic in nature and differ significantly from one scheme to another, even within countries. However, in general, CBHI schemes charge a single flat contribution, either per person, or per family of four (as in some schemes in Uganda) or per household (as in the Tanzanian CHFs). The Tanzanian approach has been criticised as richer households often have more members, and a flat contribution per household will benefit large, rich households. This in effect is regressive and poor households (with fewer members) might actually be subsiding richer households. In addition, the contribution level in each CHF is set at a meeting of the district council, which has been criticised for not necessarily taking account of what is affordable in that community. There are growing concerns internationally about the low levels of coverage and long-term sustainability of such schemes (Mills, 2007).

4.3 Collecting organisations

The key revenue collecting organisations may include various government agencies, social security agencies, CBHI schemes, private insurance funds (commercial or not) and private health care providers. Each collecting organisation is linked to a type of contributory mechanism. For example, out-of-pocket payments are collected by health care providers. The nature of the collecting organisation and whether the general public has trust in that organisation influences the extent to which it is successful in its revenue collection activities.

4.3.1 Receiver of Revenue

In both developed and developing countries, taxes are collected by a government agency such as the Receiver of Revenue or the National Revenue Authority. In countries where there is a low degree of trust in government and concerns over corruption and the ability of government to allocate funds to areas which citizens regard as a priority, tax evasion remains a problem. This has been cited as a reason for high levels of tax evasion in some countries under review, such as Uganda and Tanzania. The problem is further compounded by poor collection capacity. Where considerable effort is invested in improving revenue collection capacity and in publicly demonstrating a commitment to actively pursuing individuals and companies evading tax, such as in South Africa and Namibia, revenue collection has improved dramatically. Increased availability of tax revenue, which can result in greater government contributions to health care financing, is of considerable importance and there is, therefore, a need to win back the trust of the public in tax authorities and government in general.

4.3.2 Insurance organisations

Issues of trust and accountability also influence the functioning of social security agencies and private health insurance funds. In the case of mandatory insurance, if there is a low level of trust in government, it is likely to be necessary for this function to be administered by an independent organisation. For instance in Tanzania, the mandatory insurance for civil servants is managed by a parastatal, and there are anecdotal reports that a key reason why a separate mandatory insurance was established for private sector employees was greater trust in the NSSF than in the NHIF. These issues are highlighted in *Box 3* in relation to the proposed mandatory insurance in Uganda.

Box 3: Private health insurance and the implications for mandatory insurance in Uganda

A recent study in Uganda found that while formal private health insurance was extremely limited, most private firms are already contributing in some way to the health care costs of their employees. This occurs through private insurance, offering in-house health services and/or making an arrangement with specified health care providers to cover the health care costs of employees.

Employers, employees and private health insurance organisations were asked their views on the proposed introduction of a mandatory health insurance (social health insurance – SHI) in Uganda. Most respondents were unaware of the plans to introduce SHI and only 48% of employees indicated a willingness to join such a scheme. In general, respondents had largely negative views about the possible introduction of an SHI. The key factors driving these views were concerns about government's role in the management of the SHI scheme in the light of corruption problems and about the poor quality of care within public sector health facilities – they all see health insurance as an important mechanism for accessing private health services. Clearly there is an urgent need for increased public education about the proposed SHI, but there is also a need for very careful consideration of the nature of the organisation that will run the proposed SHI.

Source: Zikusooka and Kyomuhangi, 2007.

In the case of private health insurance, there are growing concerns over the management of funds by the private sector administrators in both South Africa and Zimbabwe. Private health insurance is regarded with scepticism in Uganda. In all three cases, these concerns about private health insurance companies are closely related to the perception of low benefits in return for high premiums and thus, that private health insurance organisations are not providing value for money. In South African, this is partly attributable to the inability of the large number of fragmented insurance schemes to effectively negotiate with powerful private providers (McIntyre et al, 2007). In contrast, private health insurance is generally trusted in Namibia, where the regulatory role of government is seen as effective in safeguarding the public's interest.

There are also mixed views on CBHI schemes. In Tanzania, the role of government in CBHI schemes is treated with suspicion. While community initiated CBHI schemes are generally trusted, there are instances of NGO-managed schemes in which communities have low levels of confidence.

5. Pooling of funds

Fund pooling refers to the 'accumulation of prepaid heath care revenues on behalf of a population' (Kutzin, 2001). By definition, out-of-pocket payments (which are not pre-payments, but rather direct payments to a provider at the time of using a health service) are not pooled. Instead, individual households bear the full costs of health care, often at times when resources are not readily available, which may impoverish vulnerable households. In assessing fund pooling via tax and/or alternative forms of health insurance, it is important to consider both the coverage (size of the population covered) and the composition (socio-economic and risk profile) of those covered.

5.1 Coverage and composition of risk pools

In this section, coverage and composition of risk pools will be considered for each of the main prepayment mechanisms.

5.1.1 Tax

Tax can potentially create a universal pool with significant degrees of cross-subsidisation. At present, a sizeable portion of the population in each country is dependent on tax funded health services. Frequently, the highest income groups primarily use services in the private sector (except for certain specialist services only available or affordable in the public sector), funded by some form of insurance. This would suggest that cross-subsidies would be equitable via tax funding. However, given the continued existence of user fees for public sector services, it is the poorest groups (generally those with the greatest burden of ill-health) who are excluded from benefiting from public sector services as they cannot afford even 'minimal' user fees.

5.1.2 Mandatory insurance

Mandatory insurance, either through social health insurance (SHI) or national health insurance (NHI) is gaining popularity in many LMICs. Different models of mandatory insurance are currently being debated, particularly the level of coverage (universal vs. limited coverage) and which groups to cover first (often civil servants).

Tanzania implemented the NHIF for civil servants in 2001. Currently, the NHIF covers less than 5% of the population. The SHIB of the NSSF for private sector workers has only

recently been introduced and covers less than half a percent of the population. Thus, these are reasonably small pools, and only include those who have jobs in the formal sector. More importantly, it is of some concern that two separate pools (through two separate mandatory insurance schemes) have been established, which reduces the opportunity for income and risk cross-subsidies.

Uganda is planning to implement a mandatory insurance scheme for all formal sector workers, which it is proposed will be administered by a National Hospital Insurance Fund (NHIF). It is planned to extend cover to informal sector workers after several years. However, the scheme has met with opposition from several stakeholders particularly the private health sector and employers who feel that it will add an extra burden to the cost of employment.

Other countries which are seriously considering implementing mandatory insurance are Namibia and South Africa. In Namibia, it is proposed that those covered by private health insurance schemes can 'opt-out' of the mandatory insurance (i.e. don't have to join the mandatory insurance scheme and rather contribute to their own private insurance scheme). International experience (e.g. in Chile) shows that opting-out allows the rich and healthy to join private schemes, fragments the risk pool and leaves the low-income and chronically ill in the mandatory scheme, thereby raising concerns of long-term sustainability. Although policy makers in South Africa are discussing implementing a universal mandatory health insurance scheme, the specifics of its structure and implementation are yet to be developed.

The way in which mandatory health insurance is being conceived and pursued in the countries under review is of concern. In most instances, it is being seen as a scheme that will only cover those in formal sector employment, which is the minority of the population that is already relatively privileged. There is a serious possibility that a two tier health system will be entrenched, with striking differences in resources for health care between the 'haves' and 'have nots'. Although some countries are talking about gradually extending coverage to other groups, international experience (especially in Latin America) shows that once health system tiers have become entrenched, it is very difficult to move towards universal coverage under a single system. It is therefore important that at the outset, there is a commitment to universal coverage with clear plans on how this will be achieved. In particular, it is important to establish an integrated funding system where there are mechanisms for pooling tax and mandatory insurance resources to benefit the entire population. Fragmentation of pools should be avoided; in the case of Tanzania having established two separate mandatory insurance pools, mechanisms for integrating the pools (such as through a risk-equalisation mechanism – see later) should be explored. As noted by Davies and Carrin (2001), 'There is growing consensus that, other things being equal, systems in which the degree of risk-pooling is greater achieve more'.

5.1.3 Private insurance

Private health insurance, which predominantly covers higher income formal sector groups and excludes low-income earners in the formal and informal sectors, tends to have a smaller presence in African countries. In the countries under review, private health insurance covers less than 1% of the population in Malawi, Tanzania, Uganda and Zambia. The private sector plays a more significant role in Zimbabwe, where it covers about 10% of the population, Namibia with coverage of 12.5% and South Africa with population coverage of 15%. Although there is low coverage by private health insurance, they tend to account for relatively high health care expenditure levels. The size of private health insurance is linked to a number of factors including the level of GDP, size of the formal employment sector and the extent of formal private health care providers.

In comparison to Namibia and Zimbabwe, which have a total of 9 and 28 medical schemes (private health insurance) respectively, South Africa has over 130 medical schemes, each offering a range of different benefit options (i.e. each benefit option is a separate risk pool). Moreover, these schemes are a mix of open and closed schemes, with the former more aggressively recruiting low risk, young and higher income members and the latter including a wider range of income groups and a growing number of older retirees. This contributes to high levels of fragmentation in risk pools and limits the potential for risk and income cross subsidisation.

5.1.4 CBHI

CBHI schemes, which are often community initiated, organic in nature and varying tremendously in contribution, benefit package and management design, tend to have very low coverage and offer limited potential for cross-subsidisation. In Uganda, CBHI schemes do not even cover half a percent of the population (see *Box 4*). Since membership is based on household units, they tend to benefit larger families who are generally better resourced compared to smaller families. Moreover, the schemes exclude the very poor and suffer from adverse selection (i.e. those with a higher risk of ill-health tend to join). In Tanzania, the 69 district council-based CHFs have achieved a relatively higher coverage level, with about 4% of the total population belonging to one of these schemes. However, these schemes are beset by similar problems of limited potential for income and risk cross-subsidy, exclusion of the very poor and adverse selection.

Box 4: CBHI schemes in Uganda

There are a number of CBHI schemes in Uganda, most of which are linked to mission and other NGO hospitals. All are very small in size, each covering less than 2% of the primary catchment population and overall, covering less than half a percent of the total population of Uganda. With the removal of user fees at all Ugandan public sector health care facilities in the early 2000s, it was unclear whether the population would continue to support CBHI schemes. This has not been the case, with many still contributing to CBHI schemes. The main reason for this trend is that CBHI schemes are primarily seen as a mechanism for securing access to NGO health services, which are preferred in light of widespread perceptions of poor quality of care within the public sector. Despite the preference for use of NGO facilities and the willingness of some to support CBHI schemes, the sustainability of these schemes is a matter of concern. The major threat to sustainability is the very small risk pool that each scheme has, ranging from 556 members in one of the smallest schemes to 5,118 members in a large scheme in 2007. In addition, a recent study of these schemes found that all but one of the schemes surveyed had expenditure levels that significantly exceeded contribution revenue. Although it is unlikely that CBHI schemes in Uganda will be a major health care financing mechanism for the foreseeable future, they are introducing Ugandans living in rural areas to the concept of health insurance and could provide a basis for a mandatory health insurance scheme to reach those outside of the formal employment sector.

Source: Kyomugisha et al, 2008.

5.2 Allocation mechanisms

Allocation mechanisms for distributing pooled funds primarily relates to government revenues and insurance contributions. In the case of government revenues, a needs-based formula is more equitable than historical budgeting as a mechanism for allocating resources between geographic areas. Such formulae generally take into consideration the relative population size, burden of disease, socio-economic status and age and sex distribution in each geographic area. A growing number of African countries are using needs-based formulae to guide the allocation of health care (or total government) resources between provinces or regions and districts. All the countries under review are either currently using needs-based resource allocation formulae or are in the process of implementing such a mechanism.

However, in some countries (such as Tanzania), part of general tax revenue for the health sector is distributed through other channels and can offset the equity gains of using a needs-based resource allocation formula. For example, in Tanzania, government provides a matching grant to each district according to the amount of CHF contribution revenue generated. While this is an incentive to CHFs to generate as much revenue as possible, and promotes the sustainability of these community-based insurance schemes, it is likely to have an adverse equity impact. The CHFs which are able to generate the most revenue are those situated in districts with a more socio-economically advantaged population. Hence, more general tax funds will be allocated to districts which are ‘better off’, offsetting to some extent the equity based allocations of other tax funds via the needs-based formula mechanism.

In relation to insurance contributions, it is possible to increase cross-subsidies in the overall insurance environment by establishing a risk-equalisation mechanism between individual insurance pools. Risk equalisation is a mechanism whereby revenue from contributions to several health insurance schemes or health funds is pooled and the individual schemes are then allocated an amount which reflects the expected costs of each scheme according to the overall ill-health risk profile of its membership. The only country under review that is in the process of implementing a Risk Equalisation Fund (REF) is South Africa. As indicated previously, South Africa has over a 130 medical schemes, each with several benefit options, resulting in several hundred fragmented risk pools. The introduction of a REF would effectively create a single pool (albeit only for the 15% of the population covered by these schemes), which will increase the potential for risk cross-subsidies across those covered by these schemes. As medical scheme contributions are not income related at present, there still remains the challenge of how to promote income cross-subsidies within insurance schemes and more importantly, how to promote income and risk cross-subsidies across the overall health system (i.e. across groups covered by medical schemes and those covered by tax revenue).

6. Purchasing

Purchasing refers to the transfer of pooled funds to providers and can take a variety of forms depending on the nature of the contributory mechanism and the pooling organisation. This can be done either directly, as in the case of out-of-pocket payments, or through a financial intermediary (e.g. private or mandatory health insurance or through government). There are two important issues to be considered in the purchasing function; the benefit package and provider payment mechanisms.

6.1 Benefit package

The benefit package must be considered in relation to the financing mechanism. In many tax funded systems, the benefit package is not explicitly defined in relation to specific services but is rather an entitlement to use a wide range of public sector health facilities (sometimes with a user fee charged). In contrast, insurance schemes tend to specify very explicit benefit packages (sometimes on a service by service basis).

CBHI schemes in both Tanzania and Uganda tend to focus on high-frequency, low-cost services (PHC and occasionally, limited hospital care). In contrast, private voluntary health insurance schemes (e.g. in Namibia, South Africa and Zimbabwe) tend to have more comprehensive benefit packages, covering both high-frequency, low-cost services as well as low-frequency, high cost services. However, more comprehensive packages are linked to correspondingly higher contributions. In South Africa, there has been a trend to focus on hospital care and chronic illnesses in medical schemes. This is partly due to the introduction of a Prescribed Minimum Benefit (PMB); government regulation requires every medical scheme to cover a range of hospital based services and care of chronic illnesses. The PMBs

were introduced as medical schemes had previously been ‘dumping’ high-cost hospitalisations and chronic patients on the public sector. Low-cost, high-frequency care (e.g. visits to general practitioners and dentists) are now covered by medical scheme members paying out-of-pocket and/or through medical savings accounts.

In relation to tax funded health services, a few countries (such as Zambia) have specified an ‘essential package’ of health services to be funded via tax revenue, with all other services provided at public sector facilities expected to be paid for by patients, but this has not been implemented. Instead, all countries under review offer a comprehensive range of services through public sector facilities. In countries like Malawi, this benefit package even includes referrals to South Africa and other countries for specialist hospital care. Although there is a comprehensive tax-funded benefit package, with a growing number of countries providing this free of any user fees, the reality is that there remains a wide gap between the benefit package and what is available (e.g. drugs) in resource-constrained public sectors. It is also clear that more research needs to be conducted into the full range of barriers to accessing services to which citizens are entitled. Many studies indicate that there are differences across groups (defined in relation to age, gender and socio-economic status) in benefiting from public sector health services (see *Box 5*), but very few indicate the precise nature of access constraints.

Box 5: Use of free public sector ART services in Malawi

A recent study in Malawi found large differences across groups in the use of free ART services. While HIV prevalence is very similar for men and women aged 15 to 49 years (11.2% for men and 11.8% for women), 61% of those on ART were female. One of the possible reasons for the greater use of ART by woman is that women receive HIV testing when they go for pregnancy-related services. There were also differences between adults and children. Although 10% of all HIV infected persons are children, only 5% of those on ART are children. The study also found that, for people living with AIDS and on ART, only 61% of the poorest 20% of the population were regularly seen by a doctor compared to 82% of the richest 20% of the population. These results clearly indicate that offering free public sector services is not sufficient in ensuring that there is equitable access to health services.

Source: Muula and Kataika, 2008.

Access to the full benefit package in public sector facilities can also be mediated through the introduction of a gate-keeping function, which serves as a deterrent to bypassing lower level facilities in favour of higher level hospital care. In some cases, such as Malawi and to some extent South Africa, direct access to higher level facilities is not permitted; patients are simply instructed to go to lower level facilities and follow the correct referral route. In other countries, such as Namibia and Zimbabwe, a bypass fee is charged to encourage patients to use the referral system.

6.2 Provider payment mechanisms

Traditionally, co-payments and user fees have been promoted on the basis that they will reduce ‘moral hazard’ on the demand-side (i.e. the tendency, borne out of entitlement to use the benefits of health insurance or tax funded services, to consume more health care than may strictly be necessary). However, supplier-induced demand (i.e. where health care providers supply more health services than are ‘medically required’) is increasingly being recognised as a major contributor to high costs of care. Supplier-induced demand occurs when providers are paid on a fee-for-service basis; providers’ incomes increase as they increase the number of services provided.

In all the countries under review, private sector health care providers are paid on a fee-for-service basis. The impact of this provider payment mechanism is most acutely evident in

South Africa, where spending by medical schemes on services for their members is spiralling, almost out of control. As a result, some medical schemes are attempting to change provider payment mechanisms, such as a flat amount per day that a member is in a private hospital instead of an itemised fee for every service provided.

In the public sector of all countries under review, health care facilities are allocated budgets and staff are paid on a salaried basis. The major challenge in these countries is that health worker salaries are relatively low, making it difficult to retain health professionals in the public sector and in the country and to motivate them to provide high quality care.

The nature of the benefit package and the extent to which benefit entitlements can be realised due to a range of access constraints, combined with the consequences of the chosen provider payment mechanisms have important implications for the distribution of service benefits across different population groups. Policy makers should not only be concerned about an equitable financing incidence, i.e. the distribution of the burden of funding health service across different groups in line with their ability to pay, but also with an equitable benefit incidence, i.e. the distribution of health service benefits between groups in line with their relative need for care.

7. Conclusions

This review of health care financing in seven East and Southern African countries has highlighted a number of key issues for future research and advocacy activities. In relation to sources of funds, there continues to be a heavy reliance on donor funding in some countries (especially Malawi and Zambia). This situation is unlikely to change in the foreseeable future given the extremely limited domestic funds. A key issue that requires further investigation is the impact of more recent modes of donor funding, such as that by the GFATM, which cannot be relied upon in the long-term due to the nature of applying for specific rounds of funding on a repeated basis, on overall health sector funding and service delivery.

In addition, there is evidence that debt relief initiatives are helping to increase government funding of health services in some countries, but this is not the case in all HIPC countries. It is important to monitor the extent to which increased 'fiscal space', through reduced debt servicing burden, is being translated into improved government spending on health care. Further, it is necessary to undertake case studies in countries that have and have not been successful in translating the HIPC and other debt relief initiatives into increased government funding for the health sector to identify both facilitating factors and obstacles.

Another key issue that requires much more extensive consideration is the extent of the burden of health care funding placed on different households and how this can be more equitably distributed. No countries in Africa have detailed and accurate information on how the burden of health care financing (whether through tax payments, health insurance contributions or out-of-pocket payments) is distributed across households of different socio-economic status relative to their income levels. Such information is needed to assess exactly how progressive current tax systems are and whether the degree of progressivity can be improved.

While there is growing consensus that user fees and other out-of-pocket payments should be reduced as much as possible, there is still considerable lack of clarity on how to generate additional domestic resources in an equitable way. Certainly there is increasing interest in establishing health insurance schemes, but while certain powerful stakeholders (such as the World Bank) are encouraging the growth of private voluntary health insurance and CBHI schemes in Africa, the evidence on the equity, efficiency and sustainability of such schemes is far from encouraging. There is overwhelming evidence that CBHI schemes have very low

population coverage, small risk pools and are generally not financially sustainable without subsidisation from governments and/or donors. Private voluntary health insurance schemes also tend to have very low population coverage and fragmented risk pools and cater only for the wealthiest groups. There is potential for mandatory insurance schemes to have greater population coverage and a large risk pool. However, unless explicit mechanisms are put in place from the outset to ensure cross-subsidies between the tax and mandatory insurance pools (or to establish an effectively integrated, single risk pool), it will simply entrench a two tier system which separates the relatively wealthy off from the rest of society.

Expressed differently the tax system is the primary mechanism for some form of income and risk cross-subsidisation in health care funding. The key factor which constrains maximising these cross-subsidies is the continued existence of user fees in public sector health care facilities, which deters the poorest (who often bear the greatest burden of ill-health) from benefiting from tax-funded health services. As well as calling for the removal of user fees at all public health care facilities, equitable health insurance options must be explored along with mechanisms for integrating insurance funds with the primary mechanism for cross-subsidies at present, namely tax funds, in order to maximise the potential for cross-subsidies in the overall health system.

At the same time, we need to explore in greater detail how to ensure that citizens can access the health service benefits to which they are entitled. The removal of fees is an important first step, but is insufficient by itself. This requires consideration of the nature of different barriers to access, with a specific emphasis on how to improve the quality of health services provided in public sector facilities.

In all of these aspects, the state bears the primary responsibility for promoting equity in health care financing. This must be done through ensuring appropriate tax policies, user fee policies, government budget allocations, donor co-ordination and providing an appropriate regulatory environment.

Finally, it is not sufficient to merely focus on the 'technical design' of alternative health care financing systems and their appropriateness within a specific country context. Far more work is required on policy processes, the role of different stakeholders and the resources that they have at their disposal to influence health care financing policy, and how one can ensure that changes in health care financing systems to promote equity are effectively implemented.

While there are a wide range of issues that require further research and advocacy, none are as important for achieving equitable health care financing as the need to:

- eliminate, or at least reduce, out-of-pocket payments;
- increase funding of health services from tax revenue (as this is the most progressive financing mechanism and the primary mechanism for cross-subsidies at present); and
- introduce mechanisms to integrate all forms of pre-payment (i.e. tax funding and health insurance).

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Appendix A: Overview of health systems in countries under review

A.1 Analysis of health care financing in Malawi

Function	
Revenue collection	
Source of funds	• Donors are the largest financer of health care, accounting for about 60% of all funding. • For domestic funding, the burden is placed on employers and households through taxes, out-of-pocket and insurance payments for health care. • There is no formal exemption policy as there are no user charges in public facilities.
Contribution mechanisms	**General tax revenue:** Generated from personal income tax, VAT, and various levies and excise duties: • Personal tax is structured progressively, with low income earners exempt and highest income earners contributing 30%. • Company tax is a flat rate of 30% on annual profits. **Private voluntary insurance:** Private insurance (medical aid) contributions are generally a flat rate based on the benefit package, not income. Some employer contributory insurance schemes are progressive, based on earnings. **Out-of-pocket payments:** • Public health facilities provide all services at no fee. Tertiary level facilities have optional paying facilities. • Out-of-pocket payments are made at mission hospitals for all services except maternal and child health services for those without insurance, or as a co-payment for those with insurance (usually a percentage of the fee). • Co-payment is also made at private providers, as a proportion of the fee. • Out-of-pocket payments made on services outside the insurance benefit package.
Collecting organisations	• The Malawi Revenue Authority (MRA) collects all tax revenue and has exceeded revenue collection tartgets in recent years. • Private health insurance is collected directly from members. A board of directors with representation from members runs the Medical Aid Society of Malawi. • For in-house employer medical aid schemes, collections are through salary deductions into employee medical funds. These are normally run in-house with representation from the employees.
Risk pooling	
Coverage and composition of risk pools	• Medical aid schemes are very small, covering less that 1% of the population. Coverage largely includes formal sector workers and their dependents. • Risk pooling in individual schemes only, not between the schemes. Thus, there is fragmentation of risk pools. • The rest of the population is dependent on tax funded services, which largely includes low income informal sector workers, the unemployed and rural poor. There is no risk pooling between the tax funded pool and medical aid schemes.
Allocation mechanisms	• No risk equalisation between risk pools, and none is envisaged in the near future. • Tax funds collected centrally by Ministry of Finance. Tax funds allocated to the health sector are pooled with donor funds at the Ministry of Finance level. These are then allocated to District Assemblies using a needs based formula that takes health needs into account, and are ring-fenced for health care at the district level.
Purchasing	
Benefit package	• Those benefiting from tax based funds have a comprehensive range of primary through tertiary level services, including referrals outside the country. • Specialist tertiary services, including those outside the minimum package (the Essential Health Package), are implicitly rationed through resource constraints. • All medical aid schemes cover a minimum package of services including inpatient care and a limited range of specialised services. Each scheme offers different benefit options. Few medical schemes cover chronic conditions, which is normally covered under the tax funded package.

	• All services in the medical schemes' package require co-payments. For services outside the benefit package, large out-of-pocket payments are usually paid.
Provider payment mechanisms	• Public sector facilities are allocated budgets and doctors are paid salaries. • Private providers are paid on a fee-for-service basis. • In addition to the salaries of health workers at mission hospitals being paid by government, those mission hospitals which are contracted by the Ministry of Health are also paid on a fee-for-service basis for specified services.
Provision	• There is an extensive network of public health care facilities. Primary health care facilities are less well distributed. However, in each of the 28 districts, there is at least one hospital. All the central (tertiary) hospitals are in major cities. • Numbers of health workers in the public sector is very low compared to the population - one doctor per 74,063 population and one nurse per 3,089 population. • The private sector is heavily concentrated in the urban areas and serves the minority of the population.

Prepared by: Edward Kataika (drawing on National Health Accounts and other sources).

A.2 Analysis of health care financing in Namibia

Function	
Revenue collection	
Source of funds	• Donor funding in Namibia equates to 16.9% of total health care spending • Domestic funding – burden placed on companies and individuals, but households bear most of the burden of funding health care services (through tax, insurance contributions and out-of-pocket payments) • Some are not expected to contribute (e.g. the lowest income groups do not have to pay tax; pregnant women, children under five and those with notifiable diseases do not have to pay user fees at government facilities)
Contribution mechanisms	**General tax revenue** is generated from personal income tax (24% of total tax revenue); VAT (26%); Company tax (13%), Customs Revenue Pool Share (33%) and a range of other taxes and levies (fuel levy, liquor licences, fishing boats and factory licences, hunting and fishing, prospecting, fishing quotas, gambling and stamp duties and fees – combined account for 4%). • Personal income tax is structured progressively; low-income earners are exempt. Marginal tax rate ranges from 17.5% for the lowest income taxpayers to 34.5% for the highest income taxpayers. • Company taxes are charged as follows: Diamond mining 50% and a surcharge of 10%, other mining companies 37.5%, Petroleum, mining and non-mining companies at 35%. • VAT is charged at 15%, but many basic foods are exempt from VAT **Private voluntary health insurance** (called Medical Schemes) • Community-rated contributions to schemes; often shared between employers and employees (but % share varies across companies). • Very few medical schemes relate contributions to income level; contributions are usually a flat rate linked to a specific benefit package, e.g, the Public Service Employee Medical Aid Scheme (PSEMAS) contribution is N$60 per principal member, irrespective of income. **Out-of-pocket (OOP) payments** • User fees at public sector facilities i.e. clinics, health centres, district and referral hospitals – the poor are exempt from fees (but have difficulties proving eligibility for exemptions). There are no incentives to collect fees (as the facility doesn't benefit from fee revenue).
Collecting organisations	• Tax collected by the Directorate of Inland Revenue in the Ministry of Finance. The Directorate has been implementing forensic tax audits and there has been an improvement in revenue collection. • Health insurance contributions collected directly from members (often employer and

	employee payroll contributions) by nine medical schemes and PSEMAS, which is not regulated as are other schemes. A Board of Trustees oversees each scheme's activities. The ten schemes are run by four commercial, profit-making administrators.
Risk pooling	
Coverage and composition of risk pools	• Medical schemes cover 12.5% of the population and include high and middle income formal sector workers and sometimes their dependents. There is risk pooling in individual schemes in relation to the benefit package offered. Of the nine medical schemes, five have a number of benefit packages, so there is fragmentation into smaller risk pools. • The remainder of the population is largely dependent on tax funded health services, and comprises low income formal sector workers, informal sector workers, the unemployed and the poor. • No risk pooling between the tax funded pool and medical schemes.
Allocation mechanisms	• No risk-equalisation between individual medical schemes, and the idea is only evolving with regard to HIV/AIDS disease management. • Tax funds are centrally collected. Funds are allocated from central government to all ministries and government agencies through medium term plans. The Ministry of Health & Social Services then allocates funds to thirteen regional directorates largely on a historical basis. This is being changed to instead use various indicators of need for health care (size and demographic composition of population and level of deprivation in each region) to guide allocation of funds to regional directorates.
Purchasing	
Benefit package	• Those using tax funded health services have a fairly comprehensive benefit package, with access to a full range of primary care clinic services through to those provided at the only specialised hospital. • Each medical scheme offers different benefit options.
Provider payment mechanisms	• Public sector facilities are allocated budgets and staff are paid salaries. • Private providers are paid on a fee-for-service basis. Some general practitioners accept capitation payments from one medical scheme that serves lower income groups. Private hospitals bill a fee-for-service.
Provision	• There is an extensive network of public sector primary health care facilities. Most of the 33 health districts have a hospital and specialist services are only provided for at the national referral hospital (Windhoek Central Hospital). The number of health professionals working in the public health sector is very low relative to the population (e.g. about 23,845 people per generalist doctor, 1,089 people per registered nurse and 79,670 people per pharmacist in the public sector). • Private health sector is heavily concentrated in urban areas. Most health care professionals work in the private sector, despite serving the minority of the population (e.g. about 3,924 people per generalist doctor, 183 people per registered nurse and 1,390 people per pharmacist in the private sector).

Prepared by: Thomas Mbeeli (drawing on National Health Accounts and other sources).

A.3 Analysis of health care financing in South Africa

Function	
Revenue collection	
Source of funds	• Very little donor funding (<1% of total health care funding) • Domestic funding – burden placed on companies and individuals, but households bear most of the burden of funding health care services (through tax, insurance contributions and out-of-pocket payments) • Some are not expected to contribute (e.g. the lowest income groups do not have to pay tax; pregnant women, children under six, the disabled and the elderly do not have to pay user fees at government facilities)

Contribution mechanisms	**General tax revenue** is generated from personal income tax (30% of total tax revenue); VAT (28%); Company tax (23%) and a range of other taxes and levies (fuel levy, excise duties, customs duties, estate tax – combined accounting for 19%). • Personal income tax is structured progressively with low-income earners being exempt and the marginal tax rate ranging from 25% for the lowest income taxpayers to 40% for the highest income taxpayers. • Company tax is charged at a flat rate of 29% • VAT is charged at 14%, but many basic foods are exempt from VAT **Private voluntary health insurance** (called Medical Schemes) • Community-rated contributions to schemes; often shared between employers and employees (but % share varies across companies) • Very few medical schemes relate contributions to income level; contributions are generally a flat rate linked to a specific benefit package (so contributions are differentiated by benefit package, not income level) **Out-of-pocket (OOP) payments** • User fees at public sector hospitals (there are no fees for PHC services) are differentiated according to income level – the poor are exempt from fees (but there are difficulties in proving eligibility for exemptions) and there are three other income categories with very low fees for the lowest income groups. There are limited incentives to collect fees (as the facility doesn't benefit from fee revenue) so many facilities do not apply fee schedules rigidly and place many patients in the lowest fee category. • Some low-income workers, who are not members of medical schemes, use private GPs and retail pharmacies and pay on an out-of-pocket basis. • The biggest share of OOP payments is attributable to medical scheme members, either in the form of co-payments or on services not covered by the benefit package. Co-payments are flat amounts or flat % of total bill.
Collecting organisations	• Tax is collected by the South African Revenue Service (SARS). SARS has recently improved tax collection mechanisms (identifying those not complying) and revenue collected has increased dramatically. • Health insurance contributions collected directly from members (often employer and employee payroll contributions) by the more than a hundred medical schemes that exist. Boards of Trustees oversee each scheme's activities. There have been considerable efforts to improve the skills of trustees and to ensure that they represent the members' interests.
Risk pooling	
Coverage and composition of risk pools	• Medical schemes cover less than 15% of the population and include high and middle income formal sector workers and sometimes their dependents. There is risk pooling within individual schemes in relation to the prescribed minimum benefit (PMB) package (see below), but most schemes have individual 'medical savings accounts' for primary care services. There are well over 100 medical schemes, and each scheme has a number of benefit packages, so there is considerable fragmentation into many small risk pools. • The remaining 85% of the population is largely dependent on tax funded health services, and comprises low income formal sector workers, informal sector workers, the unemployed and the poor. A small component of this population pay out-of-pocket to purchase primary care services in the private sector, but are entirely dependent on the public sector for hospital services. Therefore, there is a very large risk pool as anyone who needs care and is unable to pay will receive an exemption (liberally applied). • There is no risk pooling between the tax funded pool and the medical schemes. The public-private mix is the main equity challenge: while schemes cover less than 15% of the population, about 60% of funds are in the private sector.
Allocation mechanisms	• At present, no risk-equalisation between individual medical schemes, but risk-equalisation is planned, which will increase pooling between individual schemes. However, this will not address the lack of pooling between the tax and medical schemes environments. • Tax funds are centrally collected. Funds are allocated from central government to

	provinces (for all sectors) using a needs-based formula and then each province has autonomy to decide on how it will allocate these funds to individual sectors (e.g. health and education) – i.e. South Africa has a 'fiscal federal' system.
Purchasing	
Benefit package	• Those using tax funded health services have a relatively comprehensive benefit package. No set of services are specified; instead South Africans have access to a full range of health services from those provided at primary care clinics through to those provided at highly specialised hospitals. Certain very expensive services (such as dialysis and organ transplantation) are implicitly 'rationed' through resource constraints. • All medical schemes have to cover services in the prescribed minimum benefit (PMB) package, which includes inpatient care, certain specialist services and care for most chronic conditions. Each scheme offers different benefit options, which include the PMB and various other services. While schemes may not charge co-payments on services in the PMB, there are considerable co-payments on other services and large OOP payments for care outside the benefit package.
Provider payment mechanisms	• Public sector facilities are allocated budgets and staff are paid salaries. • Private providers are paid on a fee-for-service basis. Some general practitioners have accepted capitation payments from medical schemes that serve lower income groups. There are a few private primary health care 'clinics' where staff are paid on a salary basis. Most private hospitals bill on a fee-for-service basis, but have agreed to per diem payments with a limited number of schemes.
Provision	• There is an extensive and well distributed network of public sector primary health care facilities. Hospitals are less well distributed (there is an average of 400 people per public hospital bed), with specialist services being heavily concentrated in certain provinces. The number of health professionals working in the public health sector is very low relative to the population it serves (e.g. there are about 4,200 people per generalist doctor, 10,800 people per specialist, 620 people per nurse and 22,900 people per pharmacist in the public sector). • The private health sector is very large but is heavily concentrated in the large metropolitan areas. There are three very large private hospital groups (there is an average of 190 people per private hospital bed). Most health care professionals work in the private sector, despite serving the minority of the population (e.g. there are about 590 people per generalist doctor, 470 people per specialist, 100 people per nurse and 1,800 people per pharmacist in the private sector).

Prepared by: Di McIntyre (drawing on McIntyre et al, 2007 and other sources).

A.4 Analysis of health care financing in Tanzania

Function	
Revenue collection	
Source of funds	• Donors account for about 23% of total health care resources and NGOs account for 5% • Households bear a large burden of total health care financing
Contribution mechanisms	**General tax revenue** is generated from personal income tax (13.6% of total tax revenue); corporate income tax (9.6%); other income tax (7.2%); VAT (16.1%); Excise duties (6.6%); International trade taxes (44.8%) • Personal income tax (PAYE) is progressively structured where monthly income which does not exceed Tshs80,000.00 is zero rated. For income exceeding Tshs80,000.00, the lowest rate is 15% and highest is 30%. • Corporate tax is charged at a flat rate of 30% • VAT is charged at 20%

	Mandatory health insurance There are two mandatory health insurance schemes in Tanzania. · The National Health Insurance Fund, enacted in 1999 and initiated in 2001, covers civil servants. The premium is a payroll deduction of 6% of salaries, shared between the employee and employer at 3% each. · The National Social Security Fund (NSSF) Social Health Insurance Benefit (SHIB) covers those private sector workers who belong to NSSF. The premium for all social security benefits (including health insurance) is 20% of the salary, shared at 10% each between employer and employee. **Private voluntary health insurance:** There are a small number of private for-profit health insurance schemes. Premiums are risk-rated and vary between individuals depending on the risk of the individual and the benefit package chosen. **Community-based pre-payment schemes:** There are a wide range of community health funds (CHF) in rural districts and some micro-insurance schemes in urban areas (e.g. UMASITA and VIBINDO covering informal sector and small business workers in Dar es Salaam). Premiums are community-rated and members pay a flat rate. • **Out of pocket payments:** Until 1993, public sector health services were provided for free. User fees were introduced at referral hospitals in 1993, at regional hospitals in 1994, at district hospitals in 1995 and then at health centres and dispensaries. There are certain waivers and exemptions in place, but exemptions for the poor are largely ineffective.
Collecting organisations	· General tax is collected by the Tanzania Revenue Authority (TRA) under the supervision of the Ministry of Finance (MoF). Despite TRA's efforts to improve efficiency, revenue collection is low due to the narrow tax base, non-compliance by some and a tax holiday given to foreign investors. · The Ministry of Finance collects NHIF contributions and remits them to NHIF headquarter on behalf of civil servants. Government agencies remit contributions for their staff directly to the NHIF. · NSSF collects SHIB contributions directly from employers. However, some employers do not remit the contributions on time. · Premiums for private for-profit health insurance are collected directly from members of the scheme. There are two dedicated private for-profit health insurance companies (Prosperity Life Care and Strategies Insurance). Another four insurance companies offer both life and non-life insurance. · Prepayments for CHF are collected and managed at the public facility (health centre or dispensary). However, there is a history of embezzlement of funds by public officials, which has led to some lack of trust in the people who manage the CHF revenue. · Prepayment for micro-insurance schemes is collected directly by the scheme. Management of the schemes is elected by the members.
Risk pooling	
Coverage and composition of risk pools	· The NHIF is estimated to cover only 4.6% of the general population. · SHIB has only recently been introduced for NSSF members. NSSF has almost 400,000 members; only 20% are registered for SHIB, which is estimated to be only 0.24% of the total population. · Private for-profit health insurance covers some employees in private companies, foreigners and diplomats. A very small percentage of the total population are member of private health insurance. · CHFs operate in 69 of 121 district councils, with coverage varying for 4% to 18% of the population in each rural district. Average coverage is about 8.5% of the target population, and about 4% of the national population. · UMASITA members include small scale market retailers, tin smith, cobblers, stone crushers and food vendors. VIBINDO coverage is about 1,102 people. Together, these micro-insurance schemes cover substantially less than 1% of the total population.

Allocation mechanisms	• General tax and donor funding is allocated to districts on the basis of a needs-based resource allocation formula (including size of the population, under-five mortality, poverty level and an indicator of rurality). • There is no risk equalisation between individual health insurance schemes.
Purchasing	
Benefit package	• Those who use tax funded health facilities, theoretically have access to a comprehensive benefit package. However, user fees limit access and, due to resource shortages in public facilities, benefits are not always available or are of poor quality. • The NHIF benefit package includes inpatient and outpatient care from primary care to referral level, dental services, physiotherapy, reading glasses and minor and major surgical care. No co-payment is charged. • The NSSF benefit package includes out-patient services and admissions (consultations, basic and specialised investigations, simple and specialised procedures, drugs on the national drug list, referral to higher level and specialised hospitals). • Private for-profit health insurance companies offer different benefit options, normally based on consumer choice. There is no specified minimum benefit package. There are co-payments on most services. • CHFs usually only cover primary care, but in some cases include limited secondary care. No co-payment is charged. • The UMASITA benefit package includes Maternal and Child Health, VCT and treatment of common diseases such as malaria, pneumonia, diarrhoea and STIs. Surgical services are provided at government facilities (user fee is paid by the scheme). No co-payment is charged. • The VIBINDO benefit package includes primary health care services, reproductive health care services, some referral services, minor surgery, and limited hospitalisation. No co-payment is charged
Provider payment mechanisms	• In public sector facilities, staff are paid salaries and facilities are allocated budgets. • The NHIF pays providers on a fee-for-service basis. However, due to cost-containment problems, a move to capitation payments is being explored. • NSSF uses a capitation method to reimburse providers. Each beneficiary is registered with one accredited provider. The annual cost of health care is computed and payments to providers are made quarterly. • Under CHF, facility collects and manages funds. Therefore, there is no re-imbursement mechanism. • Both UMASITA and VIBINDO pay providers on a fee-for-service basis.
Provision	• There are about 5,000 health care facilities geographically distributed so that 70% of the population is within 5 km of a facility and 90% is within 10 km. The ratio of physicians to patients stands at 1:24,000. • Most facilities are in the public health sector. In some areas, there is no public health facility at district and regional level; voluntary or religious health facilities are contracted to provide services in these areas. Despite a good network of public facilities, service of is poor quality due to shortages of competent personnel, drugs and other supplies. • There are very few private hospitals, most private for profit provisions are concentrated in urban areas at dispensaries and private laboratories levels while very few at districts, almost none regional and specialized hospital levels and two at referral level. Services in private hospitals are good but expensive compared to public hospitals.

Prepared by: Derek Chitama (drawing on National Health Accounts and other sources).

A.5 Analysis of health care financing in Uganda

Function	
Revenue collection	
Source of funds	• Donors account for 27.4% of health care funding • Households bear the burden of funding health services in the country • Some households (the unemployed and the poor) are not expected to pay tax.
Contribution mechanisms	**General tax revenue** is generated primarily from personal income tax and import taxes, with VAT and other taxes accounting for a small share of revenue. • Personal income tax (PAYE) is approximately 30 of total employee's salaries. • VAT is set at 18%. **Private health insurance** accounts for less than 1% of total health care funding. Most companies pay the full contribution on behalf of employees. A few organisations require their employees to pay a small percentage of the total premium (about 20%). Premiums are related to benefit packages, rather than to income level. **Community health insurance** levies flat rate contributions. **OOP payments** • In March 2001, the government abolished user fees for health services in public sector facilities, except in 'private wards' in public hospitals. • Private Not-For-Profit (PNFP) and Private For-Profit (PFP) providers, including private clinics, hospitals, drug shops and traditional healers, continue to charge fees. • High levels of OOP payments in Uganda despite free services in public health facilities. Perceived poor quality of services, particularly due to lack of drugs and equipment (e.g. X-ray machines), and limited numbers of health workers results in high use of private providers on an out-of-pocket basis.
Collecting organisations	• The Uganda Revenue Authority (URA) collects tax and has recently increased tax revenue collection through public education and demonstrating the benefits of tax for social services. • Private health insurance contributions are collected directly from employers by the insurance company.
Risk pooling	
Coverage and composition of risk pools	• Private medical schemes cover less than 1% of the entire population. These include high- and middle-income formal sector workers and sometimes their dependants. There is limited risk pooling and cross subsidies within individual schemes. • Community health insurance schemes only cover a population of less than 0.2% of the entire population and this mainly covers the informal sector in the rural areas. • The remaining 99% of the population is either largely dependant on donor and tax funded services or services purchased on an OOP basis. There are some cross-subsidies in tax funding as it is primarily high- and middle- income earners who contribute to tax funds and the poor who use publicly funded health facilities. • Out-of-pocket (OOP) payments are the single largest sources of health care financing in Uganda (accounting for well over 30% of total health care expenditure) - there is no risk pooling in OOP payments.
Allocation mechanisms	• There is no risk equalisation between individual private health insurance schemes. • Tax funds are centrally collected, and are allocated to individual districts using a needs-based resource allocation formula.
Purchasing	
Benefit package	• There is a relatively comprehensive benefit package for those using tax funded (public health care facilities), defined through a national minimum package. However, major resource constraints result in many services not being available at facilities. • Most private health insurance schemes have a comprehensive package, covering outpatient, inpatient, antenatal, dental and optical services. The precise package received is determined by the premium level paid.

Provider payment mechanisms	• Public facilities receive budgets and staff receive salaries. • All PNFPs also receive budget allocations from government aimed at subsidising use fees especially for the poor and vulnerable within the catchment area. • Patients referred to PFPs are paid on a fee-for-service and case-by-case basis.
Provision	• About 54.5 % of the hospitals are public sector facilities, providing the bulk of the services, followed by PNFP accounting for 41.6% and PFPs for 3.9% of hospitals respectively. • There are numerous private for-profit (PFP) clinics, drug shops and traditional and complementary medical practitioners.

Prepared by: Rosette Kyomuhangi, Esther Buregyeya, Eunice Kyomugisha and Aliyi Walimbwa (drawing on National Health Accounts and other sources).

A.6 Analysis of health care financing in Zambia

Function	
Revenue collection	
Source of funds	• Substantial donor funding, with donors accounting for 42.5% of all health care funding • Internal (domestic) funding – Households appear to bear the burden of health care funding, through tax and out-of-pocket payments
Contribution mechanisms	**General tax revenue** is generated from personal income tax (35% of total tax revenue); VAT and other taxes (35%); and various levies (fuel levy, excise duties, customs duties, estate tax and grants which account for about 30%) • Personal income tax is structured progressively with low-income earners being exempt and the marginal tax rate ranging from 15% for the lowest income taxpayers up to 40% for the highest income taxpayers. • VAT is charged at 17.5%. **Out-of-pocket (OOP) payments** • User fees are charged in public sector tertiary and secondary facilities. At the district level (i.e. for primary health care and district hospitals), only the urban based districts, which comprise 16 out of 72 districts nationwide, charge user fees. Some waivers apply such as to children under 5, the elderly (over 65), pregnant women and emergency (trauma/injury) cases. • Those who use private sector services generally pay for these services operates on an out-of-pocket basis, with a small amount of the costs of private care being covered by private health insurance and limited employer-based schemes.
Collecting organisations	• Tax revenue is collected through the Zambia Revenue Authority (ZRA). During 2007, ZRA surpassed its targeted revenue collection. • Private insurance firms collect premiums directly from their clients • Out of pocket payments are collected at facility level.
Risk pooling	
Coverage and composition of risk pools	• Private health insurance schemes are minimal and the extent of their coverage has not been studied yet in the country. However, they are limited to a few formal sector employees in the urban areas. • Other than out-of-pocket expenses (mainly to purchase private sector services), tax funded services cover about 95% of the population.
Allocation mechanisms	Tax and pooled donor funding are allocated through a needs-based resource allocation formula. The formula is based on the population size in each district, adjusted for indicators of differential cost of providing health services (e.g. distance from Lusaka) and indicators of disease burden (such as proneness to outbreaks of diseases such as cholera). Some donor funds are invariably channelled through direct project support, limiting the intended impact of the allocation formula.
Purchasing	

Benefit package	Zambia has a defined set of essential services that can be funded from tax revenue. This package takes into account epidemiological and some political factors, as well as community perceptions. Services not classified as essential services, i.e. not part of the Basic Health Care Package, are expected to be fully paid for by users. However, the essential package of services has not yet been fully implemented.
Provider payment mechanisms	• Hospitals are reimbursed directly, based on their annually updated activity based budgets (part of the three year medium term framework planning) • Private providers are paid on a fee-for-service basis.
Provision	• The availability of staff is currently: One doctor for 18,000 persons; one nurse per 1,900; and one pharmacist per 480,000. • There are wide differences in health facility coverage across geographic areas, with 1,852 beds and cots in the Western province to 3,180 in the Northern province. This results in a range of about 2.3 beds per 1,000 to 4 per 1,000 between the lowest and highest bed capacity provinces in the country.

Prepared by: Bona Chitah (drawing on National Health Accounts and other sources).

A.7 Analysis of health care financing in Zimbabwe

Function	
Revenue Collection	
Source of funds	There is relatively little donor funding in Zimbabwe, constituting only 13% of all health care funding in 2005, (up from less than 5% in earlier years). There has been an explicit withdrawal of funds by traditional donors in protest at government policies. • Ultimately individuals finance health through taxes, health insurance and out of pocket payments. • The poorest are exempt from income tax. Exemptions from user fees are in place for the poor, under 5, elderly (>65) and those using mental health services. All primary health care facilities in rural areas are free; individuals properly referred through the system from primary care facilities in rural areas are exempt from fees in the next level of care
Contribution mechanisms	**General tax revenue** is generated from tax on income and profits (50%), VAT (32%), custom duties (12%), excise duties (3%) and other taxes (2%). • Income tax is progressively structured and low income groups are exempted from paying tax. Tax bands range from a minimum of 25% up to 47.5%. • Company tax is charged at 30.09%. • VAT is charged at 17.5%, with basic foodstuffs being VAT exempt (to protect the poor). **AIDS Levy** is a dedicated tax of 3% on all personal and company income. This is placed in the National AIDS Trust Fund and supports operations of the National AIDS Council. **Private Insurance** (called medical aid societies): Premiums are community-rated (i.e. not risk-rated) and are charged according to the expected cost of services according to the benefit package chosen. Premiums are shared between employers and employees. **Out of pocket payments** • User fees are charged in public sector facilities, except in rural primary health facilities (and hospitals if properly referred). • Those covered by private insurance pay co-payments and those who use private providers but who are not members of medical aid societies pay out-of-pocket. • There is also considerable out-of-pocket payments by users of public facilities for medicines and supplies that are out of stock at public facilities and therefore have to be purchased in the private sector.
Collecting organisation	• The Zimbabwe Revenue Authority (ZIMRA) collects all tax funds. • The Ministry of Finance, on behalf of NAC collects the AIDS levy. • Medical Aid societies collect premiums directly from members.
Risk Pooling	

Coverage and composition of risk pool	• Medical aid societies only cover about 10% of the population - mainly of higher-income formal sector workers and their dependents. There is considerable fragmentation, with about 30 medical aid societies. However, the two largest medical aid societies, CIMAS and PSMAS, account for 90% of medical aid members. • Most of the population is dependent on publicly funded services, but due to the lack of drugs and other supplies in public facilities, have to purchase these supplies from private providers on an out-of-pocket basis (i.e. with no pooling). • There is an element of pooling via the National AIDS Trust Fund, which is funded by formal sector employees and companies and which benefits HIV/AIDS patients and their families.
Allocation mechanisms	Tax funds are centrally collected and have recently begun to be allocated to provincial and district level via a needs-based resource allocation formula (including indicators of the disease burden such as infant and maternal mortality and tuberculosis incidence; and indicators of household socio-economic vulnerability).
Purchasing	
Benefit Package	• Relatively comprehensive package at public sector facilities (from primary through to specialist services). Facilitated by free primary health services (and hospital care if properly referred) in rural areas, and exemptions for the poor in all public facilities. However, substantial resource constraints mean that services are in reality very limited. • The benefit package in private insurance schemes depends on the level of premiums contributed by the individual.
Provider Payment Mechanisms	• Budgets and salary in Public facilities • Fee for Service in Private for profit. • Budgets and salary for Private not for profit with exception of Hwange Mine Colliery paid by per diagnostic case reimbursements.
Provision	• Good distribution of public sector primary health care facilities, with a PHC facility within 8km of every Zimbabwean. There are also district, provincial and central hospitals. • There are also mission, mine and estate hospitals, some of which are contracted to provide services on behalf of the public sector, predominantly in rural areas. • There is a growing private health sector, concentrated mainly in large cities.

Prepared by: Susan Nzenze and Amon Mpofu (drawing on National Health Accounts and other sources).

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.

EQUINET implements work in a number of areas identified as central to health equity in the region:

- Public health impacts of macroeconomic and trade policies
- Poverty, deprivation and health equity and household resources for health
- Health rights as a driving force for health equity
- Health financing and integration of deprivation into health resource allocation
- Public-private mix and subsidies in health systems
- Distribution and migration of health personnel
- Equity oriented health systems responses to HIV/AIDS and treatment access
- Governance and participation in health systems
- Monitoring health equity and supporting evidence led policy

EQUINET is governed by a steering committee involving institutions and individuals co-ordinating theme, country or process work in EQUINET:

R Loewenson, R Pointer, F Machingura TARSC, Zimbabwe; M Chopra MRC, South Africa; I Rusike, CWGH, Zimbabwe; L Gilson, Centre for Health Policy/ UCT, South Africa; M Kachima, SATUCC; D McIntyre, Health Economics Unit, Cape Town, South Africa; G Mwaluko, M Masaiganah, Tanzania; Martha Kwataine, MHEN Malawi; M Mulumba, HEPS Uganda, Y Dambisya, University of Limpopo, South Africa, S Iipinge, University of Namibia; N Mbombo UWC, L London UCT Cape Town, South Africa; A Mabika SEATINI, Zimbabwe; I Makwiza, REACH Trust Malawi; S Mbuyita, Ifakara, Tanzania

For further information on EQUINET please contact the secretariat:
Training and Research Support Centre (TARSC)
Box CY2720, Causeway, Harare, Zimbabwe
Tel + 263 4 705108/708835 Fax + 737220
Email: admin@equinetafrica.org
Website: www.equinetafrica.org

Series Editor: Rene Loewenson
Issue Editor: Di McIntyre, Pierre Norden and Rebecca Pointer