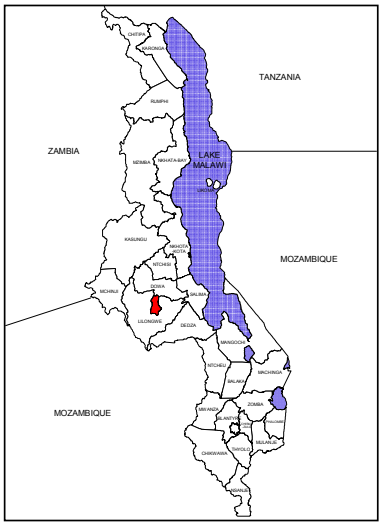
Equity in Health Sector Responses to HIV/AIDS in Malawi

"Equity in ART? But the whole health system is inequitable"



Julia Kemp[1], Jean Marion Aitken[2], Sarah LeGrand[2], Biziwick Mwale[3]

[1] Equi-TB Knowledge Programme, Malawi
[2] Independent consultant/researcher
[3] National AIDS Commission, Malawi

Regional Network for Equity in Health in Southern Africa (EQUINET)
In co-operation with Oxfam GB

EQUINET DISCUSSION PAPER NUMBER 5
August 2003

This paper has been produced with the support of
IDRC (Canada) and DfID UK

Editors: R Loewenson, C Thompson

Executive Summary

Malawi is one of the poorest countries in Africa. It has been severely affected by the HIV/AIDS epidemic. HIV/AIDS has created an increasing demand for healthcare, exacerbated by population pressure, chronic poverty and food insecurity. This demand is set against a reduced capacity to supply healthcare. With funding from the Global Fund for HIV/AIDS, Tuberculosis and Malaria (GFATM), Malawi is now in a position to commence a programme of provision of anti-retroviral therapy (ART) using a public health approach, within an integrated programme of prevention, care and support.

The Southern African Regional Network for Equity in Health (EQUINET) and Oxfam (GB), in co-operation with IDRC and DFID, have commissioned a series of technical papers on equity in health sector responses to HIV/AIDS in southern Africa. The programme, initiated in February 2003, aims to identify policy issues and options to strengthen equity in health sector responses to AIDS. A regional workshop and review panel identified the key areas for analysis at country and regional level. In line with this framework. EQUINET and Oxfam have commissioned a series of country studies from four countries in southern Africa, a regional study, and theme papers on HIV/AIDS equity issues in relation to health personnel, to food security and nutrition and gender equity.

This technical paper analyses the equity issues in HIV/AIDS health sector responses in Malawi, including access to ART. It is based on a review of published and grey[i] literature on HIV/AIDS, health sector programmes and policies in Malawi. In addition informal meetings were held with 24 key informants representing a range of key stakeholders in HIV/AIDS, including: people living with HIV/AIDS (PLWHA); Non Governmental (NGO) and civil society organisations; and representatives from the Ministry of Health and Population, National AIDS Commission, donor organisations and development partners. The initial findings of this analysis were presented to a meeting of key stakeholders in HIV/AIDS on 2 July 2003, when recommendations and ways forward for promoting equitable public policy within the health sector were discussed.

The findings

Although Malawi's National HIV/AIDS Policy lays out principles of access to HIV/AIDS care and support, regardless of gender, age, ethnic group and sexual orientation, equity remains a distant ideal. Health sector responses to HIV/AIDS have to be delivered in the context of a resource-poor setting with a weak health infrastructure. There is an absolute shortage of health staff across the sector, with over half of all government health posts unfilled. With current health staffing levels, 90% of public health facilities currently do not have the capacity to deliver the Essential Health Package, a planned minimum package of healthcare for all. A recent situational analysis of the health system concluded that 'the poor wait longer, receive fewer drugs and pay more in comparison with the wealthy'. These inequities are exacerbated for people living in geographically remote areas and for those who access peripheral rather than central or district centre-level services. Furthermore, there are very few mechanisms for people, poor or non-poor, to influence healthcare provision.

[i] Unpublished reports and documents

For the same reasons, health sector responses to HIV/AIDS do not address the needs of the poor and most vulnerable. Implementation of the continuum of prevention, care and support for HIV/AIDS is patchy, with few islands of excellence. Even where a well-coordinated national response has been implemented, such as TB control and STI management, barriers to access to care for the poorest and most vulnerable still exist. Provision of anti-retroviral treatment for people living with HIV/AIDS is currently limited to four sites, benefiting less than of 1% of those in need of treatment.

Provision of anti-retrovirals within a resource-poor setting is a reality in Malawi and is driving other health sector responses to HIV/AIDS. GAFTM funding has the potential to support a rapid scale up of ART provision to 25-50,000 people living with HIV/AIDS over the next five years. But, in the short and medium term, access to ART will be inequitable, with the immediate beneficiaries likely to be the urban educated population, and more likely to be men.

Issues arising and conclusions

Critically, *the way in which* ART is rolled out will have the greatest impact on equity in access to care for HIV/AIDS and all other healthcare. There is potential for ART provision to either strengthen or weaken the Essential Health Package. Human resources in particular are the limiting factor in the provision of health services in Malawi, and there is an urgent need to recruit and retain health staff. In order for ART provision to be equitable in this setting, it is essential that it is delivered:

- through mechanisms which do not (and will not) exclude the poor and vulnerable. (This may include developing specific interventions to ensure their access to drugs.)
- within the context of a comprehensive response to HIV/AIDS which ensures HIV/AIDS care to those who do not access ART
- in such a way that resources are not drawn away from the provision of essential services for health.

In the process of discussing equity in health sector responses to HIV/AIDS, Government of Malawi and other stakeholders have mapped out a number of broad recommendations to promote equitable public policy:

1. Immediate development of a 'Road Map' policy to lay the foundations for equity in the provision of ART.

2. Implementation of the continuum of prevention and care for HIV/AIDS as part of the EHP, fully integrated into the district health system.

3. Capitalising on the investment and momentum behind the health sector response to HIV/AIDS, to strengthen the general health system, particularly in the area of human resources.

This paper concludes that unless the health sector responses to HIV/AIDS, including ART, are delivered within the framework of the Essential Health Package, and provide additional resources for general healthcare strengthening, they could have a devastating effect on the health system. Without urgent measures to recruit and retain healthcare workers, coupled with a system-strengthening perspective, the public health response to HIV/AIDS will be delivered at the expense of public health in general.

Contents

1.Introduction 5

2. Background 6

2.1 Demographic and economic overview of Malawi 6
2.2 Overview of HIV/AIDS epidemic in Malawi 7
3. Impact of HIV/AIDS on the health sector 8

3.1 Overview of the health sector 8
3.2 Impact of HIV on health services 10
3.3 Impact of HIV on health personnel 11
4. Policy responses to HIV/AIDS and their impact on equity 12

4.1 Policy landscape for HIV/AIDS 12
4.2 How equity is addressed within HIV/AIDS policies 13
5. Health service responses to HIV/AIDS and their impact on equity 14

5.1 Financing for HIV/AIDS prevention, care and support 14
5.2 Equity in financing for HIV/AIDS 15
5.3 Anti-retrovirals - policies and guidelines for the provision of ART 16
5.4 Current provision of ART in Malawi 16
5.5 Equity issues in access to ART 17
5.6 Other health sector responses to HIV/AIDS – the 'continuum' of prevention and care 19
5.7 Equity in access to the continuum of HIV/AIDS prevention and care 21
6. Implementation of health sector responses to HIV/AIDS at district level 23

7. Discussion: How can ART and health sector responses be equitable? 26

8. Conclusion 31

Acknowledgements 33

References 34

Abbreviations and acronyms 38

1.Introduction

HIV/AIDS is causing a devastating global epidemic, with over 40 million people estimated to be living with the infection[1]. Most of these people live in the developing world, with southern Africa experiencing the most severe epidemic[2]. HIV/AIDS not only impacts on individuals, their households and families, but also has far reaching consequences on food security, human resource availability and development in general. In the last decade, the availability of anti-retroviral drugs has meant that HIV/AIDS has become a manageable chronic illness in the industrialised world. Because of the high cost and complexity of delivering this treatment, it remains largely unavailable in developing countries, where the response to the epidemic relies on prevention, care and support, without anti-retroviral therapy (ART).

Malawi has been severely affected by the epidemic, with HIV/AIDS now the leading cause of death amongst 15-49 year olds. With funding from the Global Fund for HIV/AIDS, Tuberculosis and Malaria (GFATM), Malawi is now in a position to commence a programme of provision of anti-retroviral therapy (ART) using a public health approach, to supplement the existing strategies to combat HIV/AIDS. The aim of this paper is to analyse the equity issues in HIV/AIDS health sector responses in Malawi, including access to treatment.

This technical paper forms part of a series of case-studies, and cross-cutting issues papers on equity in HIV/AIDS in Southern Africa, commissioned by the Regional Network for Equity in Health in Southern Africa (EQUINET) and Oxfam GB, with support from IDRC and DFID. It aims to inform policy and advocacy in three areas.

1. Equity issues in current health sector responses in southern Africa to HIV/AIDS and the extent to which these are associated with increased/ decreased risk of HIV infection or vulnerability to the impacts of HIV/AIDS.
2. The public policy choices now being faced and made in relation to the health sector response to the epidemic in southern Africa, with analysis of the equity implications of these policy options and of the choices currently proposed or being made.
3. Recommendations for equitable public policy within the health sector and mapping of the policy platforms and institutional agents that need to be engaged for such recommendations to be taken forward.

'Equity' in health sector responses to HIV/AIDS, refers to the provision of and benefit from services according to 'need'. An analysis of equity therefore involves asking *who* benefits from current health sector responses to HIV/AIDS and whether this corresponds to *need*. ('Who' refers to different social groups of people, usually disaggregated by axes of vulnerability such as gender, socio-economic status, age, location, or ethnic group). Based on this, inequities are inequalities that are judged to be unfair; that is they are both unacceptable and avoidable[3].

This technical paper is based on a review of published and grey[ii] literature on HIV/AIDS, health sector programmes and policies in Malawi. In order to enhance the search strategy for grey literature, informal meetings were held with 24 key informants representing a range of key stakeholders in HIV/AIDS in Malawi, including: people living with HIV/AIDS (PLWHA); Non Governmental (NGO) and civil society organisations; and representatives from the Ministry of Health and Population, National AIDS Commission and donor organisations. These key stakeholders were asked for any relevant literature and their knowledge of other information relating to the study objectives. Initial findings of this

[ii] Unpublished reports and documents

analysis were presented to a wider meeting of key stakeholders in HIV/AIDS on 2 July 2003, when recommendations and ways forward for promoting equitable public policy within the health sector were discussed.

The overall conceptual framework for the review is presented in Annex 1. The paper is structured into four main sections, with the first three parts providing the situation analysis. **Section one** provides a background to Malawi and an overview of the HIV/AIDS epidemic. **Section two** outlines the impact on the health sector. In **section three** the health sector responses to HIV/AIDS together with their equity implications are reviewed. **Section four** provides a discussion of the equity implications of these responses.

2. Background

2.1 Demographic and economic overview of Malawi

Malawi is one of the poorest countries in Africa, with an estimated per capita income in 2000 of US$ 170 per annum. Poverty levels within Malawi are also high, with 65% of the population of 11.5 million defined as poor (unable to meet their daily consumption needs)[4]. Over half of the population is food insecure[5]. Poverty levels are highest in the southern region, and worse in rural rather than urban areas. In addition to overall poverty levels, there is also a highly unequal distribution of income and consumption. The richest 20% of the population consumes 46.3% of goods and services, compared with only 6.3% by the poorest 20%, one of the most skewed distributions in sub-Saharan Africa[6].

Malawi's economy is dominated by agriculture, contributing 40% of gross domestic product (GDP) in 2001. Manufacturing, financial and professional services have shown declines in their share of GDP over recent years, with concerns that the domestic capacity to produce goods and services has deteriorated significantly. Aid contributes a significant proportion of GDP. In 1998 the rate of Official Development Assistance to GDP was 26%, a much higher proportion than other countries in the region. The various structural adjustment and macroeconomic policies are felt to have had a negative impact on poverty reduction in Malawi over the last ten years[7].

The depth and severity of poverty in Malawi is reflected in its health indicators. Life expectancy at birth dropped from 46 years in 1996 to 39 years in 2000. There has been a modest decline in infant and under-five mortality rates over the last decade, but one child in five in Malawi still dies before their fifth birthday. Children are generally malnourished with 29% of under-five year olds chronically malnourished or stunted and 5.6% suffering from acute malnutrition or wasting. Malnutrition amongst children is associated with rural populations and little or no education of their mothers. Fertility rates remain high (6.3 live births per woman) and higher rates are associated with poverty, rural residence or low socio-economic status. The maternal mortality ratio has almost doubled over the last five years, from 620 to 1,120/100,000 live births[8].

In May 1994, Malawi held its first multiparty elections bringing in the first democratically elected government. This government, now in its second term, has highlighted poverty reduction as its central policy tenet, under a Poverty Alleviation Programme (PAP). However, since 1994 it has been recognised that PAP has only had a limited impact because of its focus on a number of discrete projects rather than adopting an holistic approach. The policy focus on poverty reduction has been strengthened significantly through the recent development of a Poverty Reduction Strategy Paper (MPRSP), launched in April 2002. The MPRSP is integrally linked to the Medium Term Expenditure Framework (MTEF) and is intended to guide resource allocation to priority sectors[7]. However, Government of Malawi (GOM) policy commitment to MPRSP has not been

borne out in practice. A recent analysis of approved and revised budgets for the financial year 2001/02 shows that although overall government expenditure exceeded approved targets, PPE budgets were reduced, reflecting an increase in expenditure on non-priority activities[7].

External creditors have agreed to provide debt relief on external debt over the next 20 years under the Highly Indebted Poor Countries (HIPC) initiative. Under this initiative, once Malawi reaches full creditor conditions, a projected MK80 billion[iii] could be released for additional social sector spending over the next 20 years[7]. For the financial year 2002/03 this relief amounts to 7.9% of revenues. HIPC funding is supposed to be additional to GOM PPE expenditure.

Substantial external aid from four major donors now comes in the form of budgetary support. However, this funding is disbursed in line with IMF recommendations, which means that due to outstanding IMF questions about GOM grain reserve revenues, it has been suspended since 2001/02. This has resulted in an overall loss of government revenue of 13%[7].

2.2 Overview of HIV/AIDS epidemic in Malawi

The HIV/AIDS epidemic has a devastating impact on all aspects of life in Malawi, and undermines national efforts to reduce poverty. A recent UN assessment of the epidemic in Malawi notes 'while 16% of the population was infected with HIV, the entire population was living with HIV/AIDS'[9]. The estimated national population prevalence is 8.4% and HIV/AIDS is now the leading cause of death in the most productive age group (20-49 years) [5]. The National AIDS Commission (NAC) estimates that there are approximately 845,000 adults and children with HIV in Malawi, from the total population estimate of 11.5 million. There are an estimated 81,000 deaths annually, leaving 500,000-800,000 orphans (who have lost one or both parents)[10].

HIV surveillance figures for 2001 suggest a slight decline in HIV prevalence, however it is not known if this is due to random fluctuation or to a real trend. There is some decline in HIV prevalence amongst 15-24 year olds in Lilongwe, but this is not observed in other sites[10]. A recent UN assessment supports a cautious interpretation of the HIV prevalence trends in the southern African region:

> 'The last decade or more of internationally supported development planning has had little or no impact in containing the spread of HIV/AIDS[9].'

Sentinel surveillance of HIV/AIDS amongst women attending ante-natal clinics suggests that prevalence rates are highest in the southern region and in urban areas (22.5% compared to 10.7% in rural areas)[11]. HIV/AIDS is concentrated in the younger age groups. HIV prevalence amongst young women aged 15-24 years is four to six times higher than amongst young men in the same age group[12].

The primary mode of HIV transmission in Malawi is thought to be through heterosexual intercourse (80%), with approximately 8% of transmission thought to be from mother to child. The extent of transmission due to unsafe blood products and inadequate observation of Universal Precautions (for infection control) is unknown[10]. Knowledge of HIV/AIDS, its causes and modes of transmission amongst the population is significantly high, estimated to range from 66% to 99%[8]. However, it is increasingly recognised that

Comment: Reference DHS

[iii] 1 USD is equivalent to 91 MK

there are a number of structural factors that influence sexual relations and mitigate against behaviour change.

2.3 Social vulnerability to HIV/AIDS

Gender relations play a pivotal role in shaping vulnerability to HIV infection. Gender norms around male identity ('being a man') and female responsiveness put both women and men at risk[13]. For example social expectations for men to have several sexual partners mitigate against safer sexual practice. In the recent demographic and health survey (DHS) 18% of men reported extra-marital sex in the last 12 months compared to 1% of women[8]. These gender norms are often reinforced through traditional norms and practices, such as sexual initiation of young women and widow cleansing, which occur in some areas of Malawi.

Young women are particularly vulnerable to HIV infection, as reflected in their higher infection rates. Expectations of financial support within sexual relationships, sexual coercion by men, in particular teachers and older men, and bartering or selling sex as a livelihood strategy, increase young women's vulnerability[14,13]. Sexual violence against women, particularly young women, is thought to be under reported. In a participatory assessment of adolescent sexual behaviour in rural Lilongwe, Shah (2002) reports male notions of sexual "punishment" (sexual violence) against rude girls, defined as those who withdrew sexual favours or insisted on using condoms[15]. This notion of sexual punishment for women was reportedly supported by male elders during initiation ceremonies. Poverty exacerbates the need for economic support through sexual relationships and further reduces women's ability to negotiate safer sexual practices[14]. There are anecdotal reports that the recent hunger crisis in Malawi has had a negative impact on safer sex practices.

Social vulnerability (through gender relations, poverty, age, social and cultural norms) increases the risk of HIV/AIDS and its impacts at a number of levels. Social vulnerability increases the risk of HIV infection and progression to illness, particularly for women. This is exacerbated through biological susceptibility, such as the presence of sexually transmitted infections (STIs) and malnutrition (both in turn influenced by wider structural factors such as poverty and social norms). Poor and vulnerable populations have less access to health services or information and have reduced ability to prevent infection through affecting or negotiating behaviour change. Finally, the impact of HIV/AIDS is greater for the socially vulnerable. For example, stigma and social rejection and the burden of care within the household are greater for women; and the poor rely on the sale of meagre assets to fund care for HIV/AIDS, driving them into a cycle of further impoverishment.

3. Impact of HIV/AIDS on the health sector

3.1 Overview of the health sector

Malawi's health sector is characterised by a plurality of health providers. MOHP accounts for 60% of the total number of 'formal' or allopathic health facilities, followed by the Christian Health Association of Malawi (CHAM)[iv] with 25%. One Non-Governmental Organisation provider, BLM, accounts for 5% of all health facilities[16]. Formal private health services are also provided by companies and private-for-profit providers[17]. The scale of the traditional health sector (traditional healers and traditional birth attendants (TBAs)) is unknown. Approximately 25% of deliveries are attended by a TBA and it is thought that most communities have a traditional healer. Other sources of healthcare include grocery

[iv] CHAM have signed a Memorandum of Understanding with the Government of Malawi to provide health services.

stores and pharmacies, and to a lesser extent, community-based distribution agents (CBDA) for family planning commodities, drug revolving funds (DRF) operated by community volunteers, home based care and faith healing groups.

In government health facilities, almost all services are provided free-of-charge at the point of delivery. This is supported by GOM policy that its available resources will be used to ensure that a package of basic health services, the Essential Health Package (EHP), will be provided to all citizens. Services outside the EHP will be provided, but may be charged for[18,19]. CHAM facilities charge a set fee for service at the point of delivery, although individual facilities operate exemption mechanisms (stakeholder interview).

Malawi conducted its first National Health Accounts (NHA) exercise in 2001[17]. Total health expenditure is approximately US$12.4 per capita of which government provides approximately US$3 and donors US$4. The rest is provided by private sources, notably over US$3 from out-of-pocket expenditure by households. This analysis revealed that the ultra-poor spend between 7.4% and 10% of the value of their annual consumption on healthcare[17]. (This expenditure includes costs of transport and food, in addition to actual payment of fees.)

Different levels of health provision in Malawi are reflected in the types of health facilities. Nationally there are four central (urban district/tertiary facilities) and 22 district hospitals. These are supported by a network of health centres and clinics, which provide maternity, outpatient and limited in-patient services. Below this level there are maternity units and dispensaries. The average population per 'public[v]' health facility (GOM and CHAM) is 17,000[vi], with significant urban/rural and regional differences[16]. 54% of the rural population has access to a formal health facility within a 5km radius. If urban populations are included, and an 8km radius is taken as standard then 84% of the population has access to a health facility[20]. This national figure masks considerable district variations. In two districts, Chitipa and Kasungu, over 50% of the population live more than 8km away from a health facility.

The geographical coverage of health facilities does not provide an indication of the quality of services (staff and drug availability, or user perceptions of quality). There are severe staffing shortages in Malawi, with an estimated 50% of MOHP posts currently unfilled[20]. There is 1 physician per 50,000 people (compared to the WHO recommendation of 1:12,000), with 50% of doctors working at one of the four central hospitals[20, 16]. Similarly, the population-to-nurse ratio is 3500:1 (whereas the average for Africa in 1998 was about 1000:1). The average number of nurses per health centre is 1.9, with many facilities being run with only one nurse[16]. The availability of drugs was independently assessed in the peripheral health units in 2002 by a civil society health network[21]. It was found that there were shortages of drugs in almost all hospitals and clinics, even though some districts had not consumed their annual drug budget. (Anecdotal reports suggest that districts are often unable to consume their drug budgets because of stock-outs at Central Medical Stores). However, a more recent assessment revealed that current stocks of drugs to treat or prevent HIV-related diseases (including STIs) are reasonable at hospital level. The majority of hospitals had anti-fungal drugs, drugs for treating STIs, and cotrimoxazole and isoniazid to prevent a range of HIV-related infections[22]. Perception of availability of drugs forms an important component of user perceptions of quality of health services in Malawi. Several studies highlight that inadequate supplies of drugs in government health facilities present major barriers for users[23, 24, 25]. Other reported problems with government health facilities include poor staff attitudes and favouritism; long waiting times; and lack of confidentiality [23, 26, 24, 25, 27].

[v] MOHP, local government and CHAM facilities
[vi] This figure includes maternity services

The geographical coverage of health facilities similarly masks the physical barriers people face to access care, both in terms of external factors (flooded or otherwise impassable roads, mountainous terrain etc.) and in terms of their own physical weakness due to illness, particularly for a progressively debilitating condition such as HIV/AIDS. For example, on average half of the patients registered for home-based care services with Lighthouse clinic in Lilongwe fall into the categories of disabled (unable to contribute to household work) or bedridden (unable to get to the toilet unassisted) (stakeholder interview). For such patients, visiting the nearest health facility would be extremely difficult.

Despite a free public health service, with 'reasonable' geographic coverage, there are inequities in availability and access to healthcare. The current budgetary structure makes it difficult to assess allocation of resources by geographical area. A formula for allocating government funding to districts has been recently introduced to overcome the existing bias towards facilities with more staff and better infrastructure. The formula weights factors such as district poverty levels (20%), population (20%), existing infrastructure (40%) and historical allocation (20%)[7]. However, inequities in resource availability to districts also exist because of funds from individual donors and agencies, which target support to their chosen districts – a 'balkanisation' of the health sector[7]. Similarly intra-district resource allocations to different levels of care are difficult to evaluate.

At the moment, accountability in the (public) health sector is limited to the next level up, and ultimately to MOHP. Involvement of service users (or non-users) and wider civil society is limited to a few operational research initiatives to evaluate service performance or, very recently, to consultations on major policy changes. However the current decentralisation of government and devolution of power to District Assemblies (DA) in Malawi, should promote democratic structures within the district from the Village Development Committees to the DA, and allow a greater voice for civil society in setting priorities and running health services.

A recent situational analysis of equity in the health sector concluded that poor quality of care at each level, but particularly at the periphery, presents barriers to care[7]. Poor patients often need to make repeated visits to different care providers and are referred unnecessarily to the district centre. Time lost and distance to health services present major barriers to the poor (particularly women) because of their limited involvement in the cash economy. The analysis concludes that 'the poor wait longer, receive fewer drugs and pay more in comparison with the wealthy'[7]. These inequities are exacerbated for people living in geographically remote areas and for those who access peripheral rather than central or district centre-level services. Furthermore, there are very few mechanisms for people, poor or non-poor, to influence healthcare provision.

3.2 Impact of HIV on health services

The HIV epidemic in Malawi has created an increasing and changing pattern of demand for healthcare, exacerbated by increasing population pressure, decreasing resources, chronic poverty and food insecurity. This demand is set against a decreasing capacity to supply healthcare, as a direct result of the epidemic.

No studies in Malawi have investigated the impact of HIV morbidity on the demand for out-patient services. Hospital-based studies have shown that HIV-related conditions account for 40% of all in-patient admissions, or 70% of admissions to medical wards[5]. As one of the major opportunistic diseases associated with HIV infection, tuberculosis (TB) provides a useful proxy for general demand for HIV-related healthcare. Over the last two decades TB case notification rates in Malawi have increased five-fold, and the reported cases per

100,000 population have risen from 95 in 1987 to 275 in 2001[5]. Nationwide studies have shown that 77% of people identified with TB are HIV sero-positive[28] and more than 60% of hospitalised TB patients had one or more other HIV-related disease[29]. In-depth investigations into patient care-seeking pathways for TB diagnosis show that people with TB often make repeated visits to primary and secondary level facilities and to private providers, before being diagnosed with TB[23,30,31,32]. This increase in the TB caseload reflects increased demand for all levels of healthcare and is likely reflected by the demand for health services for other opportunistic infections (OIs).

3.3 Impact of HIV on health personnel

Human resources 'the killer assumption[vii]*'*

Availability of human resources in the health sector has been declining in recent years; MOHP estimates that over half of its posts are vacant. One of the reasons for the attrition of staff has been the development of the international market for trained health workers. Many developing countries, including Malawi, are now exporters of health staff to the developed world[33]. HIV/AIDS has further accelerated the attrition of staff from the health sector through a number of mechanisms.

HIV infection amongst health workers results in high rates of morbidity and mortality. The annual attrition rate of staff due to death is 2% [7,34]. Death rates are highest amongst 30-44 year olds, with the death rates amongst female staff peaking at an earlier age[35]. In terms of different cadres of health staff, the highest death rates have been amongst laboratory technicians and clinical officers[35]. HIV-related illness amongst health staff also causes chronic absenteeism. In Malawi, sickness is the major reason for absenteeism. GOM has a sickness policy in place but it is not implemented and record keeping for absenteeism is poor[35]. It is estimated that within the government service it takes six to twelve months to replace a health worker who has died or left the service. There is no policy to replace a worker who is chronically sick[36]. HIV/AIDS has a secondary impact on absenteeism amongst health workers because of illness and death amongst family members. Attendance at funerals for colleagues, friends and neighbours also accounts for a significant amount of absenteeism within the health sector. Since the caring role falls mainly on women, female health workers are most affected by the need to care for sick relatives.

HIV has an impact on the working conditions for health staff, which may also contribute to attrition rates. Existing staff have to cope with increased workload, often with poor remuneration. The job itself is unrewarding, with few tools to help people who present with AIDS-related illnesses. There are also reports of nurses leaving the profession because of fear of infection. This can be either of HIV infection through lack of equipment to effectively implement Universal Precautions or, amongst workers with knowledge of their own HIV status, fear of acquiring and developing an HIV-related infection such as tuberculosis[37]. These fears seem to be supported by empirical evidence. A recent assessment of healthcare waste management and injection safety revealed that amongst health workers giving vaccinations or curative injections, 49% and 57% respectively reported suffering at least one needle-stick injury during the last 12 months. Furthermore, in 44% of a sample of 29 health facilities, injection safety boxes were stored in a manner that was unsafe[55]. In a study of death rates amongst healthcare workers and teachers, tuberculosis was reported to be the cause of death more commonly in healthcare workers (47%) than teachers (27%) (although it would be very difficult to assess if and how occupational risk contributed to the acquisition and development of TB)[34].

[vii] The factor (or assumption) that is generally recognised to limit all new initiatives within the health sector in Malawi.

The demographic impact of HIV/AIDS, creating a large number of dependants may also increase the motivation of health workers to secure more highly paid employment than is provided within the general health services[37]. Within the health and development sector in Malawi, NGOs are able to provide better salaries and terms and conditions than public/CHAM health services, and employ many health workers, particularly the most qualified. Many NGOs specifically recruit health staff to run HIV/AIDS programmes, or to conduct HIV/AIDS related research. This is de facto priority setting by NGOs within the wider health sector, which produces an HIV response, but also runs the risk of providing 'islands of excellence' with limited coverage, and therefore limited impact on the majority of people with HIV/AIDS who can only access routine health services for care.

Increased demands on health services, caused by HIV/AIDS, in addition to population pressure means that there is a background of reduced resources for health, coupled with a deteriorating health infrastructure. Loss of health workers in the 35-44 year old age group also means that a degree of management capacity and institutional memory is also lost, further weakening health systems.

4. Policy responses to HIV/AIDS and their impact on equity

4.1 Policy landscape for HIV/AIDS

The Government of Malawi's response to the HIV/AIDS epidemic is captured through a series of five-year plans. The first (1989-93) focused primarily on HIV prevention, namely blood safety, behaviour change communication and management of STIs[38]. The second five-year plan (1994-98) recognised that HIV/AIDS was a multi-sectoral issue and included issues of counselling and care of PLWAs, though little was done to mitigate the impact of HIV/AIDS. Following increased recognition of the need for a coordinated national response to HIV/AIDS, the National AIDS Secretariat (NAS) within MOHP developed a National Strategic Framework (NSF) for HIV/AIDS, 2000-04. This was a five-year plan for a comprehensive and multi-sectoral response to HIV/AIDS budgeted at US$121 million. Donors and GOM pledged support to NSF to the sum of US$109 million (although much of this funding was already committed as components of existing programmes)[39]. At the time it was recognised that NAS did not have the resources (human or financial) to coordinate the NSF, and was institutionally not in a position to work across sectors. In response the National AIDS Commission (NAC) was established in June 2001.

NAC is headed by nineteen independent commissioners and reports directly to a Cabinet Committee on HIV/AIDS[viii]. NAC now has funding from a number of sources, including basket donors (CIDA, NORAD, DFID and GOM, with basket support from The World Bank) and discrete donors (such as CDC, UNDP and AfDRB)[39]. UNAIDS does not contribute funds directly but has an important role in coordination. Most staff are newly recruited to NAC and are paid professional-grade salaries, linked to performance. NAC is still building its structures, but is increasingly recognised to be taking a lead role in coordinating HIV/AIDS activities.

NAC is supported by a technical working group (TWG), comprising stakeholders from government, donors and civil society. This is supported by a number (12 or more) of sub-groups (sub-TWGs). However, the mechanism for the coordination of the sub-TWGs, and the overall decision-making processes for key policy issues are not clear (stakeholder interview). Sub-TWGs may comprise 'technicians', but not necessarily representatives of

[viii] The recent appointment of a Minister for HIV/AIDS (May 2003) may change the institutional arrangements for NAC.

wider civil society or people living with HIV/AIDS. For example, the sub-TWG for ART was commissioned to draw up guidelines on anti-retroviral provision. In a recent meeting, where the issue of 'who' should have access to ART and at what cost was discussed, there was opposition to the suggestion that such an important policy decision should involve wider political debate and consultation (TWG on ARV Guidelines, 8 April 2003).

NAC is in the process of developing the Malawi National HIV/AIDS policy through wide consultation with key stakeholders at all levels, including meetings at grassroots. The aim of the policy development is to provide the necessary legal and administrative framework for the implementation of the national response to HIV/AIDS. In terms of health sector responses, it provides for a continuum of prevention and care services.

> 'The Policy shall respond to the realities of the environment and of people's lives so as to stem the spread and reduce the impact of HIV/AIDS by providing a continuum of prevention and care services.'[40]

4.2 How equity is addressed within HIV/AIDS policies

The 'continuum of care' has a number of components under the policy, which are summarised Table 1.

Table 1: Summary of continuum of care described in the National HIV/AIDS Policy with specific equity issues highlighted

Policy component	Specific equity issues addressed under component
Prevention services	
Communication for behaviou change	Access to information is available to all regardless of gender, age ethnicity and sexual orientation. Promotion of enabling environment for involvement of PLWHA
Voluntary HIV counselling ar testing	VCT to be available for all over age 13 with guardian consent required for under 13 and mentally ill
Condom promotion for HIV prevention	Access to male and female condoms to all including young people prisoners and people in mental institutions
Prevention of mother to child (vertical) transmission	Provision of 'affordable ART' according to guidelines to prevent vertical transmission; promotion of care and support to parents
Blood and tissue safety	Availability of equipment and trained personnel at all secondary a tertiary health facilities
Involvement of traditional healers and traditional birth attendants	Recognition of role and specific training initiatives in HIV/AIDS
Treatment and Care for HIV/AIDS/STI	
STI and reproductive health services	Access to all of non-discriminatory, comprehensive services, and integration into all healthcare institutions. Specific measures to ensure access to women, young people and other vulnerable groups.
Treatment of HIV and AIDS related illnesses	Access to affordable ART for eligible people according to guidelin Treatment of HIV-related infections according to EHP
Universal Infection Control Precautions	Enforcement of WHO guidelines in healthcare settings
Clean injecting materials and skin piercing instruments	Ensure availability and proper disposal of materials and equipmer including periodic inspection of standards. Ensure functioning sterilising equipment.
Post exposure prophylaxis	Promotion of ART for victims of occupational exposure and rape
Surveillance	HIV included in notifiable public health conditions (without identification of individual)

In terms of access to prevention and treatment services, the policy lays out principles of wide access to information and services, regardless of gender, age, ethnic group and sexual orientation, and recognising the specific vulnerability of different groups. The policy also recognises the role of the Essential Health Package (EHP) to guide the provision of health services. In terms of access to anti-retrovirals both for PMTCT and for treatment, the policy does not specify population groups who should have access, implicitly recognising the limited availability of anti-retrovirals at the moment, and the need to develop more specific guidelines. Interestingly the policy refers to availability of 'affordable' ART, which leaves open the question of possible cost-recovery, but does not further specify level or measures of "affordability". Later in the document, the policy specifically outlines provision of services to the poor, particularly the poor amongst already vulnerable groups. The policy states that prevention and care services for HIV/AIDS should be 'accessible' to the poor (appropriate, freely available with wide geographical coverage) in accordance with EHP and the PRSP. Recognising the current limited availability of ART, the policy lays out principles for the accessibility of ART programmes, specifically:

> 'Government will develop mechanisms and national guidelines for the delivery of ART which do not hinder potential access by the poor.'[40]

5. Health service responses to HIV/AIDS and their impact on equity

5.1 Financing for HIV/AIDS prevention, care and support

It is difficult to document all the sources of financing for HIV/AIDS in Malawi because the national health accounts exercise did not include a specific component for HIV/AIDS, as has been conducted elsewhere.[41] When the NSF was launched in 2000, it was budgeted at US$121 million. Although donors and GOM pledged support, much of this funding was already committed as components of existing programmes, for example DFID supports a £27 million Sexual and Reproductive Health Programme across the health sector, a large component of which is prevention of STI.

In 2002, Malawi was successful in securing US$196 million from GFATM to support 'An integrated national response to HIV/AIDS'. Although funding for this proposal has only just been received, the prospect of this massive injection of funding to HIV/AIDS has had a galvanising effect on policy development and health sector responses to HIV/AIDS. Malawi's proposal to GFATM was developed over a period of 14 months and underwent a series of revisions in the scale and scope of the proposed programme.

Initially a proposal to provide ART through the public health system in Malawi was developed in response to a small MOHP stakeholders' meeting in November 2000. The proposal was based on the 'DOTS' model of TB control, and focussed mainly on ART provision (the principles of this approach are described in Harries *et al.,* 2001[42]). A wider stakeholder consultation, together with external technical input, resulted in a radical review of this approach and the development, by September 2001, of a 'Comprehensive HIV/AIDS Management Strategy for Malawi'. This comprehensive proposal covered the continuum of HIV/AIDS prevention, care and support, and made explicit attempts to support the HIV/AIDS services through the EHP and general health system strengthening. The public health system provision of ART was central to the proposal.

In response to the GFATM call and guidelines for proposals in January 2002, and feedback from donors and other partners in HIV/AIDS in Malawi, the third iteration of the proposal was developed: 'An Integrated National response to HIV/AIDS and Malaria'. This proposal was a scaled-down version of the previous iteration, and was budgeted at US$306 million. It was approved for 'deferred funding pending clarification' in the first

round of GFATM funding, April 2002, and finally approved for the sum of US$196 million. The grant supports the NSF for HIV/AIDS but primarily focuses on, and greatly expands, the HIV/AIDS care and support component, particularly in the provision of ART to 25,000 people over five years.

A recent estimate of the donor funding *directly* to NAC suggests that almost 40% of funds are currently allocated to advocacy and prevention compared to 3% for treatment care and support[ix]. With the addition of GFATM monies, the proportion for treatment, care and support rises to 47% of the NAC programme (stakeholder interview).

In addition to its support directly to NAC and MOHP, GOM has decided that each ministry will commit 2% of its total budget to HIV/AIDS activities within the ministry. The Parliamentary Budget and Finance Committee recently hired a consultant to examine whether this allocation had been spent. It was found that many ministries, including the Ministry of Health and Population, had not spent the allocation as specified and the Parliamentary Committee on Health and Population has interviewed controlling officers from all line ministries in order for them to explain their expenditure on HIV/AIDS (Health Legislation and Oversight Subcommittee Meeting, 5 June 2003).

5.2 Equity in financing for HIV/AIDS

A study conducted in Rwanda concluded that financing for HIV treatment was primarily from out-of-pocket expenditure[41]. The National Health Accounts (NHA) exercise conducted in 2001 in Malawi does not provide such an analysis of the impact of HIV/AIDS on health sector expenditure, but it was found that 26% of all finances in the health sector are from out-of-pocket expenditure. The ultra-poor were found to spend between 7.4% and 10% of the value of their total annual consumption on healthcare ('an intolerable burden for Malawi's poorest'[17]). Cost of care-seeking for TB for the poor and non-poor was estimated in Lilongwe, a setting where all public health facilities are within 6km of the urban population and care is provided free of charge at the point of delivery. It was found that on average patients spent US$13 and lost up to 22 days work whilst accessing a TB diagnosis. For the non-poor this was equivalent to 124% of their total monthly income. For the poor the cost was 248% of monthly income or 584% after food expenditure[32]. Based on available evidence, it is likely that (like Rwanda), current HIV/AIDS prevention activities in Malawi are supported from existing donors, whereas care and treatment for HIV/AIDS is financed primarily by households. It is also likely that the majority of prevention, care and treatment for HIV/AIDS is being provided through the 'public' health system (GOM/CHAM).

Malawi's application for GFATM funding addresses the policy and funding gaps for care and treatment, and augments current support for prevention. It therefore has the potential to reduce the care burden on individuals and households. Whether this reduction in care burden reaches those with most need (the poorest or most vulnerable) will depend on the policies and priorities of the implementation of the integrated response to HIV/AIDS.

The question of sustainability of financing for the integrated national response is also important. The EHP in Malawi is currently being re-costed to assess the overall cost (including previously omitted items such as central MOHP support to EHP and the cost of providing access to treatment (ARVs)). Based on the previous EHP estimate of US$17 per person, there is currently a large gap in financing of the EHP from combined GOM and donor sources (crudely estimated at US$55 million)[43]. Government of Malawi budgetary

[ix] Funds for prevention, care and support activities are also given directly to MOHP and other implementing organisations. The level of support for NAC probably also reflects donor anticipation of GFATM monies.

commitment to MPRSP (and therefore EHP) was not demonstrated in the PPE analysis of FY 2001/02[7]. An analysis of the budget recently presented for FY 2003/04 also shows that although there is a slight increase in the PPE allocation within the health budget (6.6%), this is accounted for by increases in the allocation for drugs (17.8%) and secondary curative care (19.8%). PPE allocations to primary and preventative healthcare (the main components of the EHP) show significant reductions (-10.5 and -37.1% respectively)[44]. On current levels of health sector financing it may not be possible to fully implement the EHP. Widespread access to treatment for HIV/AIDS is similarly unlikely without GFATM (or other similarly targeted) monies, unless this was at the expense of other health sector priorities. Without sustained investment, the cost of care for HIV/AIDS will fall primarily on households, remaining 'an intolerable burden for the poorest', particularly women.

5.3 Anti-retrovirals - policies and guidelines for the provision of ART

The proposal, and subsequent funding, for HIV/AIDS care and support has led to a great deal of policy impetus at national level. Much of this impetus has focused on the provision of ART and PMTCT. Guidelines for the use of anti-retroviral therapy have been developed and have gone through a series of revisions; the ARV TWG has met regularly, including *ad hoc* meetings to discuss the issue of equity in access to ART.

The strategy for ART delivery outlined in the guidelines is 'to provide standardised combination ARV therapy to HIV-positive persons who present to health facilities and who fulfil the eligibility criteria, using guardian supported treatment'[45]. First line standardised treatment is based on Triomune (two nucleoside reverse transciptase inhibitors, Stavudine and Lamuvidune and a non-nucleoside reverse transciptase inhibitor, Nevirapine). Second line treatment has not yet been decided upon for people who have adverse reactions or treatment failure on the first line regimen.

The guidelines for anti-retrovirals outline ways to deliver ART within a district health system with a poor infrastructure through mechanisms such as:

- fully standardised treatment regimens
- eligibility criteria based on WHO clinical features of Stage 3 and Stage 4 AIDS, rather than laboratory-dependent criteria such as peripheral blood lymphocyte counts or CD4 lymphocyte counts
- monitoring treatment response and drug reactions and recording treatment outcome status through clinical symptoms and patient histories, rather than laboratory-dependent tests.

5.4 Current provision of ART in Malawi

There are three systems of ART provision currently operating in Malawi:

1. GOM/MOHP supported provision of ART at two sites, the Lighthouse (Lilongwe) and Queen Elizabeth Central Hospital (QECH) (Blantyre)
2. district-based provision in two districts, Chiradzulu and Thyolo, which are operated by MSF France and Luxembourg respectively
3. provision through private providers.

Triomune is currently the standard treatment in the four public/MSF sites which are providing ART. For the GOM/MOHP supported provision of ART, Triomune is purchased directly from CIPLA, India, by Central Medical Stores and supplied to the central hospital pharmacies in Lilongwe and Blantyre. Within this programme, drugs are provided at cost to the patient, currently 2500MK per month[x], plus the (normally) one-off cost of a CD4

[x] 91MK is equivalent to US$1. The cost of ART is therefore $27.47 per month.

count of 1500MK. In Lilongwe, the Lighthouse (a Malawi-registered trust working in partnership with MOHP) is the sole prescriber of ART from this GOM/MOHP source. Lighthouse provides ART within a comprehensive care programme, including VCT, treatment and prophylaxis of infections, HBC including palliative care, and nutritional support. In QECH the ART clinic is part of the outpatient department, but is not explicitly linked to other HIV/AIDS services.

For the MSF-led programmes in Chiradzulu and Thyolo districts, drugs are purchased by MSF from the manufacturer and provided free of charge to beneficiaries. HIV/AIDS clinics operate within the outpatient department and are supported by a comprehensive HIV programme including VCT, PMTCT, treatment of infections and, in Thyolo district, home-based care services. Laboratory support for CD4 testing is provided by MSF and is free of charge.

A number of private providers in urban centres are known to prescribe ART. These providers range from NGO (not-for-profit) providers to stand-alone small private-for-profit providers. Drugs are purchased through pharmaceutical companies and are sold for profit to patients. The numbers of patients receiving ART through the private sector is thought to be small in comparison with the GOM/MOHP and MSF programmes. Some private providers follow national guidelines although there is concern about the quality of care offered by others. Anecdotal evidence (from former patients of private providers) suggest that practice in the private sector includes: mono or dual ART; people being given ART without knowledge of their HIV status or the drugs; and people being given a one week supply as a 'curative' dose (stakeholder interview). Although the National ARV Guidelines recommend regulation and certification of private providers to provide ART, this is currently not in place[45].

The health insurance sector in Malawi is very small. However, with increasing availability of ART, more of the larger employers are developing workplace HIV/AIDS policies, and a number of PLWHA are provided with funds for ART, either directly in the form of cash, or through a funding arrangement between the employer and the service provider.

Information on access to or the performance of the current ART programme in Malawi is limited. In a small study of 348 ART patients attending the Lighthouse between September 2001 and June 2002, drug interruptions were documented in 21% of cases, mainly due to costs and TB therapy. 4% of patients had to discontinue therapy due to severe toxicity[46].

5.5 Equity issues in access to ART

It is estimated that 81,000 people die each year in Malawi due to AIDS, and up to 200,000 people in Malawi would currently benefit from ART[5]. In 2002 there were three sites offering ART (QECH, Blantyre; the Lighthouse, Lilongwe, and MSF France in Chiradzulu[xi]). The numbers of new patients registered for ART in this period were 600, 454, and 316 in each site respectively (total 1370)[22]. A breakdown of age, gender and socio-economic status of these beneficiaries is not available, however it is likely that most current beneficiaries, particularly through the GOM/MOHP provision, are non-poor. (The cost of one month's supply of ART from these "public" sources is not affordable to the majority of the population, 65% of whom live below the poverty line.)

Current ART provision is funded through GOM 'at cost' or is supported by MSF. The GFATM funding over the next five years will provide access to ART for an estimated 25-50,000 people (depending on the cost of the drugs). This funding will mean the rapid

[xi] The ART programme commenced in Thyolo district in April 2003.

scale-up of ART services currently offered, and the need to set criteria for who will access the free drugs. The eligibility criteria for ART set out in the draft National ARV Guidelines[45] are:

- positive HIV test including post-test counselling
- understanding of implications and commitment to treatment

Plus either

- CD4 lymphocyte <200/mm^3
- WHO clinical stage II with a total lymphocyte count <1200/mm^3
- WHO clinical stage III or stage IV

These criteria have been developed with the collaboration of the GOM/MOHP and MSF-led ART sites and provide the technical, clinical criteria for initiating ART. It is generally recognised that the number of people clinically fulfilling the national eligibility criteria (likely 200,000) will outstrip the capacity to supply the drugs, and there have been calls amongst key stakeholders at national level to open up the debate about who should be able to access the drugs. There is recognition that the final decision to limit demand beyond the clinical criteria should be made at a political rather than technical level (stakeholder interview). Suggestions of groups to target with ART put forward in different fora include:

1. women accessing PMTCT (and the fathers)
2. PLWHA who are open about their status and using it to advance the HIV/AIDS cause
3. service providers and frontline workers in three key ministries involved in poverty alleviation - particularly health, but including education and agriculture
4. invisible groups such as prisoners and institutionalised persons
5. orphans and children of poor families.

One of the arguments against targeting pregnant women, then fathers or orphans, is that this amounts to 'targeting everybody' and does not allow demand to keep in line with capacity to deliver (stakeholder interview). Other targeting options would be more feasible but may be politically difficult to implement. A further mechanism suggested to allow ART-delivery capacity to keep pace with demand is to maintain the current pricing structure for ART in the scale up, and to slowly reduce the cost as capacity to deliver increases[47]. Although the issue of access to ART is discussed in different arenas, political, technical and amongst civil society, to date there has been no forum to bring these diverse stakeholders together. There seems to be reluctance amongst decision-makers either for a public debate, or for decision-makers at parliamentary level to limit the criteria further than the current national guidelines. This was explained by one stakeholder as a consequence of the general political climate in the country (with a general election due in 2004). It is likely therefore that ART under the GOM/MOHP system will be provided free of charge to all those who fulfil the eligibility criteria, and within this group, on a 'first come, first served' basis (stakeholder interviews and meeting of ARV TWG 8 April 2003).

Without mechanisms to limit demand, the sites currently offering ART report using 'informal' eligibility criteria (stakeholder interviews). Such criteria include: making sure the client shows commitment by attending three appointments prior to starting ART; giving priority to mothers or people with many dependants or those living nearer to the clinic; judging clients who may be able to continue to pay by their appearance. Another reported mechanism is to avoid active promotion of ART. One of the problems of informal eligibility criteria is that it puts pressure on the service provider to make *ad hoc* decisions and opens up the possibility for corrupt practices. In other health programmes around the world, such as TB, such criteria have been shown ultimately to exclude the poor, who are perceived by health workers to be a 'risk' to the overall performance indicators of their programmes[48, 49].

With funding from GFATM due to come on stream mid 2003, the plan is to scale up the GOM/MOHP provision of ART in 20 (of the 28) districts in Malawi over five years. The scale-up of ART provision will be in a phased manner, drawing upon the lessons learned in four pilot sites, Lilongwe, Blantyre, Chiradzulu and Thyolo (already operating) plus Mzuzu[5]. The ultimate aim is to develop a model whereby district and central hospitals initiate treatment, and thereafter patients will be referred to their nearest health centre and community level for continuation of treatment[5]. Clinically stable and adherent patients will be asked to return to the district or central hospital for clinical review, initially every three months and then every six months.

If the provision of ART with GFATM goes ahead on a free-of-charge, first-come-first-served basis then it is possible to speculate on the characteristics of the first potential beneficiaries of this system. They will be people who:

1. are already accessing the 'at cost' system operated by GOM/MOHP (higher socio-economic status)
2. have a high awareness of ART (high education level)
3. are in formal employment and who receive support for ART from employers
4. live in proximity to the district centre
5. are able to afford the direct and opportunity costs of care seeking, and repeated visits for therapy
6. overcome social barriers to knowing their HIV status and access VCT.

It can be hypothesised that the initial beneficiaries of the system will be highly educated and of high socio-economic status and who live in mainly urban centres. It is also likely that initially men may outnumber women because of the gender-related social barriers to accessing VCT and knowing one's HIV status. Geographical access to ART will be further limited by covering only 20 districts in Malawi. This projection of possible beneficiaries holds true even in the context of two important underlying assumptions that:

1. it is possible to scale up provision of ART given the weak health infrastructure and human resource crisis
2. current social barriers to knowing HIV status are reduced.

These assumptions will be discussed further in the following sections.

While ART will be available free of charge through GFATM funding, GOM will continue to operate the 'at-cost' service. Free provision of ART is likely to have a significant impact on existing ART patients' (or employers') willingness to continue to pay for drugs, unless this supply runs out or cannot cope with the demands placed on the system. In this case the private sector is likely (again) to have a role in addressing the shortfall.

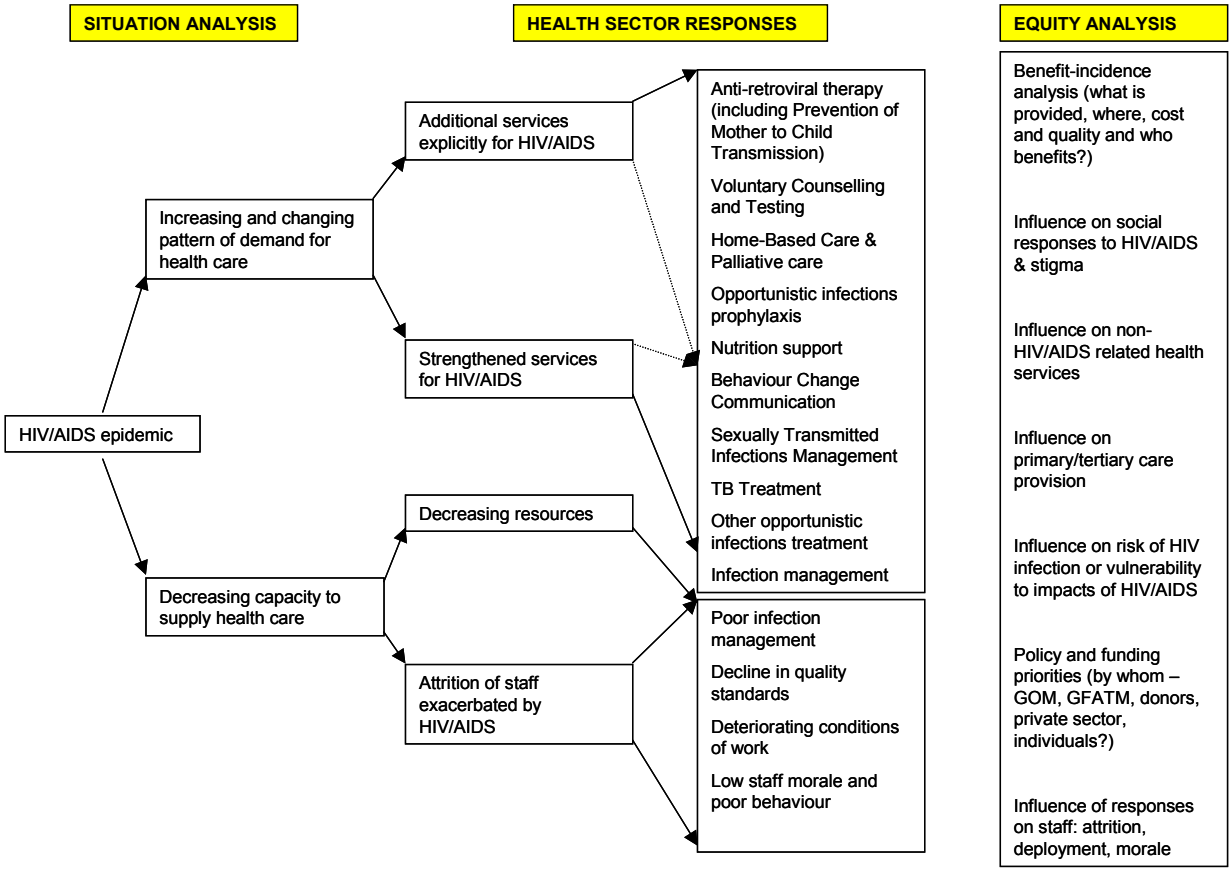
5.6 Other health sector responses to HIV/AIDS – the 'continuum' of prevention and care

MOHP outlines its comprehensive response to HIV/AIDS in the following way (stakeholder interview):

Primary prevention	Behaviour change communication (includes condom promotion and promotion of HIV/AIDS services)
Secondary prevention	Management of STI, PMTCT, VCT, condom provision, post exposure prophylaxis
Care and support	ART, treatment and prophylaxis of OIs, palliative care (linked to HBC)
Impact mitigation	care of carers, health workplace policies, counselling, implementation of universal precautions
Monitoring	sentinel and behavioural surveillance, operational research

Figure 1 below provides a conceptual framework for the comprehensive response, as a continuum of care, loosely divided into elements that were present before the HIV/AIDS epidemic but which have been adapted, and 'additional' components of the response. In terms of policy landscape, most of the policies for the elements of the comprehensive response to HIV/AIDS are established or at a well-advanced stage of development, but implementation of, and therefore access to, these responses varies considerably.

Figure 1: Conceptual Framework for equity in health sector responses to HIV/AIDS in Malawi



There are a couple of areas where the response is well established nationwide, the most notable being tuberculosis (TB) control. The National TB Programme started to implement 'DOTS' (the WHO-recommended international policy framework and programme for TB control) in 1984. Key features of TB control as a model for response to HIV/AIDS are:

- well established policy framework and five-year development plan supported by national standards and guidelines
- strong planning, implementation and reporting cycle
- GOM leadership to support the policy framework, which has engendered joint donor/GOM partnership to implement programme. The NTP is now basket funded by GOM, DFID, NORAD, KNCV and USAID, with supplementary funding from WHO for specific activities in support of the overall workplan
- training, supervision and monitoring implemented at all levels of the health system

- an uninterrupted drug and commodity supply, over years
- national guidelines implemented by all CHAM (private, not-for-profit facilities) and larger private health providers, with reporting integrated into the national database
- well established programme of operational research which, coupled with strong leadership, has allowed the programme to respond to the changing context of the HIV/AIDS epidemic, and (currently) policy changes such as the national decentralisation policy.

Although starting much later, the management of STIs (supported under the MOHP Sexual and Reproductive health programme) is also developing a similar approach with the intention of being a sector-wide initiative. For example, national guidelines have been established and communicated to key partners, including NGO and private sector providers; a comprehensive pre- and in-service curriculum has been drawn up to allow service integration at all levels; and drugs and commodities are available in health facilities.

Many of the other responses have seen important developments over the past three years in terms of strengthened national coordination and partnership between key implementing stakeholders. National policies and guidelines have recently been developed or drafted for behaviour change communication, VCT, and blood safety. Implementation of these different components of the continuum of care has depended on specific donor inputs in particular areas, often with limited geographical coverage. This has resulted in some 'islands of excellence', but overall a fragmented response to HIV/AIDS of varying quality (stakeholder interviews). This in turn limits service availability and access. Two examples of this, PMTCT and VCT are outlined below:

PMTCT services are currently offered in nine sites (four CHAM facilities and five district hospitals), with seven further sites offering partial services[50]. In terms of equity in access to current PMTCT, 95% of mothers come for antenatal care in Malawi, but only 35% deliver at health facilities. Delivery of PMTCT at district hospitals (rather than all health facilities) limits the potential beneficiaries even further.

In terms of VCT, all hospitals in the country offer some form of VCT, however only 50% of hospitals have a dedicated VCT counselling room and fewer have full-time counsellors. Twenty-two hospitals offer counselling without testing[22]. Little external supervision of the quality of VCT exists There are only a few stand-alone facilities offering services primarily to urban populations. The 2000 DHS found that 73% of men and 72% of women had an 'unmet demand' for VCT, although the report concludes that this may not reflect a person's likelihood of pursuing HIV testing options (if available). In stand-alone VCT facilities, women are less likely to access VCT services than men, and tend to do so at a later stage of disease (stakeholder interview). This may reflect gender-related differences in perceptions of VCT and impact of disclosing one's HIV-status. In a qualitative study amongst pregnant women in southern Malawi, women preferred the more anonymous atmosphere of the antenatal clinic for testing They also expressed concerns about being suspected of sexual misconduct if they attended a stand-alone VCT centre and that their marriage may be over if it was known that they had gone for an HIV test[51]. In terms of equity in access to the continuum of care, VCT is often the 'gateway' or starting point for care or treatment, hence gender (or other social) barriers to care will have a direct impact on who benefits from HIV/AIDS care or treatment.

5.7 Equity in access to the continuum of HIV/AIDS prevention and care

The scale of the health sector response and the levels of the health system in which it is being implemented will influence equity in access to HIV prevention and care in Malawi.

Equity is promoted through the availability of good quality services integrated at the periphery (both in terms of service level e.g. health centre, or geography e.g. remote districts), and amongst non-governmental service providers who provide services to hard-to-reach populations (such as adolescents)[7]. Even with a well-implemented national response such as TB control, barriers to access to care remain for the poorest and most vulnerable. Women have longer pathways to TB care; poor patients spend up to six times their available monthly income (after food) for a TB diagnosis; up to half of all smear positive cases may remain undetected from the poorest urban areas; and the impact of care seeking and illness is great, with the poor needing to take their children from school or sell assets such as pots and pans to cope [31,32, 52,53]. Many barriers to access to TB and other services relate to the poor coverage and quality of care provided within the *general* health services, particularly at the periphery. Underlying these problems are the general issues of chronic understaffing, and weak infrastructure and management systems.

In order to address the inequities in access to health services, MOHP and donor partners have been developing an Essential Health Package (EHP). This explicitly rations resources in order to prioritise cost-effective interventions, which tackle the main diseases of poverty, and to provide them equitably. Over the last couple of years the EHP has been defined and costed at both primary and secondary level, and the costing of the support and central services is currently underway[54]. Some of the health sector responses to HIV/AIDS (VCT, HBC, management of STIs, TB control, prevention and treatment of OIs) are included within the current EHP. The provision of anti-retroviral therapy was initially excluded because of the cost and the limited scope for delivery in the short and medium term[54]. Implementation of the EHP forms a central tenet of the Malawi Poverty Reduction Strategy (MPSRP)[55]. However, for it to be implemented effectively the underlying problems of the health system, particularly under staffing and weak infrastructure and systems need to be tackled through broad-based health system strengthening.

5.8 Health sector responses to the human resource crisis

The crisis in human resources in the health sector in Malawi is well documented, with an understanding that the debate is no longer about 'capacity building' but 'capacity replenishment' (stakeholder interview). In response to the crisis, MOHP has introduced an emergency training plan for healthcare workers, with the aim of doubling the current intake in the health training schools. Similarly, the Health Services Commission is currently being set up to help resolve some of the bottlenecks in human resources, for example deployment, personnel policy and practice and performance management.

In terms of specific responses to HIV/AIDS-related attrition, there is little currently on the ground for health staff within the public health system to mitigate against individual or institutional vulnerability[36]. There is no MOHP workplace or occupational health policy for HIV/AIDS for staff, and District AIDS committees have had little orientation on how to mainstream HIV/AIDS. Parliament has mandated each of the line ministries to allocate 2% of every ministry budget to address HIV/AIDS issues within the ministry. Recently, a consultancy for the Budget and Finance Committee of Parliament uncovered that many of the ministries had not spent this allocation, including the Ministry of Health and Population.

There is evidence of consolidated action to promote infection prevention in health facilities. MOHP has recently developed a policy on blood safety[56]. A national waste management policy and injection safety baseline assessment has been conducted and national policy development should follow[55]. The EPI and STI programmes are now routinely supplying single-use, auto destruct needles and there is hope that this will become standard for all routine injections within the health system (stakeholder interview).

6. Implementation of health sector responses to HIV/AIDS at district level

There are very few examples of a district-based implementation of the continuum of care for HIV/AIDS in Malawi. MSF France and Luxembourg support two district health systems, in Chiradzulu and Thyolo districts respectively. The MSF Luxembourg support to Thyolo district is presented as a case study. It is a pilot site for the implementation of ART through the public health system, and is highly regarded as a model for other district-based HIV/AIDS programmes.

An HIV/AIDS 'continuum of care' at district level: Case study of the MSF Luxembourg-supported programme in Thyolo District.

Thyolo district has a population of 475,000, and is one of the mostly densely populated districts in Malawi with a high rate of HIV infection (21% of antenatal clinic attenders). Medecins Sans Frontieres Luxembourg (MSF-L) support to HIV/AIDS prevention and care started in Thyolo in 1998. The long-term objective of the programme is to reduce HIV transmission and HIV/AIDS-related morbidity and mortality in the district. The comprehensive approach to HIV care and support is widely regarded in MOHP as a model approach for district-based health systems and MSF-L has a subsequent objective, to contribute to the design of HIV programmes in other rural districts.

The programme incorporates a number of components in the comprehensive approach, including:

Component	Includes:
Home based care	• Management of opportunistic infections at community level • Follow up of mothers who have been through the PMTCT programme • Nutritional programme follow up • Support for referrals from the hospital-based 'continuum of care' clinic and back to the home-based care programme
Voluntary Counselling and Testing	District hospital-based: • Walk-in VCT • TB wards • General wards • PMTCT Scale-up to health-centre based & private clinic-based: • Walk-in VCT
IEC/behaviour change interventions	Cross-cutting activities targeting: • Tea estate communities • Youth through schools • Youth out-of-school • Commercial Sex Workers • Prisoners • Opinion leaders (e.g. elders, community development officers)
Health centre management	• Training programmes and links to Traditional Healers (TH) and Traditional Birth Attendants (TBA) • VCT • STI management • OI management • Implementation of universal precautions
Prevention of mother-to-child transmission	Currently primarily hospital based, providing: • VCT services for new ante-natal clinic attenders • Referral of symptomatic HIV positive mothers to continuum of care clinic • Nevirapine drugs for HIV positive mothers given to take at home from 36 weeks • Nevirapine syrup administered to newborns in hospital • Infant feeding counselling, with formula support for mothers who opt for exclusive formula feeding

Antiretroviral provision	Started 22nd April 2003: • Referral of clients from Continuum of care clinic, Home-based care and PMCTC • Eligibility criteria: WHO stage III and stage IV (although informal criteria also exist for priority setting to limit demand at the outset of the programme) • Hospital-based but hope to follow up non-complicated cases from health centres in future Note separate ART programme for MSF-L and district health workers run through an MSF-L clinic
Treatment of opportunistic infections	• OI support through continuum of care clinic, and now through health centres • Training for all health staffDrug supply
Nutritional support	• For children with severe chronic malnutrition linked to underlying illness to complement to medical treatment • For people with HIV/AIDS and/or TB who are malnourished or socially destitute. • Formula infant feeding (PMCTC) and supplementary feeding for orphans to the age of 1 year.
Hospital support	Specific support to hospitals in the form of: • Upgrading of district laboratory • Medical doctor (the hospital did not have a medical officer previously) • Additional clinical officers and nurses • Support to in-patient careCommodities to ensure implementation of universal precautions

Several of the components are in early phases, particularly the ART and PMTCT programmes, but are already demonstrating considerable success. MSF-L reports uptake rates for VCT of over 97% amongst TB patients and 86% for new antenatal clinic attenders (at the district hospital). The DHO Thyolo ascribes these high levels of uptake to a 'softly, softly' approach of a long public awareness-raising campaign, coupled with careful administration within the district hospital. Other factors which contribute to the high uptake are that VCT is actively promoted to all TB patients on TB wards but is conducted in a confidential setting (a TB ward annex) by a full-time counsellor dedicated to hospitalised patients.

MSF-L used to support integrated STI treatment using a syndromic approach, but has withdrawn this support because the DFID-supported National Sexual and Reproductive Health Programme of MOHP now supplies drugs and is supporting a strengthened national training programme for all health staff. Similarly, MSF has suspended its IEC and STI programme in the Thyolo prison because a national NGO, Banja La Mtsogolo (BLM) has initiated a prison programme.

Although not mentioned in the context of the comprehensive approach to HIV/AIDS, MSF-L are also operating a HIV/AIDS treatment scheme for district health staff. This scheme was initiated for MSF-L staff only as part of their workplace policy for HIV/AIDS. In response to a request from the DHMT, the scheme now incorporates all district health staff. The ART has been administered from the MSF-L office clinic, but alternatives such as contracting a private clinic are being investigated. In terms of access to treatment for health workers, most of the 20 users of the service are clinically trained staff, although one cleaner has initiated treatment. (The DHO felt this discrepancy in numbers of ancillary staff benefiting from the scheme reflected lower levels of awareness amongst these cadres of workers).

Additional resources provided to the district for the HIV/AIDS programme:
The MSF-L inputs to the Thyolo District are funded primarily through the Luxembourg Government (60%) and internal MSF funds, such as private donations (40%). The annual budget for the inputs is in the region of US$1.2 million per year. Funds are almost exclusively held and managed by MSF-L, with occasional funding being given directly to the district for specific activities. Supplementary food is being supported by WFP and UNICEF and supplemented by MSF-L when necessary.

All additional staff for HIV/AIDS activities are employed through MSF-L, even though some are managed on a day-to-day basis through district rosters. Expected numbers of staff for 2003 for the HIV/AIDS programme include:

Expatriate staff: 2 medical doctors, an epidemiologist & a laboratory assistant (temporary)

National staff (clinical/technical)		*National staff (non-clinical/support*)	
Clinical officers	5	Counsellors	4
Medical assistant	1	Social communicators	2
Nurses	13	Receptionists	2
Nurse counsellors	5		
Community nurses	8		
Laboratory technician	1		

The DHO is involved in all staffing and recruitment decisions. Healthcare workers employed through MSF-L are paid higher rates than MOHP health staff. When MSF-L started to recruit staff for its programme, the DHMT requested that staff not be taken from within the district health system. This limit to recruitment has now been extended to exclude any health staff working in the neighbouring rural districts. Discrepancies between salaries and conditions for MSF-L staff and their MOHP counterparts initially caused difficult working relations, however these have been settled through negotiation and the introduction of a small performance-related incentive for *all* district health staff (including support staff, but excluding administrative staff). This incentive scheme, funded and managed by MSF-L, was introduced a few years ago but re-formalised one year ago through an agreement with the District Health Office. The simple evaluation of performance is conducted jointly by MSF and District supervisors each month. Performance criteria include quality of work (accuracy, discipline, cleanliness, respect for working hours) and quantity of work (incentives are not paid for periods of absence).

Drugs supplied by MSF-L are procured, stored and distributed by MSF-L. Both DHO and MSF-L report problems of stock outs at Central Medical Stores as the primary reason to run a parallel system. At primary health facility level drugs are stored alongside MOHP drugs, but accounted for separately. Drugs are reportedly used for any condition necessary and are not reserved exclusively for the HIV/AIDS programme.

What the Thyolo MSF model demonstrates is that it is possible to set up an effective continuum of care for HIV/AIDS within a district health setting, which includes the provision of ART. MSF-L and the DHO have established effective working relations, and MSF-L is invited to sit on DHMT meetings. DHO Thyolo sees the working relationship with MSF-L as a model for effective MOHP/NGO collaboration.

In terms of a model for wider implementation within Malawi it is important to consider the key features of what makes the Thyolo model work. Inputs required to set up and run the programme are considerable, and consist of additional financial resources for:

- supplementary drugs and commodities
- additional health staff
- management capacity and technical assistance
- financial incentives and workplace ART provision for health staff.

With GFATM-funding for Malawi, additional financial resources will be made available and in theory should allow for the scale-up of the Thyolo model.

Supplementary drugs and commodities for the integrated response are budgeted for. At the moment the plan is for GFATM funding to be used to procure drugs and commodities and distribute them directly to districts through an independent procurement agent (UNICEF). It is hoped that this will be a short-term arrangement of only one year in order to allow Central Medical Stores (CMS) to improve its systems. However, there is considerable concern locally that, if this arrangement continues, it will undermine MOHP and donor initiatives to support the further development of CMS, and therefore have a negative impact on general availability of drugs and supplies. There has been one

suggestion that CMS should procure any GFATM-funded drugs, which are already routinely procured as part of the Essential Drugs List (stakeholder interview).

In Thyolo additional health staff are recruited to 'fill the gaps' in the Thyolo district health establishment. MSF France also report the need to recruit additional staff to support the district health system in Chiradzulu. Staff are recruited through open competition, but not from within Thyolo or the surrounding districts. From the perspective of a district-based response limited to one district, it is possible to supply these additional health staff. Taken as a whole picture, with the prospect of national scale up, it is difficult to see how these additional staffing requirements can be met without having a huge impact on the health sector as a whole and equity in health service provision.

MSF-L supplies the additional management capacity and technical assistance to support the HIV/AIDS programme within the district, with all additional services and funding being managed through MSF-L. Without this specific and long-term management and technical support, it may prove difficult to implement similar programmes in other districts given current capacity constraints. This model of long-term technical support has also been effective with national level programmes. This type of support to district systems would require moving away from the model of national-based training programmes for implementation of interventions, to one of more holistic support to the whole district team *in situ*.

7. Discussion: How can ART and health sector responses be equitable?

"Equity in ART? But the whole health system is inequitable". The opening quote of this technical paper provides a sobering, but realistic view of equity in access to ART, which also applies to other health sector responses to HIV/AIDS. In Malawi the poor and vulnerable have a higher burden of illness and disease, have less access to health services and suffer the greatest impact of ill health.

Provision of anti-retrovirals within a resource-poor setting is a reality in Malawi and is driving other health sector responses to HIV/AIDS. The national push for access to ART has been the local imperative of having to 'do something' in the face of a devastating epidemic and a response to the concerns raised internationally about access to treatment. Current sites demonstrate that ART can be implemented, but due to outstanding technical and capacity questions, is likely to have a limited impact within the short and medium term. With the currently proposed mechanism of provision of 'first come, first served', the immediate beneficiaries of ART are likely to be the better educated (or wealthy) urban or town populations, and are more likely to be men. There is also a real possibility that demand will overwhelm the supply of ART, leading to 'treatment anarchy'[42] in the private (and public) sector, unless mechanisms can be found to control demand.

The analysis presented suggests that in order for ART provision to be equitable in this setting, it is essential that it be delivered:

- through mechanisms which do not (and will not) exclude the poor and vulnerable. (This may include developing specific interventions to ensure their access to drugs.)
- within the context of a comprehensive response to HIV/AIDS which ensures HIV/AIDS care to those who do not access ART
- in such a way that resources are not drawn away from the provision of essential services for health.

Each of these propositions is discussed in turn.

ART should be delivered through mechanisms that do not (and will not) exclude the poor and vulnerable.

The National HIV/AIDS Policy clearly establishes the principle of equitable access to ART, with specific provision that delivery mechanisms be sought to ensure access for the poor and vulnerable. The National Guidelines for ARVs establish the clinical management framework for ART and promote access to as many people as possible by establishing the principal of a district-based approach, relying on clinical (rather than laboratory-dependent) management and pushing follow-up of cases to peripheral health centres. However, GOM has funding for approximately one quarter of the estimated number of people who would benefit from ART (50,000 people from an estimated need of 200,000). The National Guidelines establish ART eligibility criteria on clinical grounds, leaving open the difficult question establishing further eligibility criteria for access to the free ARTs.

The likely provision of GFATM-supported ART will be through a 'first-come, first-served' system. It has been argued earlier that this will favour the city or town-based, higher educated non-poor population. The first beneficiaries are also more likely to be men. Lack of more explicit eligibility criteria will also put the burden deciding who gets access onto individual healthcare workers, and will likely lead to the development of 'informal' selection criteria. At best these criteria will be inconsistent across health workers and sites, and at worst will open up the possibility of corrupt practices.

Most stakeholders in HIV/AIDS in Malawi acknowledge the enormous difficulty in establishing equitable access to ART, particularly in the short term. In a recent stakeholder consultation on Equity in HIV/AIDS (2 July 2003), it was proposed that an explicit policy be drawn up to provide a 'Road Map' to promote equity over time. It was stressed that the foundations of equitable public policy need to be established now, through wide consultation. The policy should be based on general 'principles' of access rather than necessarily specifying particular groups. However, in light of the severe human resource crisis in the health sector, which limits the sector capacity to deliver ART, healthcare workers have been frequently singled out as a group that should have early access to treatment (in the context of an holistic HIV/AIDS workplace policy).

Given the limited coverage of the GOM free provision of ART, the potential for private-sector support for ART needs to be explored in much greater depth. Several large-scale employers currently provide ART to employees through workplace schemes. Through these schemes companies pay for ART at cost. It will be important to investigate possible business incentives for such employers to continue to pay for ART for staff members, alongside the scale up of the free (GOM GFATM-supported) provision of ART. This would allow some ART provision to be supported by the private sector, enabling the GOM to target the limited free treatment to people who are not supported through workplace policies. A comprehensive private sector approach to ART would also allow the possibility for GOM to engage with private providers in order to limit the 'treatment anarchy', which currently exists and which will be exacerbated if supply of drugs cannot meet the increased demand.

Access to ART needs to be monitored from an equity perspective: that is, who benefits from treatment in terms of sex, age, and socio-economic status. Once district-based systems are piloted and implemented, new initiatives may need to be developed to address any gaps in access. For example, gender-related barriers to VCT may inhibit women from accessing stand-alone VCT sites. (This would require understanding the reasons for low-utilisation and finding mechanisms to address the problem.)

Availability of ART will increase over time and hence the opportunity for equity in access will also improve. Anti-retrovirals are such a valuable commodity, both in financial and human terms, that it is imperative that criteria to determine access to them are not left to develop on an *ad hoc* basis. In terms of promoting equity, eligibility for treatment needs to be discussed openly, allowing the opportunity for explicit decision-making and planning in the short, medium and long term.

ART should be delivered within the context of a comprehensive response to HIV/AIDS

The availability of anti-retrovirals and the momentum created by the national response to HIV/AIDS has had an impact on 'hope' within the clinical community. The galvanising effect of being able to 'do something' is palpable within MOHP and its key stakeholders. It is expected that the availability of treatment for HIV/AIDS will increase demand for VCT, and this in turn will have a positive impact on people's ability to live openly with the illness and redress the stigma currently associated with HIV (stakeholder interview)[xii]. In Malawi it is too early to say whether this will hold true, beyond limited anecdotal evidence.

Despite the large investment in ART though GFATM funding, it is likely that only one quarter of people who might benefit from the drugs will actually have access over the next five years. It is imperative, therefore, that the ART-related galvanisation of the health sector benefits all those with HIV/AIDS, not just those who access the drugs. For the many people living with HIV/AIDS and for the health workers providing general health services, it is important that the message of hope and that 'we can do something' is not limited to the provision of ART alone, but extends to all components of an integrated response. This will be achieved if ART is delivered within the context of a continuum of care for HIV/AIDS. A continuum of HIV/AIDS care will prevent further infections and provide services for those who cannot access treatment and for those for whom treatment fails. The continuum of care needs to be provided equitably, focussing particularly on the levels of the service and the geographical areas that serve the poor and vulnerable.

Malawi has spent some years developing an 'Essential Health Package', which is now, the cornerstone of the national Poverty Reduction Strategy for health. The EHP is based on the principle of promoting equity in health and access to health services. It provides an explicit mechanism for rationing resources, specifically targeting the diseases of the poor. It incorporates re-distributive mechanisms for the allocation of resources, to ensure that quality services are provided at peripheral health facilities and for under-served geographical areas. This should provide appropriate services to poor and vulnerable populations and avoid the impoverishing effects of unnecessary referrals and repeated visits to health facilities.

The HIV/AIDS continuum of care is an integral part of the current EHP (with the exception of the provision of ART and PMTCT). There is a also a new initiative to re-cost the EHP, looking at the cost implications of ART and the central level services needed to support the system. In addition to essential services, there is also a need for general health system strengthening, for example in human resources and financial management; which is also being taken forward through sector support by several donors. *However*, the EHP is massively under-funded (current estimate US$55 million). Few of the EHP interventions for HIV/AIDS are fully implemented throughout the health system (including private and not-for-profit providers) and access to the other interventions is patchy, and inequitable.

[xii] It is noteworthy that within Malawi there is currently no organised advocacy campaign for access to treatment amongst PLWHA and other HIV/AIDS activists.

The MSF-led HIV responses in Malawi provide examples of how the continuum of HIV prevention and care can be offered within a district-based system with sufficient financial resources. The models show that it is possible to provide an effective response that is integrated at as low a health system level as possible in order to promote equitable care and support for HIV/AIDS.

The provision of ART and the momentum created by treatment access needs to drive the roll out of the continuum of HIV/AIDS care within the framework of the EHP. The danger in Malawi is that, to a large extent, these processes are still regarded as separate, and involve different sets of actors. This perceived separation has been exacerbated by the budget cuts demanded of the first Malawi application to the Global Fund (in the areas of broad health system strengthening). Similarly funding from GFATM will be channelled through NAC in a project-by-project approach, making general support to EHP and district health services more difficult.

The framework for providing more equitable health services has already been developed for Malawi, in the form of the Essential Health Package. This allows for the distribution of resources to enable the full implementation of essential services at the periphery (both in geographical and service-level terms). Health sector responses to HIV/AIDS need to be integral, rather than additional, to this package. In the short and medium term this will allow the benefit of HIV/AIDS care and support to reach many more people than the limited numbers who will have access to ART.

ART should be delivered in such a way that resources are not drawn away from the provision of essential services for health

The policies and processes currently being developed for the integrated response to HIV/AIDS in Malawi attempt to address the first two provisions for equity in ART above. It is the third tier of equity in ART provision, the 'process' issue, which receives least attention, yet presents the greatest challenge to the health system. In Malawi, the lack of availability of human resources in the health sector presents an extreme threat to the provision of essential health services, and to any effort to provide an equitable health sector response to HIV/AIDS. A recent assessment suggests that, with current staffing levels, 90% of public health facilities currently do not have the capacity to deliver the Essential Health Package[16].

The implementation of district-based HIV/AIDS models in Thyolo and Chiradzulu have involved recruiting extra staff for each of the HIV-related activities, in order to 'fill the gaps' within the district system. This has involved the recruitment of significant numbers of clinical and technical staff such as clinical officers, medical assistants and nurses. Without radical responses to stem attrition rates of health workers, plus new staff being trained, the requirement for staff for the national scale-up of HIV responses will deplete the general public health system. National scale-up cannot be considered without careful assessment human resource requirements, and radical measures to ensure that essential health services are supported.

Using the Thyolo model, together with experience from Chiradzulu, Lilongwe and Blantyre, it should be possible to identify the *minimum* staff complement to provide ART services, and to develop guidelines for mainstreaming comprehensive HIV care and support across the district health system. Furthermore, MSF-L have piloted innovative ways of addressing the human resource issue, focusing specifically on reducing attrition rates within the district and increasing staff management, motivation and performance. These initiatives deserve more detailed evaluation and building into national roll-out of HIV services. They include:

- Ensuring that infection control measures and commodities are in place within the district to protect healthcare workers (and patients).
- Seeking ways to use non-clinically qualified staff to conduct non-clinical activities, for example VCT and health promotion.
- Extending the MSF-L workplace ART provision to all district health staff.
- Piloting a performance-related incentive to all health staff for implementing services (rather than for being away from duties).
- Using the performance-related incentive as a mechanism to supervise staff and promote more effective management.

In addition to staffing issues, the MSF-L Thyolo model allows GOM to learn valuable lessons about integrating the HIV/AIDS continuum of care and support within a district-based system. MSF-L resources are used to secure the additional inputs of drugs and commodities and management and technical capacity. This initiative shows how additional funds could be used flexibly to strengthen the general health system and the provision of EHP services. Other initiatives also need to be piloted, for example, rather than setting up a specific clinic for HIV/AIDS care at the district hospital, mainstreaming 'care' though the system, particularly treatment for OIs[xiii]. Mainstreaming care would involve strengthening standard treatment guidelines for each service level, augmenting skills of staff, providing a continuous supply of drugs, ensuring effective referral systems and monitoring through the DHMT. Such approaches are already implemented nationally to different extents for TB and STI treatment.

Although there are several sources of funding for HIV/AIDS prevention and care in Malawi, GFATM represents by far the largest single contribution. GFATM-funding, and the national momentum behind it, should offer the opportunity to implement a comprehensive and effective response to HIV/AIDS. The rhetoric surrounding the Global Fund is that it should provide 'additional' resources primarily for drugs and commodities. Furthermore, national responses to HIV/AIDS, tuberculosis and malaria should be 'performance-based and output driven'. Because Malawi's application is a proposal to mount a national public health response to HIV/AIDS, it offers an opportunity to interrogate the notion of 'additionality' within a very resource-poor setting, with a weak health infrastructure.

GFATM funds to Malawi will be held by a fund-manager and dispersed on a grant basis (project-by-project) through NAC. It will not be possible to combine GFATM funds into basket support for the MOHP implementation of EHP or system strengthening managed by GOM. (Health system strengthening elements of the Malawi proposal were requested to be cut before funds were approved by GFATM.) MOHP will apply for and manage inputs from GFATM on a project basis. In the short term, all GFATM drugs will be procured and distributed to districts through a parallel system. For rapid results, additional staff will be required to fill 'gaps' and these can only come from the existing pool, primarily from district health services. Furthermore, GFATM funding is output driven and the release of further funds will be based on performance. Although this provides an imperative to provide an effective response quickly, it does not allow sufficient time for the wider public health system to respond, and further promotes 'islands of excellence'. (One key informant within MOHP said that the timescale demanded from their department to fulfil the GFATM responses meant that the quality of the product delivered will be compromised.) This undermines the comprehensive system-building approach, which had been established through EHP and broad health system strengthening to improve service-quality and effectiveness. Hence it is the third tier of 'process' equity that is threatened by the need to 'do something' quickly and which is exacerbated by the mechanisms and conditionality of GFATM funding. This is an area that needs much greater attention, specific planning and

[xiii] Because of technical issues and the need to secure drugs, it is likely that the provision of anti-retrovirals will need a specialised clinic at district level.

a flexible response from GFATM and other HIV/AIDS donors in Malawi. In the short and medium term, the choices made about the 'process' of providing ART are likely to have a much greater impact on equity in access to health services, and subsequently health in Malawi, than the provision of the drugs themselves.

8. Conclusion

Vulnerability to HIV/AIDS infection, and consequently its impact in Malawi, is determined by a number of social influences such as gender, poverty and age. Health sector responses to HIV/AIDS currently do not address the 'needs' of these people, and are inequitable. Many health sector responses to HIV/AIDS are only available on a limited basis, through 'islands of excellence' supported by specific donors. Even where there is a nationally implemented response, such as TB or STI treatment, barriers to access still exist for the most socially vulnerable. There is a need to develop specific interventions to address these populations.

Malawi is now in the situation of being able to launch a national response to HIV/AIDS, due to external donor support, in particular from the Global Fund. This includes the widespread provision of anti-retroviral treatment through a public health approach. The question is how to use this new investment to provide a comprehensive response to HIV/AIDS that is equitable. It is clear to GOM and other stakeholders that, in the short and medium term, the provision of ART through the public health system will be inequitable. There will not be enough free treatment courses available to supply those who currently need them. Furthermore, system and technical-related difficulties in supplying the drugs need to be overcome before they can be rolled-out on a large scale.

The analysis presented in this paper suggests that the question of 'equity' should extend beyond the usual analysis of who benefits from each of the health system responses to HIV/AIDS. This is particularly the case for the provision of ART. In a health system where resources are severely limited, the analysis of equity requires not only the assessment of whom will receive the drugs, but also more importantly, what impact provision of ART will have on 'equity' for the provision of essential health services. In Malawi, human resources are the critical limiting factor in the provision of health services. This paper suggests that unless the health sector responses to HIV/AIDS are delivered within the framework of the essential health package, and provide additional resources for general health system strengthening, they could have a devastating effect on the health system. Without urgent measures to increase and retain healthcare workers, coupled with a system-strengthening perspective, the public health response to HIV/AIDS will be delivered at the expense of public health in general.

In the process of discussing health sector responses to HIV/AIDS in Malawi, GOM and other stakeholders have mapped out a number of broad recommendations to promote equitable public policy:

1. Development of a 'Road Map' policy to lay the foundations for equity in the provision of ART. This will include: principles of ART provision within the district-based system and the Essential Health Package; eligibility criteria for access to free ART in the short, medium and long term; promotion of 'at cost' parallel ART provision through large-scale employers; and a system for monitoring who has access. The policy will require wide consultation, particularly with people living with HIV/AIDS, and its ratification needs to be at a political rather than technical level.

2. Implementation of the continuum of prevention and care for HIV/AIDS as part of the EHP, fully integrated into the district health system. Activities conducted with

GFATM-funding must be part of the EHP and adhere to the principles laid out for promoting equity, such as integrated services implemented as far as possible at the lowest level of the health system.

3. Using the investment and momentum behind the health sector response to HIV/AIDS to support general health system strengthening. The immediate priority is a holistic workplace HIV/AIDS policy, including access to ART. Further health system strengthening should also be supported, such as staff incentives and augmenting general financial and management systems. This may mean GOM (with support from its' major donors) re-negotiating with the Global Fund how funds are disbursed within Malawi.

Acknowledgements

The authors would like to acknowledge the support and contribution of the key stakeholders in HIV/AIDS in Malawi who took part in individual meetings with the authors and in the stakeholder consultation meeting on 2 July 2003, including all those who submitted unpublished reports and documents. (For reasons of confidentiality these stakeholders are not named individually). The National AIDS Commission provided significant support and funding to facilitate the wider consultation process on equity issues in HIV/AIDS and will be taking forward the recommendations of the stakeholder meeting. The authors would like to particularly thank Dr Andrina Mwansambo and Mrs Doreen Sanje at NAC for overseeing the consultation process.

Personal thanks go to Dr Roger Teck and Dr Leopold Buhendwa, Medecins Sans Frontieres Luxembourg, Thyolo district, for contributing the information that forms the case-study material presented in this paper. In particular, the authors would like to acknowledge their tremendous contribution to HIV/AIDS care in Malawi, and their encouragement to open up the wider critical debate on the roll-out of HIV care and support within Malawi. Thanks also to Andrea Cook, DFID and Erasmus Morah, UNAIDS who provided significant support to the process of consultation for this paper and in opening up the debate on equity and HIV/AIDS. Sincere thanks are offered to Matthew Boxshall, Lighthouse, Dr Bertie Squire and Dr David Lalloo, Liverpool School of Tropical Medicine for their detailed editorial comments on the text, and for providing further insights into the equity issues associated with HIV/AIDS care. Finally, thanks to the funding bodies and organisers of the series of papers, particularly to Dr Rene Loewenson, Equinet, for overseeing the process and to David McCoy and Dr Sunanda Ray for detailed comments and contributions to the first draft of the paper.

References

[1] UNAIDS and WHO (2001) AIDS Epidemic Update, December 2001. UNAIDS, Geneva.

[2] Jackson H (2002) AIDS Africa: Continent in Crisis. SAfAIDS, Harare.

[3] Whitehead M (1992) The concepts and principles of equity and health. International Journal of Health Services, 22: 429-45.

[4] NSO (2000) 1998 Integrated Household Survey: Summary Report. National Statistics Office, Zomba.

[5] MGFCC (2002) An Integrated Response to HIV/AIDS and Malaria: Application to the Global Fund. National AIDS Commission, Lilongwe.

[6] UNICEF/GOM (2000) The situation of Children and Women, UNICEF, Lilongwe

World Bank (2002). World Development Indicators Database, April.

[7] GOM/MOHP (2002) SWAp Design Mission & SWAp Implementation Plan: Draft Final Report. Ministry of Health and Population, October.

[8] NSO (2001) Malawi Demographic Health Survey, 2000. National Statistics Office, Zomba.

[9] UN (2003) James T Morris and Stephen Lewis Mission Report, Lesotho, Malawi, Zambia and Zimbabwe, 22-29 January 2003. Rome.

[10] NAC (2003) Joint review of the National HIV/AIDS Strategic Framework and Operations of the National AIDS Commission, National AIDS Commission, Lilongwe.

[11] NACP (2001) HIV/AIDS Sentinel Surveillance Report. National AIDS Commission, Lilongwe.

[12] NAC (1999) Sentinel Surveillance Report, 1999. National AIDS Commission, Lilongwe.

[13] Matinga P and McConville F (2002) A review of sexual beliefs and practices influencing sexual and reproductive health and health seeking behaviour. DFID, Lilongwe.

[14] Coombes Y (2001) A literature review to support the Situational Analysis for the National Behaviour Change Interventions Strategy on HIV/AIDS and Sexual and Reproductive Health. Liverpool Associates in Tropical Health, Liverpool.

[15] Shah M (2002) Buying sex for three sweet potatoes: participatory assessment of adolescent sexual and reproductive health in Makala Village, Lilongwe. CARE International in Malawi, Lilongwe.

[16] MOHP (2003) Malawi Health Facility Survey. Preliminary presentation of findings. Planning Unit, MOHP, Lilongwe

[17] MOHP (2001) Malawi National Health Accounts: a broader perspective of the Malawian Health Sector. Planning Department, MOHP, Lilongwe.

[18] MOHP (1999b) To the year 2020: A Vision for the Health Sector in Malawi, May.

[19] MOHP (1999c) Malawi National Health Plan, 1999–2004. Ministry of Health and Population, Lilongwe.

[20] MOHP (1999) Malawi National Health Plan 1999–2004. Volume 2: National Health Facilities Development Plan. November.

[21] MHEN (2002) Malawi Health Equity Network Budgetary Monitoring Initiative, 2002/3. National Democratic Institute, Lilongwe.

[22] Chimzizi R, Harries ADH, Gausi F, Mwansambo A, Salaniponi F, Mpazanje R (2003) Report of a country-wide survey of HV/AIDS and joint TB-HIV Services in Malawi. National TB Programme/National AIDS Commission/HIV/AIDS Unit, MOHP, Lilongwe.

[23] Kapulula PK, Chilimampunga C, Salaniponi FML, Squire SB, Kemp J (2001) The journey towards TB diagnosis: preferences of the people of Mtsiliza, Lilongwe, International Journal of Lung Disease and Tuberculosis, 5, 11, Supplement 1: S167 (Abstract).

[24] Chilowa W, Devereux S, Kadzandira J, Mvula P (2001) User perceptions of social services in Malawi. Centre for Social Research, Zomba.

[25] Khaila SW, Mvula PM and Kadzandira JM (1999) Consultations with the poor: Malawi country synthesis report. Centre for Social Research, Zomba.

[26] Kabwazi ND, Kishindo P, Salaniponi FML, Squire SB, Kemp J (2001) Barriers and enabling factors to obtaining a diagnosis and adhering to treatment for TB: A Qualitative Study, International Journal of Lung Disease and Tuberculosis, 5, 11, Supplement 1: S167 (Abstract).

[27] Safe Motherhood Project (1998) Participatory Needs Assessment Results: Summary Document for Blantyre and Nsanje Districts. Safe Motherhood Project, Blantyre.

[28] Kwanjana JH, Harries AD, Gausi F, Nyangulu DS, Salaniponi FML (2001) TB-HIV seroprevalence in patients with tuberculosis in Malawi. Malawi Medical Journal 13: 7-10.

[29] Chimzizi RB, Harries AD, Hargreaves NJ, Kwanjana JH, Salaniponi FML (2001) Care of HIV complications in patients receiving anti-tuberculosis treatment in hospitals in Malawi. International Journal of Tuberculosis and Lung Disease, 5: 979-981.

[30] Squire SB, Belaye AK, Kashoti A, Salaniponi FML, Mundy CJM, Theobald S, Kemp J (2001) "Lost" smear positive pulmonary tuberculosis cases; where are they and why did we lose them? International Journal of Lung Disease and Tuberculosis, 5, 11, Supplement 1: S166 (Abstract).

[31] Makwiza IR, Weiss M, Sanudi LA, Squire SB, Kemp J (2002) Why is Gender Important for Pro-poor TB Services in Urban Lilongwe? International Journal of Tuberculosis and Lung Disease, 6, 10, Supplement 1, S142 (Abstract).

[32] Mann G; Squire SB, Nhlema B, Luhanga T, Salaniponi FML, Kemp J (2002) Expanding DOTS? Time for cost-effective diagnostic strategies for the poorest in Malawi. Late breaker Session, 33rd World Conference on Lung Health of the International Union Against Lung Tuberculosis and Lung Disease, Montreal, Canada, 6-10 October.

[33] Martinez J and Martineau T (2002) Human Resources in the Health Sector: an international perspective. DFID Health Systems Resource Centre, London.

[34] Harries AD, Hargreaves NJ, Gausi F, Kwanjana JH, Salaniponi FML (2002) High death rates in healthcare workers and teachers in Malawi' Trans Roy Soc Trop Med Hyg, 96: 34-37.

[35] GOM/UNDP (2002) Impact of HIV/AIDS on Human Resources in the Malawi Public Sector, UNDP, Lilongwe

[36] Kathyola, J (2003) The status of human capacity development for an effective response to the HIV/AIDS epidemic in Malawi. March 2003. Unpublished.

[37] Aitken JM and Kemp J (2003). HIV/AIDS, Equity and Health Sector Personnel in Southern Africa. Forthcoming technical overview paper for Equinet

[38] MOHP/Office of the Vice President (2001) The comprehensive HIV/AIDS Management Strategy for Malawi. Ministry of Health and Population/Office of the Vice President/National AIDS Commission/National TB Programme, Lilongwe.

[39] Bellows E and Downswell S (2002) Malawi's HIV/AIDS 'mini-SWAp': A case study of risk management and capacity building under the programme approach. CIDA, Lilongwe.

[40] NAC (2003b) Malawi National HIV/AIDS Policy, Draft Two. National AIDS Commission, Lilongwe.

[41] Barnett C, Balwalkar M, Nandakumar A K, and Schneider P (2001) The application of the National Accounts Framework to HIV/AIDS in Rwanda. Special Initiatives Report No 31, Partnerships for Health Reform, Maryland.

[42] Harries AD, Nyangulu DS, Hargreaves NJ, Kaluwa O, Salaniponi FML. (2001) Preventing antiretroviral anarchy in sub-Saharan Africa. Lancet; 358: 410–414.

[43] Planning Department, MOHP (2002) Towards Institutionalising the EHP. Ministry of Health and Population, Lilongwe.

[44] MEJN (2003) Analysis of sectoral budget for health 2003/4. Malawi Economic Justice Network, Lilongwe.

[45] NAC/MOHP (2003) Treatment of AIDS: Guidelines for the use of Antiretroviral Therapy in Malawi. Draft of the First Edition March 2003. National AIDS Commission and Ministry of Health and Population, Lilongwe.

[46] Hosseinipour M, Namarika D, Magomero K, Martinson F, Luftl S (2003) Experience of the antiretroviral programme at Lilongwe Central Hospital. Preliminary findings presented to a NAC Dissemination Meeting on HIV/AIDS, Lilongwe 2003.

[47] Lighthouse ARV Working Group (2003) Letter to NAC and MOHP on ARV Equity. Lighthouse, Lilongwe.

[48] Singh V, Jaiswal A. Porter JDH, Ogden J, Sarin R, Sharma PP, Arora VK. Jain RC (2002) TB control, poverty, and vulnerability in Delhi, India. Tropical Medicine and International Health 7(8): 693-700

[49] Nhlema B, Kemp J, Steenbergen S, Theobald SJ, Tang S, Squire SB (2003) A Systematic Analysis of TB and Poverty. Technical Paper Commissioned by the Stop TB Partnership, World Health Organisation.

[50] PMTCT Technical Working Group (2003) Draft Report National AIDS Commission Joint Strategic Review. National AIDS Commission, Lilongwe.

[51] Matinga P (2003) Factors influencing pregnant women's decision-making for HIV testing in Southern Malawi. ORC Macro International, NGO Networks for Health and the Umoyo Network, Malawi.

[52] Kemp J, Boxshall M, Nhlema B, Salaniponi FML, Squire SB (2001) Application of a Geographical Information System (GIS) to examine the relationship between socio-economic status and access to care for TB in urban Lilongwe, International Journal of Lung Disease and Tuberculosis, 5, 11, Supplement 1: S166 (Abstract).

[53] Nhlema B, Benson T, Salaniponi FML, Squire SB and Kemp J (2002) DOTS is not enough: Poverty is still an issue for TB control in Malawi. Poster presentation to IV World Congress on TB, Washington, June 2002.

[54] MOHP/UNICEF (2001) Malawi Essential Health Package: Contents and Preliminary Costing. First Draft. Ministry of Health and Population/UNICEF, Lilongwe

[55] GOM (2003) Healthcare waste management and injection safety assessment report. Ministry of Health and Population, Department of Preventative Health, Lilongwe.

[56] National Blood Transfusion Trust (2002) Policy on Blood Safety.

Abbreviations and acronyms

AfRDB	African Development Bank
AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-retroviral therapy
ARV	Anti-retroviral
BCC	Behaviour Change Communication
BLM	Banja La Mtsogola
CBDA	Community-Based Distribution Agent
CDC	Centres for Disease Control, USA
CHAM	Christian Health Association of Malawi
CIDA	Canadian International Development Agency
CMS	Central Medical Stores
DA	District Assembly
DFID	Department for International Development (UK)
DHMT	District Health Management Team
DHO	District Health Office(r)
DHS	Demographic Household Survey
DIP	District Implementation Plan
DOTS	Directly Observed Therapy Short-Course – WHO recommended TB Control Strategy
DRF	Drug Revolving Fund
EHP	Essential Health Package
FY	Financial Year
GDP	Gross Domestic Product
GFATM	Global Fund for AIDS, TB and Malaria
GOM	Government of Malawi
HBC	Home Based Care
HIPC	Heavily Indebted Poor Countries
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSA	Health Surveillance Assistant
IDRC	International Development Research Centre, Canada
IEC	Information Education and Communication
IHS	Integrated Household Survey
IMR	Infant Mortality Rate
KNCV	The Royal Netherlands Tuberculosis Association
MGFCC	Malawi Global Fund Coordinating Committee – Country Coordinating Mechanism
MHEN	Malawi Health Equity Network
MK	Malawi Kwacha
MMR	Maternal Mortality Rate
MOHP	Ministry of Health and Population
MoU	Memorandum of Understanding
MPRSP	Malawi Poverty Reduction Strategy Paper
MSF-F	Medecins Sans Frontieres, France
MSF-L	Medecins Sans Frontieres, Luxembourg
MTEF	Medium-Term Expenditure Framework
NAC	National Aids Commission
NGO	Non-Government Organisation
NGP	Non-Government Provider
NHA	National Health Accounts
NHP	National Health Plan, 1999-2004
NORAD	Norwegian Development Aid
NSO	National Statistics Office
NSF	National Strategic Framework for HIV/AIDS
OPD	Outpatient Department
PAP	Poverty Alleviation Program
PHC	Primary Healthcare
PLWHA	People Living With HIV/AIDS

PMTCT	Prevention of Mother-to-Child Transmission
PPE	Priority Poverty Expenditure
PRSP	Poverty Reduction Strategy Policy
QECH	Queen Elizabeth Central Hospital, Blantyre
SRHP	Sexual and Reproductive Health Programme
STI	Sexually Transmitted Infection
SWAp	Sector Wide Approach
TB	Tuberculosis
TBA	Traditional Birth Attendant
TWG	Technical Working Group
UN	United Nations
UNAIDS	Joint United Nations Programme for HIV/AIDS
UNDP	United Nations Development Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
US$	United States Dollar
VCT	Voluntary Counselling and Testing
WB	World Bank
WHO	World Health Organisation